

Improving Urban Waters Route Map – March 2022 Update

Activity Briefing

SEPA has produced a breakdown of activities (see Appendix 1) to support delivery of the commitments set out in the improving Urban Waters (IUW) Route Map. Building on those activities, this document sets out in more detail how Scottish Water and SEPA are proposing to deliver together to meet commitments.

Section 1. UID Improvements (Theme 1, WQ & Theme 4, Sewage Debris)

Scottish Water

As of March 22, Scottish Water has already moved 71 UID needs into development based upon prioritisation work done previously (2021). Further work with SEPA has moved 9 of these from High to Medium or Low priority. The list of 71 UIDs in development includes 22 of the WQ (RBMP3 needs). A further 5 RBMP WQ needs are still to be promoted.

As a result of December 2021 re-prioritisation, a further 42 will require promotion, giving a total of 109 high priority needs (27 RBMP WQ needs).

The focus is now on screening these UID needs to determine which can move quickly to detailed development and which will require catchment planning considerations to consider system-wide needs (other hydraulically linked, lower priority UIDs, flooding needs or development constraints). These needs are currently being captured spatially and a screening approach is being developed to support relatively rapid decision-making. This screening approach can be shared with SEPA when complete.

Delivery timescales are understood with preferred solutions required by 2024 to support delivery of RBMP3 WQ UID improvements by 2027 and to move high priority aesthetic UIDs into delivery ASAP when funding is confirmed.

A UID prioritisation list will be maintained. The remaining UIDs will be categorised according to the UID prioritisation approach detailed in the UID Management Approach.

Where potential needs emerge, aesthetic or water quality studies will be raised as detailed in the Wastewater Studies Management Approach.

SEPA

For water quality, SEPA will be progressively reinitiating monitoring and classification during 2022. From 2023, this may lead to SEPA identifying SW assets are potential pressures, which may require promotion of studies to confirm any new needs again covered by the WW Studies MA.

SEPA will continue ongoing review with SW of new information arising (eg EPIs or complaints) to determine where new aesthetic surveys are required.

Section 2. Monitoring (Theme 2)

Scottish Water

The route map requires 1,000 new monitors (IUW1000) to be installed over the next 3 years and data made available internally and externally. This is a significant delivery commitment and work is considered in 4 key stages:

1. Identify monitoring locations and types of monitor
2. Identify delivery scope (eg access, power, telemetry, traffic management)
3. Develop model and deliver (max delivery rate c 50 monitors/month)
4. Develop and deliver data management system, analytics and reporting capability (link to compliance, decision-making and improved transparency)

SW is currently undertaking a first pass of where monitors should be installed focussing on considerations such as; proximity to sensitive areas, UID status, licensed monitoring requirements (SNL and WwTW), hydraulic model verification points, flooding impacts, community focus, predicted spill frequency etc. Once a prioritised list is established, this will be shared with SEPA for finalisation.

SW has engaged with consultants (Vision) to support development of the delivery model.

The 2022 (2021 data) Flow and Event data return has recently been completed. The route map commits to making this data publicly available during 2022 with commentary where the cause of spills is known.

We are developing our WW Intelligent Network capability and are currently rolling out monitors in the first pilot catchment (East Calder) in order to understand whether it is possible to learn more about current network performance issues. Installation will be complete in February with data being available thereafter.

SEPA

SEPA will review the proposed prioritisation criteria, provide data where available to support the prioritisation of event duration monitor locations and review the prioritised list.

SEPA will engage with SW on which spill data reporting arrangements will be most useful to SEPA and other users.

Section 3. Source Control (Theme 3 / Theme 7, Engagement)

Scottish Water

SW will publish the joint UID prioritisation method and the current list of high priority needs by June 2022.

SW's new customer education campaign, 'Nature Calls' had a soft launch on targeted social media at the end of 2021. A wider, formal launch followed in late February with television and radio slots and wider public awareness.

The campaign calls for a change in behaviour in terms of flushing inappropriate items which cause sewer blockages and debris in the environment and will also look to lobby for support in calling for a ban on wipes which do not meet 'Fine to Flush' standards.

The scope of the first 'Lighthouse Project' in the River Almond catchment will be discussed with SEPA at a meeting scheduled for March. It is expected that this first meeting will consider how we might go about scoping a project that will look to influence customer behaviour in this catchment, limiting access to wet wipes and changing flushing behaviours. SW is considering using Mott MacDonald (consultants) to facilitate scoping discussions given their experience in developing an approach to improved data access in Auckland (SafeSwim). We also intend to look at engaging within the catchment to generate support for a programme of disconnections (local roof drainage / surface water systems).

SEPA

SEPA will signpost to the published UID prioritisation method and will amplify the education campaign through our existing communication channels. It is unlikely that SEPA is able to publicly support the call for a ban, however we could state evidence to support this work if useful.

SEPA is currently working on an information sheet about AMR aiming for a draft in March 2022, which links closely to the AESS (AMR in the Environment in Scotland) stakeholder group work. We will plan a similar task for 2022/23 relating to microplastics. We will engage and respond to the Marine Litter Strategy consultation in March 2022.

SEPA is developing a communications plan for the stakeholder group engagement, which will start once we have the above information sheets available and have initiated the policy review (see section 5 below). This is likely to be late autumn 2022. We are reviewing what resource SEPA has available to scope and support the Almond Lighthouse project, this should be confirmed in April 2022.

Section 4: Managing Surface Water (Theme 6)

Scottish Water

Scottish Water is developing approaches to the management of surface water at city, neighbourhood, and project scale. These are being developed in partnership with SEPA and Local Authorities, examples include:

- SGA in Aberdeen developing the strategic modelling and planning approach required at a city scale to understand the strategic infrastructure that would be required to manage surface water. With the objective of reducing the risk and impact of surface water flooding and improving the performance of the sewer network to reduce sewer flooding and CSO spills
- Demonstrably Different projects in Edinburgh, working with SEPA & City of Edinburgh Council to jointly develop and deliver place-led, integrated drainage and surface water management. Focusing on developing and testing the practical implementation and policy approaches that could be utilised to deliver on the ground. Outcomes are focusing on reducing flood risk, and approaches could be scaled to other areas to reduce CSO spills in the future
- Developing a GIS-based surface water opportunity mapping tool to identify key disconnection opportunities within catchments and understand the potential these opportunities can make to the sewer network performance. Once refined, this tool could be utilised to prioritise areas where SWM interventions could play a role in delivering UID improvements in both the short and longer term
- Developing a range of SWM guidance to be taken account of during the development of Flooding & UID projects to encourage SWM interventions through all capital projects

SEPA

SEPA is preparing its response to NPF4, liaising with SW and other water industry stakeholders. We are seeking opportunities to embed BGI into urban land use planning, including proposals for strategic plans for BGI (taking into account environmental and asset capacity as well as RBMP, FRMP, DWMPs and the WRMP) and for positive climate change adaptation and resilience measures to be taken by developers on/off site.

We are aiming for the SGA Aberdeen city blueprint project to provide better information to local authorities on what such a strategic plan could look like. This project is due to complete in summer 2022 but has been delayed due to issues related to the innovative modelling approach being taken.

We will engage with SG to progress implementation of the Water Resilience Places policy.

Section 5: Policy / Regulation (Theme 5 / Theme 8)

SEPA

Under the Compliance Verification Plan for 2022 onwards, SEPA will consider specific audits of WwTW and SNL licence requirements relating to system hydraulics, including working with SW to develop a method/process for identifying which WwTWs are spilling before reaching licensed PFF. SEPA will work with SW to develop a process to ensure ongoing proactive review of spill frequencies using the SOAF criteria.

SEPA will produce a statement explaining the current regulatory approach for sewer networks, in a format suitable for publishing on our website for public information in summer 2022. We will also review our permitting position in relation to the current regulatory approach in summer 2022.

We plan to initiate a review of the current regulatory approach during 2022, engaging with SG and SW as appropriate to determine whether a change in legislation and/or policy is required.

We are supporting Scottish Government with a review of the Bathing Waters designation process and are considering producing a statement on wild swimming.

Section 6: Governance

Joint working map will be coordinated through the Joint Development Group, with progress reports submitted to quarterly NLG/Directors liaison and any issues escalated as necessary.

Scottish Water

Scottish Water is working through governance design for each of the workstreams required to support IUW commitments.

SEPA

Governance for tasks within SEPA is provided by the SEPA RBMP delivery group which reports to SEPA's AMT. Quarterly progress reports and significant issues will be escalated to this group. Specific papers will be submitted to SEPA's Regulatory Support Group for regulatory decisions as required and/or escalated to AMT.

Appendix 1 –Activity Plan

	Task	Lead	Start	End
1 Water quality	Develop confirmed RBMP3 measures	SW	2020	Dec 2024
	Identify any new needs	SEPA	Ongoing	Ongoing
2 Monitoring	Prioritise and deliver spill monitoring locations	SW	2020	Dec 2024
	Produce annual spill report	SW	Jun 2022	Dec 2022
	Near real time spill reporting	SW	Sep 2022	Dec 2024
	Pilot Intelligent networks	SW	Jan 2022	Dec 2024
3 Source control	Support SG to consider single use plastic policy	Joint	Apr 2022	TBC
	National campaign on wipes	SW	Feb 2022	TBC
	Evidence on microplastics	Joint	2021	Dec 2022
	Evidence on AMR	Joint	2020	Dec 2022
4 Remove debris	Aesthetic studies and prioritisation	SW	2018	Ongoing
	Develop High priority aesthetics solutions	SW	2020	2024
5 Regulate spills	Develop WWTW PFF investigation process	SEPA	Sep 2022	Mar 2023
	Develop spill trigger review process	SEPA	Jun 2022	Dec 2022
	Audit compliance with licences	SEPA	Apr 2023	Mar 2024
6 Manage surface water	Push for implementation of Water resilient places/NPF4	Joint	Feb 2022	Mar 2023
	Complete SGA Aberdeen	Joint	2019	Jun 2022
	Deliver DD projects in Edinburgh	SW	2019	Ongoing
	Systematise BGI structure plan/approaches nationally	Joint	2023	2024
7 Engagement	Initiate stakeholder group	SEPA	Sep 2022	Sep 2023
	Agree preferred platforms for providing geographic spills data to public (eg SAS app)	SW	Jun 2022	Sep 2022
	Review/implement use of spills in BW signage	SEPA	Dec 2022	TBC
	Almond - community wipes and attenuation	Joint	Mar 2022	Dec 2024
	TBC - 2nd Lighthouse project	TBC	2023	2024
8 Policy/Regulation	Clarify current regulatory approach to public	SEPA	May 2022	Aug 2022
	Review current regulatory approach and policies	SEPA	Sep 2022	Jun 2023
	Review regulatory position with current approach licences/compliance with current	SEPA	May 2022	Aug 2022
	Position on wild swimming/signage at non-BW	SEPA	Jun 2022	Mar 2023
9 Governance	Bilateral progress reports to NLG/Directors	Joint	-	Quarterly
	SW annual report to Ministers	SW	-	Annual

From: [REDACTED]
To: [REDACTED]
Subject: RE: Urgent - Ministerial meeting with River Almond Action Group
Date: 09 September 2022 13:05:35
Attachments: [220909 Ministerial Meeting with River Almond Action Group - Briefing.docx](#)
[River Almond WwTW standards and needs.pdf](#)
[River Almond Questions and answers - August 2022.pdf](#)
[River Almond Improvement Group - meeting minutes 01 July 22.pdf](#)

Hi [REDACTED]

Attached is the following:

- Briefing for the Ministerial meeting with RAAG as per various email exchanges as to what I think you were looking for
- A Draft Q&A doc
- Most recent minutes from the River Almond Water Quality Improvement Group
- Table of asset info (referenced in the briefing)

Hopefully this isn't bombarding you with documents and you welcome all this information. Although the Briefing Document is 10 pages, in truth the main info we think you are needing is on pages 1-3. Pages 4-10 are simply further info which you can choose to include as you wish.

Any questions on this I'll try and answer best I can.

Kind regards

[REDACTED]

SW Public
General

From: [REDACTED]@gov.scot>
Sent: 09 September 2022 10:52
To: [REDACTED]@SCOTTISHWATER.CO.UK>; [REDACTED]
[REDACTED]@SCOTTISHWATER.CO.UK>
Subject: RE: Urgent - Ministerial meeting with River Almond Action Group

Hi [REDACTED]

We're unsure on the status of Ministerial engagements. However, I think until we hear otherwise we'll assume the meeting is going ahead as scheduled.

If you're able to send what you have, we may be able to add to it later.

Thanks,

[REDACTED]

Policy Officer
Water Industry Team
Scottish Government
Office: [REDACTED]
Mobile: [REDACTED]

From: [REDACTED]@SCOTTISHWATER.CO.UK>
Sent: 09 September 2022 10:37
To: [REDACTED]@gov.scot>; [REDACTED]
[REDACTED]@SCOTTISHWATER.CO.UK>
Subject: RE: Urgent - Ministerial meeting with River Almond Action Group

Hi [REDACTED]

Just working on info to send you over, however could you confirm if the meeting with RAAG is actually likely to go ahead now on the 13th Sept, given current circumstances?

I can send you info today, however part of what I was going to send you is still 'draft', so if we had a bit more time now then that would be helpful? Equally, I can send you a lot of info today.

Thanks

[REDACTED]

SW Public
General

From: [REDACTED]
Sent: 08 September 2022 12:45
To: [REDACTED]@gov.scot; [REDACTED]@SCOTTISHWATER.CO.UK>
Subject: RE: Urgent - Ministerial meeting with River Almond Action Group

Hi [REDACTED]

Thanks for the clarification on points for the briefing and flexing on the deadline for this. I'm liaising with [REDACTED] and others and we'll get this to you tomorrow morning.

Cheers

[REDACTED]

SW Public
General

From: [REDACTED]@gov.scot <[REDACTED]@gov.scot>
Sent: 08 September 2022 08:42
To: [REDACTED]@SCOTTISHWATER.CO.UK>
Cc: [REDACTED]@SCOTTISHWATER.CO.UK>
Subject: RE: Urgent - Ministerial meeting with River Almond Action Group

[REDACTED]

Additionally;

- Detail on the Lighthouse project and intelligent network they are/ have

installed would be useful for me as I only have high level lines at the moment.

- Scottish Water, I think, are secretariat for the River Almond Water Quality Improvement Group chaired by Angela Constance so it would be good to have a copy of the most recent minute and the month the group started in 2021.

We have until close tomorrow, so if it's too much for today, would you be able to send early tomorrow morning?

Thanks,

[REDACTED]

Policy Officer

Water Industry Team

Scottish Government

Office: [REDACTED]

Mobile: [REDACTED]

From: [REDACTED]

Sent: 08 September 2022 08:27

To: [REDACTED] <[\[REDACTED\]@SCOTTISHWATER.CO.UK](mailto:[REDACTED]@SCOTTISHWATER.CO.UK)>

Cc: [REDACTED] <[\[REDACTED\]@SCOTTISHWATER.CO.UK](mailto:[REDACTED]@SCOTTISHWATER.CO.UK)>

Subject: RE: Urgent - Ministerial meeting with River Almond Action Group

Hi [REDACTED]

I think similar points to my previous email:

- we can re-state the investment in relation to the River Almond (and high level wider actions across Scotland to improve the water environment) as well as the planned investment there. If we have an estimated cost for the proposed investment in the Almond that would be great.
- Answers to the questions posed by RAAG.
- On question 4, if there's any detail on housing developments. There's a mention about disinfecting to make the river safe, can you confirm the level of treatment at associated WwTW? (secondary?) We have previously offered lines on RAAG's expectations and we can re-state that.

The water in rivers, however pristine, carries risks to humans from ingestion of naturally occurring waterborne pathogens (eg Cryptosporidium) during swimming and other water-based activities that are not of a similar concern to wildlife. There appears to be some misunderstanding that a river at 'good' ecological status or better for wildlife is also safe for humans too, however the water from the taps in our homes and in public swimming pools is specifically treated to ensure it is safe for humans; this cannot be guaranteed in a river.

I'll double check with my colleague who is producing the briefing whether he requires anything else.

Thanks,

[REDACTED]
Policy Officer
Water Industry Team
Scottish Government
Office: [REDACTED]
Mobile: [REDACTED]

From: [REDACTED] <[\[REDACTED\]@SCOTTISHWATER.CO.UK](mailto:[REDACTED]@SCOTTISHWATER.CO.UK)>
Sent: 08 September 2022 08:21
To: [REDACTED] <[\[REDACTED\]@gov.scot](mailto:[REDACTED]@gov.scot)>
Cc: [REDACTED] <[\[REDACTED\]@SCOTTISHWATER.CO.UK](mailto:[REDACTED]@SCOTTISHWATER.CO.UK)>
Subject: RE: Urgent - Ministerial meeting with River Almond Action Group

Hi [REDACTED]

Any feedback to help us focus on developing something today?

[REDACTED]

SW Internal
Personal

From: [REDACTED]
Sent: 06 September 2022 12:52
To: [REDACTED] <[\[REDACTED\]@gov.scot](mailto:[REDACTED]@gov.scot)>
Cc: [REDACTED] <[\[REDACTED\]@SCOTTISHWATER.CO.UK](mailto:[REDACTED]@SCOTTISHWATER.CO.UK)>
Subject: RE: Urgent - Ministerial meeting with River Almond Action Group

Hi [REDACTED]

We have a lot of information available that we can supply to help with any briefing.

Could you give us a view of what you have already prepared so that we can see what needs to be updated?

I've lost sight of what we've been asked for. Is it a response to questions in Angela Constance's letter of late June (attached)?

[REDACTED]

SW Internal

Personal

From: [REDACTED] <[REDACTED]@gov.scot>

Sent: 06 September 2022 08:10

To: [REDACTED] <[REDACTED]@SCOTTISHWATER.CO.UK>; [REDACTED]

[REDACTED] <[REDACTED]@scottishwater.co.uk>

Cc: Public Affairs <Public.Affairs@scottishwater.co.uk>; [REDACTED]

[REDACTED] <[REDACTED]@SCOTTISHWATER.CO.UK>; [REDACTED] <[REDACTED]@scottishwater.co.uk>

Subject: RE: Urgent - Ministerial meeting with River Almond Action Group

Importance: High

All,

To make you aware that this meeting has now been set for 13 September; we need to offer briefing by **8 September**.

If you're able to offer the information in my earlier email that would be helpful. I've also re-attached the letter RAAG sent, any answers you have for the agenda questions would be welcomed.

Thanks,

[REDACTED]

Policy Officer

Water Industry Team

Scottish Government

Office: [REDACTED]

Mobile: [REDACTED]

From: [REDACTED] <[REDACTED]@SCOTTISHWATER.CO.UK>

Sent: 18 July 2022 15:59

To: [REDACTED] <[REDACTED]@gov.scot>; [REDACTED]

[REDACTED] <[REDACTED]@scottishwater.co.uk>

Cc: Public Affairs <Public.Affairs@scottishwater.co.uk>; [REDACTED]

[REDACTED] <[REDACTED]@SCOTTISHWATER.CO.UK>; [REDACTED] <[REDACTED]@scottishwater.co.uk>

Subject: RE: Ministerial meeting with River Almond Action Group

Hi [REDACTED]

We produced an update last week. We plan to update this monthly.

Please find attached dashboard which shows commitments on tab 1 and an update against 2022 activities on tab 2.

[REDACTED] questions, please get in touch.

[REDACTED]

SW Internal

Personal

From: [REDACTED] <[REDACTED]@gov.scot> <[REDACTED]@gov.scot>

Sent: 18 July 2022 15:03

To: [REDACTED] <[REDACTED]@scottishwater.co.uk>

Cc: Public Affairs <Public.Affairs@scottishwater.co.uk>; [REDACTED]

[REDACTED] <[REDACTED]@SCOTTISHWATER.CO.UK>; [REDACTED]

[REDACTED] <[REDACTED]@SCOTTISHWATER.CO.UK>

Subject: RE: Ministerial meeting with River Almond Action Group

Thanks [REDACTED]

Copying [REDACTED] and [REDACTED] for awareness.

[REDACTED] are you able to confirm when we'd expect the next update to the urban waters routemap, and how frequent the updates will be?

Thanks,

[REDACTED]

Policy Officer
Water Industry Team
Scottish Government
Office: [REDACTED]
Mobile: [REDACTED]

From: [REDACTED] <[REDACTED]@scottishwater.co.uk>

Sent: 18 July 2022 14:59

To: [REDACTED] <[REDACTED]@gov.scot>

Cc: Public Affairs <Public.Affairs@scottishwater.co.uk>; [REDACTED]

[REDACTED] <[REDACTED]@SCOTTISHWATER.CO.UK>

Subject: RE: Ministerial meeting with River Almond Action Group

Hi [REDACTED]

We will be able to input into this briefing. We will start to pull info together and we will wait to hear from you regarding the date of the meeting.

[REDACTED] can we please discuss this tomorrow.

Thanks

[REDACTED]

[REDACTED]
[REDACTED]
Scottish Water
[REDACTED]

SW Internal

General

From: [REDACTED]@gov.scot <[REDACTED]@gov.scot>

Sent: 18 July 2022 14:10

To: [REDACTED]@scottishwater.co.uk>

Cc: Public Affairs <Public.Affairs@scottishwater.co.uk>

Subject: FW: Ministerial meeting with River Almond Action Group

****EXTERNAL MAIL**** - Think Before You Click

[REDACTED]

Forwarding for your awareness.

We don't have info on a possible date yet, but would you be able to offer information for our briefing pack?

I think if we can get confirmation of everything that SW has already done in relation to the almond (and wider actions across Scotland) as well as the planned investment there? If we have a number that would be great, but I think there's a study ongoing so we may not have investment figures yet.

Also on question 4 of the letter, if there's any info on housing developments. There's a mention about disinfecting to make the river safe, can you confirm the level of treatment at associated WwTW? (secondary?) We have previously offered the lines:

The water in rivers, however pristine, carries risks to humans from ingestion of naturally occurring waterborne pathogens (eg Cryptosporidium) during swimming and other water-based activities that are not of a similar concern to wildlife. There appears to be some misunderstanding that a river at 'good' ecological status or better for wildlife is also safe for humans too, however the water from the taps in our homes and in public swimming pools is specifically treated to ensure it is safe for humans; this cannot be guaranteed in a river.

Thanks,

[REDACTED]

Policy Officer

Water Industry Team

Scottish Government

Office: [REDACTED]

Mobile: [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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[REDACTED]

Ministerial Meeting with River Almond Action Group (RAAG)

13th September 2022

This briefing paper covers:

- Improvement work around the River Almond
- River Almond Water Quality Improvement Group meetings
- River Almond Lighthouse Project
- Improving Urban Waters Route map
- Further Information - General background to Waste Water network, history, strategy etc.

Improvement work around the River Almond

Scottish Water has undertaken significant water quality studies in the River Almond. This has involved the development of sewer network models to predict the level of CSO spills and a review of historical WwTW performance across all assets which is, in general, above the level required within the final effluent discharge licenses for these assets.

Studies also developed hydrodynamic models of the River Almond itself which have been calibrated and validated to show how rainfall and inputs from SW and other sources impact water quality over the full River System (main river reach and tributaries). This study work has identified a number of areas where assets (WwTW and CSOs) are potentially impacting water quality and where asset improvements would likely support improvement to meet Good Ecological Status. These improvement measures are set out within the 3rd Cycle River Basin Management Plan (RBMP3) which was set before Parliament in December 2021. (See attached table (River Almond WWTW Standards and needs) which sets out current WWTW license conditions and indicative standards for improvement. In addition, there are a number of CSO improvements required within the catchment.

SW and PFI partners operate a significant number of assets in the River Almond catchment. These assets generally perform well and provide treatment at a level beyond that required by discharge licenses. Occasionally there are asset breakdowns and failures that cause environmental impacts and SW endeavours to respond to these as quickly as possible. Over recent decades many £10ms has been invested to improve treatment to reduce impacts on the River. SW is committing to developing the solutions required to address the measures set out within RBMP3 and we are currently assessing options and developing preferred solution scope. We fully expect to invest £30m to £50m to deliver improvements in the River Almond but, until we have reached the point of confirming the preferred solution and agreeing with SEPA that this will deliver a proportionate response to addressing water quality issues, we can't be more specific on this cost.

There are a number of improvement measures identified against Scottish Water activities (WWTW, CSOs and water resources) in the RBMP and we have estimated that the cost of delivering these is likely to be in the range £150m to £200m. The development of solutions is at an early stage and we will be unable to clarify this range until 2024 or beyond.

River Almond Water Quality Improvement Group meetings

Scottish Water attend quarterly meetings of the stakeholder group. The purpose of the group is agreed in the Terms of reference as:

‘This stakeholder group has been set up following on-going concerns in relation to the cleanliness of the River Almond. The group looks to bring together all relevant parties who have an interest or role to play in making improvements to the water quality and amenity use of the river for the local community. The majority of participating stakeholders support work towards bathing water status for the river and it is recognised that SEPA has an independent statutory role.

The group will focus on working towards a high-quality environment for the river users and wildlife associated with the Almond, including but not limited to achieving “good” Water Framework Directive status by 2027, and monitor and track how investment and decisions will lead to local improvements.

The group will focus primarily on issues and impacts within West Lothian, noting that due to the nature of the topic, these may on occasion fall out with West Lothian. Although the focus of the group is local, it will engage with others as appropriate.’

In the past 2 years Scottish Water and Veolia have had most of the local elected officials come to East Calder WWTW for a tour of the facility with Veolia. We have also met with representatives of the River Almond Action Group, who are campaigning for improved water quality, river bathing water designation and better public information in relation to swimming in rivers.

Our Nature Calls campaign used Crammond beach (where the River Almond meets the sea) as a focus for our push for behaviour change in relation to what is flushed down the toilet.

We have had various correspondence with members of RAAG over the past few years and attached is a Q&A document in relation to some of the questions that RAAG have posed to Scottish Water and SEPA. We are also just finalising a River Almond page on the Scottish Water website which will share all planned activity and FAQs for our customers.

Lighthouse Project

The River Almond Lighthouse Project objectives are to:

- 1. Provide better access to and availability of information on water quality, root causes, dependencies and interventions:**
 - Consolidate all information related to water quality in real-time to improve understanding of root causes and dependencies.

- Identify information gaps and prioritisation of data collection and monitoring to improve understanding of water quality issues.
- Attribute and identify appropriate interventions based on real-time data analysis and early identification of anomalies.

2. Harness the power of a responsible community to influence behaviours and “collective action”:

- Provide transparent information to equip community members to inform their own decisions.
- Increase ownership amongst stakeholders and customers.
- Drive changes in stakeholder and customer behaviours.
- Report issues and triage to appropriate stakeholder.

3. Identify opportunities to improve river quality, taking a data-driven and evidence-based approach:

- Follow the One Planet Choices framework and System planning to guide river stakeholders to a decision on interventions.
- Identify key causes of water quality issues and prioritise actions based on their impact and feasibility.

This project will require a collaborative approach with multi-stakeholders to drive river water quality management.

Further information

History of Waste Water Network

Our sewer network is largely Victorian, originally built to protect public health by conveying sewage and run off away from the rapidly expanding urban areas. The result was to **combine all water (wastewater and rainwater) so only one pipe was required**

It wasn't until the Sewerage Scotland Act in 1968 which requires every local authority in Scotland to provide a network of sewers to ensure that domestic sewage, surface water and trade effluent was effectively drained from their area, and to construct sewage treatment works or other facilities to deal with the contents of those sewers.

This act gives Scottish Water has a duty to drain surface water from the curtilage and roofs of buildings only; this does not apply to road drainage. Section 7 of the same act makes provisions for SW (the Drainage Authority) to enter into agreement with roads Authorities to allow road drainage to be conveyed and treated in the same system, subject to agreed conditions around the maintenance and operation of said systems. This enabled most roads to drain to our sewers historically (as the Roads & Drainage authorities were all under the LA's at the time) without a formal 'agreement'.

Consequently about **50% of road drainage still drains to SW combined sewers.**

A **Combined Sewer Overflow (CSO)** acts as a controlled pressure relief outlet when the combined storm water and foul system become overwhelmed with heavy rainfall, protecting customers from flooding in their homes and businesses.

Combined sewer overflows are an integral part of most of the sewer networks in Scotland and the UK, ensuring that sewers do not back up and flood homes, streets and sewage works during heavy rainfall.

Scottish Water has a total of 3,614 CSOs across its wastewater network and treatment assets. There is 50,000km of sewer network in Scotland meaning that, on average there is one CSO for every 15km of sewer network

From the late 1960s **NEW developments were required to put in separate surface water systems**, but there was no infrastructure for the surface water sewer to connect to, so inevitably they would end up connecting to combined sewers.

Around 2002, **new developments required to use SUDS** (Sustainable Urban Drainage Systems) to drain surface water.

We're using S7 Sewerage Scotland Act for new developments to ensure LA agree to work under formal arrangements and share maintenance for SUDS assets that drain both roads & curtilage water.

We have over 50,000km of sewers, most are combined sewers and over 100 years old. They are long life assets and will last us well into the future. Urban creep, paving over driveways, artificial grass and the legacy of road drainage all erodes capacity, so during periods of heavy rainfall the capacity is exceeded quicker. To build a separate system is carbon and financially prohibitive and the disruption on every street and customer premises is too much

Capital Investment

SR10-SR21 we have invested £1.1Bn in Wastewater, of which **£355M** was on improving UIDs, £331 on WWTW and £422M on Flooding and SR06 overhang.

The £335M improved 279 CSOs previously classed as unsatisfactory

Scottish Water Surface Water Policy

Scottish Water published the Surface Water policy in 2015, stating 'no more in, what's in out'

Strategic Plan

Scottish Water's strategic Plan states:

- We will transform the reliability, resilience, and sustainability of our wastewater service to ensure Scotland's wastewater is collected, treated and recycled in ways that generate value and protect the environment
- DWMP (Drainage and Wastewater Management Plans) for all our sewer catchment to ensure we understand and manage the risks to their effective operation.
- Real time visibility of our sewers to reduce the risk of customer flooding and pollution incidents

- Lead the transformation of the management of surface water – in partnership with local authorities, SEPA , house builders and communities.
- Continue to invest in reducing the risk of flooding and risk of unsatisfactory discharges to the natural environment, where it is not disproportionately expensive
- We will boost our work to influence and inspire manufacturers and our customers to change their approach to disposal of inappropriate items to sewers, to minimise blockages and harmful chemicals, plastics and debris that can reach our rivers and beaches and endanger aquatic species.
- Emerging pollutants – to understand and mitigate the associated risks we will continue to work in partnership with others to undertake research, identify and implement source control and promote regulatory change where necessary and possible. Where necessary source control is not feasible we will assess how to optimise or improve our wastewater treatment works.

Strategic Partnerships

Strategic Partnerships have been formed in Glasgow and Edinburgh. These partnerships are significant, as they are improving the urban areas by retrofitting solutions to manage the surface water differently.

The Metropolitan Glasgow Strategic Drainage Partnership was formed in 2002 and brings together Glasgow city Council, SEPA, Scottish Canals, Scottish Government and Scottish Water to deliver strategic drainage improvement for the city, by planning and delivering projects to minimise flooding and improve water quality to the order of £3000M

- Such investment includes the construction in recent years of the Shieldhall Tunnel in the south side of the city to help tackle flooding and water quality in the River Clyde.
- Other investment includes our work with Scottish Canals and Glasgow City Council to deliver the £17m Glasgow Smart Canal, the first of its kind in Europe, which uses the 250-year-old Forth & Clyde Canal and smart technology and SUDS to reduce flood risk and the impacts of climate change and unlocks swathes of land across the city for investment, regeneration, and development.

Edinburgh and Lothians Strategic Drainage Partnership, formed in 2019, Scottish Water, SEPA, SG and City of Edinburgh, East Lothian and Midlothian has initiated a radical new approach, looking for opportunities to managing rainfall by **retrofitting** blue-green infrastructure to absorb or store rainfall, reduce flood risk and minimise sewer overflow spills. A demonstrator Project in Leith will be delivered this year, and a strategic integrated project in Craigleith is underway, identifying opportunities to take out or store surface water. This project is creating a partner ecosystem to develop working partnerships with local business, hospital and school to identify win win solutions for managing the surface water differently.

Separating and treating surface water in an urban environment is very challenging, as large roofs and paved areas, which create the rapid run off are often not within our ownership or influence. To be effective in this area we need to form partnerships and influence property owners to manage their surface water using sustainable drainage.

Further partnerships are being explored with Aberdeen, Perth and Dundee.

We are dealing with very challenging circumstances. The largely Victorian waste water infrastructure has served Scotland well but it was not designed to deal with the weather patterns we are seeing, and forecasting, as a result of climate change and we will have to continue coming up with innovative new ways to tackle the changing weather.

Improving Urban Waters Route Map – December 2021.

In our route map we commit to a number of activities to be completed prior to December 2024. We also commit to continuing these beyond 2024, setting and agreeing new priorities through engagement with a wider stakeholder group.

Key Outcomes and Commitments

Outcomes

- Improve water quality (to support Scotland's RBMP objectives).
- Increase monitoring and reporting to cover all combined sewer overflows (CSOs) that discharge into the highest priority waters.
- Significantly reduce sewer related debris in the environment, and
- Reduce spills from the sewer network

Commitments

By 2024 we will:

- Develop solutions for the remaining 24-27 CSOs confirmed as impacting water quality and identified as measures in the third RBMP to allow delivery of improvements by December 2027
- Install monitoring on network and treatment works CSOs discharging to the highest priority waters (including all designated shellfish and bathing waters), representing approximately 1,000 CSOs
 - These monitors will confirm spill frequency and duration and will allow us to make comparison with predicted spill frequencies (from models). We can then confirm whether spill frequency represents an environmental risk.
 - We can use the data from monitors to improve operational intelligence driving the need for further investigations on spill impact and for prioritising the need for interventions in the network and at WwTW.
 - We can use data to notify water users that spills have occurred and, over time, alert water users of spills in near real time.
 - We can use data to inform the scope of improvements required
- Deliver intelligent wastewater networks in 3 catchments (East Calder, Erskine and Lossiemouth) to expand our intelligence on network behaviour during dry weather and during rainfall and develop a plan for further roll-out of this approach and alignment with monitoring aspirations.
- Intelligent networks go beyond event duration monitoring (EDM) referred to in the bullet above, giving us proactive warning that levels are building up in the sewer network and that spill or flooding events might be occurring. Ultimately, it is anticipated that monitoring will be provided through our intelligent network capability rather than through current EDM

technology. Intelligent Networks will support our ambition to have real time control in our sewer networks.

- Support the Scottish Government to develop proposals to ban single use plastic products, such as wet wipes, and to improve labelling to promote correct disposal.
- Develop and roll out a campaign to educate customers to reduce instances of flushing items which impact the sewerage system.
- Develop solutions for those CSOs that are already confirmed as being high priority having significant SRD impacts on rivers (85 locations).
- Agree delivery timetables for the 85 high priority CSOs (currently estimated to cost around £100m - £130m) and promote for approval. Subject to approval, we will plan to deliver these CSO improvements by December 2027.
- Continue to identify solutions to reduce surface water volumes entering the sewer network by working in partnership with SEPA, local authorities, landowners and developers.
- Identify specific catchment-wide surface water management opportunities to help resolve the most significant spill impacts and to offset any future increases from climate change.

Beyond 2024, we will:

- Deliver water quality improvements to address 24 CSO water quality pressures identified within RBMP3 by 2027.
- Review, with SEPA, emerging information on water quality improvement needs and develop, prioritise and deliver solutions as appropriate.
- Roll out the intelligent network approach to cover additional catchments as appropriate.
- Develop solutions for all medium priority CSOs (around 150 locations) and agree delivery timetables for these (currently estimated to cost around £150m - £200m). We will promote these as a priority investment in the Ministerial Objectives for the period after 2027 and, subject to these being approved, we will plan to deliver improvements to these CSOs by December 2031.

The CSO identified as high and medium priority are mostly in urban environments. This information is all available also in the SW Website here - [Prioritisation of Sewer Overflows in Scotland - Scottish Water](#)

Combined Sewer Overflow (CSO) position

Scottish Water has a total of 3,614 CSOs across its wastewater network and treatment assets. There is 50,000km of sewer network in Scotland meaning that, on average there is one CSO for every 15km of sewer network.

What do CSOs do?

A Combined Sewer Overflow (CSO) acts as a controlled pressure relief outlet when the combined storm water and foul system become overwhelmed with heavy rainfall, protecting customers from flooding in their homes and businesses.

Combined sewer overflows are an integral part of most of the sewer networks in Scotland and the UK, ensuring that sewers do not back up and flood homes, streets and sewage works during heavy rainfall.

They should therefore spill during storm events but should not cause pollution if they are correctly designed and maintained.

As such, CSOs are licensed by SEPA to discharge to the environment via river and coastal waterbodies under certain conditions.

What makes a CSO unsatisfactory, why are they unsatisfactory and how many of these do we have?

Discharges via CSOs can be unsatisfactory due to:

- Operation causing water quality impacts
- Operation during dry weather
- Operation causing aesthetic (sewage related debris) impact
- Failure to meet licence conditions

It should be noted that an individual CSO can be classed as Unsatisfactory for more than one reason.

We base our assessment of whether an overflow is Unsatisfactory on the actual environmental impact that the sewer overflow is causing, rather than the number of spills recorded by monitors or predicted by hydraulic modelling, which can vary widely according to the intensity and duration of storms in any particular year.

Environmental Studies 2015-2021

In the investment period 2015 – 2021 Scottish Water carried out a pan- Scotland environmental study programme to investigate potential unsatisfactory CSOs to confirm whether these had any environmental impact.

The study programme was developed through a review of environmental performance and asset operation through staff within Scottish Water and SEPA. Complaints of operational problems (dry weather operation) and evidence of Sewage Related Debris (SRD) were considered and all waterbodies not meeting 'Good Status' were reviewed to consider whether CSO operation (discharges) could be contributing to these problems.

We then carried out robust surveys following a standardised, consistent processes.

Aesthetic studies were carried out to count and classify SRD to identify key CSOs where overflow screening might need to be improved.

We also carried out water quality studies to confirm whether our assets are likely to be impacting the waterbody classification. These water quality studies use standardised mathematical assessment techniques set out in the Urban Pollution Management (UPM) methodology that is typically used across the wider UK water industry.

These studies typically involve site inspections, installation of temporary monitoring equipment to study the hydraulics of the sewer network and modelling of the network to predict CSO spill frequency and volume and the impact that this is likely to have on receiving water quality.

We will continue to use this study approach in the future, initiating a study when we have determined that the asset is operating as expected (to rule out any maintenance issue) but where potential environmental impact appears to remain.

Investigations completed during our latest investment programme confirmed that out of the 827 CSOs thought potentially Unsatisfactory, 449 CSOs are Satisfactory whilst 378 CSOs are Unsatisfactory.

The total number of CSOs that are recorded as unsatisfactory (as of March 2021) is 656. This includes the 378 CSOs that have been identified as Unsatisfactory through study in our last investment programme and other CSOs already identified as Unsatisfactory through previous investigations.

Reduce the number of unsatisfactory CSOs

SEPA expects all Unsatisfactory CSOs to be resolved over time, unless it is disproportionate to do so, considering all possible short and long term solutions.

Scottish Water estimates that the overall cost for improving all Unsatisfactory CSOs in Scotland is approximately £650m. To facilitate a phased and affordable approach to reducing numbers, a joint strategy to prioritising improvement of Unsatisfactory CSOs using clearly defined criteria was agreed in 2020 between SEPA and Scottish Water to inform Scottish Water's forward investment plans.

Following investigation, all Unsatisfactory CSOs are classified using criteria of Very High, High, Medium or Low priority for resolution.

What notifications are given to the public about a spill?

We do not currently have, or participate in, a spill alert notification system. Storm and emergency overflows (CSOs/EOs) are licensed by the Scottish Environment Protection Agency (SEPA) to discharge to the water environment under the controlled activities regulations (CAR). Licences contain conditions set by SEPA to protect the environment and include overflow settings, event recording and reporting requirements.

Licenses do not require permanent spill event monitors to be installed on all overflows. A number of Scottish Water CSOs and EOs have licence requirements for permanent spill event duration monitoring and of these a small subset require annual reporting of spill events to SEPA. However, SEPA can request additional spill event information from Scottish Water as required.

There is also a separate reporting process to SEPA for environmental pollution incidents. These are events where a watercourse is polluted due to a Scottish Water asset and Scottish Water has a regulatory obligation to report pollution incidents to SEPA. There are varying categories for these incidents, depending on the potential environmental impact.

What else are we doing?

Scottish Water has built and maintained a large number of network models which are used to predict the level of spill and any potential impact on the water environment.

What is our strategy?

We expect the number of Unsatisfactory CSOs to progressively increase as climate change leads to more frequent and intense storms. It will be neither effective, nor in some cases feasible, for Scottish Water to continue to build bigger pipes and storage tanks for combined sewer flows under the ground.

We will continue to investigate the impact of CSOs and prioritise investment where the need is greatest.

How Scottish Water's approach to differs from English and Welsh companies

In England & Wales, the SOAF (Storm Overflow Assessment Framework) uses data (spill frequency / discharge volumes) from recently installed EDMs to set out next steps for investigation and improvement. The SOAF next steps typically describe the study activities that we have already undertaken and are described above in 'Environmental Studies'

English and Welsh companies have spill data from EDMs but not always the intelligence behind why the asset is spilling or whether it causing an environmental impact.

English and Welsh companies were funded for a wide scale roll out of EDMs, but this was not a requirement for Scottish Water's investment period 2015 – 2021 as we were studying our CSOs through our Environmental Studies Programme.

We will use the intelligence gathered through our study programme to determine which catchments require additional monitoring as a priority.

River Basin Management Plan 3

The river basin management plan (RBMP) sets out how Scottish Government, SEPA and other responsible authorities and partners work together to protect and improve the water environment in Scotland. The plan aims both to prevent deterioration and to improve the quality of the water environment to the 'good status' condition, at least. The plan is prepared by SEPA and approved by Scottish ministers on a 6 year cycle.

Scottish Water wastewater assets have the ability to impact on the water quality metric described below with other SW operations impacting water resources and fish migration. 87% of waterbodies are classified as good or better for water quality and there is no outstanding work required by Scottish Water or third parties to achieve the 2021 objective.

		Existing Licence Standards														Target Standards (Study Outputs)											
WwTW Name	Owner	CAR Standards (instantaneous, 95%ile)												UWWTD (composite)						CAR Standards							
		BOD (mg/l)		Amm N (mg/l)		SS (mg/l)	pH	Total Iron (mg/l)	Total P (mg/l)	Fluoride (mg/l)		Dissolved Copper (µg/l)		Dissolved Al (mg/l)	Non-ionic detergents (mg/l)		Anionic detergents (mg/l)		BOD (mg/l)			COD (mg/l)			RP *** (mg/l)	BOD (mg/l)	Amm N (mg/l)
		Lower	Upper	Lower	Upper			(AMC)	(AMC)	Lower	Upper	Lower	Upper		Lower	Upper	Lower	Upper	Lower	Upper	% Reduction	Lower	Upper	% Reduction			
Fauldhouse	SW	15	50	4	16	100	5 to 9											25	50	Y	125	250	Y	0.1	7.5	1	
Harthill	SW	7	28	3	12	100		2	2									25	50	Y	125	250	Y	0.1			
Linburn	SW	20	56	5	20	100				15	30	200	400					25	50	Y	125	250	Y	0.1			
Livingston	SW	20	56	2	8	100	5 to 9							0.3	0.6			25	50	Y	125	250	Y	0.1			
Winchburgh	SW	11	44	3.2	12.8	100												25	50	Y	125	250	Y	0.1			
Blackburn	PFI	10	40	2	8	100		2	0.5									25	50	Y	125	250	Y	0.1		0.9	
East Calder	PFI	15	50	2	8	100		2	0.5									25	50	Y	125	250	Y	0.1			
Newbridge	PFI	15	50	7	27	100			0.5				1					25	50	Y	125	250	Y	0.1			
Whitburn	PFI	10	40	1	4	100		2	0.5									25	50	Y	125	250	Y	0.1			

**Note: SW may not hold copies of the most up-to-date PFI licences. The Discharge Limits listed above may no longer be correct.

***Note: target standards for RP are annual averages

The following are questions that have been raised by local community groups regarding the River Almond in the East Calder area. The answers are a combination of information from Scottish Water, SEPA and other agencies:

1. Do all the current CAR licenses along the River Almond fully comply with the Water Framework and Urban Wastewater Treatment Directive? SW – possibly answered before under FOI.

Urban Wastewater Treatment Directive requirements as transposed into the Urban Wastewater Treatment (Scotland) Regulations 1994 are set out within current licences. However, some improvement measures set out within RBMP3 (River Basin Management Plan 3rd Cycle) which are required to meet environmental standards the Water Framework Directive have not yet been captured within current licences. SEPA has made it clear that these RBMP3 improvements are required prior to 2027.

2. SEPA's river monitoring strategy (and what it classifies as a "pollutant") appears to date back to 1998 – is this adequate to protect Scottish Water's environment and human health from pollution?

SEPA and its predecessor organisations have been monitoring the quality of Scotland's water environment for many years. In 2007, the water monitoring programme was expanded significantly to meet the requirements of the Water Framework Directive (WFD). This requires a broader, more holistic approach to monitoring and classifying Scotland's aquatic environment. In particular, the Directive, and the associated River Basin Management Planning process, aim to protect and improve water bodies to meet targets for ecological condition, as well as water chemistry standards. The environmental standards that we monitor against are set by Scottish Government in the form of a direction to SEPA.

SEPA's monitoring networks were designed following the detailed EU guidance required for the WFD, which remain the foundation of our water quality monitoring today. Our surveillance network of long-term monitoring sites is geographically distributed across Scotland and is designed to reflect the range of natural conditions and man-made pressures found across the country. A wide suite of chemical, biological and physical parameters are monitored at these sites to provide a full picture of environmental quality. Risk based monitoring is also an important part of SEPA's water quality assessment. This is targeted at areas of the water environment which are known to be at risk of being impacted by specific pressures and focusses effort on the elements which are most likely to be affected by the specific pressure being assessed. For example, in areas where eutrophication is likely, we would focus on chemicals most associated with nutrient enrichment, and the algae and invertebrate species which are most sensitive to these pressures. Finally, we also carry out reactive monitoring, for example to assess the impact of unplanned discharges and pollution events. Our assessment of pollution events in the water environment usually involves chemical and biological assessment.

3. Is there a long-term aspiration to eliminate or significantly reduce the number of CSOs? Could SEPA agree a long-term target with Scottish Water to address this?

At previous River Almond Improvement Group meetings and in other correspondence, we have outlined the plans for improving the monitoring and visibility of CSO performance and reducing the impact of CSOs on water quality and on sewage related debris (SRD) in the environment.

Combined sewer overflows are an integral part of most of the sewer networks in Scotland and in the wider UK, ensuring that sewers do not back up and flood homes, streets and sewage works during heavy rainfall. However, these spills should not cause significant environmental harm

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

In response to this challenge, Scottish Water published the Urban Waters Routemap in Dec 2021-
[Urban Water Routemap - Scottish Water](#)

The route map sets out work which Scottish Water will take forward to address environmental impacts from CSOs, increase monitoring and public transparency and reduce spills in the long term.

Targets for reducing spills from CSOs are currently set only where environmental impacts have been confirmed.

4. In relation to the River Almond: will the frequency and volumes of combined sewage being discharged into the river reduce by 2027? If so, by how much?

There are 5 CSOs where spills are causing impacts on water quality and these have been included in the River Basin Management Plan for improvement by 2027. We expect Scottish Water to identify the most sustainable solutions to reduce spills in these locations. We will ensure that solution design is complete by 2024 at which point will be able to confirm the expected reduction in spills.

Where CSOs are identified as causing significant litter, then SEPA has asked Scottish Water to make improvements. Solutions for addressing litter may include a reduction in spills and/or improved screening.

Following discussions with SEPA, Scottish Water published a [prioritisation method](#) for sewer overflows in Scotland in May 2022. Based on extensive ground survey and modelling studies of environmental impact, Scottish Water also published a [list of 108 overflows](#), which are considered high priority and are currently being progressed for improvement.

During 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. We highlighted the need for a step change in our efforts to tackle the most significant environmental impacts as soon as possible and to take a One Planet Prosperity approach to improving our urban waters for the long term. This includes progressively reducing sewer spills through a step change in blue green infrastructure across out towns and cities.

5. Will the public see less sewage-related debris (SRD) in the river, along its banks and beaches?

One of the aims of the range of strategies, policies, plans and work outlined in this document is to help reduce the likelihood of SR in rivers.

In addition to this our customers can also play a huge part in preventing debris in rivers and on beaches. Our new national campaign 'Nature Calls' urges customers not to flush wet wipes (and other items) down the toilet and we are calling for a complete ban on the sale of wet wipes containing plastic - [Nature Calls - Scottish Water](#)

6. Will remedial clean-up action be undertaken proactively by Scottish Water and Veolia following combined sewage spills?

Scottish Water and our partners (including Veolia) will always attend to clean up Sewage Related Debris (SRD) following an overflow operation. If any members of the public see SRD then they can report directly to Scottish Water via our 24/7 helpline – 0800 0778778 or our online portal.

Alternatively SEPA advise that any pollution can be reported to their hotline **0800 80 70 60** or through our online tool ([Report Environmental Events to SEPA](#)). SEPA aims to respond within 24 hours.

7. Will the CSO / SSO discharge data for the Almond be shared publicly in real-time? When will this be available to the public? Is there anything stopping this being done currently with spills from the WWTWs?

As outlined about, Scottish Water's urban waters routemap will give us improved data from monitors installed at CSOs, some of which will be on the River Almond. We aim to have information from SW monitors available in real time by 2024.

We are still looking at how this information will be shared and communicated

8. Can the public safely swim in the River Almond? If so, when is it safe for the public to swim in the river?

Answer provided by Public Health Scotland

Public Health Scotland has not produced public health guidance relating to wild swimming. However, we are aware of the work that SEPA carries out in relation to designated bathing waters in Scotland, as well as guidance produced by the Environment Agency and Public Health England (now UK Health Security Agency) relating to open water swimming.

The UK HSA advice is also applicable to open water swimming in Scotland. As PHS remobilises its services following the COVID-19 response, we will consider priority work areas relating to Environmental Public Health, and this topic will be included within these considerations alongside other priority areas. Queries regarding specific bathing water applications or incidents are managed at local level by either the local authority or the local Health Protection Team.

9. Could Scottish Water and Veolia share the number of sewage spills occurring from their wastewater treatment works along the Almond on a monthly basis?

In terms of other reporting data, our planned investment in monitors will help provide more real time information in the future which isn't available at the moment. Veolia do provide reports to SEPA on performance of assets and we could provide the annual report, but this is retrospective.

We will have this available in real time by December 2024

10. Other than adhering to the 3Ps, can the public help to reduce the amount of CSOs being discharged into the River Almond?

Better uptake of the 3Ps (Nature Calls) amongst the public would be a huge step forward as many blockages and hence spills are caused by inappropriately flushed items. Consumer pressure on manufacturers and retailers who produce personal hygiene products would also lead to truly flushable products and hence less spills.

Widespread uptake of water butts and a reduction in impermeable surfaces (household driveways) at domestic and commercial properties will slow down rainfall run off and attenuate flows in the sewer resulting in less sewer spills.

11. Could SEPA please provide the results of their water quality monitoring data from last summer which covered the Bathing Waters application?

This data has been provided to the group, we are happy to make it available to anyone who hasn't already received a copy. For clarity, the panel did not consider water quality results in coming to their recommendation on the Almond.

12. Would Scottish Water consider incentivising the public to manage rainwater within their properties curtilage by providing a water bill reduction for those who manage all, if not a proportion of surface water runoff?

Scottish Water have been engaging with customers through a range of events and communications in 2022 about 'Saving Water' and being more water efficient. This includes looking at what customers can do around the home and garden to save water with the added benefit of surface water management. More info here – [Water Saving Advice - Scottish Water](#)
In terms of how customers are billed, this is a matter for Scottish Government water charging policy.

13. As identified West Lothian Council's Surface Water Management Plan, could funds for the Lighthouse project be used to provide water butts or to undertake retrofit SuDS projects the East Calder WwTW drainage catchment?

Scottish Water and our partners will look at a range of options, solutions and interventions for managing surface water in the East Calder catchment.

14. Is West Lothian Council being sufficiently funded to undertake the proposed work in their Surface Water Management Plan?

Directed at WLC

15. How effective has the Shieldhall Strategic Tunnel been in addressing flood risk and improving water quality of the Clyde? How much have CSO spills reduced by pre-and post construction and operation? Has water quality improved?

The £100 million Shieldhall Tunnel has undoubtedly reduced the impacts of flooding in areas of the southside of Glasgow as it was designed to do. It eliminated a number of very polluting CSOs from small tributaries of the River Clyde by providing large volumes of storage and attenuation for storm sewage flows. While the benefits to water quality from the Tunnel will not be evident in the River Clyde itself, the small tributaries will have improved now many of the CSO discharges have been removed. We do not hold the information on pre- and post-construction spill volume reduction.

16. How is Scottish Water proactively helping to deliver The Scottish Government's Water-resilient places - surface water management and blue-green infrastructure: policy framework?

Scottish Water have supported Scottish Government throughout the development of the recommendations set out in the Water Resilient Places policy framework and are playing a leading role in setting the direction of the national advisory group for surface water management, along with local authority, SEPA and Scottish Government representatives.

The WRP framework recognised that the activities of many parties are needed, due to the varying responsibilities for managing surface water, this collaboration across organisations and residents will be essential to ensure that everybody plays their role to effectively manage surface water risks, whilst delivering great blue-green places to live that are adaptable to the future.

Scottish Water are working with local authorities and SEPA to try and develop a replicable framework for how the WRP recommendations can be delivered in practice across Scotland from both a planning and implementation perspective. This includes a number of exemplar projects underway to plan at city, neighbourhood and street scale, and use these to inform how all partners embed what we learn into planning, regeneration and infrastructure projects in the future.

17. Is the UK Government and The Scottish Government sufficiently funding Scottish Water, SEPA and local authorities to reduce the impacts of surface water flooding AND improve water quality of receiving waters, particularly given the impacts of climate change?

- Prioritising funding to do the right things first.
- Increased Capital Investment spending from £650m per year to £1Bn to help Scottish Water invest in aging infrastructure, meet the challenges of climate change and protect the environment.

No comment from SEPA

18. Could SEPA please provide evidence of their recent update at the stakeholder group meeting and confirm their plans for licenses and the River Almond website?

The River Almond Compliance Audit is underway, with the team gathering information and undertaking initial investigations. All WWTWs will have audit inspections this year and we will use that information to evaluate the efficacy of the existing permits and review or update permits where issues are identified. Further information on the work will be available later in the year.

SEPA will be reviewing the Scottish Water licences during the third RBMP cycle to reflect the improvements required at WWTWs and CSOs to deliver the water quality objectives.

The River Almond website hub is still in progress but has been delayed due to the development of our new beta website, which the hub will form part of. Further updates will be provided as soon as it is possible to do so. In the interim, Scottish Water will provide a platform where River Almond information can be shared on their website.

19. Could Veolia please provide evidence of their recent update at the stakeholder group meeting including the carbon costings?

- This has already been shared in April meeting 2022

From: [REDACTED]
To: [REDACTED]
Cc: [REDACTED]
Subject: IUW Route Map - Update Tracker September 2022
Date: 28 September 2022 12:08:44
Attachments: [IUW Dashboard - Progress Tracker.xlsx](#)

Hi all,

Please find attached update on IUW Route Map activities over the last month (2022 Activity – September tab).

There is lots more going on than space available in this spreadsheet so if you are looking for any more specifics, please let me know and I can get hold of a more detailed briefing.

Regards,

[REDACTED]

[REDACTED]

Strategic Customer Service Planning

Tel: [REDACTED]

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SW Internal
Personal

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Scottish Water

www.scottishwater.co.uk

From: [REDACTED]
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Improving Urban Waters Route Map - Progress Tracker Dashboard
Date: 22 November 2022 12:58:26

Hi [REDACTED]

The UID list has 108 high priorities for investment ([Prioritisation of Sewer Overflows in Scotland - Scottish Water](#))

27 of these were WQ driven but 3 of these WQ needs have been removed through discussion with SEPA (Levenmouth, Beardmore St CSO and East Mains SWO all removed). This leaves 24 WQ UIDs.

81 of the 108 have SRD drivers. One of these has been improved through operational interventions (leaving 80 to be promoted).

Only 2 of the 104 (24+80) UIDs remaining have yet to be promoted. These are in Carluke and Dunnswood and will be promoted ASAP.

SW Internal
Personal

From: [REDACTED]@gov.scot>
Sent: 22 November 2022 08:48
To: [REDACTED]@SCOTTISHWATER.CO.UK>
Cc: [REDACTED]@scottishwater.co.uk>; [REDACTED]
[REDACTED]@scottishwater.co.uk>; [REDACTED]@gov.scot>
Subject: RE: Improving Urban Waters Route Map - Progress Tracker Dashboard

****EXTERNAL MAIL** - Think Before You Click**

Hi [REDACTED]

Can you please check the lines below for inclusion in a Ministerial Reply to Cllr Willie Rennie – I've updated where I can but can't quite square the solutions in development figures (104/107) with the October update so could you please check it is accurate and let me know any changes asap?

[REDACTED]

As of end-October 2022 Scottish Water is in the process of developing solutions for 104 (of

107 identified) high priority unsatisfactory Combined Sewer Overflows (CSOs) due to their impact on water quality or sewage related debris and is continuing to assess the planning work required for the remainder. Following recent studies there are now 24 high priority unsatisfactory Combined Sewer Overflows (CSOs) included as improvement measures in the third River Basin Management Plan and Scottish Water is also developing solutions for 39 Wastewater Treatment works which are also included as improvement measures.

[REDACTED] | Water Policy and DECC Operations Division |
Scottish Government | 3F South | Victoria Quay | Edinburgh | EH6 6QQ | [REDACTED]
[REDACTED]

I am currently working from home, my normal working hours are 07:30-17:00

From: [REDACTED] <[\[REDACTED\]@SCOTTISHWATER.CO.UK](mailto:[REDACTED]@SCOTTISHWATER.CO.UK)>
Sent: 02 November 2022 10:16
To: [REDACTED] <[\[REDACTED\]@gov.scot](mailto:[REDACTED]@gov.scot)>; [REDACTED] <[\[REDACTED\]@gov.scot](mailto:[REDACTED]@gov.scot)>
Cc: [REDACTED] <[\[REDACTED\]@scottishwater.co.uk](mailto:[REDACTED]@scottishwater.co.uk)>; [REDACTED]
[REDACTED] <[\[REDACTED\]@SCOTTISHWATER.CO.UK](mailto:[REDACTED]@SCOTTISHWATER.CO.UK)>; [REDACTED]
[REDACTED] <[\[REDACTED\]@scottishwater.co.uk](mailto:[REDACTED]@scottishwater.co.uk)>; [REDACTED] <[\[REDACTED\]@sepa.org.uk](mailto:[REDACTED]@sepa.org.uk)>
Subject: Improving Urban Waters Route Map - Progress Tracker Dashboard

[REDACTED]

Please find attached the October dashboard update on progress against the 2022 IUW Route Map commitments (see tab '2022 Activity – Oct'). There is lots happening.

Let me know if you've any questions.

Over the next 2 months, I will look to develop a report to show progress over the first year and highlighting priorities for year 2 and beyond with help from [REDACTED] at SEPA. This will be at a higher level with clear links back to the route map document. We'll look to publish this on our website. I'm very aware that the Minister made reference to this report in her closing statements in last week's Parliamentary debate.

Regards

[REDACTED]

[REDACTED]

Strategic Customer Service Planning

Tel: [REDACTED]
Email: [REDACTED] <[\[REDACTED\]@scottishwater.co.uk](mailto:[REDACTED]@scottishwater.co.uk)>

SW Internal
Personal

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Scottish Water

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From: [REDACTED]
To: [REDACTED]
Subject: FW: Improving urban waters
Date: 09 December 2022 08:44:00
Attachments: [IUW Dashboard - Progress Tracker.xlsx](#)

From: [REDACTED]@SCOTTISHWATER.CO.UK>
Sent: 23 August 2022 15:58
To: [REDACTED]@gov.scot>
Cc: [REDACTED]@gov.scot>; [REDACTED]@scottishwater.co.uk>; [REDACTED]@scottishwater.co.uk>
Subject: RE: Improving urban waters

Hi [REDACTED]

We continue to update progress on a monthly basis. I was looking to update IPPG / SG and the website on an annual basis (monthly seems like overkill) but I'm happy to send you an update whenever you need something.

You can see the detail of where we are on the '2022 Activity (Aug)' tab.

On your standard line, I'd suggest the following:

- As of August 2022, Scottish Water has committed 90 (of 108 identified) high priority unsatisfactory Combined Sewer Overflows (CSOs) into the solutions development phase due to their impact on water quality or sewage related debris. It is continuing to assess the planning work required for the remaining 18.
- As of May 2022, Scottish Water has identified the first programme of around 250 Combined Sewer Overflows (CSO) monitors that will be delivered to meet its commitment to install 1,000 new monitors before 2024. Work is underway to identify the next priorities based upon predicted spill frequency, potential impacts and receiving water amenity with further programmes expected by December 2024.

[REDACTED]
SW Internal
Personal

From: [REDACTED]@gov.scot>
Sent: 23 August 2022 15:16
To: [REDACTED]@SCOTTISHWATER.CO.UK>
Subject: RE: Improving urban waters

Hi [REDACTED]

Hope you are well.

Just checking when you expect the next update to the IUW routemap. Will these be published on SW's website?

We've also been asked for an update on our standard lines, I don't know if you can provide that?

�. As of May 2022, Scottish Water has committed 71(of 108 identified) high priority

unsatisfactory Combined Sewer Overflows (CSO) into the solutions development phase due to their impact on water quality or sewage related debris. It is assessing the planning work required for the remaining 37.

�. As of May 2022, Scottish Water has identified the first programme of around 250 Combined Sewer Overflows (CSO) monitors that will be delivered to meet its commitment to install 1,000 new monitors before 2024.

Thanks,

[REDACTED]
Policy Officer
Water Industry Team
Scottish Government
Office: [REDACTED]
Mobile: [REDACTED]

From: [REDACTED] <[\[REDACTED\]@SCOTTISHWATER.CO.UK](mailto:[REDACTED]@SCOTTISHWATER.CO.UK)>
Sent: 18 July 2022 15:59
To: [REDACTED] <[\[REDACTED\]@gov.scot](mailto:[REDACTED]@gov.scot)>; [REDACTED] <[\[REDACTED\]@scottishwater.co.uk](mailto:[REDACTED]@scottishwater.co.uk)>
Cc: Public Affairs <Public.Affairs@scottishwater.co.uk>; [REDACTED] <[\[REDACTED\]@SCOTTISHWATER.CO.UK](mailto:[REDACTED]@SCOTTISHWATER.CO.UK)>; [REDACTED] <[\[REDACTED\]@scottishwater.co.uk](mailto:[REDACTED]@scottishwater.co.uk)>
Subject: RE: Ministerial meeting with River Almond Action Group

Hi [REDACTED]

We produced an update last week. We plan to update this monthly.

Please find attached dashboard which shows commitments on tab 1 and an update against 2022 activities on tab 2.

Andy questions, please get in touch.

[REDACTED]
SW Internal
Personal

From: [REDACTED] <[\[REDACTED\]@gov.scot](mailto:[REDACTED]@gov.scot)> [REDACTED] <[\[REDACTED\]@gov.scot](mailto:[REDACTED]@gov.scot)>
Sent: 18 July 2022 15:03
To: [REDACTED] <[\[REDACTED\]@scottishwater.co.uk](mailto:[REDACTED]@scottishwater.co.uk)>
Cc: Public Affairs <Public.Affairs@scottishwater.co.uk>; [REDACTED] <[\[REDACTED\]@SCOTTISHWATER.CO.UK](mailto:[REDACTED]@SCOTTISHWATER.CO.UK)>; [REDACTED] <[\[REDACTED\]@SCOTTISHWATER.CO.UK](mailto:[REDACTED]@SCOTTISHWATER.CO.UK)>
Subject: RE: Ministerial meeting with River Almond Action Group

Thanks [REDACTED]

Copying [REDACTED] and [REDACTED] for awareness.

[REDACTED] are you able to confirm when we'd expect the next update to the urban waters routemap, and how frequent the updates will be?

Thanks,

From: [REDACTED]
To: [REDACTED]
Subject: Media statement - Craigellachie, River Spey - 27 July 2022
Date: 09 December 2022 08:49:06

From: [REDACTED]@SCOTTISHWATER.CO.UK>
Sent: 27 July 2022 12:21
To: [REDACTED]@gov.scot>
Cc: [REDACTED]@scottishwater.co.uk>
Subject: RE: SEPA statement - Craigellachie, River Spey

Hi [REDACTED]

I had some further discussion with our Operational colleagues and can confirm that the site operator has had a look and has found no issue at the site or at the CSO beside the works.

The operator has mentioned that the river Spey is very low at the moment and was probably even lower last week, with the low level the outfall pipe from the treatment works would possibly have been visible and with the Spey being very clear any effluent from the works would have been visible at the outfall pipe.

All samples from the site have been below EAL levels so no reason to suspect a problem at the works.

Let me know if you need any more information to close this query.

Kind regards,

[REDACTED]

[REDACTED]
[REDACTED]
M: [REDACTED] | **E:** [REDACTED]@scottishwater.co.uk
Scottish Water, Corporate Affairs

SW Internal
General

From: [REDACTED]
Sent: 27 July 2022 11:06
To: [REDACTED]@gov.scot
Cc: [REDACTED]@scottishwater.co.uk>
Subject: FW: SEPA statement - Craigellachie, River Spey

Hi [REDACTED]

Please see below from SEPA re a P&J enquiry about possible pollution on the River Spey at Craigellachie.

Hope this is helpful.

Kind regards,

[Redacted]

SW Internal

General

[Redacted]

[Redacted]

[Redacted]

[Redacted]

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[REDACTED]

From: [REDACTED]
To: [REDACTED]
Cc: [Public Affairs](#)
Subject: FW: Newsdirect Daily Report: Wednesday 21 September
Date: 21 September 2022 14:31:51
Attachments: [image001.jpg](#)

Hi,

I see there is another set of questions in today from Jackie Baillie and if you need anything from us please shout.

With regards to the Mark Ruskell question, please see our draft answer which I hope is helpful.

Thanks

[REDACTED]

Question:

- Whether it will list the 1,000 Combined Sewer Overflows (CSOs) that Scottish Water announced it will be monitoring as part of its Improving Urban Waters Route Map, and where monitoring data from these CSOs will be published

Proposed Answer

- Scottish Water is currently prioritising the CSOs which it intends to monitor as part of its Improving Urban Waters Route Map. Scottish Water will consider proximity to designated water bodies (for example Bathing Waters), high amenity areas, predicted spill frequency and where environmental problems have already been identified. Scottish Water expects to complete this activity before the end of this year and will publish these locations on its website.
- Scottish Water has made commitments in its route map to publishing CSO monitoring data over the next two years. By the end of this year, Scottish Water will look to publish data already reported to SEPA on its website. Additional monitoring data will be made available as new monitors are installed.

[REDACTED]

Scottish Water

[REDACTED]

SW Public
General

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[Redacted]

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[Redacted]

[Redacted]

[Redacted]



[Redacted]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

From: [REDACTED]
To: [REDACTED] [Public Affairs](#)
Cc: [REDACTED]
Subject: RE: Urgent - PQs
Date: 15 September 2022 12:03:00

Hi [REDACTED]

See below in red. Let me know if this is sufficient.

[REDACTED]

SW Internal
Personal

From: [REDACTED]@gov.scot>
Sent: 15 September 2022 10:03
To: Public Affairs <Public.Affairs@scottishwater.co.uk>
Cc: [REDACTED]@SCOTTISHWATER.CO.UK>
Subject: RE: Urgent - PQs
Importance: High

****EXTERNAL MAIL**** - Think Before You Click

Morning all,

Do you have the answers to these questions? We need to submit them ASAP.

Thanks,

[REDACTED]
Policy Officer
Water Industry Team
Scottish Government
Office: [REDACTED]
Mobile: [REDACTED]

From: [REDACTED]
Sent: 07 September 2022 12:19
To: Public Affairs (Public.Affairs@scottishwater.co.uk) <Public.Affairs@scottishwater.co.uk>
Cc: [REDACTED]@scottishwater.co.uk>
Subject: FW: PQs

Hi [REDACTED]

We have a couple of similar PQs on the go:

- MSP: Mercedes Villalba

Due at MPO: 14/09/2022

- Question Text: To ask the Scottish Government what recent discussions it has had with Scottish Water regarding its progress towards installing spill monitors on all sewer overflows that discharge to designated bathing waters by the end of 2024.

The first programme of spill monitor installation has been focussed on proximity to bathing waters, particularly those that are at risk of failing to meet minimum water quality standards. In line with Scottish Water's Improving Urban Waters Route Map, it aims to install 1,000 new monitors by 2024. Scottish Water is continuing to define the priority locations for installation of monitors and it is expected that around 400 will be required to monitor overflows within 2km of bathing waters.

Scottish Water is working on developing a specification for the monitors by reviewing lessons learned from roll out in England and Wales and by consulting with their supply chain. Scottish Water is looking to leverage maximum value from the monitors it installs so that overall intelligence in how the sewerage system is operating can be improved.

S6W-10718 Mark Ruskell: To ask the Scottish Government when spill data for monitored combined sewer overflows controlled by Scottish Water will be published.

Scottish Water's Improving Urban Waters Rout Map published in December 2021 sets out clear timescales for the publication of spill data from monitored combined sewer overflows. The route map is published on Scottish Water's website at [Urban Water Routemap - Scottish Water](#).

Specific commitments are:

Increase reporting of spill data from monitored CSOs:

- by December 2022, for monitored CSOs where data are already currently reported to SEPA, publish spill data annually, identifying the main reason for the spills where possible (e.g. heavy rain, blockages or a flow issue at the treatment works). [note circa 153 monitoring locations]
- by December 2023, publish spill data annually for all other monitored CSOs. [circa 200 additional monitoring locations but will increase in line with new monitors delivered through a commitment made in this same route map]
- by December 2024, publish near real-time spill data for all monitored CSOs.

Would you be able to help provide answers? I'm aware from discussions with [REDACTED] that the intention is to provide annual updates to the urban waters routemap, and we can supply the link to SW's website. The most recent info I have in relation to monitoring is:

- Scottish Water has identified the first programme of around 250 Combined Sewer Overflows (CSO) monitors that will be delivered to meet its commitment to install 1,000 new monitors before 2024.
- Work is underway to identify the next priorities based upon predicted spill frequency, potential impacts and receiving water amenity with further programmes expected by December 2024. I'm OK with these words. We will have clarity on the next priority locations by the end of October 2022 and a full prioritised list by the end of the year. This will set out around 1,000 locations and Scottish Water will publish this and the methodology behind the prioritisation. Scottish Water is working on developing a specification for the monitors by reviewing lessons learned from roll out in England and

Wales and by consulting with their supply chain. Scottish Water is looking to leverage maximum value from the monitors it installs so that overall intelligence in how the sewerage system is operating can be improved.

Our deadline is 13 September.

Thanks,

[Redacted Name]

Policy Officer

Water Industry Team

Scottish Government

Office: [Redacted]

Mobile: [Redacted]

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www.scottishwater.co.uk

From: [REDACTED]
To: [REDACTED]
Subject: RE: Loch Leven: Milnathort and Kinross WwTWs
Date: 16 January 2023 15:02:55
Attachments: [image001.jpg](#)
[image002.jpg](#)
[image003.jpg](#)
[RE Loch Leven Media.msg](#)

Hi [REDACTED]

Apologies, we've had a bit of an influx of queries and I had wanted to speak to [REDACTED] as he attended a community meeting just before Christmas. I think there may be further meetings planned, here.

Meantime, it looks like [REDACTED] has been in communication with [REDACTED] about this.

Do you think that you need more information?

Many thanks

[REDACTED]

[REDACTED]

[REDACTED]

Scottish Water

Tel: [REDACTED]

Working days: Monday, Tuesday, Thursday

SW Private
Personal

From: [REDACTED]@gov.scot>

Sent: 09 January 2023 10:58

To: Public Affairs <Public.Affairs@scottishwater.co.uk>

Subject: FW: Loch Leven: Milnathort and Kinross WwTWs

****EXTERNAL MAIL** - Think Before You Click**

Morning all,

Hope you all had a good festive break!

Please see the request below from colleagues. Are you able to provide any info on historical or current investment at Milnathort and Kinross WwTW?

I don't think we've received the correspondence yet, but no doubt on its way!

Thanks,

[REDACTED]
Policy Officer
Water Industry Team
Scottish Government
Office [REDACTED]
Mobile: [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
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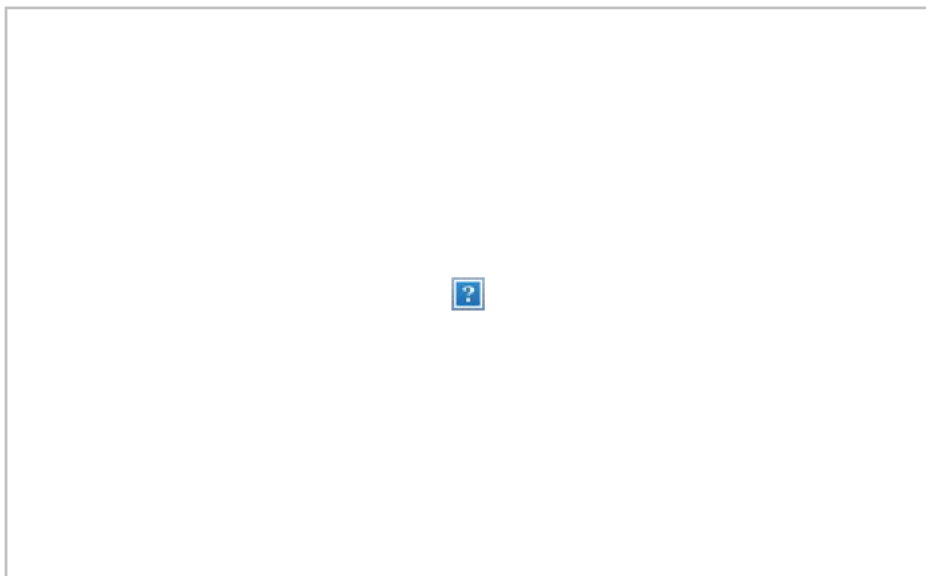
[REDACTED]

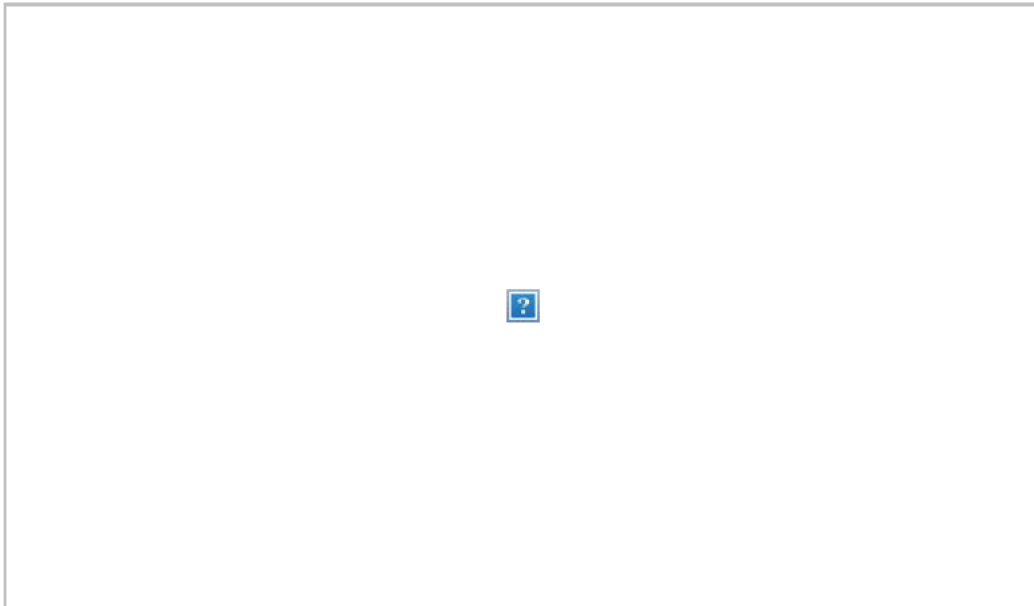
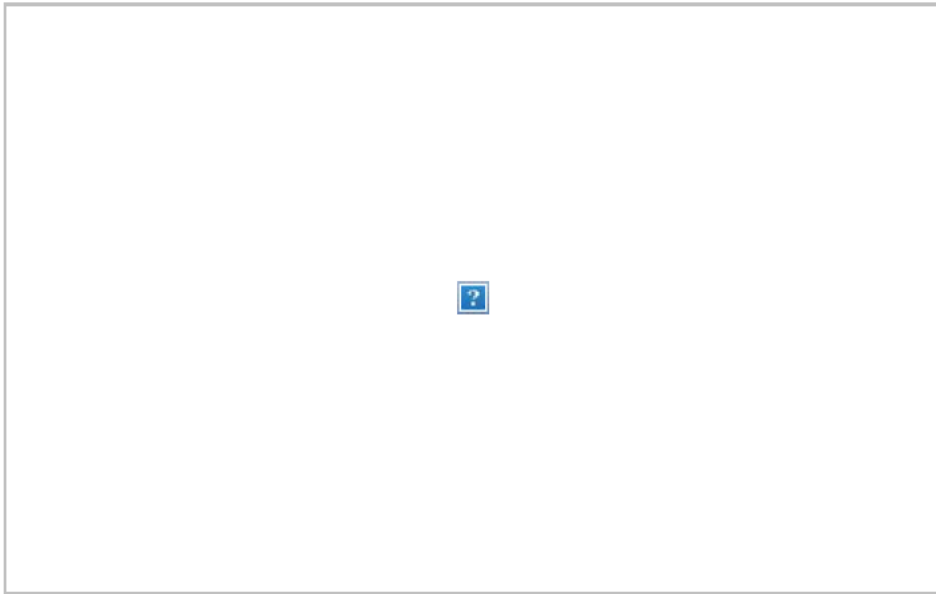
[REDACTED]

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[REDACTED]





[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

From: [REDACTED]
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Loch Leven Media
Date: 13 January 2023 14:36:42

[REDACTED]

Thanks for sending this information summarising the main points of the current situation at Loch Leven.

[REDACTED] as mentioned [REDACTED] is liaising with the stakeholder group as part of the ongoing management and information sharing between the various parties involved.

I have copied in [REDACTED] as I'm aware there was another email enquiry in circulation looking for similar information.

If you need anything further please shout.

Thanks

[REDACTED]

[REDACTED]

Scottish Water

[REDACTED]

SW Internal
Personal

From: [REDACTED]@SCOTTISHWATER.CO.UK>
Sent: 13 January 2023 08:54
To: [REDACTED]@gov.scot>; [REDACTED]
[REDACTED]@scottishwater.co.uk>
Cc: [REDACTED]@SCOTTISHWATER.CO.UK>
Subject: RE: Loch Leven Media

Hi [REDACTED]

Thanks for the information. [REDACTED]'s team have been involved in a lot of discussion with stakeholders at Loch Leven culminating in a meeting in early December.

There is lots in your email but our current position is that we have two WwTW that perform to very high standards and remove the majority of phosphorus loading from the public sewerage system. In dry weather c 90% of P will be removed through dedicated P-removal plant installed in the mid 90's at Milnathort and, we think, late 90's at Kinross (see timeline attached).

In wet weather, spills will occur in the network and at the WwTW. We don't have any detail on the quality of these discharges but modelling we have done in the past has used industry standard assumptions for SRP loading rates from CSOs. These assumed rates are around the same as for treated sewage (ie the diluting nature of storm water reduces concentrations from dry weather concentrations) although, given volumes, loading from overflows in very wet weather will likely be higher than loading from the WwTWs in very wet weather. P loading in the public sewerage system is an absolute value – ie the loading from domestic and industrial processes is a fixed maximum – this doesn't increase with rainfall (ie like the agricultural contribution might) and only the balance of treated / overflow P loading will be impacted by wet weather events.

Reports have previously put the SW P loading element from CSOs and WwTWs at around 10% of the total loading to the loch with agriculture, private sewage treatment, birds and sediment demand all having a bigger impact. In these reports we have included our loading from CSOs and WwTWs.

We are limited in what more we can do to reduce our contribution (any more treatment or spill reduction would be capital and carbon heavy) and would likely be disproportionate in terms of the benefits realised. We will continue to work with SEPA and look to support where possible. We need to be looking to target where the best cost / benefit profile is in the improvements that could be made.

See also attached a list of the 7 WwTW and 5 CSO discharges that we have as discharging Loch Leven.

Please let me know if the improvement timeline information is sufficient for you or whether you need anything else.

██████

SW Internal
Personal

From: ██████████@gov.scot>

Sent: 11 January 2023 16:53

To: ██████████@scottishwater.co.uk>; ██████████
██████████@SCOTTISHWATER.CO.UK>

Subject: Loch Leven Media

****EXTERNAL MAIL** - Think Before You Click**

██████████

You may have seen there was quite a lot of media over the Christmas period about Loch Leven, algal blooms and storm overflows, see below. In particular, Perth and Kinross Council passed a motion just before Christmas requiring the council leader write to Ms McAllan to request the environment secretary ask SEPA to introduce a weight limit on the amount of phosphorus deposited into Loch Leven. They are also seeking “far tighter controls” to “stop Scottish Water depositing untreated sewage into Loch Leven and that all such overspill events are recorded and reported (see Daily Record 27 Dec).

3 Jan [Community speak out over Loch Leven sewage debacle \(thecourier.co.uk\)](http://thecourier.co.uk)

31 Dec [Bid for Loch Leven to become protected wild swimming hotspot | The Scotsman](#)

[Plans floated for Loch Leven to become protected wild swimming hotspot | The National](#)

[Green MSP calls for Scotland's first 'wild swimming hotspot' | HeraldScotland](#)

[Campaign to clean up Loch Leven as a protected wild swimming hotspot \(thecourier.co.uk\)](http://thecourier.co.uk)

27 Dec <https://www.dailyrecord.co.uk/news/local-news/perth-kinross-councillors-call-action-28821701>

22 Dec [Local council demands action over toxic 'bright green' Loch Leven | The National](#)

You'll be aware Loch Leven is designated as a nutrient sensitive area under the Urban Waste Water Treatment (Scotland) Regulations 1994 so both Milnathort and Kinross WwTWs have to meet much tighter total phosphorus standards. Can you identify the historical investments made at Milnathort and Kinross WwTWs to introduce phosphorus treatment and roughly when this was implemented? Any other useful information you may have in relation to improvements to Loch Leven discharges and infrastructure would also be useful.

For wider context, the Scottish Government sets out the phosphorus standards for lochs in Directions to SEPA based on an annual mean total phosphorus concentration ($\mu\text{g/l}$) and monitoring and assessment by SEPA against this standard indicates Loch Leven is poor. Hence, the RBMP SEPA Priority Catchment farm visits underway aiming to reduce rural diffuse pollution. SEPA uses these standards to model the impact from any sewage discharges to the loch so a weight limit is already in place.

The increase in algal blooms starting in 2018 is more likely due to higher loch temperatures in the summer recycling phosphorus stored in the Loch sediments as Loch Leven is a naturally eutrophic (nutrient-rich) loch, which sets it apart from other large lochs in Scotland. Climate change or land use change may also be causing the increase in phosphorus contribution from rural diffuse pollution.

The most recent 2017 [Loch Leven nutrient load and source apportionment study. Scottish Natural Heritage Commissioned Report No. 962](#) strongly indicates that since 1985 point source discharges (including Milnathort and Kinross storm overflows) have been significantly reduced and rural diffuse pollution remains the major contributing factor (see graphs below). The report did recommend further investigation of the Kinross WwTW contribution which I assume was undertaken.

The report is based on 2015 monitoring data so if rainfall has increased by 40% then it would be no surprise storm overflows may be spilling more frequently. As you know SEPA is working with you to investigate and assess current storm overflow contributions further. Obviously recording and reporting overspill events in itself isn't going to help understand the potential impacts from storm overflows and a much more comprehensive study would need to be undertaken.

Happy to discuss of course. If it were possible to dig out the information by the end of the week or sooner it would be greatly appreciated. There's no firm deadline but we need to be ready to respond to queries from the Minister which we are anticipating, or we will brief her first, so sooner is better...

[Redacted] | Water Policy and DECC
Operations Division | Scottish Government | 3F South | Victoria Quay |
Edinburgh | EH6 6QQ [Redacted]

I am currently working from home, my normal working hours are 07:30-17:00

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From: [REDACTED]
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: MiCase - SEWAGE AT ST ANDREWS.ACTION NEEDED
Date: 14 December 2022 12:29:41

Hi [REDACTED]

Thank you again for your enquiry.

I have discussed this with colleagues and can confirm that our assets are operating normally, per our license. We believe that the issues described are CSOs spilling in storm conditions as we have to spill via CSOs to alleviate pressure on the local network.

Similar to many other areas with combined systems, not much we can do operationally without either significant investment or removing the surface water.

In terms of the treatment works at St Andrews we use UV during bathing water season, as per our regulatory obligations. More information is available here:

[The Bathing Waters \(Scotland\) Regulations 2008 \(legislation.gov.uk\)](#)

[Bathing Waters: Homepage \(sepa.org.uk\)](#)

Proposed lines for response:

I would like to assure you that Scottish Water is committed to protecting Scotland's urban waters and will continue to work in partnership with the Scottish Government, SEPA, local authorities, customers and others to this end.

Water quality in Scotland is considerably higher than elsewhere in the UK and across much of Europe. Two thirds of our waters already meet good status and last year 99% of Scotland's bathing waters passed stringent environmental standards with more than ever reaching 'excellent' status. The bathing water at St Andrews (both East Sands and West Sands) was classified as 'Excellent' ([Bathing Waters : Summary of last season \(sepa.org.uk\)](#))

Over the past 20 years, Scottish Water has invested heavily to help deliver substantial improvements to Scotland's water environment. We take our environmental responsibilities extremely seriously and know that, despite these improvements, we have much more to do.

To complement a new action plan to protect and improve Scotland's water environment and to ensure that the country's rivers, beaches and urban waters are free from sewage related debris, Scottish Water published its urban waters route map in December 2021, announcing plans to invest up to half a billion pounds more in Scotland's waste water network.

This route map recognises the steps that we need to take in the face of increasingly extreme weather resulting from climate change and the impact that this has on an ageing sewer system.

The plans will enable us to target investment in improving our monitoring, reporting our performance and upgrading the worst performing CSOs. For more information on this please look at our website here - [Urban Water Routemap - Scottish Water](#)

I would stress however that Combined Sewer Overflows (CSOs) are an essential part of the sewer infrastructure and act as vital relief points for the sewer network to help prevent flooding at times of extreme rainfall. St Andrews, like many other parts of Fife and Scotland, has seen more frequent intense rainfall events in recent years as a consequence of our changing climate. CSOs ensure that when these events occur we minimise the potential for sewer flooding. There is more information on CSOs here - [CSO FAQs - Scottish Water](#)

East Sands Leisure centre

With regards to the mention about East Sands Leisure centre in the incoming correspondence, I understand that it is a private drainage issue and we have provided following lines before to a local councillor:

“Several years ago, upgrades were made at the pumping station that this site drains to as well as other assets in the area. Further to this, weekly inspections are carried out at the pumping station to ensure everything is operating as it should.

These upgrades and inspections resolved historic issues and since then we don't appear to have had further calls about problems here until Thursday 17th and Friday 18th November.

Following several inspections of these assets, we do not believe the pumping station or other pumping assets in the area are causing this problem. We think that this asset should have been passing forward the flow required to not cause the centre to back up.

A member of our sewer response team attended the site and found no immediate issues with the drains in the area but were not able to speak with someone at the centre at the time. However, the issue described could be due to a partial blockage in the system and I have asked one of the team to check the sewer line with a camera which will hopefully be completed this month.”

Nature calls campaign

Scottish Water launched its 'Nature Calls' campaign in February 2022. It is a three to five year commitment to a public engagement marketing campaign to encourage people to bin wipes and other bathroom and household detritus.

Alongside this, Scottish Water is calling for a ban on wipes made with plastic, a cause supported by Scottish Ministers and wider Scottish agencies.

Early indicators show positive impacts:

- 69% of people say they will think more carefully about what they flush down the toilet having seen the campaign - a growth of about half a million people in Scotland since Feb 2022.
- 72% are now aware of how to dispose of single use bathroom waste to protect the environment.
- Scottish Water's own Sewer Choke Volume data is seeing a reduction in blockages each month year on year.

I hope the above is helpful but let me know if you need any more information.

Regards

[Redacted]

[Redacted]

[Redacted]

M: [Redacted] | E: [Redacted] [@scottishwater.co.uk](mailto:[Redacted]@scottishwater.co.uk)

Scottish Water, Corporate Affairs

SW Public

General

From: [Redacted] [@gov.scot](mailto:[Redacted]@gov.scot)

Sent: 01 December 2022 09:40

To: Public Affairs <Public.Affairs@scottishwater.co.uk>

Subject: FW: MiCase - SEWAGE AT ST ANDREWS.ACTION NEEDED

Morning [Redacted]

Please see the email below.

Are you aware of any specific issues at this area for which you can provide lines?
Would you also be able to offer some standard lines on the nature calls
campaign?

The deadline to respond is 14 December.

Thanks,

[Redacted]

Policy Officer

Water Industry Team

Scottish Government

Office: [Redacted]

Mobile: [Redacted]

[Redacted]

[Redacted]

[Redacted]

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From: [REDACTED] on behalf of [Public Affairs](#)
To: [REDACTED]
Subject: FW: Scottish Govt - Wastewater capacity - Cupar North Development
Date: 04 March 2022 15:28:10

Hi [REDACTED]

Thank you again for your enquiry regarding Cupar North Development. We have now investigated the matter raised by [REDACTED] of the Eden Angling Association.

Following the assessment early in our 2015 - 2021 investment period of the Cupar Waste Water Treatment Works, referred to by [REDACTED] in his initial correspondence, a decision was taken to replace three of the inlet pumps at the site to remove the capacity constrain. This was completed in March 2018 and delivered 3,080PE (1400HU), and as a result, we believe there should be no issue with Part 4 capacity at Cupar.

In addition, a strategic look has been taken to investigate the network impact of regional growth, and work towards prospective resolutions for any arising issues.

Let me know if you need any more information on this.

Kind regards,

[REDACTED]

[REDACTED]

M: [REDACTED] | **E:** [REDACTED]@scottishwater.co.uk
Scottish Water, Corporate Affairs

SW Public
General

From: [REDACTED]@gov.scot>
Sent: 21 February 2022 09:04
To: Public Affairs <Public.Affairs@scottishwater.co.uk>
Subject: FW: MiCase - Wastewater capacity - Cupar North Development

Morning [REDACTED],

Please see the email below.

Can you provide any information on the issue and whether there are any capacity issues at the WwTW?

Our deadline to respond is 4 March.

Thanks,

[REDACTED]

Policy Officer
Water Industry Team

Scottish Government

Office: [REDACTED]

Mobile: [REDACTED]

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From: [REDACTED]
To: [REDACTED]
Subject: FW: Sewage Related Discharge and the Water of Leith
Date: 29 July 2022 11:40:00

From: [REDACTED]@scottishwater.co.uk>
Sent: 16 February 2022 09:37
To: [REDACTED]@gov.scot>
Subject: RE: Sewage Related Discharge and the Water of Leith

[REDACTED]

Some other high level info, I will give you a buzz.

<https://www.scottishwater.co.uk/help-and-resources/document-hub/key-publications/urban-waters-improvements>

In the route map, we are committing to the installation of 1,000 monitors over the next 3 years – this is a massive undertaking. The first step is to agree which of our c. 3,600 CSOs need monitors and we are actively looking at this now. We are unlikely to install monitors on those CSOs we don't think are spilling regularly and will focus installation where we think CSOs might be spilling frequently, where we see evidence of environmental problems and where we can get useful information to improve our service. We are working on developing this priority list across Scotland within the next few months.

We know that a number of CSOs in the Water of Leith are unsatisfactory. We are addressing some of these now and we have plans to develop solutions for other high priorities in the next 3 years as part of the route map. We may look to install monitors on some of the 65 CSOs in the Water of Leith.

SW Public
General

From: [REDACTED]@gov.scot>
Sent: 16 February 2022 09:33
To: [REDACTED]@scottishwater.co.uk>
Subject: RE: Sewage Related Discharge and the Water of Leith

****EXTERNAL MAIL** - Think Before You Click**

Sorry [REDACTED]

I was off sick yesterday. I think we'll highlight the RBMP and urban waters routemap, and suggest that any concerns are raised directly at the site meeting next week.

Policy Officer
Water Industry Team
Scottish Government
Office: [REDACTED]
Mobile: [REDACTED]

From: [REDACTED] <[\[REDACTED\]@scottishwater.co.uk](mailto:[REDACTED]@scottishwater.co.uk)>
Sent: 14 February 2022 17:57
To: Public Affairs <Public.Affairs@scottishwater.co.uk>; [REDACTED] <[\[REDACTED\]@gov.scot](mailto:[REDACTED]@gov.scot)>; [REDACTED] <[\[REDACTED\]@SCOTTISHWATER.CO.UK](mailto:[REDACTED]@SCOTTISHWATER.CO.UK)>
Cc: [REDACTED] <[\[REDACTED\]@gov.scot](mailto:[REDACTED]@gov.scot)>
Subject: RE: Sewage Related Discharge and the Water of Leith

Hi [REDACTED]

Are you about tomorrow for a quick chat about this one and we can share what we have said at the previous meeting with SOS. Our meeting with this group was before Mairi McAllan made her statement to Parliament about Improving Urban Waters so we could build lines around that and the future direction of travel. We are also on site improving some of the CSO's on Water of Leith just now which is good news.

Happy to discuss if you need more info before [REDACTED] gets back next week.

Regards

[REDACTED]

SW Public
General

From: [REDACTED] <[\[REDACTED\]@SCOTTISHWATER.CO.UK](mailto:[REDACTED]@SCOTTISHWATER.CO.UK)> **On Behalf Of** Public Affairs
Sent: 14 February 2022 16:35
To: [REDACTED] <[\[REDACTED\]@gov.scot](mailto:[REDACTED]@gov.scot)>; [REDACTED] <[\[REDACTED\]@scottishwater.co.uk](mailto:[REDACTED]@scottishwater.co.uk)>; [REDACTED] <[\[REDACTED\]@SCOTTISHWATER.CO.UK](mailto:[REDACTED]@SCOTTISHWATER.CO.UK)>
Cc: [REDACTED] <[\[REDACTED\]@gov.scot](mailto:[REDACTED]@gov.scot)>
Subject: RE: Sewage Related Discharge and the Water of Leith

Hi [REDACTED]

[REDACTED] is on Annual Leave this week but I've checked with his team and can advise that we are continuing to engage directly with local campaign group, SOSLeith (Save Our Shores Leith) and have arranged to meet them on site on the 23rd February to look at the specific areas of concern and discuss next steps.

We will be able to provide more information following this meeting.

I hope this is helpful in the meantime.

Kind regards,

[REDACTED]

[REDACTED]
Castle House, 6 Castle Drive, Dunfermline, KY11 8GG

M: [REDACTED] | E: [REDACTED]@scottishwater.co.uk
Scottish Water, Corporate Affairs

SW Public
General

From: [REDACTED]@gov.scot>
Sent: 14 February 2022 15:31
To: [REDACTED]@scottishwater.co.uk>; [REDACTED]
[REDACTED]@SCOTTISHWATER.CO.UK>
Cc: [REDACTED]@gov.scot>; Public Affairs <Public.Affairs@scottishwater.co.uk>
Subject: RE: Sewage Related Discharge and the Water of Leith

Hi [REDACTED] [REDACTED]

Just a quick note to say we need to respond to this asap so grateful for any updated info you have.

Thanks,

[REDACTED]
Policy Officer
Water Industry Team
Scottish Government
Office: [REDACTED]
Mobile: [REDACTED]

From: [REDACTED]@scottishwater.co.uk>
Sent: 25 January 2022 11:08
To: [REDACTED]@SCOTTISHWATER.CO.UK>; [REDACTED]
[REDACTED]@gov.scot>
Cc: [REDACTED]@gov.scot>; Public Affairs <Public.Affairs@scottishwater.co.uk>
Subject: FW: Sewage Related Discharge and the Water of Leith

[REDACTED]

Could you please liaise with [REDACTED] to provide the up to date information of your liaison with this group to date.

Thanks

[REDACTED]

[REDACTED]
[REDACTED]
Scottish Water
[REDACTED]@scottishwater.co.uk
[REDACTED]

SW Public
General

From: [REDACTED]@gov.scot>

Sent: 20 January 2022 15:20

To: [redacted] [\[redacted\]@scottishwater.co.uk](mailto:[redacted]@scottishwater.co.uk); [redacted] [\[redacted\]@gov.scot](mailto:[redacted]@gov.scot)>

Cc: Public Affairs <Public.Affairs@scottishwater.co.uk>; [redacted] [\[redacted\]@SCOTTISHWATER.CO.UK](mailto:[redacted]@SCOTTISHWATER.CO.UK)>

Subject: RE: Sewage Related Discharge and the Water of Leith

Hi [redacted]

This has now come on the system to grateful for any up to date info you have. Our deadline is 11 February.

Thanks,

[redacted]
Policy Officer
Water Industry Team
Scottish Government
Office: [redacted]
Mobile: [redacted]

From: [redacted] [\[redacted\]@scottishwater.co.uk](mailto:[redacted]@scottishwater.co.uk)>

Sent: 18 January 2022 13:46

To: [redacted] [\[redacted\]@gov.scot](mailto:[redacted]@gov.scot)>; [redacted] [\[redacted\]@gov.scot](mailto:[redacted]@gov.scot)>

Cc: Public Affairs <Public.Affairs@scottishwater.co.uk>; [redacted] [\[redacted\]@SCOTTISHWATER.CO.UK](mailto:[redacted]@SCOTTISHWATER.CO.UK)>

Subject: FW: Sewage Related Discharge and the Water of Leith

[redacted]

We have been copied into an email to Ms McAllan from residents in Leith. We have been in dialogue with this group and also Ben MacPherson MSP.

Just wanted to keep you in the loop and if you need anything further from us please let me know.

Thanks

[redacted]

[redacted]
[redacted]
Scottish Water
[redacted] [\[redacted\]@scottishwater.co.uk](mailto:[redacted]@scottishwater.co.uk)
[redacted]

SW Internal
General

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From: [REDACTED]
To: [REDACTED]
Subject: FW: (Case Ref: SB8754) Combined Sewer Overflows
Date: 29 July 2022 11:32:00

From: [REDACTED]@SCOTTISHWATER.CO.UK>
Sent: 07 April 2022 15:50
To: Public Affairs <Public.Affairs@scottishwater.co.uk>; [REDACTED]
[REDACTED]@gov.scot>
Subject: RE: (Case Ref: SB8754) Combined Sewer Overflows

[REDACTED]

Here is a link to our urban waters route map as some of the wording from this would likely help with this reply:

[Urban Water Routemap - Scottish Water](#)

SW Private
Personal

From: [REDACTED] **On Behalf Of** Public Affairs
Sent: 07 April 2022 15:47
To: [REDACTED]@gov.scot
Subject: FW: (Case Ref: SB8754) Combined Sewer Overflows

[REDACTED]

Do you need anything further in relation to this query?

Many thanks

SW Private
Personal

From: [REDACTED]@SCOTTISHWATER.CO.UK>
Sent: 31 March 2022 12:17
To: [REDACTED]@gov.scot>; Public Affairs
<Public.Affairs@scottishwater.co.uk>
Subject: RE: (Case Ref: SB8754) Combined Sewer Overflows

Hi [REDACTED]

We don't set out any plans to publish CSO locations in the Route Map. The Route Map focusses on publishing more performance data over the next 3 years.

In terms of geo-referencing our CSOs, this would be straightforward since we have grid references for each.

Whether there is any concern (security / reputation) about making this list publicly available, I'd have to check around the business to see if this is already in the public domain.

[REDACTED]

SW Internal
Personal

From: [REDACTED] <[REDACTED]@gov.scot>

Sent: 31 March 2022 10:46

To: Public Affairs <Public.Affairs@scottishwater.co.uk>

Cc: [REDACTED] <[REDACTED]@SCOTTISHWATER.CO.UK>

Subject: FW: (Case Ref: SB8754) Combined Sewer Overflows

****EXTERNAL MAIL**** - Think Before You Click

Hi [REDACTED]

Please see the email below.

Can we offer any lines in relation to the improving urban waters routemap to answer this query?

Our deadline to respond is 8 April.

Thanks,

[REDACTED]

Policy Officer

Water Industry Team

Scottish Government

Office: [REDACTED]

Mobile: [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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From: [REDACTED]
To: [REDACTED]
Subject: FW: MiCase - Aberlady Bay
Date: 29 July 2022 11:33:00
Attachments: [image001.jpg](#)

From: [REDACTED]@SCOTTISHWATER.CO.UK> **On Behalf Of** Public Affairs
Sent: 10 March 2022 16:28
To: [REDACTED]@gov.scot>
Subject: RE: MiCase - Aberlady Bay

Hi [REDACTED]

Thanks for your email. I believe that [REDACTED] received a copy of the letter from Paul McLennan MSP and is consulting on this with relevant colleagues. There is a history to this and we have ongoing engagement with the community, including a number of meetings.

I've copied and pasted some information from a previous update we provided the Community Council below. This is slightly dated now, but thought you might find it useful and most of this won't change in terms of our position now.

We will further discuss this with [REDACTED] and provide you with some lines for response.

Kind regards

[REDACTED]

Info to Aberlady and Gullane Community:

Scottish Water will provide further capacity to meet the demand from developments as identified through the East Lothian Local Development Plan 2018, Local Housing Strategies and other relevant existing plans.

Scottish Water work closely with developers who wish to connect to our network to discuss their specific developments and phasing plans to ensure that we provide the required capacity at the right time. Another very important part of this is the network capacity assessments which new developments undertake to ensure we are not increasing the risk of flooding or increased spills from the sewer network.

In terms of capacity and connections from new properties, Scottish Water's primary focus is on maintaining compliance with what comes out of the works, rather than focusing on number of properties that drain to the works (although this is also useful).

We must maintain strict compliance with our outfall licence and allow capacity to be used before we instigate a funded intervention to increase capacity at the works. In August 2019 we had a study carried out and completed which showed that the DWF (Dry Weather Flow) figure for Gullane WWTW is still under that of the current license.

In August 2018 we wrote to the community council to advise members that that in relation to Gullane WWTW that: 'The treatment works at Gullane have been modelled for future growth and will be able to support the projected increases in flows through operational maintenance. Specifically how we are doing this is increased tankering of the sludge from the works and we will continue tankering as the development progresses over the next three years and the additional

flows into the works will be monitored closely.'

This current situation remains the same and we will continue to monitor the works as the development progresses.

Concern about Combined Sewer Overflows (CSO) and Sewer Related Debris (SRD):

Following concern from the local community about the outfall from CSO's at Aberlady, Scottish Water carried out investigations into the operation of the Loan Cottage CSO to monitor and look for evidence of sewage related debris. Scottish Water operatives visited the site regularly (2-3 times a week) to carry out checks and take photos, which were shared with SEPA. During this enhanced monitoring there was no new evidence of SRD.

In addition, further investigations were carried out on the surface water sewer and upstream network. This involved placing a number of baskets, which act as additional screens, to catch any solid debris in the network. This uncovered a cross-connection between the surface water and waste water sewers. Scottish Water fixed this problem.

CSO's are a vital part of the combined sewer network drainage system in Scotland to help prevent sewer flooding at times of heavy rainfall. More information is available on our website - <https://www.scottishwater.co.uk/help-and-resources/faqs/waste-water-faqs/cso-faqs>

[REDACTED]
Castle House, 6 Castle Drive, Dunfermline, KY11 8GG
M: [REDACTED] | E: [REDACTED]@scottishwater.co.uk
Scottish Water, Corporate Affairs

SW Public
General

From: [REDACTED]@gov.scot>
Sent: 10 March 2022 11:39
To: Public Affairs <Public.Affairs@scottishwater.co.uk>
Subject: FW: MiCase - Aberlady Bay

Hi [REDACTED],

Please see the attached letter, which you may already be aware of.

Would you be able to offer some lines to help in our response? Can you also confirm whether SW is minded to meet the MSP/residents?

Our deadline is 21 March.

Thanks,

[REDACTED]
Policy Officer
Water Industry Team
Scottish Government
Office: [REDACTED]
Mobile: [REDACTED]

[REDACTED] [REDACTED] [REDACTED] [REDACTED]
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To: [REDACTED]
Cc: [REDACTED]
Subject: RE: MiCase - Aberlady Bay
Date: 23 March 2022 10:01:55
Attachments: [image001.jpg](#)
[Gullane and Aberlady Community Update - July 21.pdf](#)

Hi [REDACTED]

Thank you again for your email about the concerns of Paul McLennan MSP on behalf of his constituents about Aberlady Bay.

I have attached an update we provided to Mr McLennan and the community in July 2021 which provides information and gives an overview of this area.

We have continued engagement with the community and there are some further updates:

- We completed work late last year to replace and upgrade the pumps at Aberlady pumping station and are not aware of any issues with the operation of these new pumps.
- We are in the process of installing the flow monitors at our treatment works to more accurately measure the flow which spills at the inlet CSO and we are expecting these to be in place around mid-April.
- We have not had any recent reports of sewage or sewage-related debris present at spill sites.

We would certainly be happy to continue discussions with Paul McLennan and the community. It would be best to wait for sufficient data to be available from the flow monitors once they are installed, but we can contact Paul McLennan around July/August to arrange an update and to provide information from the flow monitors.

I hope this information is helpful in the meantime.

Kind regards

[REDACTED]

[REDACTED]
M: [REDACTED] | **E:** [REDACTED]@scottishwater.co.uk
Scottish Water, Corporate Affairs

SW Public
General

From: [REDACTED]@gov.scot>
Sent: 10 March 2022 11:39
To: Public Affairs <Public.Affairs@scottishwater.co.uk>
Subject: FW: MiCase - Aberlady Bay

Hi [REDACTED]

Please see the attached letter, which you may already be aware of.

Would you be able to offer some lines to help in our response? Can you also

From: [REDACTED]
To: [REDACTED]
Subject: FW: SOSLeith: Sewage Related Discharge and the Water of Leith
Date: 29 July 2022 11:37:00
Attachments: [image001.jpg](#)

From: [REDACTED]@SCOTTISHWATER.CO.UK>
Sent: 07 March 2022 15:49
To: [REDACTED]@gov.scot>; [REDACTED]
[REDACTED]@scottishwater.co.uk>; [REDACTED]@gov.scot>
Subject: RE: SOSLeith: Sewage Related Discharge and the Water of Leith

Hi [REDACTED]

Just emailing you following my meeting with SOSLeith, community group last week. Apologies been a few days since the meeting but just not had a chance to catch up to update you.

I'm not sure how much detail you are looking for, but some notes and observations below from me:

- [REDACTED] (Corporate Affairs) and [REDACTED] (Networks team leader) from Scottish Water met with [REDACTED] from Save Our Shore (SOS) Leith on Wed 2nd March
- Meeting was held in person at the shore area of Water of Leith (Customs Wharf)
- In advance of the meeting [REDACTED] had asked if there was a map available showing the Scottish Water Combined Sewer Overflows (CSOs) in the area. I shared with them a map that Forth Rivers Trust have made available on their website which has all the CSOs in the Forth area, here: [Sewage Outfalls of the Firth of Forth | Forth Rivers Trust](#)
- The group wanted to meet in person to speak to us about CSOs and look at some of them in the area so they could understand more
- Although there are a number of CSOs in the Water of Leith Basins area, they aren't really visible as they are under the water level and the assets are accessed via manholes in the road or pavement. We explained this and a bit about how CSOs operate.
- They asked us about investment and we stated that there has been investment to upgrade CSOs in the Upper Water of Leith ([Water of Leith - Scottish Water](#)) as per agree priorities with SEPA. There are a further 23 CSOs in the lower part of the Water of Leith (roughly Slateford area down to the shore) which we are now looking at developing solutions for. However we highlighted that these solutions were based not on preventing these overflows from operating in storm conditions (as licensed) but more about upgrading to provide better screening to prevent rags (wipes etc) from overflowing into the river. Also that although we can develop solutions, they won't necessarily mean we progress with them to actual physical interventions and if we do these will take years.
- We also talked about Urban Waters Routemap. I advised we have not set out what CSOs will be prioritised for installing monitors but Water Of Leith CSOs will be considered for this.
- We talked about the Scottish Water 'Nature Calls' campaign and the importance of urging customers not to flush wipes down the toilet, which they had all seen and were very supportive of.
- I asked them about their community litter picks in the area around the river and whether they were observing a lot of Sewage Related Debris, but they said they hadn't seen much, although weren't convinced there wasn't in the bottom of the river.
- We talked about the importance of partnership working, in particular Scottish Water working with Edinburgh Council around surface water management and I promised to keep them informed of some partnership projects that are being discussed at the moment.

General sentiment from the meeting was that they very much welcomed the chance to meet us and speak to us. They appreciated there wasn't much to be observed on a walk over but said their understanding was enhanced from the meeting and complimented Scottish Water on our engagement and openness.

There were no specific actions from the meeting, other than to continue dialogue and updates when we had them.

I hope this is useful, happy to discuss further this week if you need.

Kind regards

██████████

SW Public
General

From: ██████████
Sent: 02 March 2022 10:41
To: ██████████@gov.scot; ██████████
██████████@scottishwater.co.uk>; ██████████@gov.scot>
Subject: RE: SOSLeith: Sewage Related Discharge and the Water of Leith

Hi ██████████

No problem, meeting this afternoon at 2pm with ██████████ and some of his colleagues. I'll update you on Friday if that's ok, as I'm going to be out on site all day on Thursday.

Thanks

██████████

SW Public
General

From: ██████████@gov.scot>
Sent: 01 March 2022 14:39
To: ██████████@scottishwater.co.uk>; ██████████
██████████@gov.scot>
Cc: ██████████@SCOTTISHWATER.CO.UK>
Subject: RE: SOSLeith: Sewage Related Discharge and the Water of Leith

Hi ██████████

We've just received the letter on our MiCase system today. Would you be able to provide an update following the meeting tomorrow?

Thanks,

██████████

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From: [REDACTED]
To: [REDACTED]
Cc: [Public Affairs](#); [REDACTED]
Subject: FW: River Almond Action Group - A request for a meeting
Date: 08 July 2022 11:28:28
Attachments: [River Almond Action Group.pdf](#)
[RF Forth SEPA Update - wastewater improvements in the Almond.msg](#)

Hi [REDACTED]

Further to your email seeking more information about the River Almond stakeholder group, please see the main bullet points and actions below:

1. We continue to play an active role within the River Almond Action Group (RAAG) and will continue to update the group on the progress we make in further understanding the scope of solutions and in developing these to create plans for investment.
2. We have installed Electronic Data Monitors at key CSO locations along the Almond and sensors within the East Calder sewer system which will help determine future investment requirements in the sewer networks.
3. We are undertaking a detailed review to determine the asset enhancement and operational changes which may be required at the identified waste water treatment works and CSOs to ensure that we contribute positively to achieving good water status by 2027, supporting Scotland's RBMP3.
4. We continue to work with partners to look for opportunities to advance blue/green infrastructure projects which will help reduce flooding and manage surface water more effectively.
5. The River Almond is the focus for a pilot 'Lighthouse' project as part commitments set out in our Improving Urban Waters Routemap. We have included representatives from RAAG to ensure that their input is heard and that they are part of the process moving forward. Good progress has been made through collaborative effort to identify scope and to create a vision for the project.
6. We anticipate that the impact from housing development in the River Almond catchment can be mitigated to ensure that there is no detriment in current performance levels. Any connections from new housing will include only waste water (foul) connections with surface water (rainfall runoff) being managed via Sustainable Urban Drainage Systems. Housing developers, working with and supported by Scottish Water, are required to ensure that the sewerage system is reinforced to deal with increases in foul flow.

If you require any further information please let me know.

Thanks

[REDACTED]

[REDACTED]
Scottish Water
[REDACTED]

SW Internal
General

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