

**From:** [REDACTED]  
**To:** [REDACTED]  
**Subject:** FW: Revised draft - Enquiry from Angela Constance MSP - River Almond spillage (Case Ref: AC1783)  
**Date:** 14 August 2020 14:12:48

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Hi [REDACTED],

The confirmation we have had from SEPA is that this incident on 6<sup>th</sup> April was classed as a Category 3 incident.

At the time of the incident on 6<sup>th</sup> April, Veolia took the necessary actions to address the spill and to appropriately notify SEPA. Veolia have followed this up with an action plan and put measures in place to prevent issues recurring and these measures were discussed with SEPA.

Since this incident in April, we have set up a multi-agency group, which includes SEPA and the local authority, to co-ordinate information whenever necessary.

If there is any question over the classification, we think it would more appropriately be a matter for SEPA to comment or provide any further information.

I hope this has helped.

[REDACTED]  
Public Affairs Officer  
Scottish Water  
Tel: [REDACTED]

[www.scottishwater.co.uk/listening](http://www.scottishwater.co.uk/listening)

SW Private  
Personal

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**From:** [REDACTED]@gov.scot [mailto:[REDACTED]@gov.scot]  
**Sent:** 12 August 2020 11:05  
**To:** Public Affairs  
**Subject:** FW: Enquiry from Angela Constance MSP - River Almond spillage (Case Ref: AC1783)

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

Hi [REDACTED],  
Please see the query below.  
Can you provide any information on spills in this area and any actions by SW?  
Thanks for your help, the deadline is 17 August 2020.  
Regards,

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



[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

I

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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Scottish Water

[www.scottishwater.co.uk](http://www.scottishwater.co.uk)

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**From:** [REDACTED] on behalf of [Public Affairs](#)  
**To:** [REDACTED]  
**Cc:** [REDACTED]  
**Subject:** FW: Water of Leith | Sewage - amended version  
**Date:** 24 September 2020 16:54:01  
**Attachments:** [image001.jpg](#)  
[image002.jpg](#)  
[image003.png](#)  
**Importance:** High

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Hi [REDACTED] We just had an amendment to make to the reply about the Water of Leith and I've highlighted the change below. I'd be grateful if you could delete the previous version. Many thanks, [REDACTED]

Hi [REDACTED]

Thanks for your enquiry regarding recent sewage discharge into the Water of Leith.

Following report of sewage leaking into the Water of Leith we have discovered a blockage and cleared it.

We've carried out some further investigations in the area and identified a cross-connection where the foul waste from a nearby block of 39 flats is discharging into a surface water sewer. This is a private issue, however we're taking forward actions to have this rectified as quickly as possible. We are confident that rectification of this cross-connection will resolve the current pollution problem. We will continue to review network performance to ensure that we have appropriate interventions in place for any future incidents.

[REDACTED] and [REDACTED], our [REDACTED] recently met with Friends of Water of Leith Basin group to discuss their concerns and we have agreed to arrange a follow up meeting with the group to provide them with an update. [REDACTED] is also the dedicated point of contact for the group and he is following up directly with them to answer some questions which they have asked.

We have a number of improvements currently underway the Upper Water of Leith, upstream of the Murray Burn where improved screening is being installed as part of our current SR15 investment programme. This is part of a phased approach which will be fully completed by March 2022. Please see the link below for further information – <https://www.scottishwater.co.uk/in-your-area/investments-in-your-area/water-of-leith>.

In terms of the longer-term plans, working with SEPA, we have carried out a study of the CSOs discharging to the Water of Leith and have looked at whether the screening arrangements are appropriate to minimise the risk of sewage related debris ending up in the waterbody. We have identified a number of CSOs where we believe that screening improvements would enhance the environment. At this point in time, we are looking at how we prioritise investment need in CSO improvement across the whole of the country, recognising that we need to prioritise funding where the biggest benefits can be achieved. Whilst we are delivering investment in this area further upstream as highlighted above which will deliver improvements, we are not currently in a position to confirm any additional timelines at this stage.

We recognise that there are a whole range of factors, including growth and climate change that can affect our services or impact customers. Scottish Water is working with its partners in the Edinburgh and Lothians Strategic Drainage Partnership (ELSDP) to look at a range of long term options which will seek to manage storm water in a sustainable way. This includes working with public sector partners, developers and communities to ensure that pressure on infrastructure is reduced in a way that still enables growth within Edinburgh and the Lothians.

Please let me know if you need any further information on this.

Regards,  
[REDACTED]



[Redacted content]

\*\*\*\*\*

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**From:** [REDACTED] on behalf of [Public Affairs](#)  
**To:** [REDACTED]  
**Subject:** RE: Beach pollution - letter from Mark Ruskell MSP  
**Date:** 04 December 2020 15:09:23

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Hi [REDACTED]

I've just noted that there was also reference to new houses in this area:

*"Aberdour for instance has recently had 85 new houses approved by the Scottish Government reporter, with a further 125 awaiting an appeal decision. This level of development combined with increasing instances of extreme weather could have a disastrous impact on pollution along the Forth coast."*

You could add some lines around this to explain our position.

I note your comment on new houses in Aberdour, Scottish Water has a surface water policy which is being applied to all new developments and which is supported by the Scottish Government. The aim is to ensure that the waste water network is sustainable and that we protect the environment and existing customers by not accepting further surface water into the combined sewer network, unless it is an exceptional circumstance.

Hope this helps.

[REDACTED]

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

SW Public  
Personal

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**From:** [REDACTED]@gov.scot [mailto:[REDACTED]@gov.scot]  
**Sent:** 04 December 2020 14:32  
**To:** Public Affairs  
**Cc:** [REDACTED]  
**Subject:** RE: Beach pollution - letter from Mark Ruskell MSP

Thanks [REDACTED].

[REDACTED]

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

---

**From:** [REDACTED]@SCOTTISHWATER.CO.UK> **On Behalf Of** Public Affairs  
**Sent:** 04 December 2020 13:12  
**To:** [REDACTED]@gov.scot>  
**Cc:** [REDACTED]@SCOTTISHWATER.CO.UK>; [REDACTED]  
[REDACTED]@scottishwater.co.uk>  
**Subject:** RE: Beach pollution - letter from Mark Ruskell MSP

Hi [REDACTED],



██████ doesn't work on Fridays, but I've pulled something together based on the comments from our asset planner and waste water ops.

It is worth noting that the issue at Aberdour Silver Sands in August was following the heavy flooding all over Fife. Our analysis of the storm event shows that the scale of this weather event was significantly in excess of the capabilities of a satisfactory sewer network and would also be well in excess of the hydraulic capacity of all urban drainage systems (not just sewers, but roads drainage, watercourses and other means of dealing with rainfall). The design standard of the sewer system in Scotland is to drain up to a 1 in 30 year rain storm, which are heavy rainfall events that have an approximate 3% probability of occurring every year. Rainfall analysis for the event in August has highlighted that the return period of the storm was over a 1 in 500 year return period. Aberdour Silver Sands was flooded and so performance would have been compromised which was reflected in the water quality shortly after the storm event.

After reviewing our records, we can confirm that this was the only recent issues and Scottish Water's infrastructure was not the only contributing factor - surface water was a very significant factor, especially coming off the fields nearby. You will be aware that this area was particularly affected, e.g. caravans at Pettycur Bay Caravan Park were sliding down the hill, a road collapsed along the private section of Shore Road above Black Sands Beach.

The following press article provides some more details about this extreme flooding event – <https://www.dunfermlinepress.com/news/18680964.bridge-tumbles-homes-flooded-extreme-rainfall/>

Please let me know if you need any further information.

Regards

██████

██████████████████ | Public Affairs Officer  
Castle House, 6 Castle Drive, Dunfermline, KY11 8GG  
M: ██████████ | E: ██████████@scottishwater.co.uk  
Scottish Water, Corporate Affairs

SW Public  
Personal

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**From:** ██████████@gov.scot]  
**Sent:** 04 December 2020 11:09  
**To:** Public Affairs  
**Subject:** RE: Beach pollution - letter from Mark Ruskell MSP

Hi ██████████,

Were you able to provide any information on this? I think we'll try to respond today.

Regards,

██████████████████  
Policy Officer  
Water Industry Team  
Scottish Government  
Office: ██████████  
Mobile: ██████████

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**From:** [REDACTED]@SCOTTISHWATER.CO.UK> **On Behalf Of** Public Affairs  
**Sent:** 01 December 2020 12:36  
**To:** [REDACTED]@gov.scot>  
**Subject:** RE: Beach pollution - letter from Mark Ruskell MSP

Hi [REDACTED]

A quick email to confirm we've received the query. We will write as soon as possible with information.

[REDACTED]  
Public Affairs Officer  
Scottish Water  
Tel: [REDACTED]

[www.scottishwater.co.uk/listening](http://www.scottishwater.co.uk/listening)

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**From:** [REDACTED]@gov.scot [mailto:[REDACTED]@gov.scot]  
**Sent:** 30 November 2020 18:11  
**To:** Public Affairs  
**Subject:** FW: Beach pollution - letter from Mark Ruskell MSP

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

Hi [REDACTED]

Please see the attached.

Do you have any lines you could provide?

Unfortunately, the deadline has already passed so grateful for a response asap.

Thanks,

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

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

[Redacted]

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**From:** [REDACTED]  
**To:** [REDACTED]  
**Cc:** [Public Affairs](#)  
**Subject:** RE: Discharges of untreated sewage (Case Ref: KO5529)  
**Date:** 05 January 2021 14:45:40

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Hi [REDACTED]

I don't have anything on the shelf to pull from but I would suggest something along the lines of:

- The physical water and sewerage service to the vast majority of households and businesses in Scotland is the responsibility of Scottish Water. Scottish Water is accountable to Scottish Ministers who set the objectives that Scottish Water must achieve. In England these services are provided by private companies so their arrangements are quite different and in Scotland mean that Scottish Ministers are able to give much greater direction on the priorities of Scottish Water.
- Turning to the water environment more generally, in Scotland plans to improve the water environment are drawn up by the Scottish Environment Protection Agency (SEPA) under a process known as River Basin Management Planning. The long term aim is for all water bodies to achieve good ecological status with each planning cycle (which tend to be six years) setting out the steps that all users of the water environment, including Scottish Water, need to take as the next steps towards this long term aim.
- I trust this provides the information you require.

[REDACTED]

SW Internal  
Personal

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**From:** [REDACTED]@gov.scot>  
**Sent:** 24 December 2020 12:42  
**To:** [REDACTED]@scottishwater.co.uk>  
**Cc:** Public Affairs <Public.Affairs@scottishwater.co.uk>  
**Subject:** FW: Discharges of untreated sewage (Case Ref: KO5529)

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

Hi [REDACTED],

We received the query below, Jon suggested you may have some lines.

Are you able to provide any contribution by 6 January 2021?

Have a good Christmas!

Thanks,

[REDACTED]

Policy Officer  
Water Industry Team  
Scottish Government

Office: [REDACTED]

Mobile: [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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**From:** [REDACTED] on behalf of [Public Affairs](#)  
**To:** [REDACTED]  
**Subject:** RE: South Esk pollution - new sources  
**Date:** 26 June 2020 14:09:45  
**Attachments:** [image009.jpg](#)  
[image011.jpg](#)  
[image012.png](#)  
[image013.png](#)  
[image014.jpg](#)  
[image015.jpg](#)  
[image016.jpg](#)  
[image017.jpg](#)  
[image018.png](#)  
[image001.jpg](#)

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Hi [REDACTED]

Please see below an update on this enquiry.

### Scottish Water South Esk River update – June 2020

#### Background

- Scottish Water recently received reports of sewage related debris near outfalls at two locations near Dalkeith linked to the South River Esk.
- One was the Benbught Burn, near Newbattle Golf Course, Dalkeith.
- The other was an outfall known as Waterfall Park, in the same area but to the East of the South Esk River.
- These are the two locations highlighted by local resident [REDACTED].

#### Benbught Burn

- There is a Scottish Water Combined Sewer Overflow that has an outfall to the Benbught Burn.
- On being alerted to problems of sewage debris (wet wipes and sanitary items) which was in the burn we attended immediately to inspect and do a clean-up.
- We have contracted Rentokil to help clean up and they have been working there for over 1 week.
- The items in the burn look like they have accumulated over time (similar to the Mary Burn in Lord Ancrum's Wood) and the volume of items is a result of multiple spills from the outfall rather than a particular event.
- There are no signs of a fresh/new spill into the burn.
- We will complete the clean-up and are also checking local network and infrastructure to ensure there are no defects.

#### Waterfall Park

- There is no Scottish Water outfall at this location.
- The outfall that has been identified by locals is what we would call a piped or culverted watercourse outfall.
- There was a lot of debris on the metal grill at this outfall which Scottish Water has removed.
- Most of this looked more like litter, but there was some evidence of items that have been wrongly flushed down the toilet.
- We have reviewed the network and are monitoring to see if there are 'miss-connections'. This is when properties foul sewers are incorrectly connected into the surface water network.
- Picture of the cleaned grill at Waterfall Park.

#### Mary Burn, Lord Ancrum's Wood

- We are pleased to advise that we have not seen any spills into the Mary Burn from the CSO in Lord Ancrum's Wood for months now.
- It has been dry weather so before we celebrate we will continue to monitor over the summer when historically in the past two years we have seen some of the highest rainfall recorded. However it does look like the adjustments we have made at the asset have made a big improvement.
- We would also like to think that the local Scottish Water education campaign, including the work of local community campaigners, in relation to what should and shouldn't be flushed down the toilet has also made a difference.

We would urge everyone to remember our 3P message – only Pee, Poo and toilet Paper should be flushed down the toilet. More information here – [www.scottishwater.co.uk/cycle](http://www.scottishwater.co.uk/cycle)

For more information on Combined Sewer Overflows, there is information available here - <https://www.scottishwater.co.uk/help-and-resources/faqs/waste-water-faqs/cso-faqs>

[REDACTED], local resident, has been liaising directly with Scottish Water via email on these issues and along with other local stakeholders were provided with this update yesterday.

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

Kind regards

[REDACTED]

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

SW Private  
Security

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**From:** [REDACTED]@gov.scot [mailto:[REDACTED]@gov.scot]  
**Sent:** 26 June 2020 10:49  
**To:** Public Affairs  
**Subject:** RE: South Esk pollution - new sources



Morning [REDACTED]

Were you able to provide an update on this?

Thanks,

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

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**From:** [REDACTED]  
**Sent:** 22 June 2020 12:05  
**To:** Public Affairs (Public.Affairs@scottishwater.co.uk) <Public.Affairs@scottishwater.co.uk>  
**Subject:** FW: South Esk pollution - new sources

Morning [REDACTED]

We received this email, which doesn't really have a question but points out new issues with the river Esk. I've also had a follow up email noting a group has been formed to resolve the problems.

Does SW have any updated lines in relation to the Esk?

Thanks for your help, this case has a deadline of 26 June 2020.

Regards,

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

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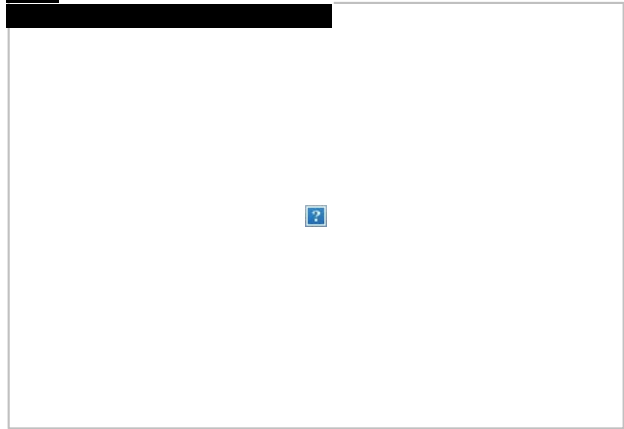
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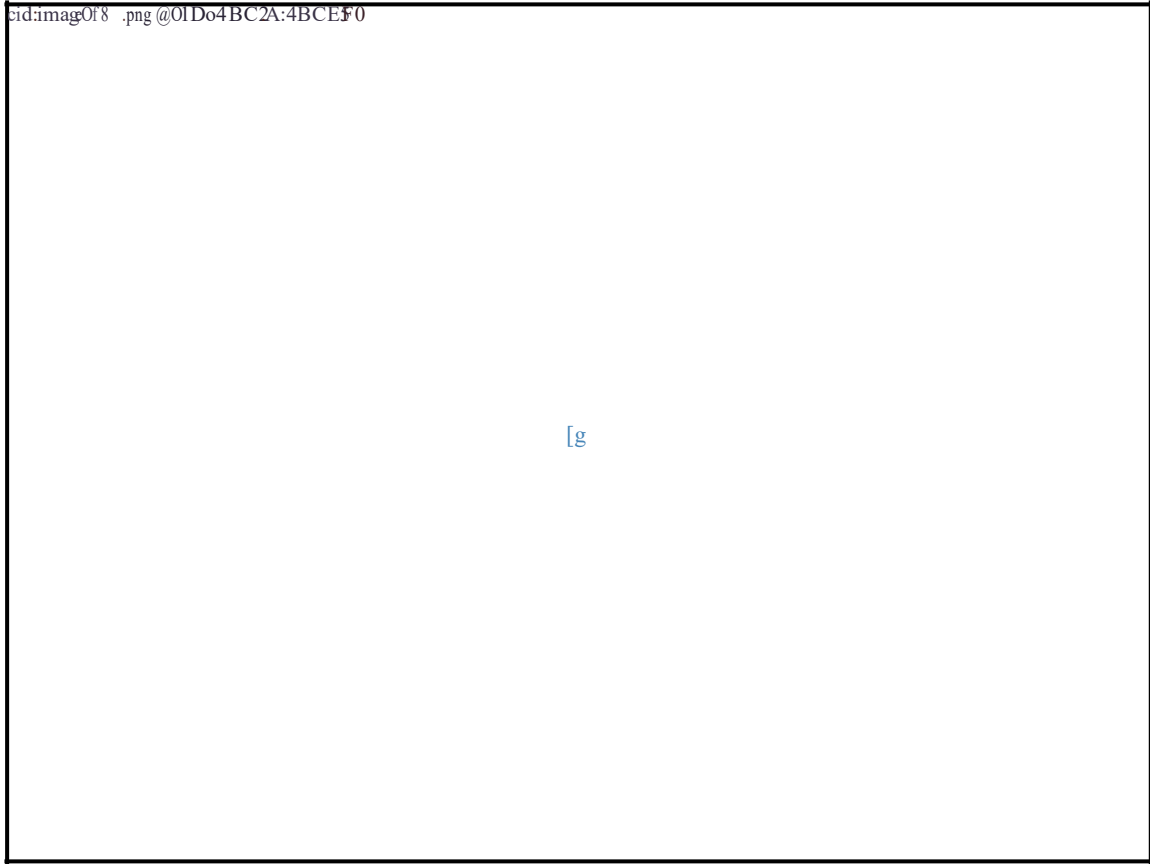
[g]

cid:image0\_f6.Jpg@01D64BC2.A4BCESF0

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cid:image017.jpg@01D64BC2.A4BCE5F0

cid:image008.png@01D04BC2A:4BCE70



[g]

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**From:** [REDACTED]  
**To:** [REDACTED]  
**Cc:** [REDACTED]; [Public Affairs](#)  
**Subject:** RE: enquiry from Angela Constance MSP (Case Ref: AC4181)  
**Date:** 03 August 2021 17:25:07

---

Hi [REDACTED]

Nothing to add really.

We had a meeting with our consultant (m2 / Stantec) yesterday so that they could clarify what we have asked them to do in our brief.

They intend to submit a proposal for our review in the next two weeks. This would include a programme and costs for doing the work (likely 9-12 months as indicated below). We will review this and then seek to commence work, likely in September.

We can give regular progress reports to RAAG and other interested parties.

[REDACTED], happy for one of your team to be involved in the Steering Group.

[REDACTED]

SW Internal  
General

---

**From:** [REDACTED]@scottishwater.co.uk>  
**Sent:** 03 August 2021 16:50  
**To:** [REDACTED]@gov.scot; [REDACTED]@SCOTTISHWATER.CO.UK>  
**Cc:** [REDACTED]@SCOTTISHWATER.CO.UK>; Public Affairs  
<Public.Affairs@scottishwater.co.uk>  
**Subject:** RE: enquiry from Angela Constance MSP (Case Ref: AC4181)

Hi [REDACTED]

I tried to give you a phone about this one.

We indicated to the stakeholder group at the last meeting we were going to commence a study shortly with consultants to determine what investment may be required at our assets which serve the River Almond to enable good river water quality to be achieved by 2027. This study will also review any operational improvements required together with opportunities to develop more blue / green infrastructure which will also assist in the future. This study is likely to take approximately 9/12 months to complete.

Until this is complete we are unable to advise on timescales or what should be tackled first in order of priorities. We continue to engage with RAAG and there is another follow up meeting with the stakeholder group being planned for 19<sup>th</sup> August.



[REDACTED], is there anything I have missed or other changes required to this update?

Thanks

[REDACTED]

[REDACTED]

[REDACTED]

Scottish Water

[REDACTED] [@scottishwater.co.uk](mailto:[REDACTED]@scottishwater.co.uk)

[REDACTED]

SW Internal

General

---

**From:** [REDACTED] [@gov.scot](mailto:[REDACTED]@gov.scot) <[REDACTED]@gov.scot>

**Sent:** 03 August 2021 14:51

**To:** [REDACTED] [@scottishwater.co.uk](mailto:[REDACTED]@scottishwater.co.uk)>

**Subject:** FW: enquiry from Angela Constance MSP (Case Ref: AC4181)

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

Hi [REDACTED],

We've received another case on this issue. Is there any new information to provide? We'd previously noted that SW is currently in the planning stages, determining what investment will be required to meet good ecological status in the River Almond and that therefore we are unable to provide specific timescales or details of interventions. Is SW able to offer some sense of the timings of the process (or indicate when that might be possible)? We also intend to note that SW will continue to provide regular updates on progress via the stakeholder group.

Thanks,

[REDACTED]

Policy Officer

Water Industry Team

Scottish Government

Office: [REDACTED]

Mobile: [REDACTED]

---

[REDACTED] [REDACTED] [REDACTED]

[REDACTED]

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**From:** [REDACTED]  
**To:** [REDACTED]  
**Cc:** [Public Affairs](#)  
**Subject:** RE: Correspondence from the office of Tommy Sheppard MP: Seafield WWTW and bathing water quality  
**Date:** 17 September 2021 15:11:17  
**Attachments:** [image001.png](#)  
[image002.png](#)  
[image003.png](#)  
[image004.png](#)  
[image005.png](#)  
[image006.png](#)  
[SG BATHING WATERS RESPONSE FOR MSPs.docx](#)  
**Importance:** High

---

Hi [REDACTED]

Please see attached as requested some lines re Seafield and bathing water quality.

Kind Regards,

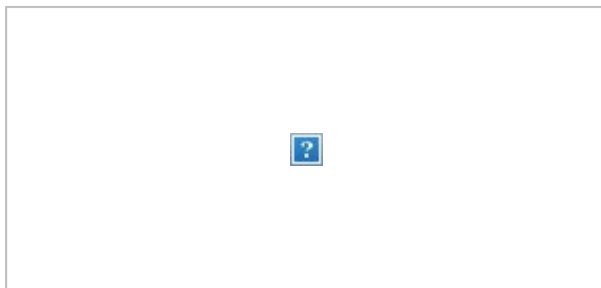
[REDACTED]  
[REDACTED] (Scotland)

Corporate Affairs

[REDACTED]  
[REDACTED] [@scottishwater.co.uk](#)  
twitter [REDACTED]

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SW Private  
Personal

---

**From:** [REDACTED] [@gov.scot](#) <[REDACTED] [@gov.scot](#)>

**Sent:** 09 September 2021 07:52

**To:** Public Affairs <[Public.Affairs@scottishwater.co.uk](mailto:Public.Affairs@scottishwater.co.uk)>

**Cc:** [REDACTED] [@gov.scot](#)

**Subject:** FW: Correspondence from the office of Tommy Sheppard MP: Seafield WWTW and bathing water quality

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

Morning [REDACTED],

Please see the attached letter, related to Seafield's effect on bathing water quality.

Can you provide some lines to help us answer? The MP has referred to the investigations into extending the outfall, which didn't happen, but there was some investment at Fillyside I think which we could highlight.

Our deadline is 17 September.

Thanks,

[REDACTED]

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

[REDACTED]  
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## **DRAFT RESPONSE FOR SG TO RESPOND TO MP/MSPS**

The Seafield site operates within a Licence granted by SEPA and is tested and audited on a frequent basis to ensure that the final effluent and stormwater discharges to the Forth Estuary meet the requirements of the Licence.

It is correct that the main factor in Scottish Water's influence on Bathing Water Quality is the impact of storm drainage (CSO - Combined Sewer Overflows). These act as a vital relief point in the combined sewer network for times of extreme rainfall to help prevent flooding to homes and businesses.

In 2019, Scottish Water upgraded our Nantwich Drive asset and installed a new penstock to increase the flow of waste water to Seafield (WWTW) and improving environmental performance for Portobello Central, Portobello West and Fisherrow bathing waters.

As a result that there should be a reduction in spills from Fillyside (CSO). In addition to this, we carried out a large-scale, Scottish Government funded study in Edinburgh to identify misconnections (when a home or business has wrongly connected their plumbing into the surface water system) and network issues, working closely with SEPA to target areas potentially impacting Portobello West and Fisherrow by focusing on those areas around the Braid/Figgate Burn and Brunstane Burn. This study identified 21 misconnections to our network and work began in late 2019 to further investigate and rectify these misconnections. This work was programmed to finish by April 2020, however there were some delay due to Covid-19 and work was complete in August 2020. We have also identified and rectified 23 network issues, including sewer blockages and sewer collapses.

We are continuing discussions with SEPA to determine how improvements to our assets could impact the bathing water quality at Portobello and whether improvement at further CSO discharges is likely to represent an appropriate cost/benefit profile.

Working together, public partners are focused on:

Addressing misconnections:

A misconnection is when a home or business has wrongly connected their plumbing into the surface water system, which eventually discharges into rivers or streams instead of the public sewerage network where it is treated. Multiple misconnections have been addressed through a Scottish Water led project funded by Scottish Government.

Sewerage Network Improvements:

Scottish Water have made improvements to the sewer network so there should be a reduction in spills from Fillyside combined sewer overflow at Portobello.

Addressing Litter and Dog Fouling:

Litter and dog fouling levels have been reduced by a Scottish Government funded 'My Beach Your Beach' campaign undertaken by Keep Scotland Beautiful (<https://www.keepsotlandbeautiful.org/community-and-place/my-beach-your-beach/>)

Scottish Water customers can also play their part by thinking before they flush items that cause blockages in the sewer networks and can impact the environment. We urge everyone only ever to flush the 3Ps (Pee, Poo and Paper (toilet)) to help prevent blockages and protect rivers, burns and coastal waters.





**From:** [REDACTED]  
**To:** [REDACTED]  
**Cc:** [Public Affairs](#); [REDACTED]  
**Subject:** FW: Urgent - River Almond - Angela Constance  
**Date:** 22 September 2021 16:50:36  
**Attachments:** [response to Cab Sec.pdf](#)  
[291020MisconnectionsExplained.pdf](#)  
[241120MisconnectionsPolicy.pdf](#)  
**Importance:** High

---

Hi [REDACTED]

I'm emailing in response to the letter attached and your email asking for Scottish Water comment on particular points raised.

In terms of 'Misconnections':

- Scottish Water work with local authorities, developers and engage with plumbing trade groups to prevent misconnections and proactively identify them.
- Property owners are responsible for the maintenance and repair of sewage pipes within the boundary of their property.
- Although responsibility lies with the property owner, Scottish Water will help to resolve the problem as quickly as possible.
- More information on our approach to misconnections is detailed in the attached documents.

In relation to the point raised about the health of rivers in Scotland:

- Scottish Water and our partners (including PFI operators) are always striving to protect the environment whilst providing an essential service to our thousands of customers and businesses who live and work in West Lothian.
- The overall health of rivers is a matter for SEPA to comment upon, who publish data and set the agenda for change in the context of River Basin Management Planning. This takes into account not just final treated discharges from WWTW'S and CSO sewer networks, but also council owned surface water outfalls, any private discharges to rivers from businesses, septic tanks and also diffuse pollution, all of which impact water quality.
- We have agreed to notify local stakeholders of any discharges from our East Calder works as a result of operational issues which may impact the river.
- We are also committed to educating the public on the vital storm relief that combined sewer overflows provide to help prevent sewer flooding to homes, streets and businesses.

If you have any further questions on this information please don't hesitate to ask.

Kind regards

[REDACTED]

[REDACTED]

[REDACTED]

**Scottish Water**

**Mob.** [REDACTED]

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[www.scottishwater.co.uk](http://www.scottishwater.co.uk)

SW Private  
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**From:** [@gov.scot](#)

**Sent:** 17

September 2021 10:56

**To:** [@gov.scot](#)

**Cc:** [@scottishwater.co.uk](#)

**Subject:** FW: Urgent - River Almond

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

Morning all,

Please see the attached letter.

Can you provide any current info in relation to the River Almond? In particular, is there an issue with misconnections here? Grateful for general lines on misconnections and water quality.

Unfortunately, the response is due urgently so grateful for any info asap.

Thanks,

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

[Redacted]  
[Redacted]  
[Redacted]  
[Redacted]

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## **Gullane WWTW and Catchment Summary – Community Update**

We have been liaising with community representatives and local customers over a number of years in relation to concerns regarding the capacity of waste water network and treatment in the Gullane and Aberlady. Throughout we have tried to provide answers to all questions which have been asked and where issues have been highlighted we have investigated and responded.

This document is a summary of information with regards to key areas we are being asked about, namely:

- Waste Water Treatment Works (WWTW) capacity
- Network capacity (with specific focus on new developments)
- CSOs and Cross Connections
- Aberlady Pumping Station

### **WWTW capacity**

In terms of waste water treatment capacity 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. This is the same approach across Scotland.

In 2016 a growth project was carried out to assess Gullane WWTW and its ability to treat additional growth identified in the Local Development Plan, Housing Land Audit and through discussions with potential developers. The additional development accounted for was 452 housing units (HU) or 1017 population equivalent (PE).

The CAR Licence for the works states the Dry Weather flow (DWF) should not exceed 1584m<sup>3</sup>/d. At the time of assessment, the DWF measured 1360m<sup>3</sup>/d. This confirmed there was headroom of 224m<sup>3</sup>/d which could accommodate up to 1066 PE which is more than the identified growth. This means DWF will not be breached due to the growth in the catchment. Note that the additional growth will have minimal impact on the storm discharges as the new developments will be discharging foul only. Some existing surface water discharges to the combined network have been removed as part of the Saltcoats development and two primary school extensions are attenuating existing surface water flows.

The site has a Flow to Full Treatment (FFT) measure of 81 l/s prior to spills. This figure is not predicted to increase with the identified growth.

The only outcome for consideration following the assessment was the volume of sludge production due to the additional growth. Increased tanker movements are required to remove the build-up of sludge and this is managed operationally.

Gullane WWTW has a suspended solids consent of 150 mg/l and from records back to May 2009, the site has never failed a sample.

Since the conclusion of the growth project Scottish Water has approved an additional 467HU and two primary school extensions within the catchment equalling 1062 PE. This means the site will



remain within the available capacity identified in the Growth project once all approved development has been constructed. Scottish Water will initiate a new Growth project once we become aware of further development within the Gullane WWTW catchment. This will again take into consideration the impact of new development flows on the current license conditions and if further discussions are required with SEPA, as well as the works ability to treat to the required standards.

Following on from the community councils previous FOI request it became apparent that the signal which records the WWTW inlet storm screen operation, highlighted a high number of activations over the last few years. It is felt this data is unreliable for several reasons. The data shows the signal is operating more than once for a single storm event. The signal also records wash down events and routine operation of the screen for maintenance purposes. These factors mean the total number of signals provided does not accurately represent the number of spill events on site, instead it is thought to be over recording.

Scottish Water realise the importance of gaining a better understanding of spill frequency at the WWTW inlet and are looking to install flow monitoring on the CSO outfall pipework. The feasibility of installing a flow monitor still needs to be investigated prior to project promotion.

### **Network capacity**

When a developer wishes to discharge to an existing Scottish Water sewerage network the case needs to be reviewed to check for network capacity. This review process considers the risk of either introducing or making worse a flooding issue, top water level increases and impact to the environment through combined sewer overflows (CSO). If there is any doubting the capacity, Scottish Water will request a Drainage Impact Assessment (DIA) is carried out by the developer. Following this review a letter is sent to the developer stating there is “insufficient capacity” and further assessments are required in the form of a DIA. This assessment is then used to confirm available capacity and determine if mitigation solutions are required. Mitigations often include upsizing sewers, storage tanks, surface water removal or a change in connection point. Examples of these assessments are as follows:

#### **Elcho Terrace DIA (Cruden Homes)**

This DIA which was carried out by RPS, showed flooding and CSO detriment during the Stage 1 assessment. Stage 2 was carried out and identified a few options to rectify these increases which included upsizing a large section of the Aberlady network, a storage tank and increasing the pass forward flow rate of Aberlady SPS. Following a further review of the DIA it was noticed that the baseline model being used by RPS was incorrect. The pump rate in the model at the time was much lower than reality. This meant the upstream network drains much quicker than the model predicts, therefore reducing the risk of flooding / spills. The developer also agreed to change their connection point to avoid pumping flows through the main network in Aberlady, which again removes the flooding risks identified in the original report.

Based on the updated Aberlady SPS pump rate and the change in connection point, the development could proceed.

### Saltcoats DIA (CALA)

Cala have a few developments in the Saltcoats area. Scottish Water Horizons carried out a DIA to confirm the impacts from these developments. This assessment identified increased Manhole flooding at 8 manholes on the downstream path which is unacceptable. The stage 2 then identified an area of surface water which was connected to the combined network around the Fire College. The assessment looked at the impact of removing this surface water discharge from the network to offset the increase flow from the development. The results showed that all manholes had a reduction in modelled predicted baseline flooding, therefore showing a betterment on the network compared to the pre-development scenario. In conclusion during storm events, there will be less flow entering the network, less risk of manhole flooding and a reduction in storm spills at the WWTW inlet. This development has no impact on the CSO's upstream of Aberlady SPS due to the hydraulic separation the pumping station provides.

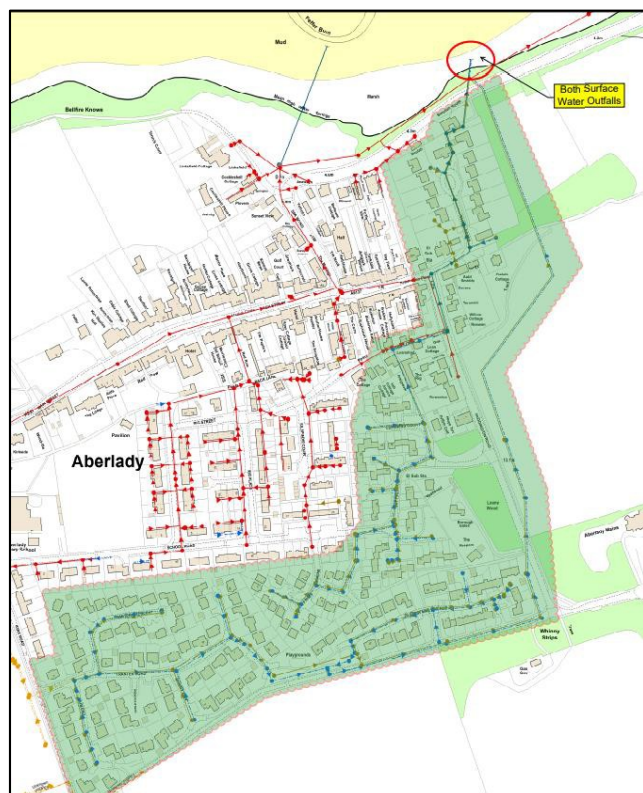
### Cross connections in Aberlady

Following customer reports of sewerage related debris (SRD) being visible in dry weather flows in 2018, Scottish water initiated an investigation to check for cross connections in the upstream catchment. The spills were reported at the Loan Cottage CSO outfall. Wire baskets were installed at various points within the upstream catchment, including the CSO overflow chamber to identify where the SRD was coming from. The baskets were left in place for a period and once examined, identified a possible cross connection present. Dye testing was carried out on properties in that area which identified a property which was cross connected. The cross connection meant the property was discharging its foul waste directly to the CSO overflow pipe and to the bay. This would explain why the CSO overflow pipe appeared to be operating in dry weather flow. Scottish Water immediately carried out a repair which was completed in December 2018.

#### *Cross connection survey diagram.*

The area shaded green is the area of the cross-connection investigation carried out by Scottish Water.

Scottish Water continued inspecting this outfall twice a week for several months and found no issues.





### **Further investigations at Aberlady SPS**

Further investigations identified that the start stop levels of the pumps were set higher than they should have been.

Scottish Water initiated a modelling exercise to check if the higher than expected start stop levels at the pumping station resulted in dry weather flow spills for CSO's in Aberlady. The modelling confirmed CSO's in Aberlady should only spill in storm conditions, not during dry weather.

However, to further decrease the risk of spills in Aberlady, both pumps in the station are in the process of being replaced. Once this has been completed the start stop levels will be lowered and a further examination of the station performance carried out.



WWTW Final Effluent and Inlet CSO Long Sea Outfall

Aberlady SPS Rising Main discharge point

Trunk Sewer carrying flows from Gullane

Gullane WWTW

Aberlady SPS Rising Main

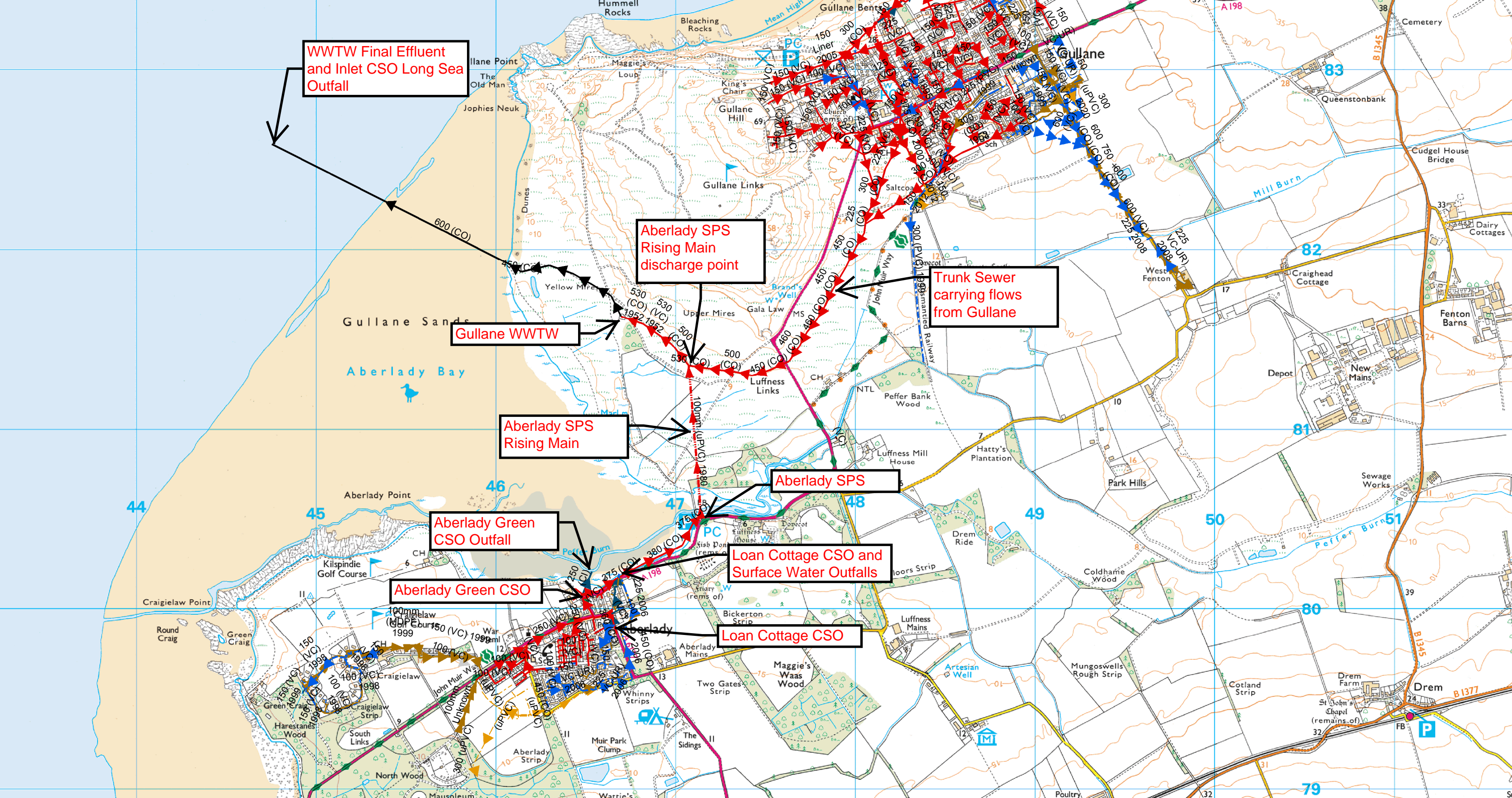
Aberlady SPS

Aberlady Green CSO Outfall

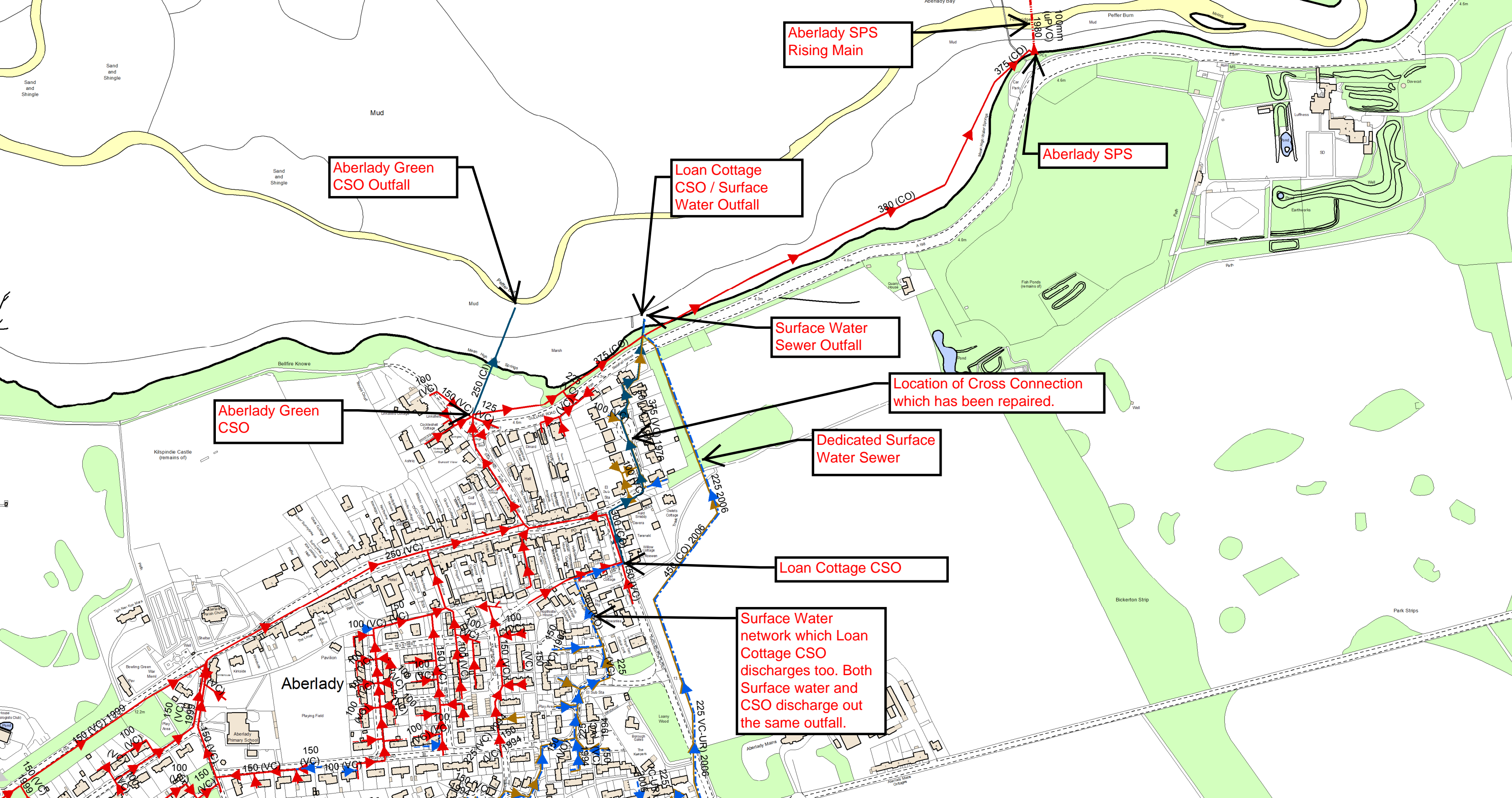
Loan Cottage CSO and Surface Water Outfalls

Aberlady Green CSO

Loan Cottage CSO







Aberlady SPS  
Rising Main

Aberlady SPS

Aberlady Green  
CSO Outfall

Loan Cottage  
CSO / Surface  
Water Outfall

Surface Water  
Sewer Outfall

Location of Cross Connection  
which has been repaired.

Dedicated Surface  
Water Sewer

Aberlady Green  
CSO

Loan Cottage CSO

Surface Water  
network which Loan  
Cottage CSO  
discharges too. Both  
Surface water and  
CSO discharge out  
the same outfall.

Aberlady

## **Background**

Cala Homes are requesting a foul sewerage connection for a 150 residential unit development site at Gullane, Muirfield Grove, Saltcoats. The proposed development is to be considered over **one** future model scenario.

The baseline model utilised for the study was sourced from the "DOA000511\_3189\_MMa\_2\_OCT19\_9\_0.icmt" database provided by Scottish Water Asset Studies.

The future model parameters have been agreed with Scottish Water Horizons in the Development Data Summary (DDS), dated 26/03/21. Flows are to be pumped to the existing network at 4l/s.

The original Stage 1 assessment was issued 13/04/21 (See report reference 501300/34/DG/276 Gullane, Muirfield Grove, Saltcoats - Stage 1 Summary Report (Draft)). Following further discussions with Scottish Water it was agreed to undertake an additional stage 1 analysis using the following methodology (as agreed in email 27/05/21):

1. Re-run baseline removing **all** Cala development and adding Fire Service College surface water back into combined sewer. Add in Cala development & establish comparative impact (including the 150 unit pumped development at Saltcoats).
2. Remove surface water from college and add in **all** Cala development to check it mitigates against the impact of Cala's full development.

**Flooding Analysis**

1. **Re-run baseline removing all Cala development and add Fire Service College surface water back into combined sewer. Add in Cala development to future model & establish comparative impact (including the 150 unit pumped development at Saltcoats).**

Table 1 summarises the flood increases in the catchment for the above analysis.

Node ID	Baseline (+Fire College)					Future Development (+ Fire College)					Difference				
	Storm Durations (mins) & Flood Volumes (m <sup>3</sup> )														
	60	120	180	300	600	60	120	180	300	600	60	120	180	300	600
NT48828601	25	24	20	14	4	32	32	28	21	9	8	8	8	7	5
NT48825501	21	30	34	34	24	22	31	35	37	28	1	1	2	2	4
NT48824403	68	97	115	136	136	72	103	122	146	149	4	6	7	10	14
NT48824402	282	360	405	441	415	292	374	423	468	452	11	14	17	27	36
NT47819901	362	502	589	721	911	376	522	618	759	960	14	20	29	38	49
NT48828604	19	20	19	16	6	22	24	23	20	10	3	4	4	4	4
NT48828605	12	14	13	11	4	13	16	17	14	7	2	3	3	3	3
NT48828604a	12	14	13	11	4	14	16	16	14	6	2	3	3	3	3

**Table 1 – Comparative Hydraulic Analysis (30 Year Return Period - Summer)**

**Note**

1. Due to MS Excel rounding error comparative results may show +/- 1 m<sup>3</sup> error.

**2. Remove surface water from college and add in all Cala development to check it mitigates against the impact of Cala's full development.**

Table 2 summarises the flood increases in the catchment for the above analysis.

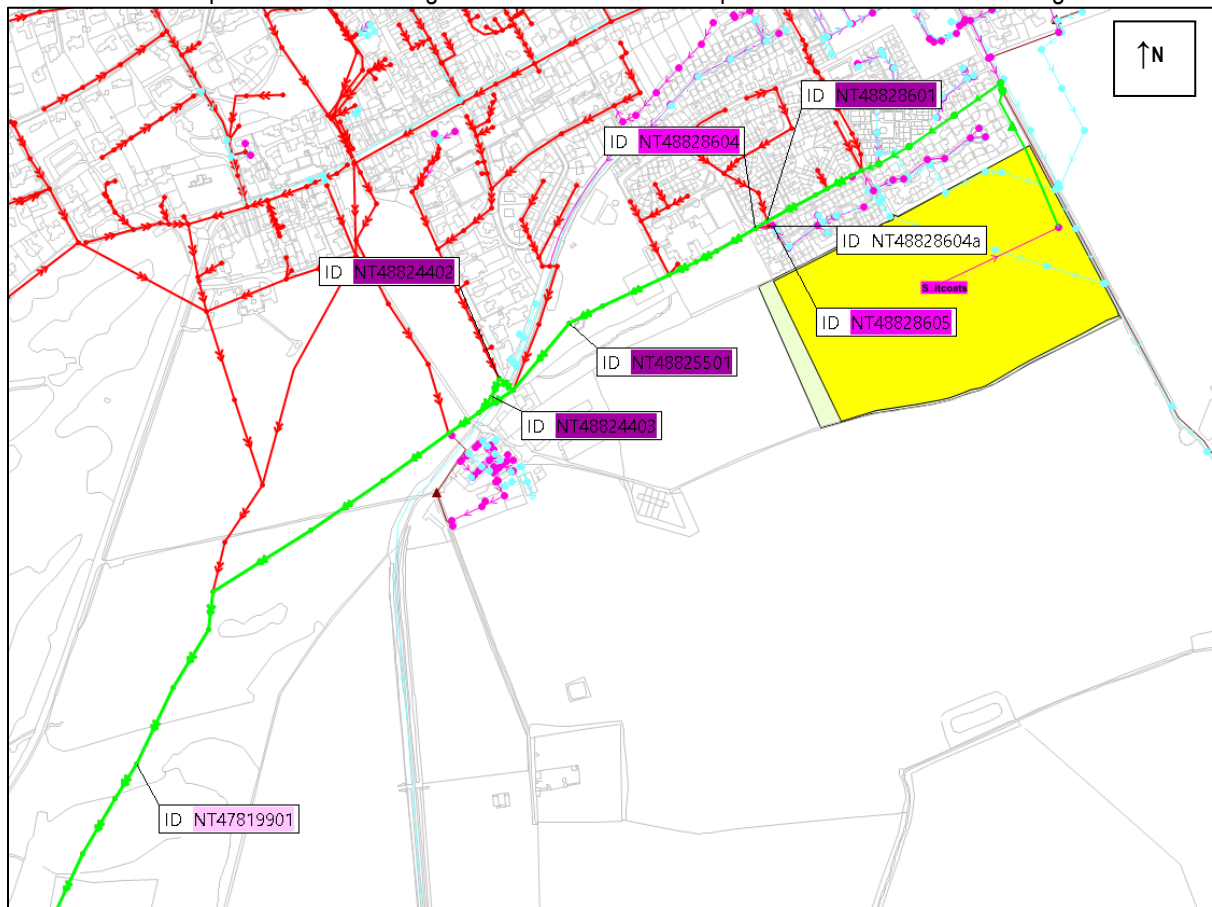
Node ID	Baseline (+ Fire College)					Future Development (-Fire College)					Difference				
	Storm Durations (mins) & Flood Volumes (m <sup>3</sup> )														
	60	120	180	300	600	60	120	180	300	600	60	120	180	300	600
NT48828601	25	24	20	14	4	24	17	13	7	0	-1	-7	-7	-7	-3
NT48825501	21	30	34	34	24	20	28	30	29	16	-1	-3	-4	-5	-8
NT48824403	68	97	115	136	136	62	86	101	116	109	-6	-11	-13	-20	-27
NT48824402	282	360	405	441	415	268	337	374	391	348	-13	-23	-31	-49	-67
NT47819901	362	502	589	721	911	322	435	511	623	774	-40	-67	-78	-99	-137
NT48828604	19	20	19	16	6	18	17	15	11	2	-1	-4	-4	-5	-4
NT48828605	12	14	13	11	4	11	11	10	7	1	-1	-3	-3	-4	-3
NT48828604a	12	14	13	11	4	11	11	10	7	1	-1	-3	-3	-4	-3

**Table 2 – Comparative Hydraulic Analysis (30 Year Return Period - Summer)**

**Note**

1. Due to MS Excel rounding error comparative results may show +/- 1 m<sup>3</sup> error.

The location of the predicted flood changes in relation to the development site is shown below in Figure 1.



**Figure 1 – Flood Change Locations in Relation to Proposed Development**

**Note**

1. Primary downstream sewer route from proposed development highlighted in green.
2. Indicative development boundary shaded yellow and labelled.