

[REDACTED]
[REDACTED]

Date: 23 September 2022

[REDACTED]
Water Company Account Manager (South West)
Environment Agency

Dear Kevin

AMP7 EXE ESTUARY SHELLFISH WATERS
Exmouth CSOs – Maer Road PSCSO and Phear Park PSCSO

Many thanks the meeting on 15th September 2022 which gave us the opportunity to discuss the Exmouth Shellfish requirements. It was good to meet your colleagues [REDACTED] and we were very pleased that [REDACTED] could also join us, as I know she has been collaboratively working with us to develop a solution since 2019.

We were understandably disappointed by the rejection of the extension for this scheme as we feel we have been discussing the complexities of the solutions with the EA and we feel this proposal is now has a wider environmental benefit for the Exmouth area, which has had quite sensitive external challenges. We are keen to continue to work with you to agree this solution and delivery dates with you. I have therefore set out our proposal and position on the environmental impact discussed at the meeting below.

South West Water's Proposal

As has previously been recognised, the PR19 process was completed before a winter verified hydraulic model was available and as a result, the PR19 proposed solution of storm tanks at Maer Road SPS and Phear Park SPS was ultimately not feasible due to the pass forward flow not being great enough to drain them as well as the timing coinciding with a number of other developments and investments in the area.

The proposed strategic solution is to increase pass forward flows from both pumping stations to Maer Lane STW. This does increase the modelled volume of annual storm discharged at the STW Settled Storm Overflow (SSO), although overall the modelled predicted volume is lower in total over the three overflows.

Through coastal hydrodynamic modelling we have shown the increased volumes to have an insignificant impact on the (pre-May 2022) designated bathing and shellfish waters. This approach was discussed at a collaborative meeting with the EA on 24th September 2021, with the fallback position being to install storm UV, subject to DEFRA agreement.

As per your letter dated 17th August 2022, we recognise that the STW SSO volume increase does not align with the EA 'no det' policy and hence we propose to install Storm UV in line with the original proposal. We note that DEFRA's *Consultation on the Government's Storm Overflows Discharge Reduction Plan 31 March 2022* supports UV disinfection as a permanent alternative to reducing spill frequencies for overflows discharging to bathing waters (Headline Target 2).

The strategic solution requires pumping station upgrades and a new STW outfall to provide increased capacity. This allows for the future STW treatment capacity upgrade which would be needed to meet the water quality standards for the newly designated Sandy Bay shellfish waters.

Under the usual WINEP investigation drivers STW improvements would not be delivered until AMP9, however as the solution is already known, the STW treatment upgrade can be carried out in AMP8 (under WINEP driver SWIMP) providing early benefit for Sandy Bay shellfish waters and the wider environment (see graphic). Delivering the pumping station upgrades and outfall capacity increase now will also ensure the STW upgrade can be delivered earlier in AMP8 than would otherwise be possible. The upgrade would be designed to allow for future 2050 6DWF treatment and hence provides resilience against catchment growth.

The meeting on 15th September helped clarify that the EA seek to achieve the River Basin Management plan objective of 300 E.coli/100ml at all Shellfish Waters, and that these WINEP outputs were included as it was deemed that overflow discharge reduction would assist in achieving the objective within the Exe Estuary, alongside other non-SWW catchment improvements.

As discussed at the meeting, the EA deterioration modelling shows the Exe Estuary to be at risk of deterioration. This annual modelling is based on CEFAS monitoring data available on their website but also includes assumptions on *E.coli* concentrations of continuous and intermittent discharges and other sources. Whilst the modelling predicts risk of deterioration the actual CEFAS monitoring data (see graph) is showing long term improvements with regard to *E.coli* concentrations. We therefore believe there is no increased risk to the shellfish industry between 30th September 2022 and December 2023 when the outfall can be built and pass forward flows can be increased from Maer Road SPS, reducing storm discharges from Maer Road PSCSO. We also note that the CEFAS monitoring data for Sandy Bay ends June 2019 which may indicate that the beds are not currently being harvested.

The delivery team are currently working to achieve increased forward flows from Phear Park by 30th September 2022, and partial increased flow from Maer Road, in order to provide maximum environmental benefit until the outfall upgrade.

We believe the proposed improvements are the best possible outcome for the environment and enabling us to deliver the first phases within AMP7 will ensure that the benefits are realised as early as possible. Having surety that the proposals will meet the AMP7 WINEP outputs will enable this scheme to be internally approved and work to commence which is extremely time critical. We need to secure the outfall drilling contractor's equipment for this autumn / winter by early October. The holiday park is proposing to develop their site further and delaying the drill until next year may cause unnecessary delay and issues for these businesses.

As noted, we believe this is the only feasible solution and the investment in the outfall and storm UV represents a significant increase in our investment (c.£10m additional investment) as well as providing wider benefit to the environment, where shellfish water quality has already improved in the Exe Estuary (based on actual sampling data).

Please could you provide confirmation that this solution is acceptable (subject to Defra agreement on the Storm UV – as per latest guidance) to deliver the AMP7 WINEP outputs (to allow me to obtain internal approvals for the significant outfall and storm UV investments) alongside the process for us to agree the revised timeline, as well as any potential to meet the Phear Park outputs if the additional pumps were in place by 30 September 2022.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Horne'.


Compliance and ESG Director

CC.




Delivering Benefits Earlier

As per WINEP / Standard PR24 (if storm storage were feasible)

AMP7 Y1	AMP7 Y2	AMP7 Y3	AMP7 Y4	AMP7 Y5	AMP8	AMP9
	K&K FE UV (30/06/21)					
	Exeter CSOs (30/06/21)				Sandy Bay SW investigation	SPS Upgrades and Increased STW outfall capacity
		Maer Rd and Phear 10 spills (30/09/22)				STW SSO 10 spills (FFT upgrade)
						STW FE UV for Shellfish

Current Strategy

AMP7 Y1	AMP7 Y2	AMP7 Y3	AMP7 Y4	AMP7 Y5	AMP8	AMP9
Most Exeter CSOs (01/08/20)	K&K FE UV (30/06/21)			Hartopp Rd CSO spill reduction (Waterfit)		
		Phear 10 spills (30/09/22)	Maer Rd 10 spills (31/12/23)			
			SPS Upgrades and Increased STW outfall capacity	STW Storm UV	STW SSO 10 spills (FFT upgrade)	
					STW FE UV for Shellfish	

Cockwood CEFAS Monitoring Results

