Dŵr Cymru Welsh Water

SOAF Investigation Output Summary

Cyfoeth Naturiol Cymru Natural Resources Wales

Reference: SOAF.R 00001

Please see Audit Statement Technical Guidance for further information

ASSET INVESTIGATION DETAILS					
SAP Asset Name:	Ruthin Berse Road Coedpoeth CSO		**Asset Template reference**	CG0356301-RUTHIN-BERSE ROAD COEDPOETH ,-72051-Stage 1 - OC-Flintshire & Wrexham	
Investigation Type	SOAF (River)				
Year of breach:	*2020*	**Spill Trigger cause:**	*OC Continuation Restriction (Maintenance)*		
Year of Investigation:	*2022*	**Investigation year performance:**	*27*		
Population of Asset	*1148*	**Modelled Performance: (DESIGN) / (CALIBRATED)**	*26 / 116*		
Permit Details					
Storm Permit ID:	CG0356301	**Storm Permit Name:**	RUTHIN/BERSE ROAD COEDPOETH		
Asset NGR:	SJ2925350939	**Waterbody ID**	GB111067051730		
Discharge NGR:	SJ2937750899	**Water body Discharge location**	Gwenfro		
Brief description of asset *(Screen, PFF flow control, Storage, outfall)*					
Incoming Pipe: 300mm; CSO Type: Single sided high level weir; Screening: 6x6mm 2d; Flow Control: X-Pipe ; PFF Pipe: 225mm; Storage Provision: None; Consent: 31l/s.					

SOAF STAGE 1						
Details of assessment:	Asset condition surveys supported by hydraulic model assessment of the asset performance against available telemetry information (EDM and radar rainfall datasets). Additional flow and rainfall monitoring was undertaken to improve the baseline model accuracy and assist in defining the root cause of spills.					
Permit Compliance						
PFF	Design Compliant – Operational Intervention required to restore.					
Storage	N/A					
Screening	Compliant					
Bespoke/Other	N/A					
SOAF Stage 1 findings						
Following the hydraulic model assessment, the primary cause of the high spills at the asset is concluded to be OC Continuation Restriction (Maintenance). The predicted pass-forward flow is currently below consent prior to the first spill but PFF is predicted to be with 10% of the consent following cleaning of the asset and the sewer downstream of the asset . The model is fit for use, based on the flow monitor trends and telemetry trends.						
Cause of spill count :	**Other Cause**	**OC Continuation Restriction**	**Catchment Hydraulic**	**No**	**Infiltration & IRP required**	**No**
Future Operational Management Proposal:	*The primary cause of the spills are operational factors that have been assessed as deliverable in the short term. The asset has been added to the SOAF Intervention programme with the details outlined below.*					
Operational intervention required:	*Desilt from the asset chamber SJ29502903 downstream to SJ29512101*					
SOAF Operational Intervention						
Start Date:	**Oct-23**	**Completion Date:**	-	**Indicative future annual spill performance** *(less than 40 do not continue to stage 2)*	-	
Intervention Description:	**A continuation restriction due to maintenance has been identified as a factor in excess spills at this asset. A cleanse of the sewerage network is required to restore compliant flows. This asset will be highlighted for future Cyclic Maintenance based upon the review of the post intervention return.**					
Proposed Completion Date:	**Oct-24**	**Data years to be excluded from future SOAF triggers calculations**	*TBC*	**Request to hold stage 2 surveys for environment recovery**	*N/A*	

SOAF STAGE 2					
Receiving Waterbody WFD Status			-		
Stage 2a					
Aesthetic survey:	Spring	-	**Aesthetic Total score** (inclusive of amenity classification, previous complaints & pollutions)	0	-
	Autumn	-		-	-
Stage 2b				*Yes / No unable due to culverted watercourse*	

Invertebrate survey:	Spring	-	**Invertebrate survey score:**	-	-
	Autumn	-		-	-
Stage 2c Required:				*Yes / No*	
Stage 2c screening:	0	**Progressed through screening?**	0	**Stage 2c water quality assessment Score:**	-

SOAF STAGE 3 - STEP 1>3						
Options assessed	Rainscape		Traditional Storage	N	PFF Increase	N
Equivalent storage volume required	0	**Rainscape Cost**		£-	**CBR**	N/A
Bespoke future trigger agreement	40	**Traditional Storage**		£-	**CBR**	N/A
		Other		£-	**CBR**	-
Key Constraints						
Future Active Management Proposal						

Conclusion and Future Spill Reduction Proposals					
Summary	*RUTHIN/BERSE ROAD COEDPOETH was Shown to have a other cause issue resulting in higher spills which are expected to reduce once a resolution has been implemented.* *Once the assets New spill performance is established, if this is shown to still be in excess of 10 the impact of the asset will be established as part of DCWW's Storm Overflow Water Quality Assement Strategy (SOWQAS) in AMP8*				
Asset Prioritisation Level	-			**Delivery Predicted Period**	-
Asset NEP ID	*N/A*	**Asset NEP Driver Code**	*N/A*	**Detailed Design Predicted Period**	-
Progression to Stage 5 In AMP	*No*	-			

SOAF AGREEMENT					
	Date	**SOAF STAGE**	**Name**	**Contact Details**	**Location of Output**
DCWW Approval	27/10/2023	*Stage 1 - OC*	**Christian Phillips Adams**	christian.phillipsadams@dwrcymru.com	*Email*
Regulator Liaison Date	Click here to enter a dat				

CSO Classification					
Satisfactory	**N**	Unsatisfactory	**Y**	Sub Standard	**Y**
		Any operation in dry weather conditions?	**N**	Does not meet modern standards of engineering and aesthetic control for storm overflow structures set out in the British standard BS EN 752:2017 drain and sewer systems outside buildings	**N/A**
		Any operation in breach of permit conditions?	**Y**	Does not have sufficient hydraulic capacity compared to accepted minimum design standards	**Y**
		Any significant visual or aesthetic impact due to solids or sewage fungus?	**N/A**	Risks becoming unsatisfactory because discharges have increased beyond the original design due to infiltration, growth and urban creep	**N**
		Cause or significantly contributes to a deterioration in the biological or chemical status of the receiving water?	**N/A**		
		Causes or significantly contributes to failures in bathing water quality standards for identified bathing waters?	**N/A**		
		Causes or significantly contributes to failures in shellfish quality standards for identified shellfish waters	**N/A**		
		Causes or significantly contribute to failures in water quality standards in coastal and transitional waters?	**N/A**		
		Causes pollution of groundwater?	**N/A**		