SOAF Investigation Output Summary

Dŵr Cymru Welsh Water

Cyfoeth Naturiol Cymru Natural Resources Wales

Reference: SOAF.R 00001

Please see Aurill Statement Technical Guidance for further information

ASSET INVESTIGATION DETAILS					
SAP Asset Name:	Talwrn Rd No2 CSO		**Asset Template reference**	CM0175501-TALWRN ROAD NO 2 CSO-71746-Stage 1 - OC-Flintshire & Wrexham	
Investigation Type	SOAF (River)				
Year of breach:	*2020*	**Spill Trigger cause:**		*OC Telemetry*	
Year of Investigation:	*2020*	**Investigation year performance:**		*187 Spills*	
Population of Asset	*3690*	**Modelled Performance: (DESIGN) / (CALIBRATED)**		*N/A*	
Permit Details					
Storm Permit ID:	CM0175501	**Storm Permit Name:**		TALWRN ROAD NO 2 CSO	
Asset NGR:	SJ2836851709	**Waterbody ID**		GB111067051730	
Discharge NGR:	SJ2849051830	**Water body Discharge location**		R. Gwenfro	

Brief description of asset
(Screen, PFF flow control, Storage, outfall)

Incoming Pipe: 600 mm; CSO Type: high-level, single-sided weir; Screening: Huber Rotamat - 6mm mesh; Flow Control: X-Pipe; PFF Pipe: 225 mm; Storage Provision: None; Consent: 75 l/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).					
Permit Compliance						
PFF	Not Applicable - Assessment not required to progress to point of compliance review					
Storage	N/A					
Screening	Compliant					
Bespoke/Other	N/A					
SOAF Stage 1 findings						
Primary Cause: OC Telemetry Secondary Cause: None Following the hydraulic model assessment, the cause of the high spills at the asset is concluded to be OC Telemetry, with no secondary cause of spills. The telemetry was reading a level of 162% from April 2019. The EDM unit was subsequently recorded as being broken and was in need of replacement.						
Cause of spill count :	**Other Cause**	**Yes**	**Catchment Hydraulic**	**No**	**Infiltration & IRP required**	**No**
Future Operational Management Proposal:	*SCOPEX PRISM indicates that the telemetry sensor appears to have been fixed in July 2021*					
Operational intervention required:	*None*					
SOAF Operational Intervention						
Start Date:	**N/A**	**Completion Date:**	*N/A*	**Indicative future annual spill performance** *(less than 40 do not continue to stage 2)*	-	
Intervention Description:	**N/A**					
Proposed Completion Date:	**N/A**	**Data years to be excluded from future SOAF triggers calculations**	*N/A*	**Request to hold stage 2 surveys for environment recovery**	*N/A*	

SOAF STAGE 2					
Receiving Waterbody WFD Status			Moderate		
Stage 2a					
Aesthetic survey:	Spring	2021	**Aesthetic Total score** (inclusive of amenity classification, previous complaints & pollutions)	20	Low
	Autumn	2021		20	Very Low
Stage 2b				*Yes / No unable due to culverted watercourse*	
Invertebrate survey:	Spring	2021	**Invertebrate survey score:**	0	No Impact
	Autumn	2021		6	Moderate

Stage 2c Required:					Yes / No
Stage 2c screening:	-	**Progressed through screening?**	Not Required	**Stage 2c water quality assessment Score:**	Not Required

SOAF STAGE 3 - STEP 1>3						
Options assessed	Rainscape		Traditional Storage	Y	PFF Increase	N
Equivalent storage volume required	Volume m3	**Rainscape Cost**		£ Cost	**CBR**	Ratio
Bespoke future trigger agreement	Number of spills	**Traditional Storage**		£ Cost	**CBR**	Ratio
		Other		£ Cost	**CBR**	Ratio
Key Constraints						
Future Active Management Proposal						

Conclusion and Future Spill Reduction Proposals					
Summary	*TALWRN ROAD NO 2 CSO 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 Assessment Strategy (SOWQAS) in AMP8*				
Asset Prioritisation Level	*Priority 3*			**Delivery Predicted Period**	*AMP9/10*
Asset NEP ID	*DCWW102089a*	**Asset NEP Driver Code**	*W_U_O_IMP1*	**Detailed Design Predicted Period**	*AMP8/9*
Progression to Stage 5 In AMP	*No*	*Proposed Solution yet to be taken through detailed design devloped*			

SOAF AGREEMENT					
	Date	**SOAF STAGE**	**Name**	**Contact Details**	**Location of Output**
DCWW Approval	01/03/2024	*Stage 1 - OC*	**Christian Phillips Adams**	christian.phillipsadams@dwrcymru.com	*Email*
Regulator Liaison Date	Click here to enter a date.				

CSO Classification					
Satisfactory	**N**	Unsatisfactory	**Y**	Sub Standard	**N**
		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**
		Any operation in breach of permit conditions?	**N**	Does not have sufficient hydraulic capacity compared to accepted minimum design standards	**N**
		Any significant visual or aesthetic impact due to solids or sewage fungus?	**Y**	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?	**Y**		
		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**		