

ASSET INVESTIGATION DETAILS			
SAP Asset Name:	CORWEN THE PAVILLION REAR OF		Asset Template reference
Investigation Type	SOAF (River)		CM0172301-CORWEN REAR OF THE PAVILLION --2430-Stage 4 - Non CBA- Denbighshire
Year of breach:	2018	Spill Trigger cause:	Hydraulic
Year of Investigation:	2019	Investigation year performance:	82 Spills
Population of Asset	805	Modelled Performance: (DESIGN) / (CALIBRATED)	75 Spills
Permit Details			
Storm Permit ID:	CM0172301	Storm Permit Name:	CORWEN REAR OF THE PAVILLION
Asset NGR:	SJ0813443556	Waterbody ID	GB111067052060
Discharge NGR:	SJ0825243519	Water body Discharge location	Dee - Ceiriog to Alwen
Brief description of asset (Screen, PFF flow control, Storage, outfall)			
Incoming pipe: 450mm; CSO Type: Hole in the wall with screen; Flow Control: None; PFF Pipe: 300 mm; Storage Provision: N/A; Consent: No numeric details available - assumed to be a deemed as is permit. This CSO protects downstream treatment works. Flow backs up from the inlet works to CSO leading to spills			

SOAF STAGE 1						
Details of assessment:	Assessment of asset performance undertaken by asset condition surveys supported by hydraulic model enhancement through flow survey and verification.					
Permit Compliance						
PFF	Compliant					
Storage	N/A					
Screening	Compliant					
Bespoke/Other	N/A					
SOAF Stage 1 findings						
Following the hydraulic model assessment, the cause of the high spills at the asset is concluded to be Hydraulic, with OC Continuation Restriction (Maintenance) as the secondary cause of spills. The predicted pass-forward flow is 47.5 l/s compared against SOC-A of 15.4 l/s. No numerical consent available for the asset. The model is fit for use, based on the reported spill numbers and telemetry trends.						
Cause of spill count :	Other Cause	Yes	Catchment Hydraulic	Yes	Infiltration & IRP required	No
Future Operational Management Proposal:	<i>The primary cause of the high spills is hydraulic and as such the asset progresses for Stage 2 and 3 assessments under the worst-case impact scenario of the current performance. However, operational interventions detailed below are required to mitigate excessive spills beyond the design criteria and should be implemented prior to the final Stage 4 decision confirmation.</i>					
Operational intervention required:	<i>Desilt required across the inlet pipework to improve flow into the treatment works, however this does not significantly impact the operation of the asset and is only causing a minor degradation in spill performance. As such, the system is operating broadly as designed and minor additional maintenance changes are required to improve the operation of the asset.</i>					
SOAF Operational Intervention						
Start Date:	Sep-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:	Sep-24	Data years to be excluded from future SOAF triggers calculations		Request to hold stage 2 surveys for environment recovery		

SOAF STAGE 2					
Receiving Waterbody WFD Status			Good		
Stage 2a					
Aesthetic survey:	Spring	2021	Aesthetic Total score (inclusive of amenity classification, previous complaints & pollutions)	UTC	Unable to access
	Autumn	2021		UTC	Unable to access
Stage 2b					
Invertebrate survey:	Spring	2021	Invertebrate survey score:	UTC	Unable to access
	Autumn	2021		UTC	Unable to access
Stage 2c Required:					
Stage 2c screening:	Not required	Progressed through screening?	Yes	Stage 2c water quality assessment Score:	0 - No impact

SOAF STAGE 3 - STEP 1>3						
Options assessed	Rainscape		Traditional Storage	Y	PFF Increase	N

Equivalent storage volume required	21.11812	Rainscape Cost	£1,403,180.00	CBR	0
Bespoke future trigger agreement	40	Traditional Storage	£96,558.88	CBR	0
		Other	-	CBR	-
Key Constraints	No major factors affecting suitability of solution/pricing details				
Future Active Management Proposal	The primary cause of spills was hydraulic and Stage 2 impact assessments have shown that the asset was not having a detrimental effect on the receiving waterbody. Assessment of the potential high-level solutions have indicated that the asset does not pass the SOAF cost benefit threshold for further investigation. Given the high spill numbers, options for spill reduction will be developed under the Drainage and Wastewater Management Plan as part of the overall Welsh Water CSO strategy.				

Conclusion and Future Spill Reduction Proposals					
Summary	<p>Based on the direction from the Welsh Government led Better River Quality Task Force, DCWW Storm overflow spill recution programme will target the elimination of ecological harm and prevention of adverse ecological impact of any SO.</p> <p>With a large programme of assets requiring improvmnt priority will be given to CSOs having the greatest impact in the most sensitive receiving waters.</p> <p>To ensure that the improvement delivered is long term, the improvements for each site will be based on the expectation that water quality upstream of the discharge meets good or high ecological status (GES) irrespective of the actual status of the water.</p> <p>This approach has formed the basis of DCWW's portfolio investment plan for Storm Overflows.</p> <p>CORWEN REAR OF THE PAVILLION was Shown to have a No / Very low Impact therefor as set out above based upon our Long Term Delivery Strategy a spill reduction scheem to elimeite this level of impact is Profiled to be delivered between 2040-2050</p>				
Asset Prioritisation Level	Priority 5			Delivery Predicted Period	AMP11/12
Asset NEP ID	N/A	Asset NEP Driver Code	N/A	Detailed Design Predicted Period	AMP10/11
Progression to Stage 5 In AMP	No	Proposed Solution yet to be taken through detailed design developed			

SOAF AGREEMENT					
	Date	SOAF STAGE	Name	Contact Details	Location of Output
DCWW Approval	29/09/2023	Stage 4 - Non CBA	Christian Phillips Adams	christian.phillipsadams@dwrcymru.com	NRW - Sharefile
Regulator Liaison Date	Click here to enter a date				
CSO Classification					
Satisfactory	Y	Unsatisfactory	N	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?	UTC	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		
		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		