

ASSET INVESTIGATION DETAILS			
SAP Asset Name:	Nr 626 Clydach Road CSO		Asset Template reference
Investigation Type	SOAF (River)		BW4104701-SWO.YNYSTAWE (POINT 86 NEW MA-52490-Stage 1 - OC-Swansea
Year of breach:	2017	Spill Trigger cause:	OC Continuation Restriction (Downstream Hydraulic)
Year of Investigation:	2021	Investigation year performance:	168 Spills
Population of Asset	443	Modelled Performance: (DESIGN) / (CALIBRATED)	102 Spills
Permit Details			
Storm Permit ID:	BW4104701	Storm Permit Name:	SWO.YNYSTAWE (POINT 86 NEW MAP)
Asset NGR:	SN6831100292	Waterbody ID	GB110059032180
Discharge NGR:	SN6728098550	Water body Discharge location	Tawe -confluence with Twrch to tidal I
Brief description of asset (Screen, PFF flow control, Storage, outfall)			
Incoming Pipe: 300mm; CSO Type: double-sided, low-level weir; Screening: None; Flow Control: X-pipe; PFF Pipe: 225mm; Storage Provision: None; Consent: None – Deemed permit			

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	Deemed Permit – Does not meet SocA					
Storage	N/A					
Screening	N/A					
Bespoke/Other	N/A					
SOAF Stage 1 findings						
<p>Primary Cause: (Downstream Hydraulic) Secondary Cause: None</p> <p>Following the hydraulic model assessment, the cause of the high spills at the asset is concluded to be OC Continuation Restriction (Downstream Hydraulic) with no secondary cause of spills. The asset is unable to Pass SOC A (8.3l/s) at first spill. The model is fit for use, based on the reported spill numbers and telemetry trends.</p>						
Cause of spill count :	Other Cause	Yes	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 requiring longer term (1+ year) intervention programmes. Given the scale of the issue, the asset will progress under a bespoke intervention programme with details to be supplied to with the regulator and other stakeholders outside of the normal SOAF processes					
Operational intervention required:	A wider review of influencing factors is required					
SOAF Operational Intervention						
Start Date:	-	Completion Date:	-	Indicative future annual spill performance (less than 40 do not continue to stage 2)	N/A	

Intervention Description:	With The primary cause of spill is the hydraulic capacity of the downstream sewer network being exceeded, this will require a longer term capital intervention programme in line with DCWW's long Term delivery strategy				
Target Completion by Date:	-	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			Moderate		
Stage 2a					
Aesthetic survey:	Spring	2021	Aesthetic Total score (inclusive of amenity classification, previous complaints & pollutions)	0	-
	Autumn	2021		0	-
Stage 2b				Yes / No unable due to culverted watercourse	
Invertebrate survey:	Spring	2021	Invertebrate survey score:	0	No Impact
	Autumn	2021		0	No Impact
Stage 2c Required:				Yes / No	
Stage 2c screening:	-	Progressed through screening?	-	Stage 2c water quality assessment Score:	0

SOAF STAGE 3 - STEP 1>3						
Options assessed	Rainscape		Traditional Storage		PFF Increase	
Equivalent storage volume required	692m3	Rainscape Cost			CBR	
Bespoke future trigger agreement	Traditional Storage			CBR		
	Other			CBR		
Key Constraints	N/A					
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. Further details are shown below detailing DCWW's plans for storm overflow spill reduction.					

Conclusion and Future Spill Reduction Proposals				
Summary	<p>SWO. YNYSTAWE (POINT 86 NEW MAP)Based on the direction from the Welsh Government led Better River Quality Task Force, DCWW Storm overflow spill reduction 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 improvement 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>SWO. YNYSTAWE (POINT 86 NEW MAP) was Shown to have an other cause issue resulting in higher spills which are expected to reduce once a resolution has been implemented.</p> <p>The asset will under take classification as part of DCWW's GN066 in AMP8, to establish any impact that there might be.</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
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	01/05/2024	Stage 1 - OC		Christian Phillips Adams	<a href="mailto:christian.phillipsadams@dwrcymru.com">christian.phillipsadams@dwrcymru.com</a>	Email
Regulator Liaison Date	Click here to enter a date					
CSO Classification						
Satisfactory	N	Unsatisfactory	N	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	U	

Any operation in breach of permit conditions?	<b>Y</b>	Does not have sufficient hydraulic capacity compared to accepted minimum design standards	<b>Y</b>
Any significant visual or aesthetic impact due to solids or sewage fungus?	<b>U</b>	Risks becoming unsatisfactory because discharges have increased beyond the original design due to infiltration, growth and urban creep	<b>N</b>
Cause or significantly contributes to a deterioration in the biological or chemical status of the receiving water?	<b>N</b>		
Causes or significantly contributes to failures in bathing water quality standards for identified bathing waters?	<b>N/A</b>		
Causes or significantly contributes to failures in shellfish quality standards for identified shellfish waters	<b>N/A</b>		
Causes or significantly contribute to failures in water quality standards in coastal and transitional waters?	<b>N/A</b>		
Causes pollution of groundwater?	<b>N/A</b>		