

ASSET INVESTIGATION DETAILS			
SAP Asset Name:	Llanarth Bridge New CSO		Asset Template reference BP0319201-LLANARTH BRIDGE CSO LLANARTH CEREN-72036-Stage 1 - OC-Ceredigion
Investigation Type	SOAF (River)		
Year of breach:	2021	Spill Trigger cause:	OC Continuation Restriction (Maintenance)
Year of Investigation:	2021	Investigation year performance:	163 Spills
Population of Asset	281	Modelled Performance: (DESIGN) / (CALIBRATED)	49 Spills
Permit Details			
Storm Permit ID:	BP0319201	Storm Permit Name:	Llanarth Bridge CSO, Llanarth, Newquay, Ceredigion
Asset NGR:	SN4240257700	Waterbody ID	GB110063041400
Discharge NGR:	SN4239157710	Water body Discharge location	Gido - headwaters to tidal limit
Brief description of asset (Screen, PFF flow control, Storage, outfall)			
Incoming Pipe: 225mm; CSO Type: Single-sided, high sided weir; Screening: Mechanical Screen - 6 mm 2d; Flow Control: X-Pipe ; PFF Pipe: 150mm; Storage Provision: N/A; Consent: 12.5/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	Compliant					
Storage	N/A					
Screening	Compliant					
Bespoke/Other	N/A					
SOAF Stage 1 findings						
<p>Primary Cause: OC Continuation Restriction (Maintenance) Secondary Cause: OC Telemetry</p> <p>Following the hydraulic model assessment, the cause of the high spills at the asset is concluded to be OC Continuation Restriction (Maintenance), with OC Telemetry as the secondary cause of spills. The predicted pass-forward flow is within 10% of consent prior to the first spill. The model is fit for use, based on the reported spill numbers and telemetry trends.</p> <p>Unable to CCTV downstream due to 50% silt and debris in CSO channel - passed to networks to resolve.. Telemetry shows erratic spikes for April, June, July, August, September, and October 2021</p>						
Cause of spill count :	Other Cause	Yes	Catchment Hydraulic	No	Infiltration & IRP required	No
Future Operational Management Proposal:	Regular jetting schedule					
Operational intervention required:	Clear sediment, Re-calibrate telemetry					
SOAF Operational Intervention						
Start Date:	Jan-24	Completion Date:	TBC	Indicative future annual spill performance (less than 40 do not continue to stage 2)	39	
Intervention Description:	<p>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.</p> <p>Telemetry has been identified as a factor in excess spills at this asset. Telemetry maintenance has been issued to address this problem. This is focused on, the re calibration to correctly capture spills and future performance will be monitored</p>					
Proposed Completion Date:	Jan-25	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	-	Aesthetic Total score (inclusive of amenity classification, previous complaints & pollutions)	-	-	
	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:	Not Required

SOAF STAGE 3 - STEP 1>3						
Options assessed	Rainscape		Traditional Storage	Y/N	PFF Increase	Y/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	Note of major factors affecting suitability of solution/pricing details					
Future Active Management Proposal	i.e. Bespoke improved planned maintenance/mitigation, investigation under DWMP or NEP revisit – future funding intention					

Conclusion and Future Spill Reduction Proposals					
Summary	<p>Llanarth Bridge CSO, Llanarth, Newquay, Ceredigion was Shown to have a other cause issue resulting in higher spills which are expected to reduce once a resolution has been implemented.</p> <p>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</p>				
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	27/01/2024	Stage 1 - OC	Christian Phillips Adams	<a href="mailto:christian.phillipsadams@dwrwymru.com">christian.phillipsadams@dwrwymru.com</a>	Email
Regulator Liaison Date	<a href="#">Click here to enter a date</a>				
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?	-	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?	-		
		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		