

ASSET INVESTIGATION DETAILS			
SAP Asset Name:	Dilwyn Arms Pontardawe		Asset Template reference
Investigation Type	SOAF (River)		BP0343601-DILWYN ARMS PONTARDAWE CROSS NPT-72250-Stage 4 - Non CBA-Neath Port Talbot
Year of breach:	2017	Spill Trigger cause:	Hydraulic
Year of Investigation:	2020	Investigation year performance:	135 Spills
Population of Asset	3207	Modelled Performance: (DESIGN) / (CALIBRATED)	173 Spills
Permit Details			
Storm Permit ID:	BP0343601	Storm Permit Name:	Dilwyn Arms CSO, Herbert Street, Pontardawe
Asset NGR:	SN7216403946	Waterbody ID	GB110059032190
Discharge NGR:	SN7217203939	Water body Discharge location	Upper Clydach - headwaters to confluen
Brief description of asset (Screen, PFF flow control, Storage, outfall)			
Incoming Pipe: 450 mm; CSO Type: low-level, single-sided weir; Screening: mechanical 6mm 2D ; Flow Control: None; PFF Pipe: 225mm; Storage Provision: None; Consent: 40l/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						
Following the hydraulic model assessment the cause of the high spills at the asset is concluded to be Hydraulic, with influence by ingress of clean water from multiple sources, with pass forward flow meeting consent prior to first spill. The model is fit for use, based on the reported spill numbers and telemetry trends.						
Cause of spill count :	Other Cause	-	Catchment Hydraulic	Y	Infiltration & IRP required	Y
Future Operational Management Proposal:	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.					
Operational intervention required:	Once these interventions are in place, the hydraulic modelling indicates the asset will be compliant with it's discharge permit.					
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:	Infiltration has been identified as a factor in excess spills at this asset. An infiltration reduction plan (IRP) is in the process of development to address the problem. It is recognised in the Storm Overflow Assessment Framework that investigation and resolution of infiltration issues can be difficult and that solutions may be iterative with IRPs potentially only succeeding over the medium to long-term.					
Proposed Completion Date:	Oct-28	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			Good		
Stage 2a					
Aesthetic survey:	Spring	2021	Aesthetic Total score (inclusive of amenity classification, previous complaints & pollutions)	60	High
	Autumn	2021		25	Low
Stage 2b				Yes / No unable due to culverted watercourse	

Invertebrate survey:	Spring	2021	Invertebrate survey score:	24	Extremely Severe
	Autumn	2021		4	Low
Stage 2c Required:				Yes / No	
Stage 2c screening:	Not Required	Progressed through screening?	No	Stage 2c water quality assessment Score:	N/A

SOAF STAGE 3 - STEP 1-3						
Options assessed	Rainscape		Traditional Storage	Y	PFF Increase	N
Equivalent storage volume required	975	Rainscape Cost		Target Not Achieved	CBR	N/A
Bespoke future trigger agreement	40	Traditional Storage		£3,540,944.00	CBR	N/A
		Other		0	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 having a minimal effect on the receiving waterbody, with the waterbody itself currently achieving a good or higher status. Assessment of the potential high-level solutions have indicated that any solution entailed excessive costs for the benefit it provided and thus the asset does not pass the SOAF Cost Benefit threshold and will not progress to detailed benefits assessment. Further details are shown below detailing DCWW's plans for storm overflow spill reduction.					

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 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>Dilwyn Arms CSO, Herbert Street, Pontardawe was Shown to have a Severe + Impact therefor as set out above based upon our Long Term Delivery Strategy a spill reduction scheme to eliminate this level of impact is Profiled to be delivered before 2035</p>					
Asset Prioritisation Level	Priority 1			Delivery Predicted Period		AMP8/9
Asset NEP ID	DCWW101973a	Asset NEP Driver Code	W_U_O_IMP1	Detailed Design Predicted Period		AMP7/8
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	24/10/2023	Stage 4 - Non CBA	Christian Phillips Adams	<a href="mailto:christian.phillipsadams@dwrcymru.com">christian.phillipsadams@dwrcymru.com</a>	Email
Regulator Liaison Date	<a href="#">Click here to enter a date</a>				
CSO Classification					
Satisfactory	<b>N</b>	Unsatisfactory	<b>Y</b>	Sub Standard	<b>Y</b>
		Any operation in dry weather conditions?	<b>N - No spills during DWF</b>	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	<b>UTC - Amenity rating not available</b>
		Any operation in breach of permit conditions?	<b>N - Compliant</b>	Does not have sufficient hydraulic capacity compared to accepted minimum design standards	<b>Y - Under Capacity, SOC A not retained</b>
		Any significant visual or aesthetic impact due to solids or sewage fungus?	<b>Y - High</b>	Risks becoming unsatisfactory because discharges have increased beyond the original design due to infiltration, growth and urban creep	<b>Y</b>
		Cause or significantly contributes to a deterioration in the biological or chemical status of the receiving water?	<b>Y - Extremely Severe</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>		