

New Forest Biodiversity Forum

Reducing Combined Sewer Overflows

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Storm overflows have received considerable public attention in recent years which has driven legislative change, significant root cause analysis, and the development and deployment of solutions. This presentation will cover the root cause analysis undertaken by Southern Water on circa 1,000 storm overflows. The analysis uses machine learning techniques and shows that in the southeast 25% of spill events are driven by ground water infiltration into public and privately owned sewers, 64% of spill events are driven by surface water inundation into the sewer network, and the remaining 11% is complex and due to multiple factors. The presentation will cover key learnings from promoting a different approach and a solution set which has favoured optimisation and source control over traditional end-of-pipe infrastructure. In groundwater driven catchments this has featured the sealing of private (or customer) sewers and the construction of wetland treatment. In surface water driven catchments a five-stage process has been developed. The initial results from this novel programme will be shared alongside the plans to scale the delivery as part of a large environmental improvement programme across the southeast of England and in the New Forest.