

# Storm Overflow Task Force

October 2022



from  
**Southern  
Water** 

# What are storm overflows?

Storm overflows are a pressure relief valve for the system to prevent the devastating impact of sewer flooding



from Southern Water

# There are broadly 3 main types of intervention to reduce flooding and storm overflow use:

## 1. **Source control** (removing and slowing the flow of rain water)

Rainwater harvesting, Permeable paving, Green roofs, Soakaways (includes tree pits), Rain garden (swales), Planters

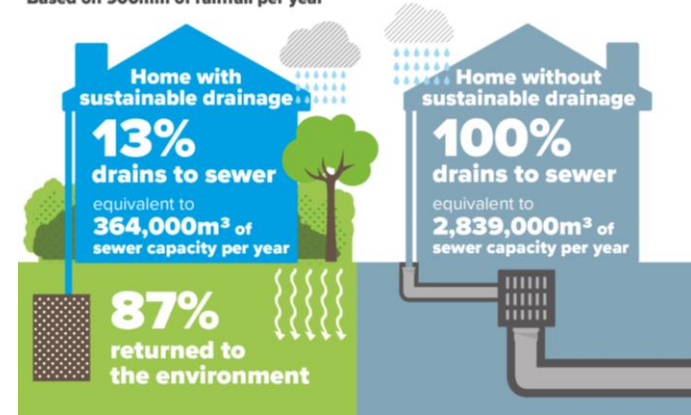
## 2. **Optimisation of existing infrastructure**

Optimisation, tweaking of connected systems and interface, Different mechanical and electrical equipment (e.g. pumps), Improvements in pumping station and storm tank use and control, Smart network control with increased digitalisation

## 3. **Build bigger infrastructure** (building larger pipes, pumping stations, etc.)

Wetlands treatment (Groundwater), Sewer lining/sealing (Groundwater), Larger sewers, Large storm tanks, Large treatment works

**Water run-off for a development of 10,000 homes:**  
Based on 900mm of rainfall per year



# Sustainable solutions also have wider benefits.

## Sustainable drainage

The risk of flooding and storm overflows can be reduced by slowing surface water runoff reaching the sewer. There are a number of ways we can do this...



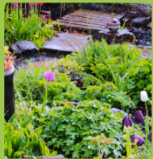
Permeable paving and soakaways



Green roofs



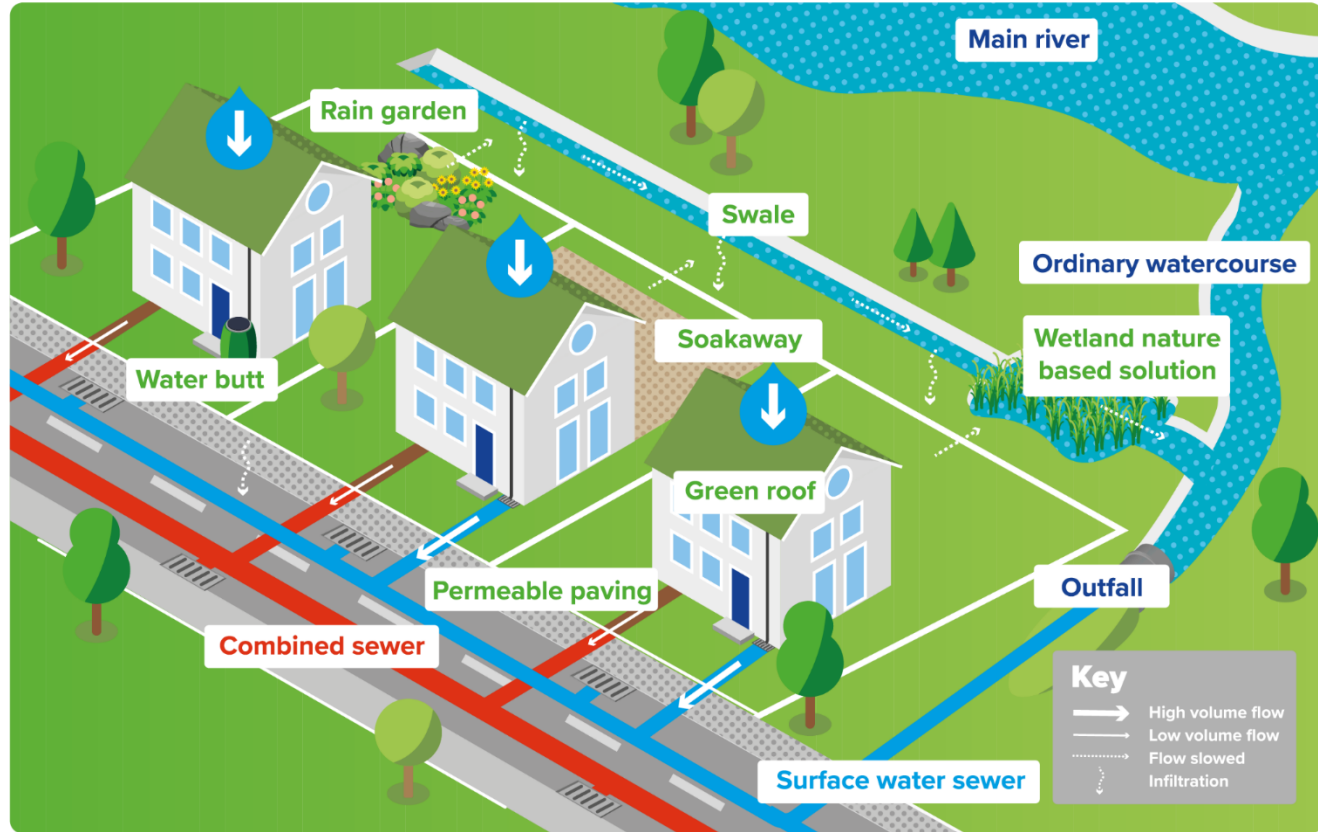
Swales and wetlands



Rain gardens



Water Butts



# Gurnard & Havenstreet

## Pathfinder Process

1. Optimisation
2. Misconnections
3. NHH SuDS
4. Highway Schemes
5. Household SuDS
6. Monitor (TS,SLM, PRD, FD, RD)

- UNESCO Biosphere Reserve & AONB
- 1 pumping station: Blackbridge Brook
- Permitted PFR: 12lps (8lps storm)
- 5mm rain, 12hrs
- 132 household, 6 NHH, 1 x Highways
- Waterbutt, planter, swale