KENT COUNTY COUNCIL

KENT FLOOD RISK MANAGEMENT COMMITTEE

MINUTES of a meeting of the Kent Flood Risk Management Committee held in the Council Chamber, Sessions House, County Hall, Maidstone on Wednesday, 12 July 2023.

PRESENT: Mr A R Hills (Chairman), Mr N Baker, Mr P Cole, Ms M Dawkins, Jenni Hawkins, Mrs M McArthur and Ms L Wright

ALSO PRESENT: Mr G Brooker, Mrs G Brown, Cllr P Garten, Mr C Mackonochie

IN ATTENDANCE: Mr M Tant (Flood and Water Manager), Mr T Harwood (Resilience and Emergency Planning Manager) and Mr M Dentten (Democratic Services Officer)

UNRESTRICTED ITEMS

32. Declarations of Interest
(Item 4)

No declarations were made.

33. Minutes of the meeting held on 21 March 2023
(Item 5)

RESOLVED that the minutes of the meeting held on 21 March 2023 were an accurate record and that they be signed by the Chairman.

34. Southern Water - Presentation
(Item 6)

Jon Yates (Pathfinder Delivery Lead (East), Southern Water) and John Mealey (Stakeholder Engagement Manager (Kent), Southern Water) were in attendance for this item.

1. Mr Yates gave a presentation which updated Members on the work of Southern Water's Clean Rivers and Seas Taskforce since the Committee's last meeting. The contents of the presentation included:

    a. the objectives of the Swalecliffe, Margate and Deal pathfinder projects;

    b. source control, optimisation of existing infrastructure and construction of larger infrastructure as the three main types of intervention; and

    c. sustainable drainage systems in Whitstable and Deal, which included the installation of five free raingarden planters at 13 schools, education

sessions and a successful bid to the Department for Education to work with a further 50 schools in 2023/24.

2. A Member asked whether there was sufficient public awareness and understanding of sustainable drainage systems (SuDS). Mr Yates acknowledged that there was insufficient public understanding of SuDS and water usage. He explained that Southern Water had undertaken a significant amount of community outreach and expanded the Taskforce's staff from 6 to 20 in recent weeks which included professionals with education and communications expertise.

3. In response to a question from a Member, Mr Yates agreed to provide an update on the Beachbuoy initiative at the Committee's next meeting.

4. Mr Yates agreed to provide the Committee with a copy of the business plan for combined sewer overflow infrastructure.

5. The Chairman thanked Mr Yates for his presentation and answers to the Committee's questions.

RESOLVED to note the content of the presentation.

35. Shoreline Management Plans - Presentation
(Item 7)

Priscilla Haselhurst (Clerk and Engineer, Lower Medway Internal Drainage Board) was in attendance for this item.

1. Ms Haselhurst gave a presentation. The contents of her presentation included:

    a. the purpose of Shoreline Management Plans, as a policy framework for managing flood and coastal erosion risk, which were developed by seven strategic coastal groups, with consideration of the developed, historic and natural environments;

    b. that management policies fell into one of four categories, Hold the Line, Managed Realignment, No Active Intervention or Advance the Line;

    c. that the proposed solutions had to be technically feasible, environmentally acceptable and economically sustainable;

    d. Kent's coastal risk; and

    e. the Shoreline Management Plans refresh process.

2. Members asked how the importance of a section of coastline was judged in Plans. Ms Haselhurst explained that economic impact and the scope for environmental improvement were key factors and also significantly influenced funding opportunities.

3. In response to a question from a Member, Ms Haselhurst confirmed that shoreline flood defences were monitored extensively, considering their condition and effectiveness. She noted that monitoring on privately owned shoreline was a challenge.

4. A Member asked to what extent existing infrastructure influenced a plan's policies and for further information on the Shoreline Management Plan affecting Whitstable. Ms Haselhurst agreed to provide the requested information following the meeting.

5. The Chairman stressed the importance of keeping communities informed on the impact Plans would have on their local shoreline and how that impacted flood risk.

6. The Chairman thanked Ms Haselhurst for her presentation and answers to the Committee's questions.

RESOLVED to note the content of the presentation.

36. Local Flood Risk Management Strategy development - Presentation
(Item 8)

1. Mr Tant updated the Committee on the Council's responsibilities as the Lead Local Flood Authority concerning surface water, groundwater and ordinary watercourses. He explained that KCC had a duty to produce a Local Flood Risk Management Strategy and acknowledged the progress made under the existing 2017-2023 Strategy. He highlighted areas for further improvement, Flood Risk Regulations and the timeframe for the future Strategy which was to be decided.

2. Members examined whether the Council was working closely enough with water companies to ensure that the management of surface water did not have an unforeseen impact.

3. Following a question from a Member, Mr Tant explained KCC's role as a statutory consultee on all major planning applications regarding surface water as well as local planning authorities' obligations to undertake a local flood risk assessment on any sites proposed for development. He confirmed that the Environment Agency's was required to comment on and object to development on the floodplains.

RESOLVED to note the content of the presentation.

37. Environment Agency and Met Office Alerts and Warnings and KCC severe weather response activity
(Item 9)

1. Mr Harwood introduced the report which updated Members on water levels, weather statistics, Environment Agency and Met Office warnings, and flood response activity since the last meeting of the Committee. The report stated that 20 flood alerts warnings had been issued by the Environment Agency

which contrasted with no flood alerts in the corresponding period in 2022. He noted that March and April 2023 had seen rainfall above the long-term average in Kent, whilst May and June had been much drier at 45% of the long-term rainfall average. He added that June had been the hottest on record and negatively impacted infrastructure, with pipe loss and damage experienced. The Kent Resilience Forum's response activity was drawn to the Committee's attention. It was explained that the summer temporary use (hosepipe) ban had reduced water use by 4%.

2. Following a question from a Member, Mr Harwood reassured the Committee that KCC worked with all local utility providers and handled incidents through the Kent Resilience Forum Utilities Group. He confirmed that KCC were cognisant of developments with Thames Water and that contingencies had been discussed with government.

1. In response to a question from a Member concerning preparedness for hot weather, Mr Harwood confirmed that Emergency Planning worked with the Director of Public Health through Kent's Health Protection Board and considered the responses required to protect vulnerable residents.

RESOLVED to note the warnings received since the last meeting of the Committee.

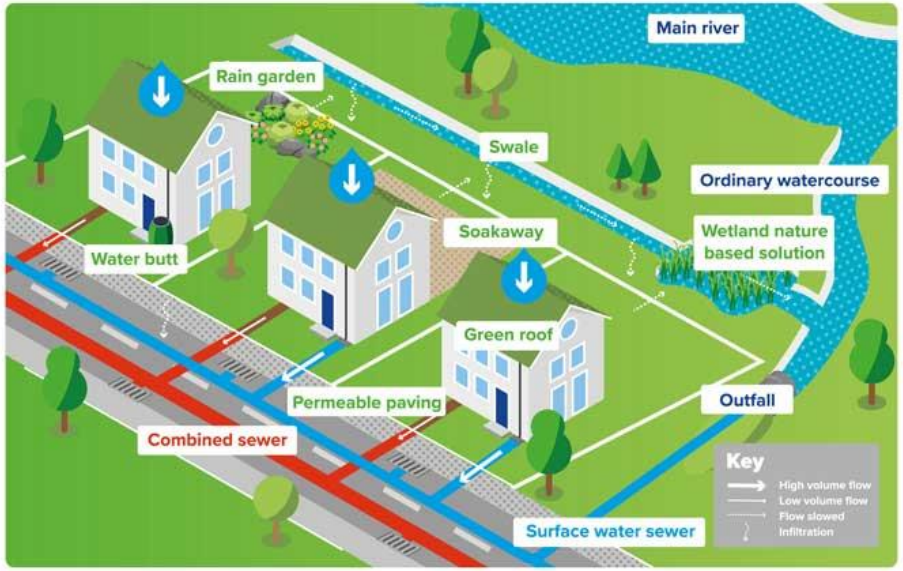
Kent Flood Risk Management Committee
12 July 2023

Southern Water Clean Rivers and Seas Taskforce Update

Jon Yates, Programme Delivery Lead - East

What is the Clean Rivers and Seas Task Force?

- Southern Water initiative set up in November 2021, with the aim of reducing the use of storm overflows.
- Responsible for delivering pathfinder projects over the next two years, as well as delivering a regional plan to reduce storm overflows between now and 2030.



Link to Southern Water website: [Clean Rivers and Seas Task Force]

Page 2

Our task force is exploring ways to reduce storm overflows via our pathfinder projects

The Clean Rivers and Seas Task Force is a dedicated team that is working to significantly reduce the use of storm overflows by 2030. **It is delivering six pathfinder projects over the next two years.**

Pan Parishes

- Sealing private pipework with an innovative chemical called Tubogel, as well as sealing the public sewer network to reduce groundwater infiltration.
- Exploring the creation of a local wetland.

Swalecliffe

- Working to reduce Swalecliffe's 74 hectares of hard surfaces.
- Separating the surface water and sewer network.
- Hotspot mapping shows us where to target solutions.

Margate

- Finding opportunities to increase surface water drainage with local councils. For example, reducing the amount of hard surfaces across Margate.
- Looking at opportunities to separate the surface water and sewer network and improve drainage.

Sandown

- Enhancing wastewater pumping station control, surface water removal and storage solutions.
- Trialling slow-drain water butts in Havenstreet.

Deal

- Installing smart or passive water butts or rain planters.
- Working with the local councils and highways to introduce roadside verges, parks and gardens and more green spaces.
- Engaging with schools.
- Surveying surface water connections.
- Introducing rainfall monitors and tracking the flow of surface water.
- Improving our Golf Road pumping station.
- Increasing our storm tank capacity.

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

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

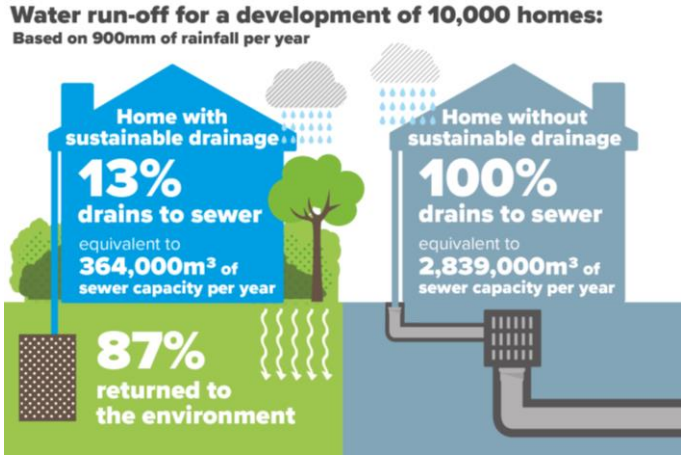
   Rainwater harvesting, Permeable paving, Green roofs, Soakaways (includes tree pits), Rain garden (swales), Planters

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



Kent Catchment Update

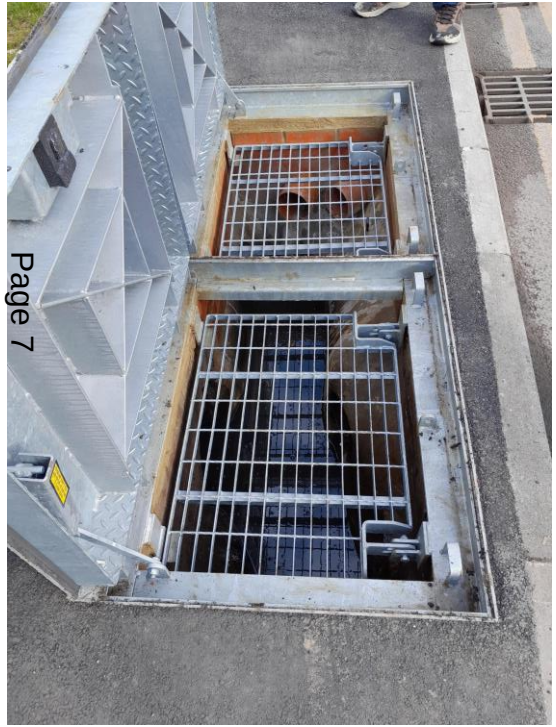
Optimisation

Whitstable and Deal

Albert Road

Dear Max,
I hope that you are well.
I took this photo yesterday after some fairly heavy rain - so am quite relieved that the new pipe work and gullies along the road appear to be functioning.
I don't care to remember when we first got involved!
Anyhow, I am wondering what the status of the works at Pumping station are. SW have mentioned in the past that there was an upgrade planned but I'm not sure who to ask. The Task Force remit was I understand to follow up on these items. Is there an update available yet?
Kind regards

Peter Wyatt

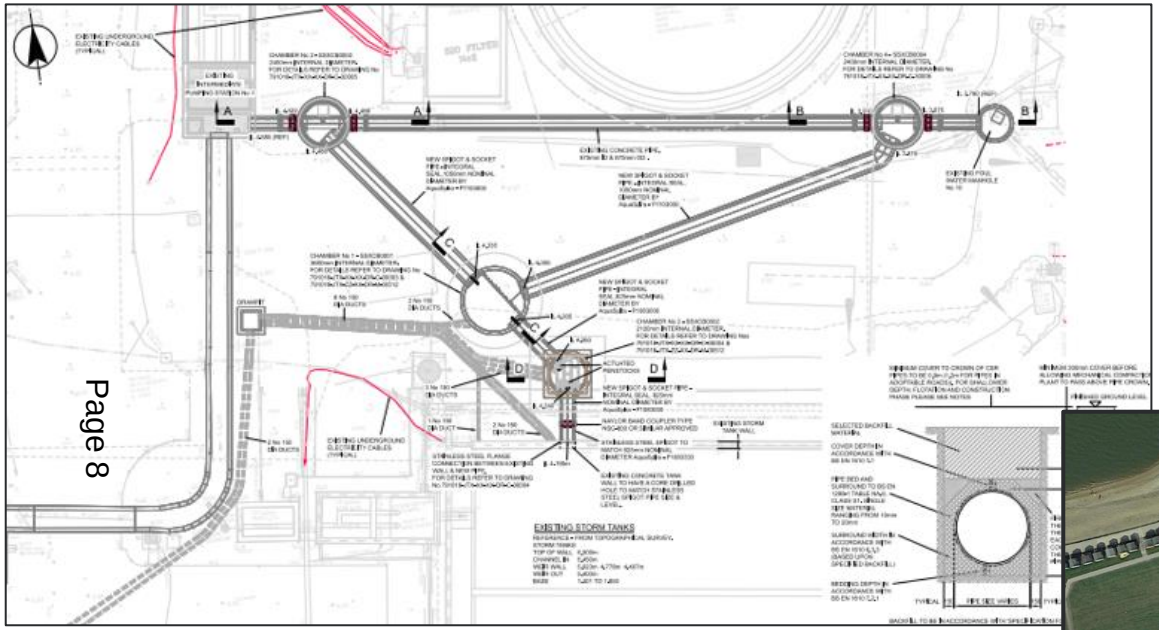


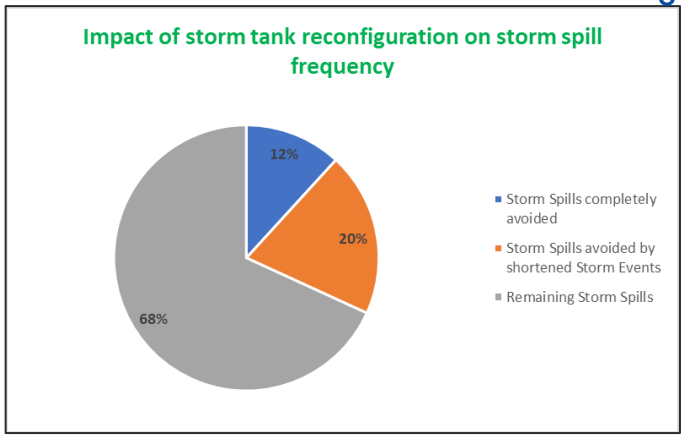
Construction works completed November 2022

Flood risk resilience increase in Albert Road Deal.

Swalecliffe Treatment Works

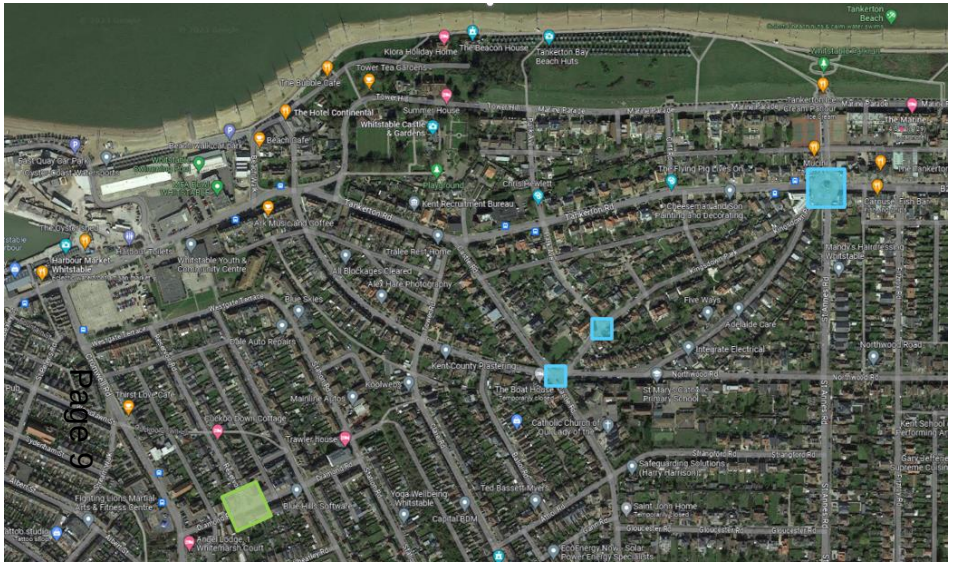
JY

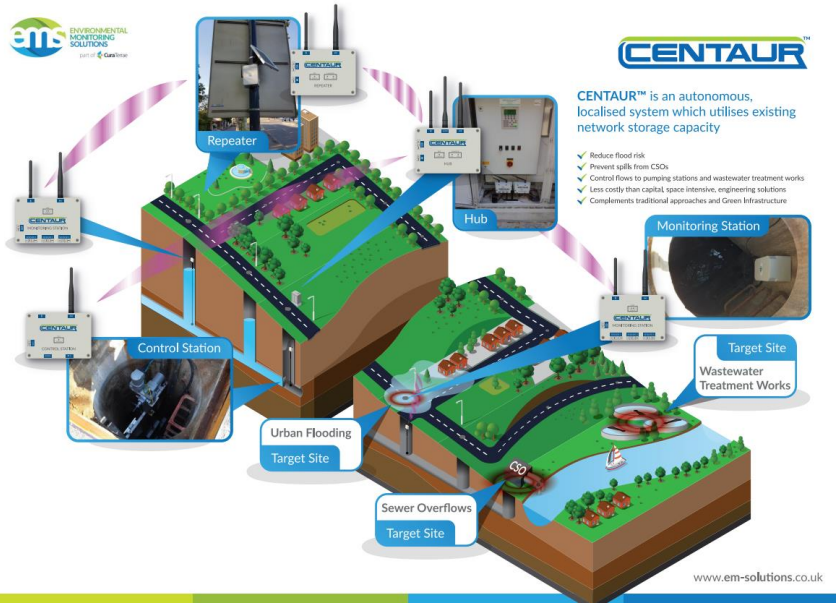




Construction works completed May 2023.
Permit Variation acceptance for the trail with the Environment Agency for review.

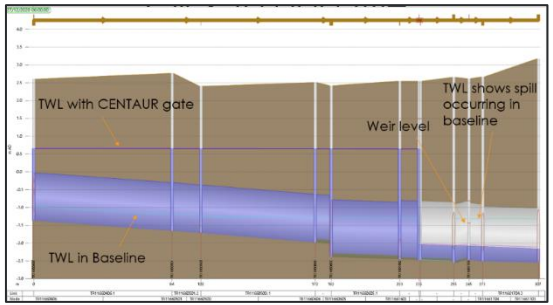
Centaur Gates





Diamond Road CSO, modelled c60% reduction in spill

Tankerton Circus CSO, modelled c40% reduction in spill



WATER for LIFE from Southern Water

Misconnections

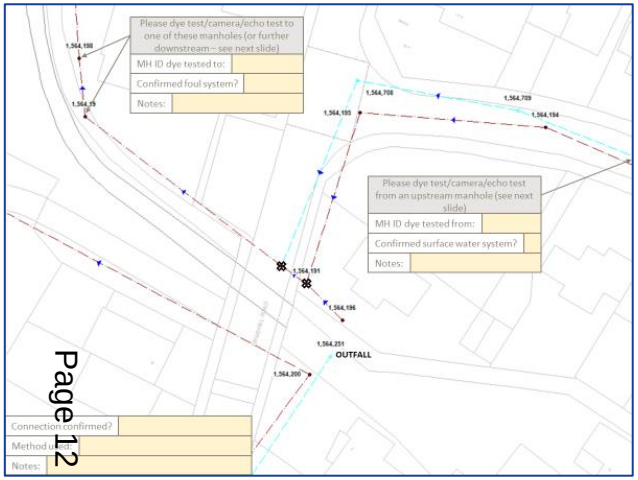
Whitstable and Deal

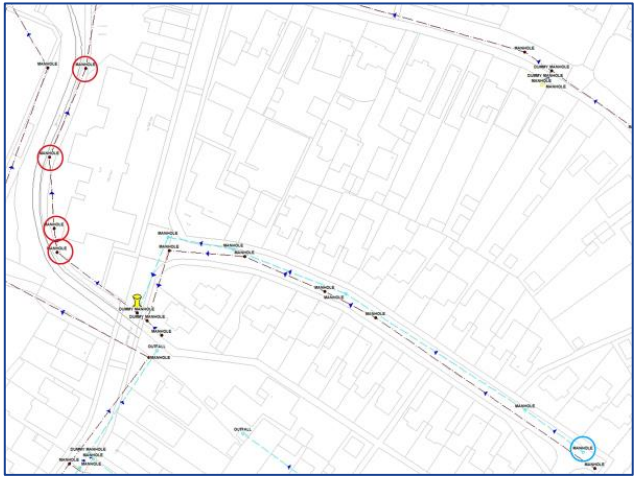
Misconnections

Whitstable

Deal

Surface Water Connections





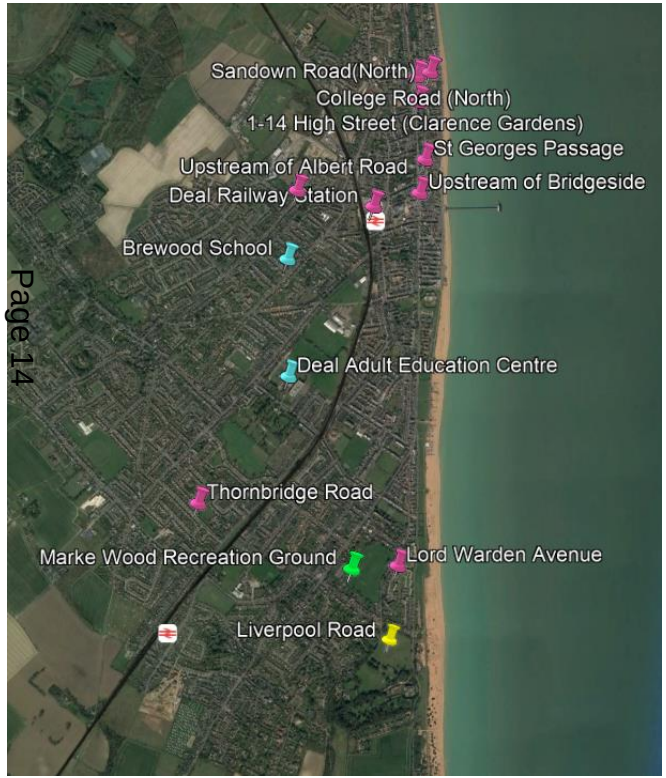
Misconnection Methodology

- Once potential location identified, the network is dye traced and route mapped.
- Ecology and Environmental desktop study to identify potential opportunities and risk of misconnection. Review of Flood Risk Activity Permit requirements.
- Fluidion test (E-Coli) and Merc Test (ammonia) of the surface water line at the connection point and upstream on the surface water.
- Realignment of the misconnection (Construction)
- Testing and monitoring of the misconnection post construction

SuDs Schemes

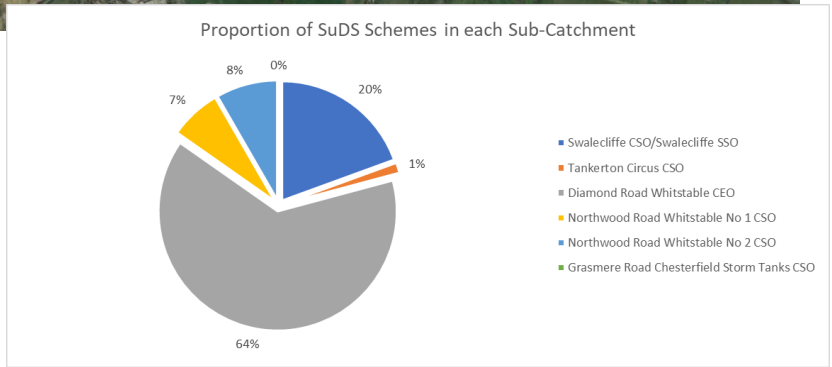
Whitstable, Deal and Margate

SUDS Scheme Locations

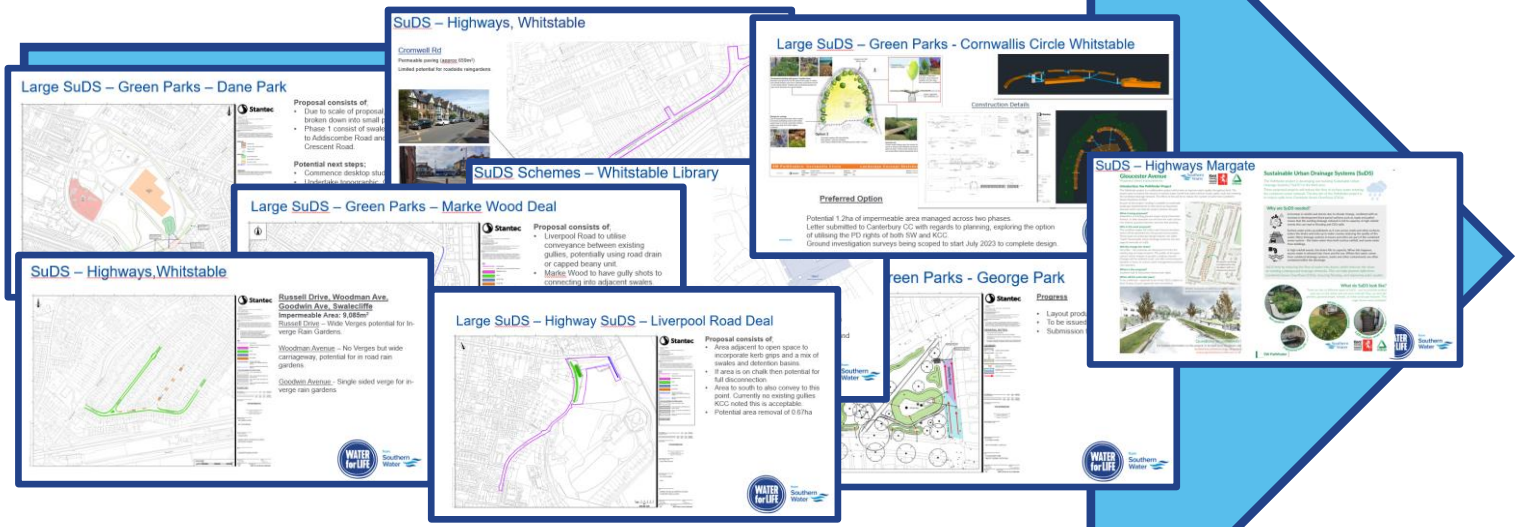


Deal

Whitstable



Route to Delivery



- Identified Schemes are moving from concept design to outline
- Surveys are underway to gather more details
- A wider integrated team inclusive of KCC has been established to review schemes and integrate development

SuDS – Highways Margate

Gloucester Avenue

Proposed street improvements

Southern Water · Kent County Council

Introduction: the Pathfinder Project

The Pathfinder project is a collaborative project which aims to improve water quality throughout Kent. The project aims to reduce the amount of surface water runoff from hard surfaces (roads, paths, roofs etc) entering the combined drainage network. The effect of this will be to reduce the number of spills from Combined Sewer Overflows (CSOs)

As part of this project, funding is available to undertake landscape improvements to sites (such as Gloucester Avenue) which can help the project achieve this goal.

What is being proposed?
Adaptation of existing grassed verges along Gloucester Avenue, to take rainwater run-off from the road surface into shallow, grassed channels, and new tree planting.

Why is this work proposed?
The modified verges will collect and channel rainwater, which will be absorbed into the ground and by plants. These types of Landscape design features are called "SuDS" (Sustainable Urban Drainage Systems). *See next page for more info on SuDS.*

Will this change the street?
Very little - the proposals are designed to fit into the existing layout/verge footprint. The profile of the grass surface will be shaped to provide a shallow channel. Changes will be relatively small, and offer environmental benefits in terms of surface water management and flood risk reduction.

Where is this proposed?
Southern half of Gloucester Avenue (see right)

When will the work take place?
To be confirmed - expected to be in late 2023, subject to Kent County Council approvals and consultation.


ABOVE: Impression of what the proposed swales along Gloucester Avenue will look like.

Questions or comments?

For further information on the project, or to have your say please visit detailstobeconfirmed.co.uk, or contact address@detailstobeconfirmed.co.uk.

Sustainable Urban Drainage Systems (SuDS)

The Pathfinder project is developing and building Sustainable Urban Drainage Systems ("SuDS") in the Kent area.

These proposed projects will reduce the flow of surface water entering the combined sewer network. The key aim of the Pathfinder project is to reduce spills from Combined Sewer Overflows (CSOs).

Why are SuDS needed?

A increase in rainfall and storms due to climate change, combined with an increase in development (hard paved surfaces such as roads and paths) means that the existing drainage network is full to capacity. In high rianfall events this can lead to flooding and CSO spills

Surface water picks up pollutants as it runs across roads and other surfaces, enters the drains and ends up in water courses reducing the quality of the water. Many drainage systems in towns and cities are part of the combined sewer system - this takes water from both surface rainfall, and waste water from buildings.

In high rainfall events, the drains fills to capacity. When this happens, excess water is released into rivers and the sea. Where this water comes from combined drainage systems, waste and other contaminants are often contained within the discharge.

SuDS help by reducing the flow of water into drains, which reduces the strain on existing underground drainage networks. This can help prevent spills from Combined Sewer Overflows (CSOs), reducing flooding, and improving water quality.

What do SuDS look like?

There are lots of different types of SuDS - you've probably walked past one on the street and not even noticed! They can look like planters, grassed verges, treepits, or other landscape features. This page shows some examples:


Rain gardens


Swales and grassed channels


SuDS planters, smart water butts


Engineered tree pits

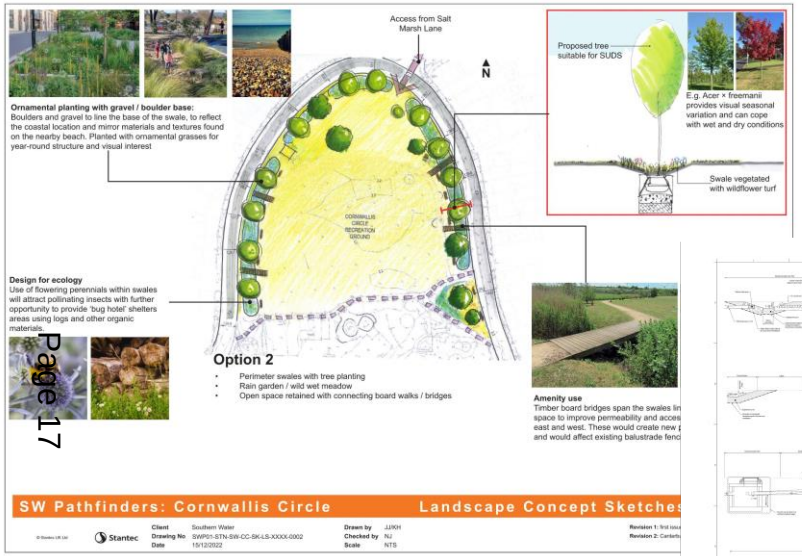
Southern Water · Kent County Council

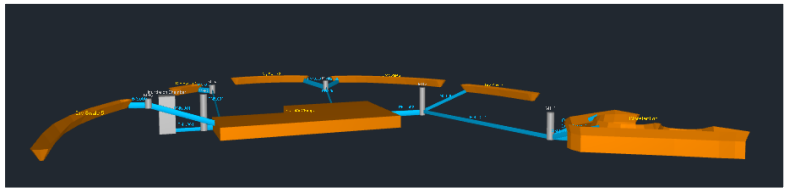
SW Pathfinder

LIFE

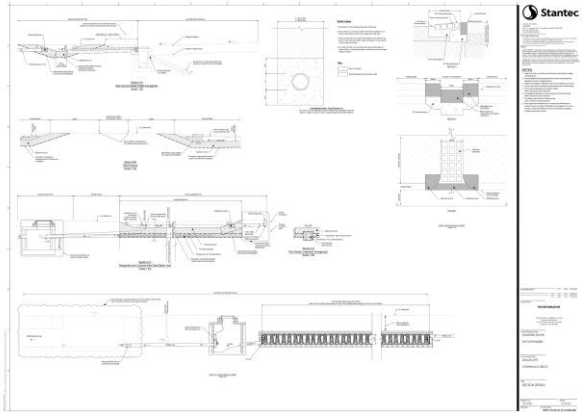
from Southern Water

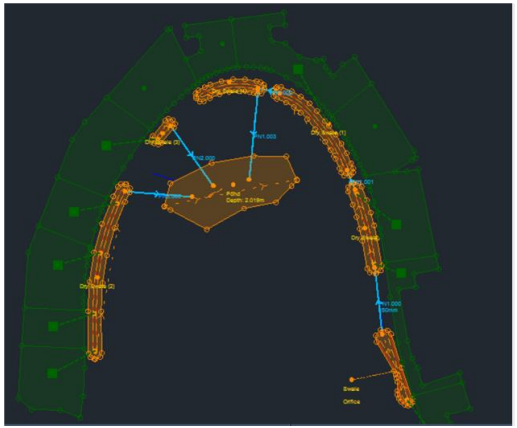
Large SuDS – Green Parks - Cornwallis Circle Whitstable





Construction Details





Preferred Option

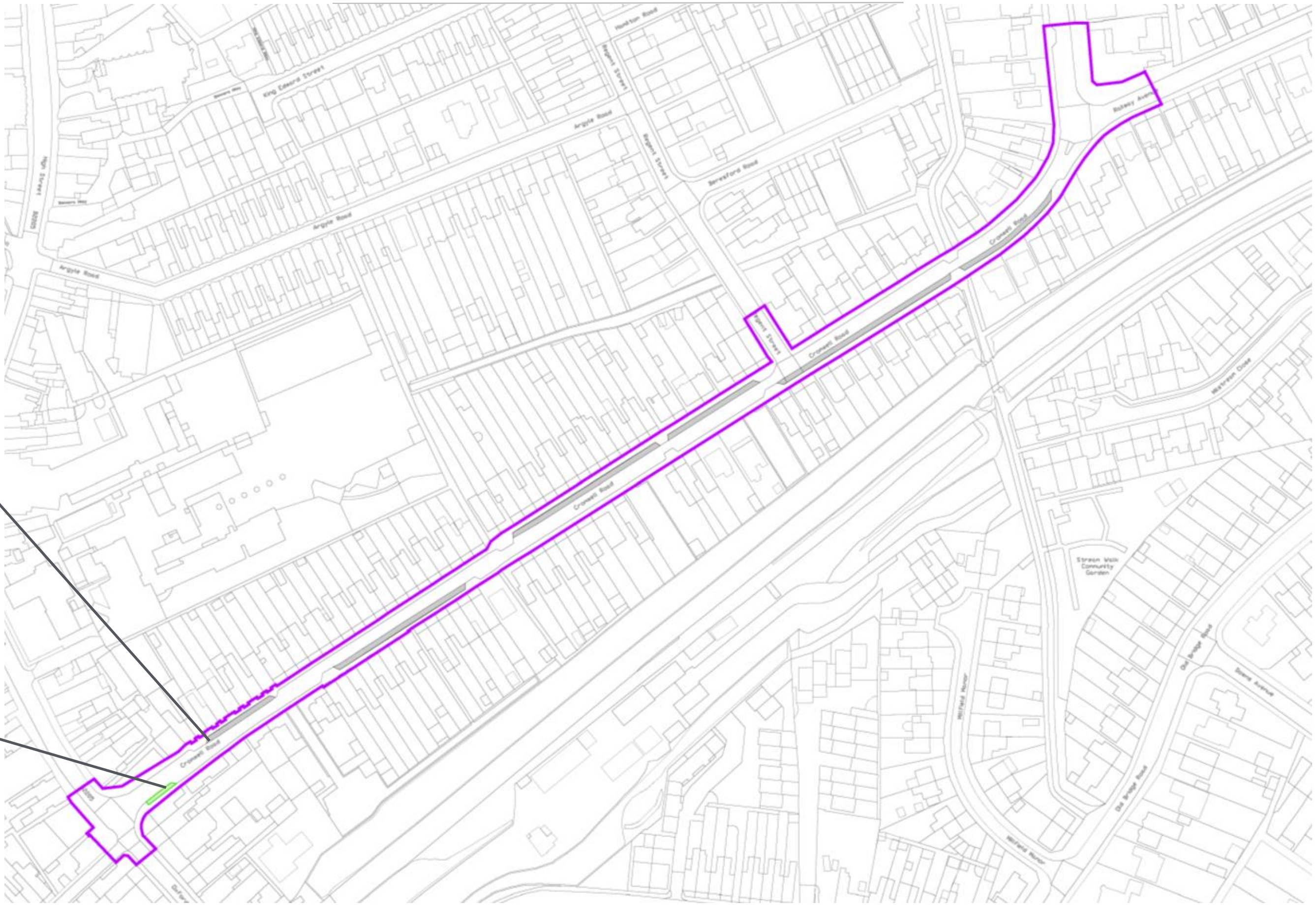
Potential 1.2ha of impermeable area managed across two phases.
Utilising the Permitted Development Right of both Kent County Council and Southern Water – Application for a Certificate of Lawful Development Underway

SuDS – Highways, Whitstable

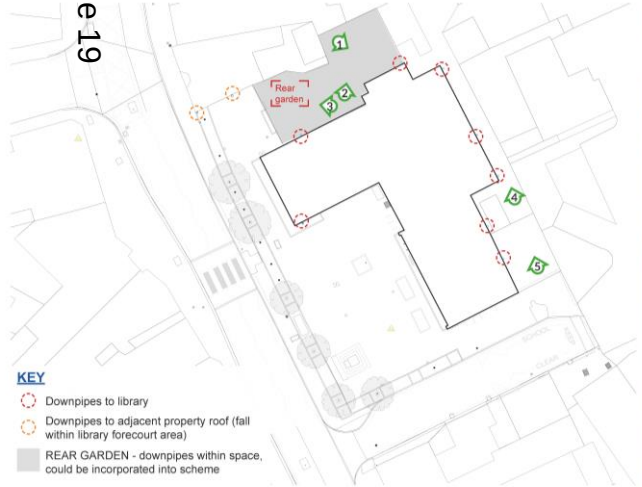
Cromwell Rd

Permeable paving (approx 659m^2)

Limited potential for roadside raingardens.



SuDS Schemes – Whitstable Library



Potential 0.11ha of impermeable area managed.
Excellent opportunity of educational and community links

SuDS – Highways,Whitstable

Russell Drive, Woodman Ave, Goodwin Ave, Swalecliffe

Impermeable Area: 9,085m²

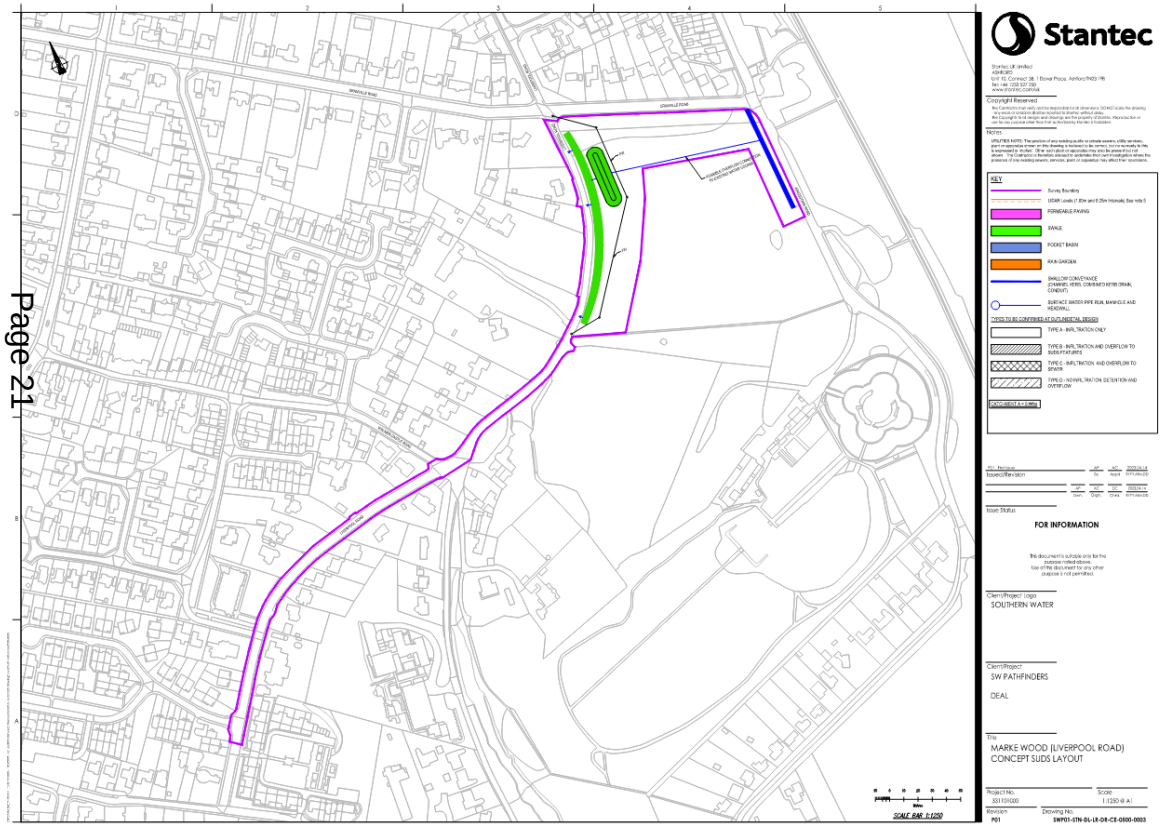
Russell Drive – Wide Verges potential for In-verge Rain Gardens.

Woodman Avenue – No Verges but wide carriageway, potential for in road rain gardens.

Goodwin Avenue - Single sided verge for in-verge rain gardens

WATER for LIFE from Southern Water

Large SuDS – Highway SuDS – Liverpool Road Deal



Proposal consists of;

- Area adjacent to open space to incorporate kerb grips and a mix of swales and detention basins.
- If area is on chalk then potential for full disconnection.
- Area to south to also convey to this point. Currently no existing gullies
- Potential area removal of 0.67ha

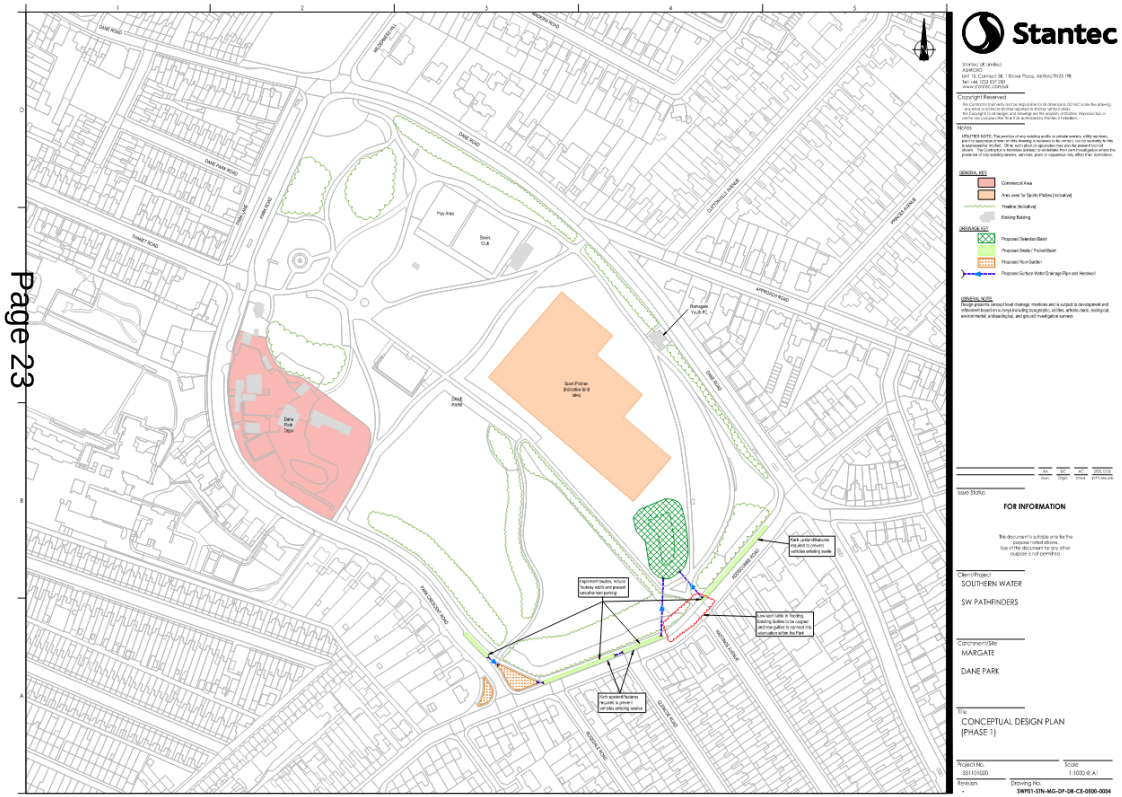
WATER for LIFE from Southern Water

Large SuDS – Green Parks – Marke Wood Deal

Proposal consists of;

- Liverpool Road to utilise conveyance between existing gullies, potentially using road drain or capped beany unit.
- Marke Wood to have gully shots to connecting into adjacent swales.

Large SuDS – Green Parks – Dane Park



Proposal consists of;

- Due to scale of proposal, scheme broken down into small phases.
- Phase 1 consist of swales adjacent to Addiscombe Road and Park Crescent Road.

Potential next steps;

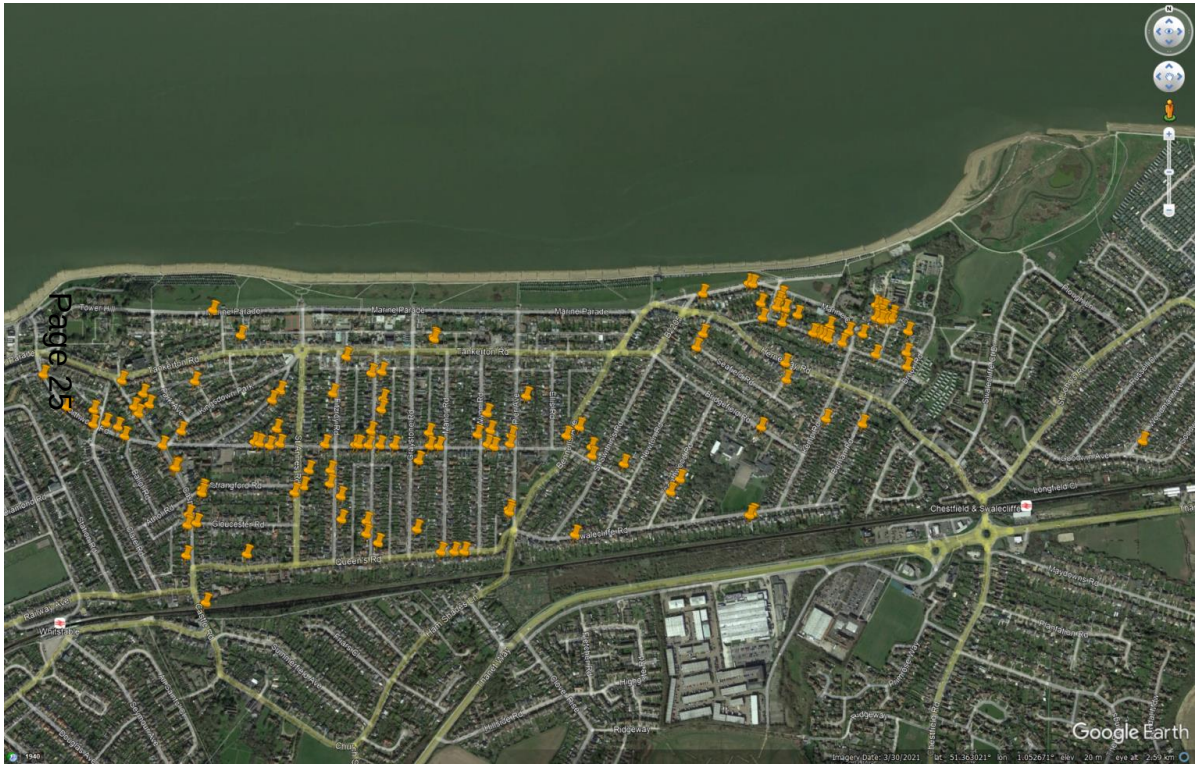
- Commence desktop studies.
- Undertake topographic, GPR/EML surveys.
- Ground Infiltration testing.

Planters and Water butts

Whitstable

WATER for LIFE from Southern Water

Planters and Water Butts – Target 300



from Southern Water

Date: April 2023

Contact: 0330 303 0368

Dear Customer

"Slow the Flow" – Water butt installations

Southern Water is working hard to reduce Combine Sewer Overflow uses in Whitstable and we are introducing evidence-based solutions to help slow the flow of water within the catchment.

One of our initiatives is the installation of **free** water butts to residents and business within Whitstable, these will store and slow the flow of rainfall from entering the sewer network.

For this initiative to be successful we need our customers support and accept a free water butt system.

Rescue 2 will be installing these butts on behalf of Southern Water throughout April and May 2023.

If you would like to receive a Slow the flow water butt, please book a survey with Rescue 2:

Please email your full name, address, and contact number to Utilities@rescue2.co.uk alternatively call on 01903 871105 and we will arrange a survey/installation.

Alternatively, visit our Storm Overflow pages on our website or contact us on the details below.

Telephone: 0330 303 0368 quoting Clean Rivers and Sea Task Force – Whitstable
Email: CustomerServices@southernwater.co.uk quoting Clean Rivers and Sea Task Force – Whitstable

In Whitstable, and we are hoping to achieve at least a 20 per cent reduction in total storm overflows in these areas by spring 2025.

We are already taking action to make improvements to our treatment works in Swalecliffe and we are in the process of installing a storm reconfiguration system, where we utilise our onsite storage before using our long sea outfall, this will reduce Long Sea outfall events.

Yours Sincerely

Jon Yates
Pathfinder Delivery Lead

Southern Water, Southern House, Yeoman Road, Worthing BN13 3NX
southernwater.co.uk

Southern Water Services Ltd, Registered Office: Southern House, Yeoman Road, Worthing BN13 3NX Registered in England No. 2366670

Target 300 –300 water butts installed in the CSO catchments in May 2023

Planters and Water Butts – The Next steps

Water butt second wave

Planter opportunities

WATER for LIFE from Southern Water

SuDS for Schools

Margate

SuDS for Schools - Margate

- 13 schools participated in Cat A programme
- Other schools were removed from the project if they weren't connected into the foul sewer with two schools, Holy Trinity and St John's Church of England Primary School and St Anthony's School refusing the planters despite being connected
- Dane Court Grammar School in Broadstairs is our Kent Cat C school

Margate Cat A	Bromstone Primary School, Broadstairs
	Callis Grange Nursery and Infant School
	Cliftonville Primary School
	Drapers Mills Primary Academy
	Garlinge Primary School and Nursery
	Palm Bay Primary School
	Salmestone Primary School
	St Gregory's Catholic Primary School
	St Mildred's Primary Infant School
	St Peter-in-Thanet CofE Junior School
	Upton Junior School
	Hartsdown Academy
	Cliftonville Primary School

Cat C	Dane Court Grammar School

SuDS for Schools

- Year one project is now complete, with 43 schools receiving 5 free raingarden planters which were installed on site – Cat A schools
- 4 schools are having SuDS schemes designed and signed off next month, ready for work to commence over the summer – Cat C schools
- In total, 22 Kent schools participated in Cat A programme and 1 school in the Cat C
- We've started holding education sessions with the schools involved, including 6 schools in Kent. This part of the project will be ongoing until the summer
- Successful DfE bid to work with another 50 schools this financial year (April 2023 – March 2024). The list of schools is TBC but will predominately focus on the Pathfinder areas

from Southern Water

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Shoreline Management Plan Refresh

Priscilla Haselhurst
Lower Medway IDB
Vice Chair SECG

Agenda

- What are Shoreline Management Plans?
- What is the SMP Refresh?
- Work to date
- Next steps

What are Shoreline Management Plans?

- Policy framework for managing flood and coastal erosion risk
- Short (0-20), medium (20-50) and long-term periods (50-100)
- Developed by seven strategic coastal groups
- Consider the developed, historic and natural environment
- Hold the Line, No Active Intervention, Managed Realignment, Advance the Line.
- Must be technically feasible, environmentally acceptable and economically sustainable

Our coastal risk

1.8 million homes at risk from sea flooding and erosion

2014: storm closes mainline railway for 2 months with £1.2bn economic impacts

85% of saltmarsh lost since the 1850s

1,300 known landfills on the coast

Challenges and Opportunities

- Widely accepted and embedded in planning policy?
- Provides a ‘route map’ to formulate planning strategies and guide future development
- Achieving multi-benefits
- Non-statutory documents
- Fragmented ownership around the coastline
- Economic viability of schemes

Quick overview of SMP-R Project

- 20 SMPs cover England – developed between 2006 and 2011
- SMPs mainly remain sound documents outlining the ‘most appropriate thing’ to do at the shoreline
- But changes have occurred since, such as:
  - *new guidance and legislation*
  - *changes in coastal evolution/management*
  - *coastal strategies and schemes*
  - *social attitudes*
  - *environmental designations*
- Also, we are now coming towards end of 1st epoch – are we ‘epoch 2 ready’?

Aims of the refresh

- Provide guidance on how SMPs can incorporate new knowledge, legislation etc.
- Improve overall quality, deliverability, and consistent application of key principles across SMPs – but recognising local nuances
- Ensure SMPs remain technically robust but adaptable to future change
- Promote the principle that SMPs should be ‘living’ and provide a clearly defined route-map with actions to be ‘epoch-2 ready’ and enable delivery of the policies over the coming decades

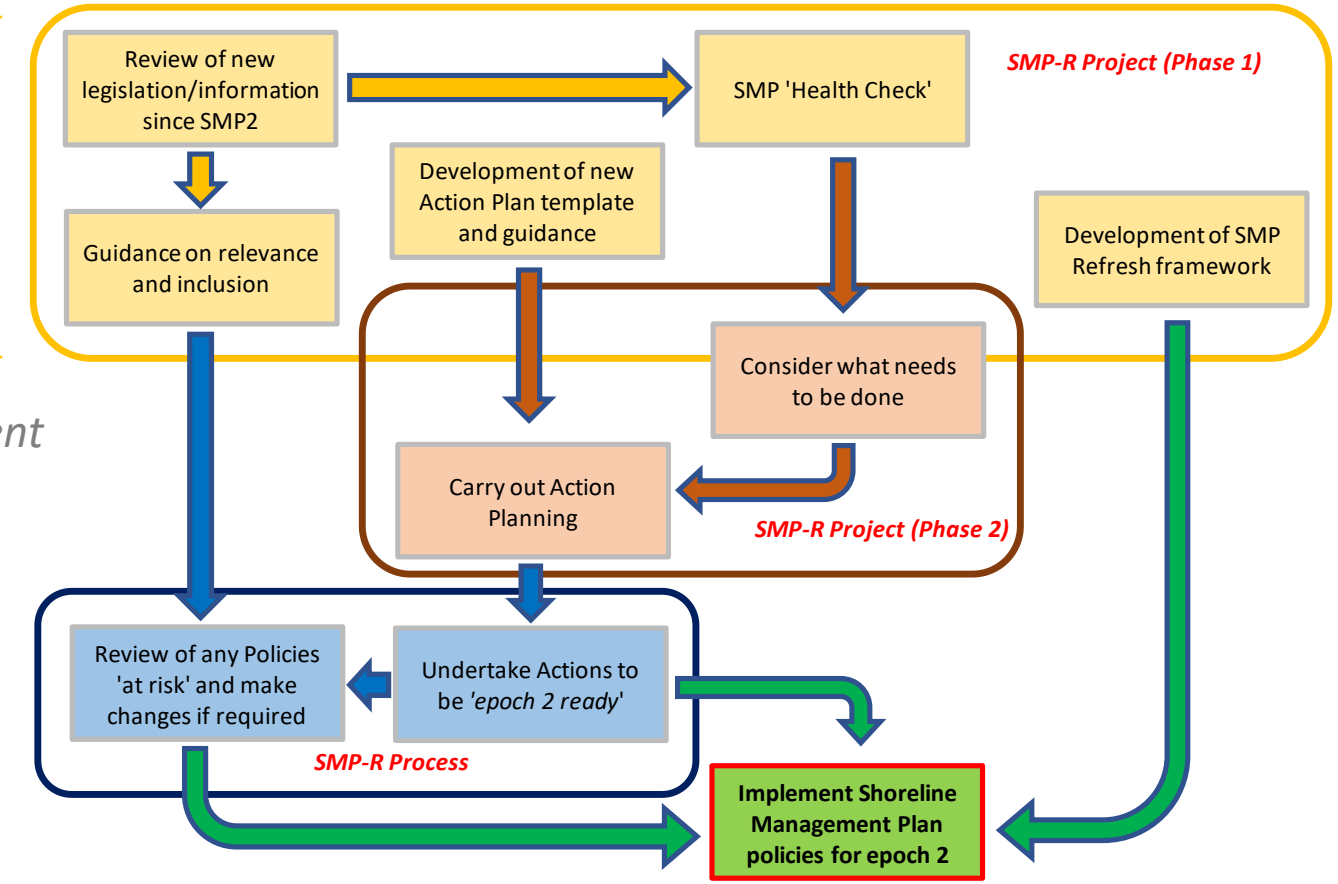
This is not SMP3 and it will not change policies, short cut the SMP policy change process or take away any local ownership or decisions on SMPs.

What is involved in the Refresh?

SMP Refresh is both a **Project** and a **Process**:

Jacobs & RHDHV

SMP Management Groups



Next steps

- EA developing online digital platform
- Launch expected December 2023
- Accessible evidence base to increase understanding

Overview of Digital Platform

https://defra-smp-staging.publishmydata.com/

Questions?

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Local flood risk management strategy

Max Tant, Flood and Water Manager

Local Flood Risk Management Strategy

- As Lead Local Flood Authority, KCC has an overview of local flooding
  - Surface water
  - Groundwater
  - Ordinary watercourses
- We have a duty to produce a Local Flood Risk Management Strategy (LFRMS) for local flooding
- The LFRMS must be consulted on publicly

Previous LFRMS

- KCC adopted our first LFRMS in 2011
- Revised version was adopted in 2017 for period 2017-23
- We must now adopt a new LFRMS
- Some good progress was made in the previous LFRMS
  - Opportunities for joint working improved (DWMPs, CSO taskforce)
  - Improved understanding of delivering schemes to reduce local flooding (George Park)
  - Improve funding for local flooding schemes
- Areas for improvement remain
  - Scale of local flood risk management needs to increase
  - Funding is still project based
  - Pandemic has impacted community engagement

New LFRMS

- Likely to be shorter, more focused on flood risk management outcomes
- Objectives are likely to be similar to the previous LFRMS
  - Understanding flood risk
  - Reduce the risk of flooding
  - Resilient planning
  - Resilient communities
- Climate change and adaptation will be more prominent
- Time period may be longer, 10 years

Next steps

- Drafting consultation version now
- Will share with key partners for informal comments over summer
- Committee approval in late autumn prior to public consultation
- Consultation in late 2023 for 8-12 weeks
- Adoption after ETCC in early 2024

Flood Risk Regulations

- As LLFA we are also subject to requirements in the Flood Risk Regulations
- These transpose the EU Floods Directive into English Law
- They set out a six-year rolling cycle of flood risk assessment, mapping and planning, which starts with the Preliminary Flood Risk Assessment (PFRA)
- We should be undertaking the PFRA this year
- These regulations are part of the EU Retain Law Bill and are currently due to be sunset on 31 December 2023
- Defra has advised us that we do not need to undertake the PFRA this year

QUESTIONS

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