

Sources of Pollution West Norfolk Bathing Waters

LOVE EVERY DROP. PUT WATER AT THE HEART
OF A WHOLE NEW WAY OF LIVING.

BATHING WATER POLLUTION

love every drop
anglianwater

1

Dog Poo

Dog poo contains some nasty parasites and bacteria and any fouling on the beach that's not picked up gets washed into the sea.

4

2

Highways

Pollution can come from highways drainage. Run off from roads during wet weather washes chemicals, traces of oil, dirt and other pollutants into the sea.

3

Grazing Animals

Excrement from grazing animals can wash off fields into bathing waters during periods of heavy rainfall.

4

Bird Droppings

Bird droppings contain harmful bacteria and can wash down from rooftops when it rains into the bathing water. Droppings from large populations of birds under piers and other coastal structures can also be a problem.

5

Overflows

To protect properties from flooding during heavy rainfall combined sewer overflows and emergency overflows can lead to dilute sewage entering the bathing water.

6

Litter

Litter encourages vermin which carry disease. Their excrement gets washed into the bathing water along with the litter.

7

Equipment Checks

Routine visits to Water Recycling Centres and Pumping Stations are essential in discovering and preventing issues which could otherwise affect bathing water quality.

8

Boats

Boats can flush their bilge tanks and discharge onboard toilets directly into the sea.

9

Seaweed and Sediment

Bacteria growing in seaweed can pollute bathing water. Disturbed sand and sediment on the sea bed can release trapped bacteria.

13

Sewer Capacity

Sudden increases in seasonal holiday makers can put extra pressure on sewer capacity. Couple this with a reduction in sewer capacity due to a build up of fats, oils and grease and sewers and Water Recycling Centres can struggle to cope, making a pollution incident more likely.

12

Private Overflows

Discharges from private sewer systems, such as private pumping stations owned by caravan parks or privately owned cess pits, could result in untreated sewage entering the bathing water.

11

Chemicals and Fertilisers

Chemicals and fertilisers wash into rivers from farmland when it rains.

10

Muck Spreading

Muck spreading or the presence of manure heaps can result in bacteria washing into the bathing water when it rains.

Anglian Water Assets

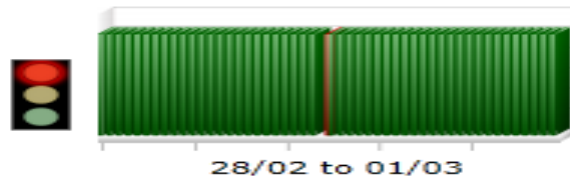


LOVE EVERY DROP. PUT WATER AT THE HEART
OF A WHOLE NEW WAY OF LIVING.

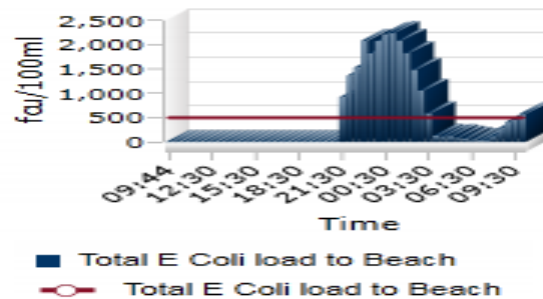
Sewernet System

love
every
drop.
anglianwater

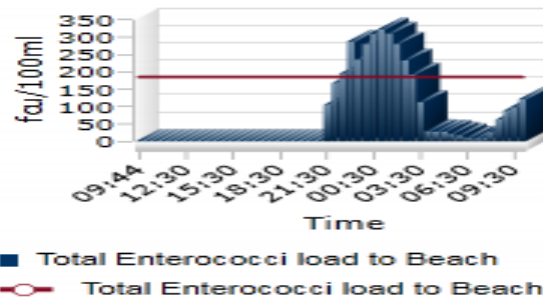
Southend Thorpe Bay Beach alert status



Southend Thorpe Bay Total E Coli load to Beach



Southend Thorpe Bay Total Enterococci load to Beach



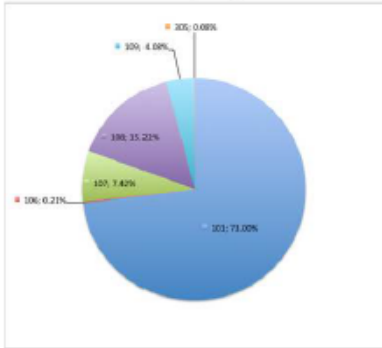
LOVE EVERY DROP. PUT WATER AT THE HEART
OF A WHOLE NEW WAY OF LIVING.

CREH Studies

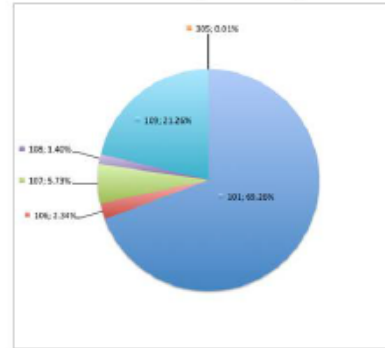


love
every
drop.
anglianwater

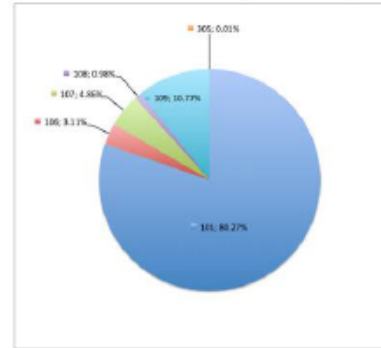
Base Flow Discharge Budget: $5.02 \times 10^6 \text{ m}^3$



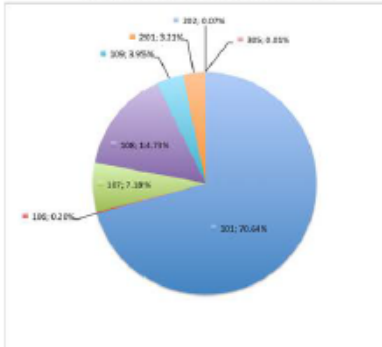
Base Flow *E. coli* Budget: 2.26×10^{13} organisms



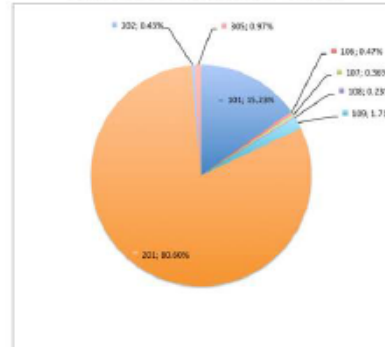
Base Flow Confirmed Enterococci Budget: 1.43×10^{13} organisms



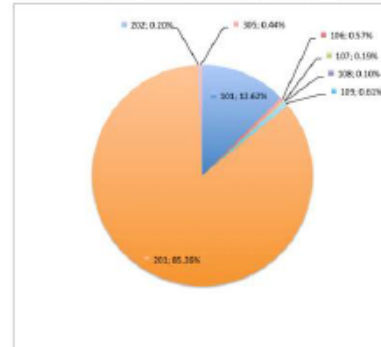
High Flow Discharge Budget: $8.27 \times 10^5 \text{ m}^3$



High Flow *E. coli* Budget: 2.14×10^{14} organisms

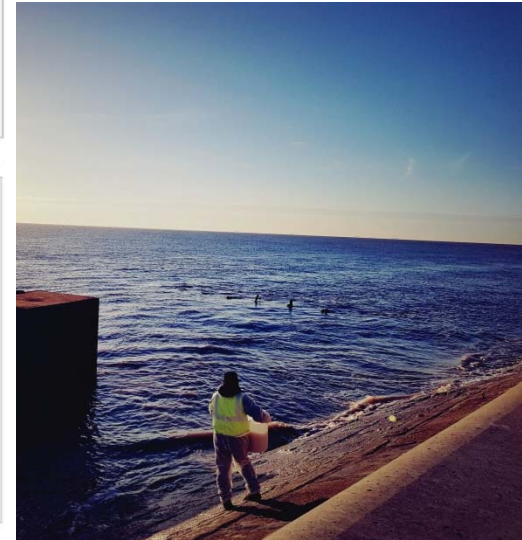


High Flow Confirmed Enterococci Budget: 2.15×10^{14} organisms



■ 101 Heacham River
 ■ 106 Searles Outfall
 ■ 107 River Hun
 ■ 108 River Ingol
■ 109 Boathouse Creek
 ■ 201 Seagate Surface Water
 ■ 202 Oasis Roof/Surface Water
 ■ 305 South End Rd TPS Outfalls*

* South End Rd TPS outfalls carry the Fring WTW brine effluent during base flows and combined brine effluent and dilute storm sewage overflow effluent from the TPS during high flows.



LOVE EVERY DROP. PUT WATER AT THE HEART
OF A WHOLE NEW WAY OF LIVING.

Surface Water Outfalls



LOVE EVERY DROP. PUT WATER AT THE HEART
OF A WHOLE NEW WAY OF LIVING.

Assessment of River Heacham



LOVE EVERY DROP. PUT WATER AT THE HEART
OF A WHOLE NEW WAY OF LIVING.

Non-Human Sources



glianwater



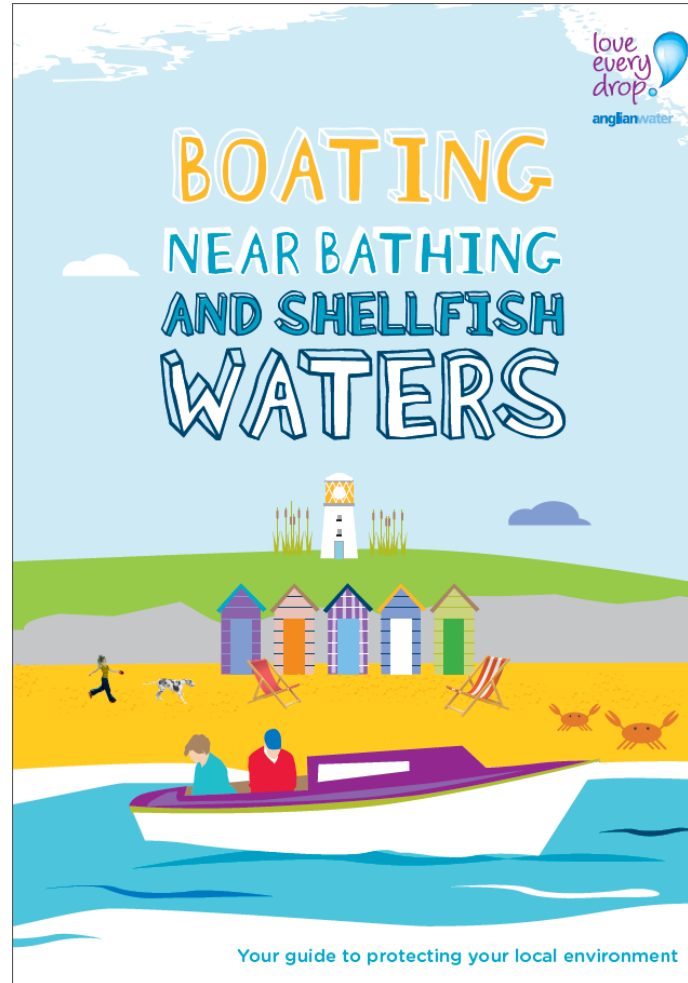
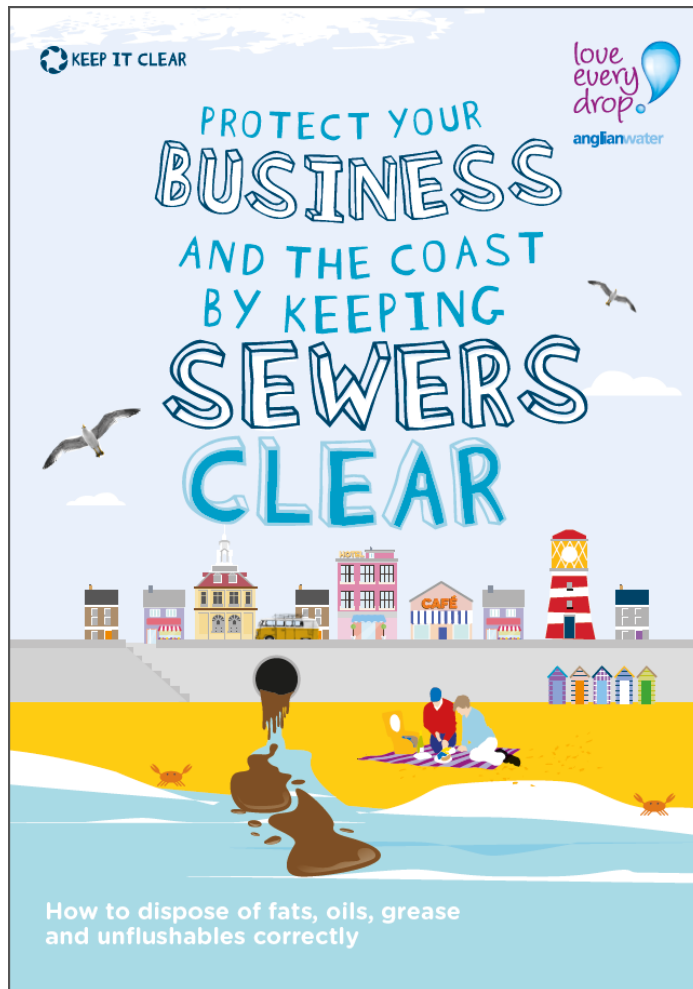
LOVE EVERY DROP. PUT WATER AT THE HEART
OF A WHOLE NEW WAY OF LIVING.

Public Campaigns



LOVE EVERY DROP. PUT WATER AT THE HEART
OF A WHOLE NEW WAY OF LIVING.

Advice Leaflets



love
every
drop.
anglianwater

LOVE EVERY DROP. PUT WATER AT THE HEART
OF A WHOLE NEW WAY OF LIVING.



LOVE EVERY DROP. PUT WATER AT THE HEART
OF A WHOLE NEW WAY OF LIVING.