ISLAND RIVERS → PARTNERSHIP

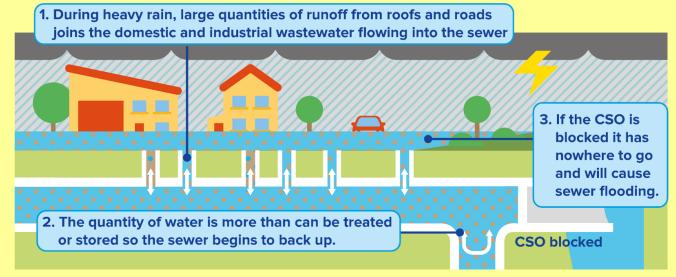
NEWSLETTER DECEMBER 2022

Welcome to what should have been our summer newsletter. We have had a busy few months, so apologies. We have decided to focus on key issues for the next couple of newsletters. This newsletter is all about sewage discharge into our rivers and sea. There is a discussion on the causes and regulation, and also positive actions that we can all take to alleviate some of the problem.

We finish with other news from the Island's rivers and streams.

SEWAGE DISCHARGES TO RIVERS AND THE SEA

Managing surface water is about making sure that water drains safely from homes and gardens, roads, fields, businesses and public spaces. Much of our drainage is into a single pipe system – Combined Sewer (CSO). On the Island, even in urban areas, there are not many two pipe systems (foul and surface separated). If the volume of water entering the drainage network overwhelms the system, it can sometimes cause heavily diluted sewage to be released into rivers and the sea. This is not the only cause, but it is one that we the general public can do something about.



Southern Water analysis has shown that, in general, discharges are over 95% rainwater. Of this, 30% of flow comes from roads, 40% from roofs, and 15% from garden and open spaces. They have calculated that if they can remove 40% of storm water, they can reduce CSO discharges by 80%. As usual, things are only going to get worse with our changing climate.

ARE STORM OVERFLOW DISCHARGES LEGAL?

Under certain conditions, yes. In England, the Environment Agency issues permits for individual storm overflows which set conditions for when they can be used and how they should be monitored and maintained. There are around 15,000 storm overflows in England, their locations and discharge data are available to view on an <u>interactive map</u> from The Rivers Trust.

The Government have plan to reduce discharges significantly by 2035 and completely by 2050, but not everyone feels this is stretching enough.

HOW IS IT ALL MONITORED?

Discharges are monitored electronically and the regulator is the Environment Agency. Surfers Against Sewage track real-time overflows and forecast pollution risk, also on an interactive map. Southern Water have also produced Beach Buoy This tool provides near real-time information about storm release activity near coastal bathing waters. The Solent Protection Society monitor available data and campaign. There is a lot of relevant data on their pages. Much more on all this on our webpage—link at end.

WHAT WE, THE COMMUNITY CAN BE DOING TO REDUCE DISCHARGES

Support Southern Water investigations by providing time and date stamped evidence Send in photos and videos of overland flow, flooded areas and level of surface ditches to Southern Water. They need time, date and clear location as this has to be matched to met office data. Send to us and we will forward on.

Report blocked highway gullies to Island Roads

We find this app easiest, but you are welcome to give them a call.

Don't put fat, oil, grease or unflushables into the system They cause blockages, blockages back up into homes or escape through manholes.

Prevent water from entering the Combined Sewer system, or reduce the flow in

Water butts and soakaways etc are part of the Pathfinder Project. If possible, disconnect existing drainage from this system

Do not have impermeable driveways and gardens See page 4!



Photo Credit: Keith Marston



Photo Credit: Martin Gibson

SOUTHERN WATER ACTIONS—ISLE OF WIGHT PATHFINDER

There are a number of elements to this on the Island—these are happening now.

Getting their own sites in order

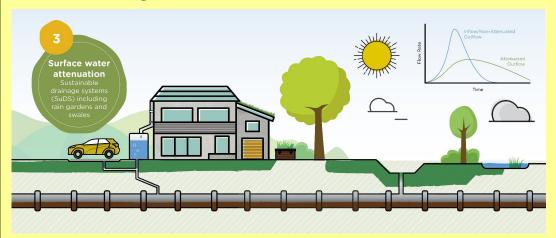
Basically, making sure the pumps work to their optimum potential, making sure alarms work correctly, increasing storm storage and making sure rainwater falling on their own sites isn't going into the CSO.

Tackling Connectivity

Surface and storm water do not need to be treated, therefore if it can be removed from the CSO system it should be. Are large rooves or other large impermeable areas flowing into drainage? Often, it's not apparent to the business owner or householder, so Southern Water will offer free connectivity surveys.



And then slowing the flow



This can be through Sustainable Urban Drainage Systems, highway drainage and even the humble water butt!

Initial Results

Havenstreet was selected as it was small and easy to monitor results. One pumping station discharged to Blackbridge Brook, in storms capacity was exceeded by 50% which meant that on average there were about 20 releases per annum.

There are 184 households within the catchment. All of these were offered slow drain water butts and 6 non-household properties with large impermeable roof areas were offered SuDs planters. There were 132 take-ups. Additionally, a highways misconnection was diverted to a swale. This took place between August and October 2022. At the time of writing this there has not been a pumping station discharge despite extreme rain events.

Southern Water are now moving to Cowes for a larger challenge!

DRIVEWAYS AND OTHER PAVED AREAS

Did you know?

- The extra surface water from a driveway can contribute to local flooding especially when it rains heavily. A driveway measuring 21 square metres can discharge the same amount as 2 baths of water during just 1 hour of normal rainfall.
- Where hard (non-permeable) surfacing allows water to run off a driveway and onto the highway, this extra water enters the highway drainage system via the gullies in the road. It is often not designed to cope with lots more water. This could result in flooding to the highway and surrounding area.
- Driveway surface water can also be contaminated with fluids such as oil, petrol/ diesel, coolant and brake dust etc which can make their way into the highway drainage system that often connects to local streams and rivers.
- Paving over entire front gardens can also be detrimental to local wildlife and biodiversity. Insects and organisms have a reduced habitat so there's less food for mammals and birds.
- To replace more than 5 square metres of paving with impermeable surface require planning permission

Best practice

- Use permeable surfacing
- Don't do it!
- Read our webpage for more details

Useful Links

http://islandrivers.org.uk/sewage-discharges-to-rivers-and-the-sea/

http://islandrivers.org.uk/pathfinder/

http://islandrivers.org.uk/driveway-best-practice/







AND OTHER NEWS!

CAUL BOURNE AND NEWTOWN CREEK

A new group has been formed to take a holistic approach to the catchment and:

- Produce a data based Catchment Overview
- Identify issues, and building of evidence
- Determine how to address issues
- Identify potential funding
- Deliver improvements

If you are interested in this, please contact us. Details on final page.



Photo Credit: Alan Rowe

HOT OFF THE PRESS: BEAVERS BECAME A NATIVE SPECIES ON 1ST OCTOBER 2022. IN THE NEXT NEWSLETTER WE WILL COVER THE ISLE OF WIGHT BEAVER DEBATE

LOVING THE LUKELY

Southern Water are undertaking river habitat enhancement work on the Lukely Brook between its source near to Bowcombe, down to Towngate Pond in Newport that will make the stream more resilient to environmental change, improving flows and water depths in the stream, and providing increased public amenity value.

Last month trees were cut back at Spring Lane to allow more sunlight into the channel, ahead of planting marginal aquatic plants, and redistributing gravel in the riverbed to create more variety in flow and water depths. At Bowcombe experimental dams have been constructed to allow more water on to the floodplain and slow the flow in storms.

This is a continuation of earlier improvement work that focused on improving passage for fish and eels.





HELP FOR FARMERS AND LANDOWNERS

We are lucky to have both Mark Simmons from IW AONB and Gary Clarke from Southern Water providing advice and support.

Mark is providing advice on a number of issues and opportunities. Flavours of the month are mob grazing, regenerative agriculture and cover crops.

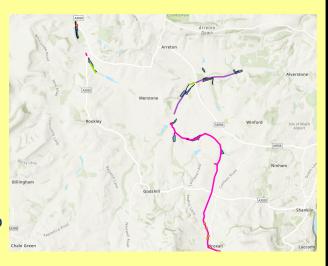
Gary can provide financial assistance for a wide range of improvements that reduce the impacts of farming of on water quality in the areas coloured on this map.

Together they are also running a number of workshops. mark.simmons@iow.gov.uk gary.clarke@southernwater.co.uk



BASHING THE BALSAM

Our brilliant volunteers spent 1718 hours controlling Himalayan balsam this year. It's really beginning to work. The screen clip opposite is from our interactive map. The pink line is our 'SWAT' team—Steve and Ken. There is so little balsam in this part of the stream that they just need to walk through 4 times a year, Previously we had groups pulling fields full. To find out more about the project and view the map go to https://islandrivers.org.uk/projects/plant-positive-invasive-non-native-species-removal/



GET INVOLVED!

ISLAND RIVERS CATCHMENT PLAN This guides the work of Island Rivers and is reviewed annually.

http://www.islandrivers.org.uk/island-rivers/island-rivers-catchment-plan/

VOLUNTEER FOR PRACTICAL WORK Details of opportunities can be found here:

http://www.islandrivers.org.uk/love-your-river/get-involved/

ISLE OF WIGHT INVASIVE NON-NATIVE SPECIES PLAN Details threats to the Island:

http://www.islandrivers.org.uk/isle-of-wight-ias-action-plan-feb2020/

VISIT OUR WEBSITE It's a massive source of information on the Island's rivers, activities, issues etc http://www.islandrivers.org.uk

FOLLOW US ON FACEBOOK We post here regularly, and love to receive photographs to repost! https://www.facebook.com/islandrivers



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The organisations helping to steer this project are the Environment Agency, Natural Enterprise, Hampshire and Isle of Wight Wildlife Trust, Isle of Wight AONB, Isle of Wight Council, Southern Water, Natural England, CLA, NFU, Isle of Wight Estuaries Project, Solent Forum, Marine Management Organisation and Arc Consulting.

FOR FURTHER DETAILS ON ANY ITEMS IN THIS NEWSLETTER CONTACT:

CAROL FLUX 07790 906232

carol.flux@naturalenterprise.co.uk

