Environmental Actions on the Medway Estuary 2020



Medway Swale Estuary Partnership (MSEP)

Top Five Climate Change Issues Associated with the River Medway

Rising sea levels/coastal squeeze – This will result in the loss of habitats, such as mudflats and saltmarsh (both excellent at carbon sequestration), particularly where hard sea defences are used to protect local housing/amenities/infrastructure against flooding.

Associated with this will be increased storm surges and an extended tidal range (so higher high tides). These issues will also impact on the estuary's birds through loss of high tides roosts, breeding sites (particularly the islands) and feeding grounds. The potential loss of the islands will also result in the loss of local heritage.

Rainfall - Reduced rainfall during the summer/longer periods of drought (marshes drying out), with heavier longer periods of rain during winter.

This will also impact on river flows (increased winter/reduced summer).

Higher temperatures – Increased risk of drought and negative impacts on existing flora and fauna. Higher water temperatures, will lead to changes in the estuary's marine ecosystems and increase the number/spread of invasive non-native species

Increased pollution – Increased flooding is likely to lead to increased risk of agricultural run-off (especially if the ground is dry), leading chemicals being washed downstream and additional sewage from storm drains.

Coastal erosion – Increased storm surges, higher tides, compounded by isostatic rebound (a geological process, which means the south east is sinking whilst the north is rising, caused by the last glaciation)

Established in 2000, the partnership's work is centred on the understanding, conservation and promotion of the estuary's natural and cultural heritage.

Ecological projects include:

North Kent Catchment Improvement Group – Hosted by the partnership along with the South East Rivers Trust, the group has identified a number of issues facing the catchment and has developed a catchment action plan, in order to undertake projects that deliver positive and sustainable outcomes for the estuary and its freshwater tributaries.

Sea Wall Botanical Survey – A report on factors affecting the occurrence of nationally scarce plant species on the estuary's sea walls.

Guardians of the Deep - A three year HLF funded project in partnership with Kent Wildlife Trust and Thanet Coast Project (supported by Natural England and Kent County Council), focused on the county's network of Marine Conservation Zones (MCZs), which includes the Medway and Swale as two separate zones (Medway Estuary and The Swale). Its aim was to inspire and involve local communities and especially young people, in protecting and monitoring our coastal and marine wildlife, through the following activities:

- **Coastal Guardians** The creation of a network of volunteers who oversee a stretch of coastline and undertake practical activities to maintain it.
- Coastal Connections Working with organisations responsible for protection
 of marine environments (along with other like-minded organisations), to build
 awareness of and support for the importance of sustainable use of our marine
 environment.
- Coastal Citizen Science Training local people to take a direct role to help conserve their local natural coastal heritage.
- Wildbeach A programme of outdoor educational activities aimed at schools, focused on the marine environment.

Since the end of the project (May 2020), the MSEP has retained its GOTD project officer and is continuing to undertake (and seek additional funding) to continue a number of the projects and activities.



The project was set up to address the impact that additional development in north Kent will have on bird populations on the Thames, Medway and Swale Estuaries. These sites are Special Protection Areas (SPAs) and Ramsar sites that are protected by both European and international designations.

The north Kent coast between Gravesend and Whitstable is internationally important for wildlife. The Thames, Medway and Swale estuaries and marshes are protected under international designation as Special Protection Areas (SPAs) and Ramsar Sites. Every year, around 250,000 waders and waterfowl travel thousands of miles to spend winter on the north Kent coast, feeding and resting on the marshes in preparation for the long return journey to their breeding grounds in the spring. Research shows that recreational visitors can cause disturbance to these birds, reducing their chances of successful breeding. The North Kent Strategic Access

Management and Monitoring Strategy (SAMMS) was prepared in 2014, setting out a package of strategic measures for resolving the additional disturbance issues to wintering birds, arising from new housing development.



Serving You Green Space Development Team (GSD)

GSD are working to support (MSEP) with beach cleans and equipment. In 2020 a financial contribution was made to MSEP to provide skips for a concentrated beach clean in an area with chronic plastic pollution at Cliffe Fort.

When COVID restrictions are lifted, GSD will co-ordinate with the Community Pay Back Team to assist with litter picking and secure easy access through Brett's land for effective skip and litter collection.

In 2019 officers from GSD, together with Safer Community Wardens and local volunteers, cleared an area of riverbank in Strood of shopping trolleys and large items of debris.

There have been tentative discussions with Peel Ports and RSPB on feasibility of salt marsh protection using dredging material.

Rivers Charter

GSD have drafted a Rivers Charter which is designed to bring river stake holders together to identify ecological and river access improvements. The Charter aims to be a funding tool for these improvements with a goal to create a Rivers Trust which will run and manage access points such as Sun Pier and Rochester Pier.

An Accessible River – Gap Analysis

GAB team undertook an analysis of the River Medway to better understand which sections of the riverbanks are accessible as footpaths and cycleways.

The team found out that Medway has coastline and river frontage totalling 45 miles of which 21 miles does not have legal, public access rights.

These have been mapped and an assessment made of how and when opportunities might arise that could unlock inaccessible sections.

It is anticipated, with further research, the analysis can complement Local Plan Policy and be used to secure funding for river access improvements to include infrastructure and green space development.

In the absence of a dedicated Medway Council River strategy, the Gap Analysis could inform future riverfront planning determinations with a view to unlocking more access.



Living River Foundation (LRF)

LRF is a local not for profit organisation which monitors micro plastics that have broken down from items in the river or entered from wastewater and raises awareness to protect and improve the Thames and Medway rivers.

Their work includes organising litter picks facilitating talks and workshops within the local community to engage and allow others to understand the issues faced by their local environment. They also run regular fish and chip cruises (sustainably sourced in non-plastic packaging) with Jetstream Tours and talks provided by local fish and bird experts such as BirdWise to help people understand why the river is so important.

In September 2019 they did their first <u>Litter Critter</u> however the amount of litter was too much for the small group of volunteers. More clean ups are planned throughout the year (subject to funding) and they have already upgraded their vessels to help do so. LRF actively promote volunteering and fundraising opportunities on their website.

They have partnered with Marina Developments Limited and Chatham Maritime Trust to clear litter from Marina Basin, the estuary and surrounding area and in 2019 they organized a beach clean with Mayor of Medway Habib Tejan who launched a Litter Boom in Chatham Marina. The recycled plastic boom has been strategically placed to passively collect and capture rubbish such as plastic bottles and fast food wrappers. Once the litter has been caught and collected it is then sorted into different types of plastic and sent for recycling or made into craft items. It is also hoped that it can be traced back to source and businesses engaged with to eliminate the litter in the first place.

LRF survey the estuary for microplastics that have broken down from items in the river or entered from our waste-water via our clothes and toothpastes. Brunel University have just completed analysis of 2018 Thames data and they are hopeful that the next student will undertake analysis of Medway data.

LRF is currently working towards charity status.



Kent & Essex Inshore Fisheries and Conservation Authorities

(IFCA)

They are tasked with the sustainable management of inshore sea fisheries resources in their local area. They are made up of representatives from the constituent local authorities (who provide funding for the IFCA) along with people from across the different sectors that use or are knowledgeable about the inshore marine area, such as commercial and recreational fishermen, environmental groups and marine researchers, who offer their time voluntarily.

The Marine Management Organisation, Environment Agency and Natural England also each have a statutory seat on the IFCA. Through their local management and funding structures, IFCA help put local authorities, local communities, local businesses and individual citizens in the driving seat, allowing them to play a bigger part in the protection and enhancement of their inshore marine environment.

IFCA, working with the Rochester Oyster Floating Fisheries (ROFF) manage the River Medway Nursery Area which is the UK's biggest 'No Take' zone in the Medway estuary, an area of 12 square kilometres from Hoo to Grain. More information on the River Medway Nursery area can be found here.