

SevernTidings

Working in partnership for the future of the Severn Estuary

25 YEARS OF SEP

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Photo of the Year credit – © Jason Hawkes

Discover. Enjoy. Respect.

PARTNERIAETH ! STUARY PARTNERSHIP

WELCOME

John Harrison Chairman of the Severn Estuary Partnership

Welcome to the 25th Anniversary
Edition of the Severn Estuary
Partnership's Severn Tidings.
I do hope you will enjoy our reflections on the
past 25 years and join us as we look forward to the

We all have our own personal perspectives on the Estuary and inner Bristol Channel. Having lived, worked, and enjoyed many leisure activities in and around the estuary over the past 65 years, I have come to the conclusion that it's just too large for one person to know all its treasures and challenges. However, thanks to all those who are committed to working in partnership, there is a never-ending supply of information which enables SEP to promote a more sustainable approach for the estuary.

years to come.

No one would disagree that estuary living presents significant challenges today, including a number of environmental, social and economic issues. Reading the articles in this special edition of Tidings reminds us that estuary life was also challenging for our predecessors, from early Mesolithic settlers seasonal use of the estuary through to vulnerable communities today under threat from climate change. Yet there are common themes which remain constant:

- A dynamic environment where land and water change rapidly, sometimes uncontrollably.
- A maritime highway which has shaped our communities' economy and wellbeing.
- A special haven for wildlife which is now recognised internationally.

SEP's achievements over the past 25 years have been due largely to the support of many individuals and organisations - too numerous to list here! However, one person is deserving of recognition in our 25th Anniversary Year

- Dr Rhoda Ballinger, School of Earth and Environmental Sciences, Cardiff University. Rhoda was instrumental in the establishment of SEP and has worked tirelessly to support the partnership over the last 25 years! Her dedication to developing a strong and effective team lies at the heart of SEP's achievements. Her ability to build lasting relationships with a diverse range of stakeholders and her engaging personality are well recognised by all of those who have worked with her, both across the Severn Estuary and beyond. Her independ

those who have worked with her, both across the Severn Estuary and beyond. Her independent and evidence led approach has earned her respect locally, nationally, and internationally. Most of all it is her passion for the estuary over the past 25 years which shines though and stimulates others to participate in working towards a sustainable estuary for all. Without Rhoda, SEP may not have had the success and longevity it has had, and, as Chair, I want to take this opportunity to express our immense gratitude to Rhoda for all the work and passion she has, and continues to, put into SEP.

Dr Rhoda Ballinger

I hope you enjoy reading Tidings 2021 and join in our celebrations over the coming months. A very special thanks to all the SEP team based at Cardiff University who have worked hard to support the partnership and have continued to build links with stakeholders, particularly during a challenging last 12 months or so.

We live in a special place! Thank you for all the continued support to ensure everyone understands why we must care for the estuary and recognise its contribution to the lives, livelihoods and well-being of communities across the Severn Estuary.

Severn Estuary Partnership Update

Dr Emma McKinley, Severn Estuary Partnership and Cardiff University

Over the last 25 years, the Severn Estuary Partnership has had the opportunity to get involved in a wide range of exciting and interesting projects, working closely with stakeholders and communities across the Estuary.

Celebrating 25 years of SEP

We are delighted that the Severn Estuary Partnership reached its 25th Anniversary last year in 2020. Despite the impact of Covid-19 restrictions on activities, we have enjoyed looking back at the past 25 years, reaching out to past members and chairs of the Partnership, and thinking about next 25 years of SEP! As part of these celebrations, the Severn Estuary Forum 2021 programme showcases an exciting range of speakers representing the projects and research happening across the Estuary, and we are excited to welcome many of you.

Changes to the SEP Team

Since our last Severn Tidings update, the SEP team has undergone lots of changes! Many of you will remember Lucy Taylor was our SEP Manager during our last Forum and Tidings edition – in March 2020, Lucy left us for pastures new and is now settled into her new position with the Environment Agency. Big thanks go to Lucy for all of her passion and enthusiasm for SEP during her time with the Partnership! In the interim period, Dr Emma McKinley, Cardiff University, has been supporting the SEP team and has worked closely with the Litter Free Coast and Sea Somerset project, as well as supporting everyday management of the team over the last year or so. In addition, since we last published Severn Tidings, the team has also welcomed Barbara Wren, our administrative assistant, and Katie Havard-Smith, our SEP and ASERA officer (find out more about Barbs and Katie on Page 4!). Litter Free Coast and Sea Somerset has always been one of our most active projects – we are currently in the process of

We are pleased to award Jason Hawkes with 'SEP Photo of the Year 2021.' If you have a Severn Estuary-related photo that you would like to submit for the SEP 'Photo of the Month', please send your images to severn@cardiff.ac.uk. The winner for each month will be featured in our SEP e-newsletter!

Our Contributors:

At SEP our key role is to keep all of our stakeholders informed of project developments and proposals that are happening within, or will have an impact on, the Severn Estuary. In this edition we are delighted to have contributions and viewpoints from a wide variety of estuary groups, projects and organisations:

Association of Severn Estuary Relevant Authorities, Severn Estuary Coastal Group, Wales Coastal Monitoring Centre, Plymouth Coastal Observatory, Cardiff University, The Marine Management Organisation, Welsh Government, Natural Resources Wales, The Bristol Port Company, Associated British Ports, Somerset Wildlife Trust, The Living Levels Landscape Partnership, Forest of Dean District Council, Severn Rivers Trust, Environment Agency, Newport City Council, Natural England.

We would be interested to hear your views on the wide range of topics featured in this edition. Please get in touch by emailing **severn@cardiff.ac.uk**.

recruiting a new project officer, as both
Tanya Cox and Emily Wordley have moved
on to new opportunities in recent months!
Keep your eyes open for information about
this new position in e-news soon! Finally,
we are absolutely delighted to take this
opportunity to introduce and welcome our
incoming SEP Manager, Alys Morris, who will
be joining the team in early summer 2021.

Adapting to Change

Of course, 2020 brought some challenging times for SEP, and all of the people, groups and organisations we work with. As with many organisations, the initial impact of Covid-19 meant a few unsettled weeks as we adjusted to working remotely and worked to develop new ways of engaging with communities and stakeholders across the Estuary. Despite the initial stall that Covid-19 had on our work, the team have been busy behind the scenes, providing all our usual services to various Estuary groups, engaging with stakeholders and communities on both sides of the Estuary, developing online campaign materials, and, most excitingly, planning for when restrictions lift! We continue to provide up to the minute information about the estuary using a range of social media outlets including Facebook, Instagram and Twitter. Since March 2020, we have moved all of our meetings and engagement activities online, which included our first virtual Joint Estuary

Day (JED) Meeting in June 2020, and, of course, our planning for this year's Severn Estuary Forum.

Marine Planning: Project Delivery and Influencing Policy

Throughout 2020, SEP continued to liaise with the Marine Management Organisation (MMO), Welsh Government (WG) and the Coastal Partnership Network (CPN) to ensure the Severn is properly considered and all stakeholders are given a voice in matters relating to the development of marine planning. As part of this, in August 2020, we finalised our work on the MMO's EMFF bid "Enhancing Stakeholder Engagement", including an animation and a poster series.

Litter Free Coast & Sea Somerset: Delivery and Project Expansion

Our flagship project, Litter Free Coast and Sea Somerset, has definitely been

one of our 2020 success stories! With an award of additional funding, the team have been working hard to continue to engage communities in campaigns and activities designed to reduce marine and beach litter and protect bathing water quality in Somerset. Of course, Covid-19 had an impact

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COAST & SEA

SOMERSET

on our ability to deliver this -the team adapted to online working, keeping our communities engaged and delivering new campaigns throughout the year, including featuring on This Morning in February! SEP would like to thank Emily Wordley and Tanya Cox for their amazing contribution to the project. Tanya had been with us since 2017 and has now go on to a new position with Flora and Fauna International - huge thanks to Tanya for all of her work on the LFCSS project during her time with us! We are also incredibly grateful to Emily, who joined us just weeks before the lockdown restrictions were implemented in 2020 and despite the challenges of getting to know a new team, and community stakeholders in a completely virtual format, Emily continued the fantastic activities of the LFCSS project, including curating our wonderful celebratory SEP film! Emily has now gone on to further her academic studies, and we would like to take this opportunity to wish her well!

Launch of the new SEP website

We are SO excited to launch our brand-new website – as always, you can keep up to date with everything we're doing as well as useful information about activities, events and projects happening around the Severn Estuary.



MEET THE SEP TEAM As we look back at 25 years of SEP, we thought we should also look at where the SEP team were back in 1995, when it all started! Take a look below!



Name: Rhoda Ballinger Role: Member of SEP Management Group; Line Manager of SEP staff Time worked: 25 years!

Describe your role within the Severn **Estuary Partnership.**

I've been actively engaged with SEP, and its predecessor, the Severn Estuary Strategy, more or less since its inception. I've also been involved with staff management and overseeing some of the European projects, such as IMCORE, which SEP has been involved

What has been your favorite aspect of working within the partnership and why?

Meeting stakeholders from around the Estuary and discussing their views and aspirations for the future management of the area.

What are you excited to start work on in the partnership's 26th year?

I'm particularly excited to see how we can expand our hands-on project work (such as LFCSS and the Discover the Severn) to the rest of the Estuary.

Where is your favorite place in the Severn Estuary and how does it make you feel?

This is a really difficult question as I have lots of favourite places and to some extent it is weather-dependent! However, I frequently enjoy visiting the shore from Cardiff Bay to Lavernock Point and appreciating the mudscapes associated with the Estuary's massive tidal range.



Name: Alvs Morris Role: Severn Estuary Partnership Manager Time worked: starting in June 2021

Describe your role within the Severn **Estuary Partnership.**

I will be starting in the role of Severn Estuary Partnership Manager in June 2021. With responsibility for the strategic development of the Partnership I will lead the coordination and management of day-to-day activities



Alvs in 1995

of the Partnership team and oversee the provision of the Partnership's secretariat services and project delivery.

What are you excited to start work on in the partnership's 26th year?

2021 is a year in which bold targets and plans already made in relation to sustainability should translate into actionable changes. I'm really excited to start my role with SEP at this important time, in order to help realise the vision of a sustainably managed and thriving Severn Estuary.

Where is your favorite place in the Severn Estuary and how does it make you feel?

Growing up on the Glamorgan Heritage Coast, the stretch of coastline between Monknash and Nash point has always been my favorite place! Hidden away down a long winding track it's never busy, so when you reach the beach you get an amazing sense of peace and tranquility.

Penarth Head from Cardiff Bay Barrage - © Rhoda Ballinge



Name: Emma McKinley Role: SEP Temporary Manager Time worked: Unofficially since 2016; officially since 2020

Describe your role within the Severn **Estuary Partnership.**

I've worked with SEP on different projects over the last 5 years – since March 2020, I have been supporting the team as Temporary Manager, which has really meant I have been lucky enough to work closely with the whole team and most of the different groups we are involved



Emma in 1995

What has been your favorite aspect of working within the partnership and why?

My work is all focused on how people interact and connect with our ocean, coasts and seas - and so I particularly enjoyed working on the Discover the Severn project, and working to better understand how people feel about and connect with the Severn Estuary. Working with the team over the last year or so, has given me such an interesting and valuable insight into all of existing work happening across the Estuary!

What are you excited to start work on in the partnership's 26th year?

I'm excited to be thinking about how we can continue to work with communities and stakeholders over the next few years - and continuing to find exciting ways that we can try to better understand how people value and connect with the beautiful land- and seascapes of the Severn Estuary.

Where is your favorite place in the Severn Estuary and how does it make you feel?

OOOh! There are so many to choose from! In our house, we love a quick dash over to the beaches around Barry – it's so close for us to get a frequently needed dose of Vitamin Sea, as well as being a great place for dog walks with Bodhi, our pooch!



Name: Katie Havard-Smith Role: Severn Estuary Partnership and European Marine Site Officer

Time worked: August 2019 - Present



Describe your role within the Severn Estuary Partnership.

I am responsible for the day-to-day communications of SEP, including our social media channels, monthly e-newsletter and annual Severn Tidings magazine. I also organise events and meetings and share in the secretariat responsibilities. I am also the Association of Severn Estuary Relevant Authorities (ASERA) Officer, where I am responsible for undertaking and facilitating the preparation, implementation, and monitoring of the Management Scheme on behalf of the ASERA members.



Katie in 1995

What has been your favorite aspect of working within the partnership and why?

My favourite aspect of working within the partnership has been learning all about the Severn Estuary; its unique wildlife and habitats, alongside its thriving human landscape.



What are you excited to start work on in the partnership's 26th year?

I am excited for our annual Severn Estuary Forum in May, and for our Severn Estuary Big Beach Clean in September.

Where is your favorite place in the Severn Estuary and how does it make you feel?

My favourite place on the Severn Estuary is the Severn Way near Oldbury-on-Severn. It always makes me feel inspired and connected to the ebb and flow of the estuary and I love watching the birds pick through the mudflats!



Name: Rarhara Wren Role: Admin Assistant Time worked: May 2019 - Present

Describe your role within the Severn Estuary Partnership.

I am responsible for handling the day-to-day admin and providing support to the team which includes dealing with enquiries, emails and finances, creating and maintaining files and records, and organising and minuting meetings. I am the general point of contact for internal and external stakeholders.

What has been your favorite aspect of working within the partnership and

I enjoy learning about and exploring my local area and so it has been incredibly fascinating discovering more about the nature and wildlife and points of interest associated with the Severn Estuary.



Where is your favorite place in the Severn Estuary and how does it make you feel?

I love to visit Porthkerry Country Park as its range of habitats provides a whole variety of interests for individuals and families. It's a beautiful space to explore and relax. Being there makes me feel connected to history (you can't miss the Victorian viaduct!) as well as the environment via the green and blue spaces.







An Estuary Round Up

The Association of Severn Estuary **Relevant Authorities (ASERA)**

Katie Havard-Smith, ASERA Officer

ASERA is made up of the statutory organisations around the Severn



Estuary that collectively manage their activities on the Severn Estuary European Marine Site (EMS). The Severn Estuary EMS incorporates the marine areas of both the Special Area of Conservation (SAC) and Special Protection Area (SPA), protected under the Habitats Regulations.

ASERA is currently updating the Good Practice Guidelines for recreational activities taking place within the Severn Estuary EMS. These will be published on the ASERA website (www.asera.org.uk) in both English and Welsh and will be promoted throughout the estuary. Turn to page 25 for more information on the purpose of the guidelines and the activities they cover.

ASERA is undertaking a desk-based study to review land-based recreation activity in the Severn Estuary. Data have been collected on the intensity, frequency and location of various land-based activities taking place within and adjacent to the Severn Estuary. Some of the activities being reviewed include bird watching, horse riding and dog walking. This summary report and series of GIS maps are likely to be consulted on later this year. If you have information or data that would be useful to inform this study, please contact the ASERA Officer.

ASERA also remains engaged with a wide range of groups and projects focused on issues ranging from recreational fishing, coastal access and estuary awareness to invasive non-native species, marine litter and implementation of marine codes.

manager of inshore fisheries in England, and has a range of other roles as a Relevant Authority for the Severn Estuary EMS, which falls within its District. Anne Hayes and Louise Hemmings (both of the Bristol Port Company) were elected to remain in their respective roles as Vice-Chair and Honorary Treasurer of the Association. All would like to thank the outgoing Chair, Sarah Revill (Natural Resources Wales) for her excellent work and continued commitment to the Association.

For more information, please contact the ASERA Officer, Katie Havard-Smith, at severn@cardiff.ac.uk or visit our website at www.asera.orag.uk.

Severn Estuary Coastal Group Update

John Buttivant, Severn **Estuary Coastal Group** Chair

The Severn Estuary Coastal Group has a core membership of local authorities and statutory agencies (such as Natural England, Natural Resources Wales and the Environment Agency) and covers the Severn Estuary coastline from Lavernock Point up to Gloucester and back down to Anchor Head in North Somerset. The group is responsible for producing and maintaining the Severn Estuary Shoreline Management Plan and the associated Action Plan. The group facilitates an exchange of information, knowledge, research and best practice between its members who all have interests in managing the flood and coastal erosion risks around the estuary and its interaction with the natural and built environment.

Normally the group meets in person on a quarterly basis, but this has not been

it is likely that at least 3 of the 4 meetings in future will remain virtual even after

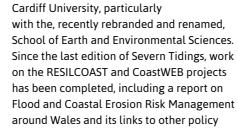
Recent meetings have included updates on the Regional Coastal Monitoring programmes, bird feeding and roosting sites, modelling of flood risk and climate change and the refresh of the Shoreline Management Plan. The forthcoming meetings will have a focus on Research and Development, Habitats, flood incident readiness and the Refresh of the Shoreline Management Plan.

Cardiff University Update

Dr Emma McKinley, Severn Estuary Partnership

Over the last 25 years, SEP has worked closely with

areas, including well-being.



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The SEP team and some of the SEP Management Group have also made contributions towards the newly devised Geography programmes in the School, including presentations on careers and data provision for undergraduate dissertations as well as assistance with lecture presentations on specific topics related to coastal management. A number of SEP-related student placements over the last 18 months or so have provided invaluable additional support to SEP, assisting with e-news and website development amongst other things. These placements provide invaluable work experience for the students. We've recently heard that one of our former work experience students is now managing a has been appointed in a very senior role in the Ministry of Housing, Communities and

In September 2019, Drs Emma McKinley and Rhoda Ballinger started work on the Coastal Communities Adapting Together (CCAT) project, an INTERREG Ireland-Wales funded project, running until November 2021. Working with partners across Ireland and Wales, led by University College Dublin, the project focuses on coastal communities in Fingal, Ireland, and Pembrokeshire, Wales. Through a diverse programme of activities, CCAT seeks to support communities in understanding how they can adapt to climate change through workshops and initiatives such as mapping the changes in their area and planning to make their

communities more resilient to the effects of climate change. As part of the project, the team ran an online event about all sorts of issues relating to climate change, coastal management and community engagement - you can see the recordings of the event on the CCAT website! In response to Covid-19, the project team also moved to a completely online format for all activities and have recently published a paper reflecting on this process and what it might mean for coastal community engagement now and in the future. If you'd like more information on this, get in touch with Dr Emma McKinley at mckinleye1@cardiff.ac.uk.

In January 2021, the UN Decade of Ocean Science for Sustainable Development was launched by the United Nations. The Decade sets out a call for a transformation in the relationship between people and the ocean, coasts and seas. One aspect of this is a demand for enhancing ocean literacy currently defined as 'an understanding of the ocean's influence on you and your influence on the ocean' across society. Dr Emma McKinley recently led a report on ocean literacy in the UK, funded by Department of Environment, Food, and Rural Affairs (DEFRA) and the Ocean Conservation Trust.

Policy Updates

Natural Resources Wales' Area Statements

Chloe Hatton, People & Places Officer, Natural Resources Wales

The purpose of NRW's Area Statements is to identify priorities and opportunities for the sustainable management of natural resources (SMNR) in Wales and to drive forward a collaborative approach that engages action on the ground to address these. There are 6 regional Area Statements, and 1 marine.

Our Area Statements are the result of two years' hard work and collaboration between a large number of cross-disciplinary organisations. NRW and numerous partners worked together to first understand where we are now, then to share knowledge and expertise and making recommendations for future improvements that benefit the environment, people and places of Wales.

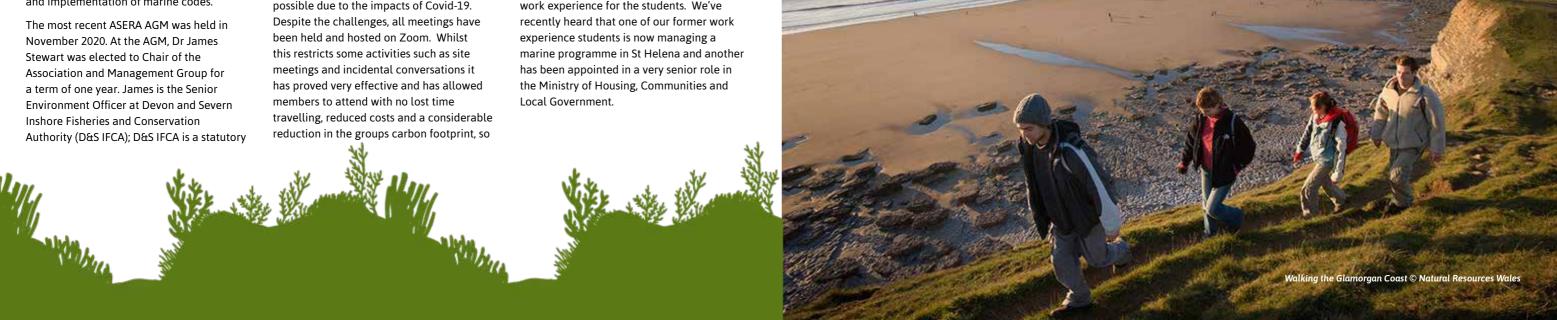
Despite Covid-19, work on the Area Statements continues across Wales, and NRW are now working with partners to deliver on our ambitious aims.

Focusing in on the Severn Estuary, this includes work on...

- The 4 South East Wales priority themes: Linking our Landscapes, Climate Ready Gwent, Healthy Active Connected and Ways of Working;
- The 5 South Central Wales priority themes: Building Resilient Ecosystems, Connecting People with Nature, Working with Water, Improving our Health and Improving our Air Quality;
- The 3 Welsh national Marine priority themes: Building Resilient Marine Ecosystems, Nature-based Solutions and Adaptation at the Coast, and Making the Most of Marine Planning

PLEASE CLICK HERE

to read or provide feedback on each of the Area Statements



South West Regional Coastal Monitoring Programme

Joseff Saunders, Coastal Process Team Leader, Plymouth Coastal Observatory

The South West Regional Coastal Monitoring Programme (SWRCMP) is one of seven which encompass the entire coastline of England and Wales and is run by Plymouth Coastal Observatory (PCO). The Defra funded Programme, whose remit stretches around the coast from Portland Bill in Dorset to Beachley Point on the border with Wales (2,450 km), has been collecting, collating and managing coastal data since 2006.

The aim of the Programme, is to provide a standard, reliable and cost-effective method of monitoring coastal change on behalf of the South West Coastal Groups and in partnership with the Environment Agency and Local Authority councils. The Programme collects multiple types of data, including topographic beach survey data, near-shore bathymetry, LiDAR, aerial photography and habitat mapping. The Programme also has a network of wave buoys and tide gauges around the South



The data feeds into a long term dataset showing changes to the beaches and coastline of the South West and is primarily used to inform beach management decisions based on high quality scientific evidence. All of the data collected by the Programme is available, free-of-charge and is utilised by numerous different organisations from consultants to interested individuals. PCO currently consist of a small team of seven who are based at Plymouth University. For any more information and to access to our free data, please visit our website southwest.coastalmonitoring.org

Wales Coastal Monitoring Centre

Gwyn Nelson, Programme Manager, Wales **Coastal Monitoring Centre**

The Wales Coastal Monitoring Centre (WCMC) is a 100% Welsh Government funded organisation tasked with surveying the coast to inform Flood and Coastal Erosion Management Decisions. The WCMC gained traction when two full time staff were employed in 2019. Since then, a risk score of the entire Welsh coastline was completed and a cost model applied to determine which locations could be monitored using the allocated budget. A

survey specification was also introduced across Wales, which ensures data integrates with the English coastal monitoring network.

The WCMC have now surveyed 791km of high-risk coastline in Wales, to the Mean Low Water Springs datum. The WCMC have already achieved repeated surveys at active locations, with the aim of understanding seasonal and ultimately long-term beach intertidal evolution processes.

In the last year the WCMC have started an undergraduate work placement scheme, and

achieved funding for an additional

CMAC: WCMC 3 graduate placements, including collaborative projects with Aberystwyth and Bath University.

Our Primary School programme, developed under the new Welsh Curriculum 2022, includes 15+ virtual tours contributed from multiple international Universities.

You can learn more on our new website at www.wcmc.wales.

Shoreline Management Plan Refresh

John Buttivant, Coastal Engineer, **Environment Agency and Severn Estuary** Coastal Group Chair

The current second generation of the Shoreline Management Plan (SMP) was produced around 10 years ago using the best data and knowledge that was available at the time. The plan set out policies to manage the coast in three-time epochs over the next 100 years. The transition to the second epoch policies is in 2025, now only 4 years away. Although the SMP is still considered sound and effective, with these factors in mind, it was considered timely to refresh the SMP to take into account the latest understanding of our complex coastline and the readiness for the transition to the next epoch policies.

In England the process was managed nationally by the Environment Agency on behalf of all the coastal groups. It included a review of the guidance documents to produce technical notes that will guide

the coastal groups in consistently updating the SMPs, as well as a health check of the policies, with recommendations for areas that may warrant further work in light of the refreshed guidance and/or changing knowledge and understanding of the risks. The health check has been provided to the coastal group and this will form the basis of the group's work over the coming year or two to target updating of the plan. The health check does not directly alter any policies, it simply provides a focus for issues the group need to consider and responsibility for any changes remains with

In Wales, the refresh process started last Autumn. It has adopted a very similar approach to the English refresh, although the technical notes will be reflecting the differing policy and funding framework that exists in Wales. The finalised technical notes and health check documents are expected to be issued to the group this summer which

will provide a consistent approach to the entire Severn Estuary Coastal Group area, whether English or Welsh.

In order to support this, we hope to appoint an SMP project officer to work with group members and other stakeholders to update the SMP and action plan, with any changes to the plan being subject to the scrutiny of the coastal group under the normal change management procedures.

The final phase of the refresh project will deliver a new visualisation tool. This will improve online access to the SMP, allow updates and amendments to be shown and make the whole process much more accessible and user friendly. This is expected to go live in 2023 once development has been completed and the initial updates and improvements to the plan from the health checks have been incorporated.

Policy Updates

South West Marine Plan

Sophie Kendall, South West Marine Planner, Marine Management Organisation

The Marine Management Organisation (MMO) has developed the South West Marine Plans through a series of phases to which the Severn Estuary Partnership (SEP) and other stakeholders in the south west were integral. At phase 1 in 2017, we explored causes and effects of identified issues within the south west marine plan areas. At phase 2 we engaged stakeholders on the second outputs in 2018, which consider different ways of achieving the high-level marine objectives. This ensures the choices made, and their implications, have been considered. In 2019, for phase 3, we held workshops and

conducted online engagement to gather feedback on draft policies before holding a formal public consultation between January and April 2020.

The South West Marine Plans are currently being finalised and are close to being

submitted to the Secretary of State for Environment, Food and Rural Affairs for

Marine planning cycle EVIDENCE Iterations

> approval prior to adoption. In preparation for the adoption of the plans in 2021, we have been delivering marine plan implementation training to decision makers from February to April 2021. This will ensure the marine plans are successfully implemented post-adoption.

The development of these plans would not have been possible without the help

> of the wide range of people and organisations within the south west who have contributed extensive knowledge and expertise that has fed into the marine planning process. Coastal partnerships, such as SEP, have proved instrumental in synthesising the enormous amount of data and knowledge into a range of clear and succinct issues and opportunities, which the MMO's marine planners are able to work with. We would like to thank everyone in the south west marine plan area for contributing to the development of the South West Marine Plans as this would not have been possible without you.

For any queries including booking implementation training for your organisation please contact: sophie. kendall@marinemanagement.org.uk or planning@marinemanagement.org.uk

Welsh National Marine Plan

Rebecca Rees, Marine Planning Engagement and Liaison Officer, Welsh Government

In the year since the Welsh National Marine Plan (WNMP) was launched, the Welsh Government's Marine Planning team have focussed on plan implementation. Despite the challenges faced in 2020, work has continued steadily to provide Relevant Public Authorities (RPA) and other plan users with resources to help them implement the Plan. In the Summer the Implementation Guidance (IG) was published which guides the practical application of the WNMP and is a consideration for RPAs in taking decisions which may affect the plan area.

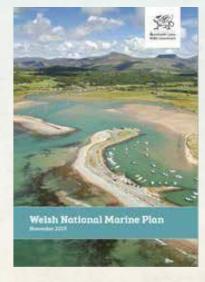
With face to face engagement on hold, five recorded webinars were produced to explain more about the Marine Planning process and how to apply the WNMP. The team are also working with stakeholders on a Marine Planning Governance document that provides technical and plan guidance information about sectors operating within the Welsh Marine Plan area.

Progress has been made to monitor and report on the plan's effectiveness. In January, Welsh Government published the

Monitoring and Reporting (M&R) Framework

which outlines the strategic approach to develop indicators for monitoring the implementation of a plan-led system for Welsh waters. Since then, the team have been working to develop a suite of indicators for monitoring the implementation and effects of the Plan. In December 2020, a User Survey was launched seeking views of stakeholders on WNMP awareness and how it has been used in the 12 months since it was adopted. Participation in this survey was voluntary and closed on 12 January 2021. However, stakeholder views and experiences are important in order to help inform marine planning and the implementation of the

Work is also progressing on the spatial approach Welsh Government are taking to Marine Planning which includes further development of the Marine Planning Portal, the Sustainable Management of Marine Natural Resources project, development of Sector Locational Guidance (SLG) and consideration of identification of Strategic Resource Areas (SRAs) to apply WNMP safeguarding policy. This work will continue to be developed into 2021 with the key stakeholder groups - Marine Planning



Stakeholder Reference Group (MPSRG) and Marine Planning Decision Maker's Group (MPDMG).

The MPSRG has acted as a 'critical friend' throughout the marine planning process and advises Welsh Government on approaches to marine planning. The MPDMG comprises RPAs that have to use the WNMP in their decision making. Find out more about the Groups via the links above. To keep updated on Marine Planning in Wales sign up to our regular newsletter or if you have any further questions about the Welsh National Marine Plan and wider work email the team: Marineplanning@gov.wales

Litter Free Coast and Sea Somerset Project

David Spray, SEP Student Assistant

Litter Free Coast and Sea Somerset (LFCSS) is an exciting community project, helping people and businesses to make simple decisions that will help their local seas, coasts, and shores. In 2015, the European Bathing Water Directive was changed to improve bathing water quality around the UK resulting in a revised standard for bathing water quality. These changes prompted a poor bathing water quality classification at Burnham-on-Sea beach on the Somerset coast. In response, Wessex Water, the Environment Agency, and Sedgemoor District Council formed a partnership with the Severn Estuary Partnership and Cardiff University to fund the innovative Litter Free Coast and Sea project, coordinated by SEP, based on earlier successes of the sister project in Dorset. As a result, Litter Free Coast and Sea Somerset has been protecting our beaches and coasts from litter and pollution since 2016.



Current and Future LFCSS Project Sites

LFCSS aims to protect bathing water quality and reduce beach and marine litter along the Severn Estuary coastline by encouraging local communities to consider their own impacts on water quality and marine litter.

Working in close partnership with the coastal communities of the North Somerset coast, LFCSS continues to adapt and innovate into its fifth year of operation. LFCSS has cooperated with schools, businesses and communities to identify and tackle sources of marine pollution, creating engaging and effective campaigns that encourage small changes to make big environmental differences. Whether it be reducing single use plastics or responsible disposal of dog waste, LFCSS, and its campaigns, are drivers of meaningful change that benefit the people and environment of the Somerset coast.

Severn Tidings Issue 20 Spring 2021 - page 10

The future looks bright for the project with a further 5 years of funding secured from Wessex Water and a range of ambitious projects in the pipeline.

Fact: Bathing water quality is a measure of the amount of harmful bacteria in coastal waters popular with bathers, paddlers, splashers and water-users!

Business Award Scheme

In 2018, the LFCSS Business Award Scheme was launched to address issues linked to local bathing water quality. The Business Award is made up of three different levels - Ripple, Roller, Crest – and is designed to guide local businesses through a range of different actions to ultimately improve on-site sewage, drainage and waste policies. The team have been working with businesses for the past two years on this scheme and is proud to see a number of local participants reaching the highest level of the award now.



How the Business Award Scheme works



Current and Future LFCSS Project Sites



SEP Projects Beach Cleans

Tackling beach litter is inevitably one of the first things that coastal residents and visitors want to address – particularly in response to the increased public awareness of the problem of marine plastic pollution that was awakened following Sir David Attenborough's landmark Blue Planet II series. Unsightly, dangerous and pervasive in nature, a two-part solution is needed to tackle beach litter: a reduction at source and the physical removal of litter already polluting the coastline – much of which gets repeatedly washed ashore with each tide. Over the years, LFCSS have proudly worked with and supported two incredibly active beach cleaning groups in Burnham-on-Sea and Berrow respectively and have purchased and installed a number of ever-popular '2 minute beach clean' boards throughout the project area. This effort has notably reduced litter along the coastline. LFCSS have been able to secure funding for the groups to support their activities and regularly join the beach cleans, speaking to volunteers about ways in which they can reduce their own reliance on single use plastics - the same types that are often found on the beaches they clean.

Emily Wordley, former Project Officer, litter picking

Don't Feed the Locals

Launched in 2016, this campaign has been one of LFCSS's most notable successes – now adopted by coastal towns throughout the UK. Brilliantly simple in its messaging, the 'Don't

feed the locals' campaign implores people not to give food to seagulls, thus avoiding high numbers of these mighty birds in coastal towns. Scavenging sea birds can be dangerous as they home in on ice creams and chip-shop chips and other staples of the British coast. Not only are the gulls a nuisance, but their poo is also known to contain high proportions of the harmful bacteria we need to avoid to maintain good bathing water quality. Fewer birds mean less poo and better water quality - therefore, many coastal towns now display our colourful signage in support of this campaign.

Cigarette Butt Campaign

disposal.

According to Keep Britain Tidy, cigarette butts are the most common form of litter in England. The Ocean Conservancy have also revealed cigarette butts were the most commonly littered item collected during their international ocean cleanup. Through the campaign, Litter Free Coast and Sea Somerset are asking individuals to think about how they dispose of their cigarette butts. The campaign aims to address the current social norms of littering cigarette butts, whist promoting their responsible

Somerset **School Coastal** Championship

In addition to local businesses, LFCSS have developed a similar programme for local schools, working in partnership with Somerset Wildlife Trust and Carymoor Environmental Trust, The Coastal Championship aims to engage school children with the ways that we can all protect our seas and coasts, whilst providing a framework for schools to follow and build on. As with the Business Award Scheme, schools can achieve accreditation at a Ripple, Roller or Crest level, in addition to achievement certificates and promotion through LFCSS.

POO FIGHTERS

Dog fouling is offensive in every sense of the word. It is unsightly, terribly annoying when caught on the bottom of ones' shoes and, perhaps more importantly, a fineable action. Dog poo, like that of seagulls, contains very high levels of harmful bacteria. When left on the side of roads and pathways, or indeed on the sandy shore, dog poo can alter local ecological balance and leach bacteria into the immediate environment. To tackle the issue and to support local Dog Wardens, LFCSS have worked with the local community to establish a volunteer group of Poo Fighters who monitor areas of the town and coastline for persistent fouling; highlighting the issue through spray campaigns and working with vets and the wider public to draw attention to- and clamp down on the issue. We have had fun running community dog walks, photo competitions and evening talks with local vets in dog friendly cafes and hope to see more of this in the future.

#BACITBINI © Emily Wordley

What next for Litter Free Coast and Sea Somerset?

SEP is enormously proud of the success of Litter Free Coast and Sea Somerset since its inception just five short years ago and warmly thank all those who continue to support us in the community - that is what the project is all about! We have built up a substantial following throughout the community and online through our dedicated social media channels and we are currently updating our website to include more of our exciting campaign materials and project successes.

Looking forward, we are thrilled to have been selected by Wessex Water to continue delivering on-the-ground community outreach and engagement work through the Litter Free Coast and Sea model in an additional eight bathing waters across the Somerset coastline over the next five years. We have developed a range of new campaign materials and have begun building links with local communities in these new areas ensuring that all campaigns are locally appropriate and can be delivered by community stakeholders.

If you or anyone you know would like to get involved in the project, please do not hesitate to get in touch with us at litterfreesomerset@gmail.com.

Discover the Severn Project

By David Spray, SEP Student Assistant

Focusing on communities in South-East Wales, the Discover the Severn project delivered innovative, inclusive, and enjoyable ways for people and their families to learn more about the value of the Severn Estuary and how to care for it. The project aimed to empower local communities with the knowledge and skills to help them protect, respect and enjoy their local coastal environment, whilst providing direct benefits for physical and mental health and well-being. Discover the Severn focused on delivering fun and inclusive ways for local communities to learn more about the special heritage, wildlife and ecosystems of the estuary through a range of interactive engagement activities and outreach materials. The project has passed on the knowledge, skills and tools to help communities protect and respect their local environment for our future generations.

The 18-month project was run by the Severn Estuary Partnership between July 2018 and December 2019 and was kindly supported through funding from Natural Resources Wales (NRW). The project was aligned with the NRW Top Level Challenge to help people to live healthier and more fulfilled lives through improved access to the outdoors for health and wellbeing.

Approach

Discover the Severn focused on three specific communities: Castleland in Barry, Grangetown in Cardiff and Pillgwenlly in Newport. Through an initial review, we investigated what barriers exist in these areas that limit access to the Severn Estuary and identified a range of driving characteristics between the different communities. This review allowed SEP to tailor a range of events, and subsequent activity packs for each community, increasing community engagement and connection with the Estuary on our doorsteps.

A programme of engagement events, including interactive stalls at local events, presentations, and activities such as scavenger hunts and beach cleans were organised in various locations across the target community areas. Working closely with the communities, SEP produced a range of activity packs and training guides to allow different communities and individuals to connect with the Severn Estuary, whether that be for health, wellbeing or engaging with the landscapes and wildlife of the estuary. The packs have been developed in different mediums to encourage communities to rediscover their connection with the estuary in the ways that best suit them.



Map of Discover the Severn project communities

Success

The project has successfully provided a legacy of resources and opportunities to help coastal communities connect with the Severn Estuary whilst identifying the barriers that currently stand in the way. The project identified time and access as the two primary factors limiting community engagement with the estuary, but still found that over three quarters of participants felt that the Severn Estuary was part of their identity. Responding to this, Discover the Severn successfully improved awareness of access opportunities whilst creating and highlighting fun activities to further foster a connection with the estuary. In the long term, the project has produced community initiatives and events that will continue to run (The Big Severn Estuary Beach Clean and Severn Estuary Recreational User Forum for example), providing continued ownership for the targeted communities in years to come. Overall, the project raised awareness of the benefits and fostered a confidence in using and enjoying all that the Severn Estuary has

Events

Several key engagement events were undertaken during the Discover the Severn Project, on a variety of scales covering a range of different topics. The aim of all the events during the project was to engage with local communities through fun activities that highlighted all that the Estuary has to offer and overall enhanced individuals' connection with the estuary environment.

Severn Estuary Big Beach Clean

2018 marked the first Severn Estuary Big Beach Clean, attracting over 1000 participants to clean Severn Estuary beaches of litter over the course of a weekend. A second Big Beach Clean event was also held in 2019, with outreach stands also set up within the three target communities. During these events, the SEP team spoke to residents about marine litter, to find out how they felt about the Severn Estuary and to assess the wellbeing impacts of beach cleaning within each community.



Grangetown Team during the Severn Estuary Big Beach Clean © Keep Grangetown Tidy

SEP Projects

Severn Estuary Nature Sessions

As part of Discover the Severn, we also ran 12 nature sessions. By bringing the local rocky shore to events, local communities were provided with the opportunity to explore this environment and discover up-close the different plants that live in the rockpools around the Severn Estuary. People were able to touch and feel samples and specimens, complimented by child friendly games and challenges.



Welsh language coastal scavenger hunt



School children enjoying the Nature Session © Severn Estuary Partnership

Activity Packs

The Discover the Severn activity packs were designed to help connect local communities to the Severn Estuary, increasing stewardship and engagement with the unique wildlife and plant life, heritage and landscape of the estuary. All potential activities were trialled by the local target communities, informed by early consultation with key groups at each site. There were a wide range of activities developed with the aim of engaging a diverse range of future estuary stakeholders to create cohesive community ownership of the Severn Estuary's natural resource. Due to Covid-19 restrictions, we have not been able to deliver the final activity packs to the communities, but, as restrictions begin to lift, we are looking forward to dropping them off in time for people to start using them over the summer months!

Coastal Geocaching routes - Geocaching is an outdoor activity where people use Global Positioning System (GPS), such as the ones found in most smart phones to seek small objects and containers called geocaches. Several geocaches were set up by SEP in each study site. Each geocache includes information about the project, 'fun facts' about the estuary, marinethemed swags (tradeable items), Good Practice Guidelines and details about the Activity Packs. Due to Covid-19 restrictions these are out of action at the moment, but, as restrictions begin to lift, they will be up and running again!

Litter bingo & marine litter quiz - Community clean ups and litter picking events are highly topical and increasingly popular in the UK. Litter picking is a fun activity for all ages and can be a great family activity. To keep younger pickers entertained, we developed a Litter Bingo game and quiz that can be played during clean up events.

Discover the Severn photography challenge - Launched at the Discover the Severn Day in Barry, the competition invited community members to 'Discover the Severn' through the medium of photography. Using local clues and locally-set challenges that link communities to the coastline, this photography competition was designed to get residents outdoors, exploring the environments and nature on their own doorstep and looking for innovative ways to capture everyday scenes.

Coastal scavenger hunt - This was developed for families with young children in mind. A series of nature-based 'treasures' have been listed with tick boxes on fun colourful posters. Families can walk around their local community to find each of the 'treasures'. This aims to encourage nature-based learning through physical activity on the coast.

Fitness scavenger hunt – The fitness scavenger hunt has been designed to get communities moving, stretching, jumping and bending along the way. It incorporates lots of different aspects of nature, heritage and estuary facts and takes players on a local route designed to foster a connection with the estuary.

Call of the Severn - Through an organic and iterative process, a team of writers collaboratively produced a story about the Severn, highlighting local nature and history to promote a sense of well-being and belonging. A local musician donated music to accompany the audio book and a local acoustic engineer has recorded the story binaurally and interspersed 'environmental sounds' to augment the story telling. Have a listen here.



DISCOVER THE

SEVERN

LITTER

Discover the Severn film – a short, uplifting, promotional film aimed to inspire local Severn Estuary communities to connect with their local coastal environment. This has been released on SEP social media for all to view and you can view it here.

Celebrate the Severn Event

To celebrate the success of the project, Lucy Taylor, SEP Partnership Manager at the time and Katie Havard-Smith, SEP Project Officer invited all those who had participated in the project to the Celebrate the Severn event, held at the Norwegian Church in Cardiff Bay in December 2019. Katie and Lucy thanked all those who had participated, disseminated final engagement materials and used the event as a final opportunity to showcase all that the Severn Estuary has to offer for local communities. Event highlights included our photography competition gallery, a showing of the Call of the Severn and the Discover the Severn Film.



Listening to the Call of the Severn at the Celebrate the Severn event © Katie Havard-Smith

Discover the Severn Day

The Discover the Severn Day was an interactive event designed to demonstrate and promote the key recreational activities that the estuary has to offer! The SEP team invited individuals to litter pick on Barry seafront, chat about their connection with the estuary and any barriers they find prevent them from visiting often. In addition to members of the community, other key local stakeholders were invited to showcase local projects to get involved with, including Cardiff Harbour Authority, the Flat Holm Society, The National Coast Watch Institution, the Living Levels Landscape Partnership and the RSPB.



The SEP Team at the Discover the Severn Day in Barry © Severn Estuary Partnership

Discover the Severn guides

As part of the project, Discover the Severn produced four guides to showcase the Severn Estuary, covering four different topics. These go hand in hand with our Explore the Severn guide! Flip to the back page of the magazine to view the guides and get in touch if you would like a hard copy!

Discover the Severn Access Maps

Consultation in the early stages of the project identified that access to the coast was one of the major barriers standing in the way of community engagement with the Severn Estuary. To address this, a series of access maps were developed to encourage people to get out onto the Estuary! The maps provide information about how to reach the coastline from your local community, whether that be on foot, by bike, train or bus. They show places to visit and whether they are free, wheelchair friendly, dog friendly, if there is parking and so much more!





"I've worked with SEP for almost its entire life. There have been many changes, though a constant throughout has been the remarkably high level of commitment and professionalism shown by all those involved. There have been countless challenges that have tested the Partnership, especially during periods of limited resources, but the delivery of high-quality products and the provision of a platform to give the Estuary a voice has continued unbroken; and long may it continue; congratulations SEP. I must also thank Cardiff University for its longstanding support, specifically the guidance of Dr Rhoda Ballinger."

Rhys Morgan, former SEP Management Group member and NRW representative.

"I joined the Partnership team two years after its inception in 1995. In those early years, SEP successfully developed its role in providing a coordinated approach to the management of the estuary. It did this by bringing together the multiplicity of agencies who each had specialist responsibilities, such as ASERA, the Association of Authorities looking after the European designated Marine Site, and the Standing Environment Group dealing with Marine Pollution Incidents in the Bristol Channel. The Partnership began hosting Estuary-wide Forums, providing common secretariat services for all the agencies. promoting information sharing and awareness raising, and in 2001 published the Strategy for the Severn Estuary. This was a milestone document setting out the way in which sustainable management of the Estuary could be achieved in terms of social, economic and environmental interests. To achieve such an Estuary-wide approach endorsed by over 130 organisations representing cities and county councils, universities, government agencies, port authorities and major industries amongst others was a major step forward. It has to be recognised that the Strategy was non-statutory



© Severn Estuary Partnership

Celebrating 25 Years of SEP

25 Years of the Severn Estuary **Partnership**

To celebrate our 25th year at SEP, we asked some of our past SEP chairs, managers and members for a couple of lines about SEP over the years.

so that an on-going co-operative approach was always going to be needed to ensure that initiatives and developments followed its strategic management framework, a continuing challenge for the Partnership."

George Ashworth, former SEP Chair and Monmouthshire County Council representative.

"I wasn't the first Chair but I was the South Gloucestershire representatives at the time of SEP's inception. We had for some time been attending a number of different Severn organisations which overlapped in their remits and we kept on meeting the very same people at the various meetings. So it was sensible to bring all the bodies together into one umbrella organisation, saving everyone time and expense. The Partnership shifted up a gear when Cardiff University agreed to be its host and provided office space, especially as the work fitted so well with the scope of the Earth Sciences Faculty, and for us there was regular input from students enthusiastic about their

We took on an international flavour by being active members of Les Esturiales, which, then Chair of SEP, I was most honoured to be made President of. That connection meant travel across to Lisbon, Cork, Bordeaux and Szczecin (Stettin, Poland), which I felt was very worthwhile in playing our part for the estuaries

I do hope that, despite potential challenges, SEP will still maintain its overseas links, as those links have proved invaluable."

Peter Tyzack, former SEP Chair and South Gloucestershire Council representative.

"With an array of protected sites, unique habitats, the highest tidal range in Europe, multiple political and managerial boundaries and a whole host of uses and users, the Severn

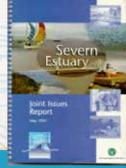
Estuary was a wonderful place to learn my trade in coastal management. To this day I believe that people are central to the success and sustainability of the estuary and integrated consensus management where possible is key. The Severn Estuary Partnership has, and continues to play a pivotal role in this, from bringing together stakeholders, learning from others and developing a cross border strategy and the state of the estuary report both of which have helped to shape national policy and the health of the Severn Estuary. I am confident that SEP can continue to thrive for another 25 years and beyond, promoting the wealth of our shared unique resource. Through the work of SEP, the estuary we all know and love will continue to be in safe hands and future generations encouraged to engage in its strategic management. I firmly believe, because of SEP more and more people are falling in love with our wonderful estuary and "if they are aware, they will care"! Thank you SEP, keep up the good work and here's to a sustainable future."

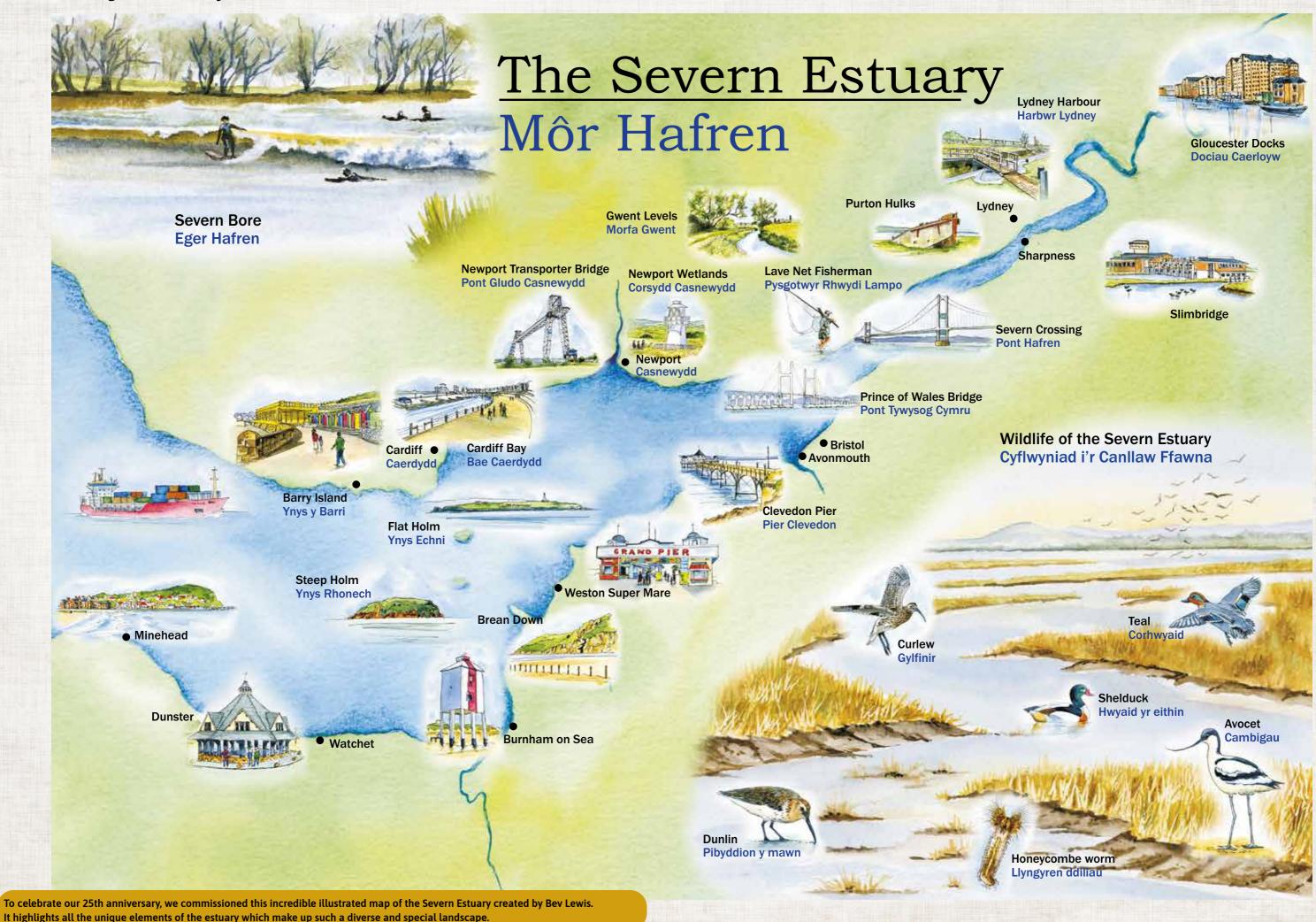
Paul Parker, former SEP Manager.

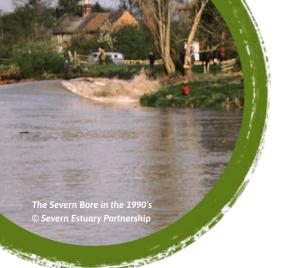
"Wow – 25 incredible years! You don't have to look far to uncover the key role SEP has played in the management of the Severn Estuary during that time; from on the ground local community engagement projects to developing an estuary wide Strategy, influencing national policy, and sharing best practice across Europe. Inspiring people to work together for the future of the estuary is what the Partnership is all about, and its unique position continues to strengthen as it supports stakeholders working together to build a future that is vibrant, dynamic and resilient in a changing climate. It has been so rewarding and enjoyable to have been a part of the SEP team, and I look forward to seeing what comes next for the Partnership!" Lucy Taylor, former SEP Manager.

he Joint Issue

eport produced by SEP - May



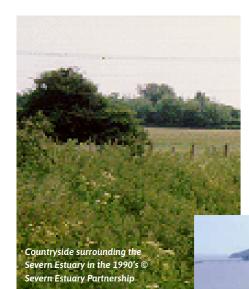




David Spray, SEP student assistant

Promoting sustainable development of the Severn Estuary is a central aim of the Severn Estuary Partnership, allowing communities and individuals to benefit from the resources that the estuary has to offer, whilst conserving the unique environment for future generations. Since the founding of SEP in 1995, the estuary, its communities and how it is used has changed dramatically in some areas, with others remaining almost the same as they have been for hundreds of years. The state of the Severn Estuary is governed by the physical and natural environments, the people that call the estuary home and that ways in which we all use the estuary. Effective management of this fantastic cultural, environmental, and economic resource relies on these three facets aligning to ensure ongoing health and prosperity of our estuary.

The Physical & Natural Environment



The Severn Estuary is home to a truly unique range of habitats which globally important flora and fauna call home. Water is the defining feature of the

The State of the Severn Estuary – 1995 and now

XX X

Severn Estuary, fed by some of the United Kingdom's most important rivers and shaped by the third largest tidal range in the world. Since 1995, the tides may not have changed but the life that depends on them has.

Habitats

The Severn Estuary has an exceptionally large freshwater catchment, covering over 21,000 square kilometres and home to over 600 watercourses. The rivers that feed the estuary have changed significantly since the partnership's founding; in the 1990's, the primary issues facing the estuary's rivers were a legacy of mining, chemical pollution and barriers to fish migration. Today nutrient pollution, and the algal blooms it causes, present a new challenge for environmental decision makers and users.

The Severn Estuary is dominated by its intertidal and coastal habitats, which are of international importance. Reflecting the unique nature of the estuary, a range of protections and designations have been assigned to protect these habitats and species. Even before SEP was established, sections of the estuary had been classified as Sites of Special Scientific Interest (SSSI's). However, the majority of protections and designations have come within the partnership's lifetime. In 1995, the estuary became both a Ramsar and a Special Protection Area (SPA) on the basis of the globally and nationally important bird populations that call the estuary home, while in 2009, the estuary gained Special Area of Conservation (SAC) status, classified based on the estuary's saltmarshes, mudflats, sandbanks and honeycomb worm reefs (sabellaria alveolata).

1990's © Severn Estuary Partnership

Species

The diverse range of habitats in the Severn Estuary support uniquely diverse life, both above and below the waves. The birdlife that the Severn Estuary is famous for continue to visit and thrive on both sides of the water.



Davies @Ecology_Cymru

Bewicks Swan © Neville Davies @Ecology_Cymru

The curlew and Bewick's swan populations within the estuary are globally important, the latter attracting bird enthusiasts from around the country. Bewick's swan populations have declined significantly since



Sheltering birds on the Estuary ©Severn Estuary Partnership



the partnerships founding, with scientists continuing to deliberate over the reason for the population decrease. However, there are indications that the total European population is increasing once again. Despite the lower returning numbers of Bewick's swan, the estuary still hosts over 70,000 estimated migratory birds every winter, with many more calling the estuary their permanent home.

Below the surface, over 300 fish species are to be found within the Severn Estuary, including protected and rare species such as the allis and twaite shad, and European

Eel. In alignment with global trends, the number of migratory fish that call the estuary home have declined significantly in the last century. Despite this, the estuary and its tributaries remain a key habitat for nationally important populations of shad, eel and salmon. Since the founding of SEP, a number of organisations, projects and initiatives reversed these declines. Improving river water quality, creating spawning habitat, increasing fish access and river

connectivity, and implementing wide reaching international legislation, it is hoped that these key migratory species will continue to survive and thrive in the Severn Estuary. Looking to the future, the Blue Marine Foundation has indicated that the River Severn and Severn Estuary may play an important role in the reintroduction of sturgeon to the UK, seeing these fish that can reach over 400 pounds in weight, swim in our rivers once more.

Invasive species negatively impact the environment around them and once established are exceptionally difficult to remove. Several invasive species are found around the Severn Estuary, both on land and below water. Although some species such as mink are widespread and have been established since the 1950's, more recent developments in the Severn Estuary have facilitated the introduction of nonnative species. Cardiff Bay hosts two freshwater invasive species, the zebra mussel and so-called killer shrimp; both assumed to

tacilitated the introduction of nonnative species. Cardiff Bay hosts two freshwater invasive species, the zebra mussel and so-called killer shrimp; both assumed to have originated from leisure craft in the early 2000s. These species cannot be removed now that they are established, so effort has been focused on reducing the spread of these species to new sites.

Human Development and Activities

The people that inhabit and use the Severn Estuary form a crucial element of the estuary's environment, in addition to the habitats and species it supports. Since 1995, the population around the Severn Estuary has grown to well over 1.5 million, an increase of over 200,000 in 25 years. Many of the estuary's population live in low lying, coastal urban areas with histories and heritage rooted in shipping, industry and trade. Many of these founding purposes persist to the current



day, and the Severn Estuary is a unique resource, attracting millions of visitors a year, maintaining traditional fishing practices and providing a site for nationally important civil development.

Development

Since 1990, large scale development has taken place across the estuary, both to change the coastal environment for the benefit of people, but also to preserve and create key habitat sites. The Cardiff Bay barrage construction is considered by many to be the most significant infrastructure project to have occurred within the Severn Estuary in the last 30 years. Completed in 1999, the barrage changed large areas of mudflat and bird habitat into a freshwater lake. As compensation for the development, Newport wetlands was created, covering



Dredging in the Severn Estuary © Severn Estuary Partnership



© Severn Estuary Partnership

Tourism

estuary so special.

Tourism and recreation are increasingly important in both the Severn Estuary and the UK as a whole. Tourism in England and Wales contributes over £110 billion to the

protecting the habitats that make the



Gloucester Docks © Severn Estuary Partnership

UK economy annually and supports over 2 million jobs. Some tourist attractions in the estuary, such as the Severn Bore, have been attracting visitors for generations, whilst redevelopment of coastal waterfronts in Cardiff Bay and Portishead have boosted visitor numbers since the 1990s. The unique environment of the Severn Estuary is a significant draw to tourists domestically and abroad, improving the environment through the responsible disposal of litter and the improvement of water quality has been a key focus for project throughout the Severn,

Barry Island in the Summer © Severn Estuary Partnership

particularly from the Litter Free Coast and Sea Somerset team who have worked tirelessly since 2016 to improve the status of Severn Estuary bathing waters and to reduce the impact of litter in the environment.

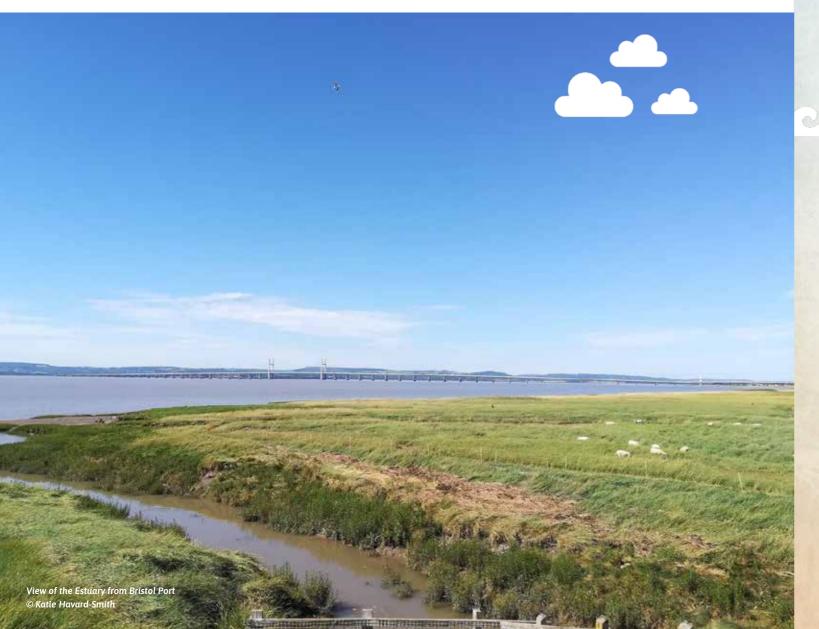
Fisheries

The Severn Estuary is home to a unique assemblage of fish species and historically has been home to a wide range of commercial and recreational fisheries, some of which continue to this day.

Up until the early 2000s, commercial fishing for both marine and migratory species was undertaken in the estuary. Salmon fishing was undertaken using traditional methods, utilising putchers (fixed baskets) or draft nets, secured to the mud and emptied when the tide recedes. Fixed net and putcher based salmon fishing no longer operate as part of conservation efforts for Atlantic salmon in the estuary. Lave fishermen continue to capture salmon as a historic, artisanal fishery, continuing to use a method that has been in practice for centuries but currently operate on a catch and release basis. Commercial marine fisheries continue to operate in the estuary but continues at a low intensity, focused primarily on the western limits of the estuary, in the Bristol Channel and out into the Celtic Sea.

Management of the Estuary

Management of the Severn Estuary occurs in a number of different ways and is delivered by several local authorities and other relevant organisations across the estuary. Across the estuary, marine and terrestrial planning processes ensure that sustainable development occurs, particularly important whilst managing a cross-border site with many protected areas and designations. Developments and changes in the way that the estuary is managed are ongoing, for example, the second generation of Shoreline Management Plans aim to manage the impact of sea level rise and coastal erosion, whist new river basin management plans drive to improve water quality in the rivers that feed the estuary. The Severn Estuary Partnership continues to facilitate a collaborative approach to estuary management, helping estuary stakeholders to enjoy and develop the Severn Estuary in a sustainable manner both now and for years



Blue Space and Wellbeing

Bring your beach home -**Litter Free Coast and** Sea Somerset campaign

Don Harty, Litter Free Coast and Sea Somerset Research and Engagement Student Assistant

Nature is incredibly important to our physical and mental health. Being surrounded and immersed in the natural environments found along the beautiful Severn Estuary relaxes and de-stresses our minds. Physically being able to walk, run, swim, surf and sail in a clean environment reinvigorates our bodies and releases positive hormones. Beach days offer all of these benefits in one place - from running, jumping and swimming and, most importantly, ice cream eating!

In March 2020, Covid-19 brought many of these activities to an end as lockdowns were imposed, limiting travel and activities.

In response to the lack of physical



connection to nature caused as a result of these restrictions, Litter Free Coast and Sea Somerset led a social media campaign to encourage people to #BringTheBeachHome. This was run in partnership with Litter Free Coast and Sea Dorset and Leave Only Footprints. The campaign aimed to bring activities that people would normally do on the beach into their homes, to entertain people both physically and mentally, while keeping both adults and children connected to the environment.

Activities such as planning at home picnics with ocean sounds, beach themed workouts, photography competitions and quizzes were

> created by the team with the whole family in mind. The most popular activity was a toilet roll arts and crafts activity which reached over 1,400 people! The Severn Estuary Partnership team all created their own arts and crafts which were showcased on the post



and were impressed with the creations of the public.

The campaign was an overarching success, with high levels of engagement throughout. This showed people were enjoying the activities, thanks to the inclusive design of the activities which were planned to be fun, educational and beneficial for families to enjoy together. The response from the community was very positive and some of the photos received were brilliant.

Posting interesting and fun activities for people to do meant that people remained engaged with key Severn Estuary Partnership messages such as not littering, even when they were not in the area. Hopefully, the many other benefits that people enjoy at the beach were brought into their homes as well!

Litter Picking and Wellbeing

Sam Williams, former SEP placement student

Following the success of the first event in 2018, the Severn Estuary Big Beach Clean 2019 saw the return of a weekend of organized beach cleaning and litter picking throughout 20 locations around the Severn Estuary. The weekend joined together volunteers from Keep Wales Tidy, the Environment Agency, the Marine Conservation Society, Natural Resources Wales, and the wider community in locations stretching from Penarth Beach in Wales to Minehead in England. With over 1000 volunteers taking part, the event allowed a unique opportunity to investigate how taking part in beach cleans and litter picks in green and blue spaces could have an impact on personal and community well-being. Volunteers had the option to complete a well-being questionnaire following each litter pick, giving an insight into any potential impacts on the volunteers physical and mental well-being. Results from

the study showed that 75% of individual's agreed that they felt a sense of achievement through taking part, 65% agreed that they formed new connections within their community, and 76% agreed that taking part had made them feel less stressed and more relaxed. By offering optional engagement materials and learning resources during a selection of the litter picks, volunteers could learn more about the threats faced by their local environment including the prolific problem that is plastic pollution in the Severn Estuary, encouraging them to then change behaviors towards waste and litter in their everyday lives. The overwhelming results of the study support calls for the natural environment to be used as a 'blue prescription' for mental health problems such as depression, anxiety, and stress, as well as allowing communities to take ownership of their local environment, form new relationships, and reduce social isolation in vulnerable populations.





Barry Island Stand-Up Paddleboarding Group with the SEP Team during the Severn Estuary Big Beach Clean © Barry Island SUP

Estuary Project Updates

Adapting the Levels

'Working together now to adapt naturally to the climate of the future.'

Sally Easton, Somerset Wildlife Trust

The Somerset Levels are on the UK's frontline of climate change, facing increased risks from sea-level rise, river flooding and drought. Recognising these threats Somerset County Council, Somerset Wildlife Trust & FWAG SouthWest formed a partnership project; Adapting the Levels. This is also part of a larger EU Climate Adaptation project called Co-Adapt, where 12 partners from 4 countries work together, sharing knowledge and developing best practice.

The project encourages the use of naturebased solutions to flooding and drought, offering advice and funding to farmers/ landowners and communities. The team also develop Adaptation Pathways, a new 'climate-smart' approach to planning that links actions to environmental change rather than time. This approach is fast becoming the global 'Gold Standard for climate adaptation planning.

Following a series of successful events the team published an illustrated Report and summary Leaflet in December 2020, both are available at www.adaptingthelevels.co.uk.

The report found that communities on the Somerset Levels are united in their desire for increased action on climate adaptation. There was overwhelming support for the wider adoption of nature-based solutions to flooding and drought, with 93% of respondents agreeing or strongly agreeing

that these options need to be a major part of the solution.

There was wide recognition that local farmers are key to the success of naturebased solutions, and the community were supportive of new subsidy schemes to fund

"Floodwater storage on agriculture" land/payment for landowners."

Calls for more education and wider engagement formed the basis of the projects next steps, with two technological solutions in development:

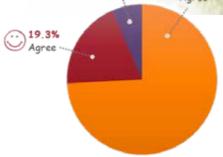
The first is an online tool that allows the team to publish the adaptation pathways in an editable form; allowing people to vote or adjust options, add new ideas and comment on the pathways. This encourages input from community level right up to local decision-makers and infrastructure experts, making the resulting pathways an valuable resource.

The team are also working on a mobile app called Somerset Trails, this geo-location app takes the user on a real-world journey, bringing theory to life in videos that relate the surrounding landscape, to climate change and nature-based solutions to flooding and drought. The app will be available on Android and iPhone from summer 2021.



ADAPTING

THE LEVELS













Estuary Project Updates

From the Forest to the Sea -200 years at Lydney Harbour

Rose Farrington, Community Projects Leader Forest of Dean District Council

Lydney Harbour is situated on the Severn Estuary in the county of Gloucestershire. Lydney Pill, and later, Lydney Harbour provided the Forest of Dean's principal sea link for the export of coal, timber and iron ore. The industrial remains of the docks and harbour that visitors see today were built in the 19th Century and were operational up until the 1970s.

In 2019 the Lydney Coastal Community Team received £2.1 million for the regeneration of Lydney Harbour. With this funding, the Destination Lydney Harbour (DLH) project aims to attract increased visitor numbers to discover the hidden gem of Lydney Harbour

and Docks and the wider area.

The project will create safe, attractive transport routes into the harbour and the area will be developed as a recreation and tourism destination. As part of the project activity, two existing buildings have already been converted into accessible toilets and a visitor information hub. The info hub will display creative heritage interpretation, including audio recorded as part of the project. A new modular café building will be installed in the summer, serving light refreshments to visitors.

Improved heritage interpretation, a public art installation and arts-based walking trail projects are all in development and mooring points and further seating will be installed. Improvements will be made to

cycle, walking, and highway routes with the installation of a footway, street lighting, and the resurfacing of Harbour Road, Also. underway is a community rowing boat building project called Lydney Skiff, which will bring lost craft skills back to Lydney.

The work has already begun at Lydney Harbour and is due to continue throughout









Celebrating the glorious Gwent Levels!

Gavin Jones, Community Engagement Officer, Living Levels Landscape Partnership



Landscape

Partnership is a National Lottery Heritage Funded programme for the Gwent Levels, a very special landscape in south east Wales, stretching from the edge of Chepstow to east Cardiff via Newport. The 12 partners, headed up by RSPB Cymru, are working towards a sustainable future for this unique stretch of the Severn Estuary coastline. Despite recent challenges, the programme

continues to deliver exciting projects across a range of subjects and three key themes, helping to recapture, enhance and celebrate the unique heritage of the Levels.

Under our theme of 'Understanding and appreciating', the people who shaped the landscape are celebrated in a series of sculptures along our shoreline, including 'The Brinker', at Magor Marsh Nature Reserve plus 'The Fisherman' and 'The

Engineer' at Black Rock Picnic Site. A programme of walking and cycling routes, improved visitor gateways, animated reconstructions and an 'Ambassador' programme, will be encouraging visitors to 'Discover Gwent Levels'!

'Conserving and Restoring' our natural heritage restores old orchards and creates new ones with the help of volunteers, but also DNA tests to discover old local Levels' varieties. The restoration of overgrown and neglected field ditches and re-introducing the practice of willow pollarding, is helping to restore the landscape's traditional character and improve biodiversity. To date 21km of field ditches have been restored to favourable condition and over 150 willows

pollarded, with plans to create meadows and pollinator corridors.

The opportunity for 'Learning and Engaging', is made possible through a range of learning resources and projects for both schools and colleges. Volunteers in both the recording of stories and archival research, are helping to recapture the Levels' historical landscape through documentation and social history. Our programme of activities has successfully transitioned online, covering

such diverse subjects as poetry, pylons and obviously, the 1607 'Great Flood', even spawning a Levels creative writing group. This online presence, alongside a fantastic website, is arguably increasing our reach as a programme.

The partnership is now looking to its legacy, not just maintaining the benefits of the project but also reinforcing and enhancing the identity of the Gwent Levels. We would love to hear your views and our survey is still open

Discover more about the Living Levels Programme and the Gwent Levels - visit our website www.livinglevels.org.uk







The Newport Transporter Bridge an unmissable landmark!

Emma Newrick, Project Officer, Newport Transporter Bridge

The Newport Transporter Bridge is more than a landmark dominating the city's skyline. It is the world's most complete, surviving transporter bridge. Following funding from the National Lottery Heritage Fund and Welsh Government the bridge will undergo extensive restoration including work to the main boom, eastern approach viaduct, replacing a number of suspension cables and restoring lost architectural features of the gondola.



Gondola – (©Ross Owen)

A new three-storey visitor centre will be built with a café, shop, community space and a dedicated gallery will bring the history of the bridge to life. The gallery will feature the stories of those who built the bridge, designed the bridge and used the

There will also be more car parking spaces for visitors and an exciting activities programme including theatrical performances, art workshops and mindfulness sessions.

In collaboration with the Our Living Levels project, the Severn Estuary Partnership, Natural Resources Wales and the Wales Coastal Path, visitors will discover more about the wider natural environment and improvements will be made to the immediate landscape with outdoor seating, walking trails and viewing platforms.

The site will remain closed until Spring 2023 but there will be plenty of opportunities to get involved through joining the residents panel, sharing

memories and photographs, becoming

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a volunteer or a Friend of the Newport Transporter Bridge. For a behind the scenes look at the work on site, interviews with engineers, architects and conservators and the history behind this rare icon subscribe to the Bridge's YouTube channel or follow on social media @ NpTBridge Twitter/Facebook and @Nptbridge1906 Instagram



Recreation on the Severn

The England Coast Path – opening soon!

Tim Hall, Wessex Seas Team Leader,

Work is progressing at pace on the sections of path along the Severn Estuary from Aust to Brean Down now approved (in part) by the Secretary of State. Two sections, one at the beginning of the stretch and another at Woodspring Bay received objections and now sits with the Planning Inspectorate for

Initial scrub clearance work has been completed by Bristol City Council north of Avonmouth. Further south North Somerset Council have recently been awarded a

£72,000 for a range of infrastructure works including waymarking and gates between the National Trust site at Middle Hope through to the border with Somerset at the River Axe. We are also working with North Somerset CC on designs for environmental

interpretation that will be used at certain

Further grants will be awarded soon including a specially designed disabled create a long stretch accessible by buggies

Path stretch between Brean Down and Minehead a very exciting initiative was recently launched by Somerset County Council to enable walkers to hear about the local history and customs where they are walking using a phone app. Click here for more.

CLICK HERE, for updates on the development of the coast path throughout the whole of England.

© Natural England



Unlocking the Severn Project Update

By Jennie Hermolle, Communications and Marketing Officer

The 2021 shad run is a key milestone for Unlocking the Severn. For the first time in more than 170 years, twaite shad will be able to easily pass two weirs on the River Severn near Worcester. The shad can now swim through new fish passes, on their way to spawning habitats upstream.

At the first impassable weir that shad meet, at Diglis in Worcester, we have just completed the largest deep vertical slot fish pass in England and Wales. The pass is

100 metres long, 8 metres wide, 5 metres deep. It is formed of a series of 11 ascending pools, that take the fish in manageable steps from one level at the bottom of the weir to the



higher level above it. Most excitingly it includes a unique underwater viewing window for a glimpse of the fish in the river. We hope to start public tours later in the summer. The experience will start at our converted visitor hub on the Diglis lock island and culminate in a visit down into fish pass viewing gallery.

Unlocking the Severn is a project built around the rare twaite shad, an iridescent fish related to herring that migrate on to the River Severn from

the sea every spring to spawn. We are restoring access to shad's historic spawning grounds upriver via four fish passes past River Severn weirs built for navigation purposes in the 1840's. Beyond the Diglis Pass, is the Bevere bypass channel, completed in September 2020. Next is Holt fish pass, and the final pass on the Severn

is at Lincomb near Stourport. Additionally, in 2019, the project made alterations to 2 weirs on the River Teme tributary, which now gives access to high value spawning habitat.

Delivered by the Canal & River Trust, Severn Rivers Trust, Environment Agency, and Natural England, Unlocking the Severn is in the process of reopening over 150 miles of the River Severn to this protected fish species. It is made possible through funding from the National Lottery Heritage Fund and the European Union LIFE programme.

A comprehensive monitoring programme is also in place. Please join our shad counting effort as we release film footage of this year's run during May on www.unlockingthesevern.co.uk.



©Charles Crundwell



©Charles Crundwell

The Severn Estuary Good Practice Guidelines – New Update

Keeping our Spectacular Severn Special

By Katie Havard-Smith, ASERA Officer

The Association of Severn Estuary Relevant Authorities (ASERA) is pleased to be launching the updated Good Practice Guidelines for the Severn Estuary European Marine Site very soon! The guidelines will now include up to date information on using

Good **Practice** Canllawia Guidelines Arfer Da Safle Morol Ewropeaidd Lich ffordd chi o gefnogi ein habei

drones in and around the European Marine Site. The guidelines now include up to date information on using drones in and around the European Marine Site.

Our estuary supports nationally and internationally important habitats and species and is a key migratory route for salmon and internationally rare fish species. The extensive mudflats, saltmarshes and coastal grazing marshes make it one of the most important estuaries in the UK for its number of wildfowl and wading birds with over 80,000 birds visiting every winter. It is a key refuelling top for important spring and autumn passage birds.

Activities undertaken around the estuary and its coastline should be sympathetic to the needs of wildlife, especially the thousands of wintering birds that visit every year. Our estuary is particularly popular for

recreational activities, so your actions can really make a difference to the future of the estuary!

The purpose of these guidelines is to encourage the sustainable use of the estuary and its coastline, providing an enhanced and safer environment for recreational users and visitors to enjoy, whilst reducing disturbance to our Estuary wildlife and habitats. They cover a range of activities, from wildfowling to walking and bird watching to bait digging.

Please help to keep our coastline looking clean, beautiful and full of wildlife. You can view our Good Practice Guidelines in both English and Welsh on the ASERA website here. If you would like to set up a meeting to discuss what your club or community can do or for further information, please get in touch with the ASERA Officer, Katie Havard-Smith at severn@cardiff.ac.uk.

HOW TO GET INVOLVED:

Follow us on our Social Media accounts: Facebook: @SevernEstuaryPartnership Twitter: @SevernEstuary

Instagram: @SevernEstuary

Check out our new website for volunteering opportunities and for updates from SEP at www.severnestuarypartnership.org.uk

Walking the Wales Coast Path – an interview with Roisin Willmott

Katie Havard-Smith, SEP and ASERA
Officer



Roisin Willmott at Seawall © Roisin Willmott

The Wales Coast Path opened in 2012 and won the Silver Jubilee Cup Award from the Royal Town Planning Institute (RTPI) in 2013 for planning excellence. As a representative of RTPI herself, Roisin set to 'Discover the shape of a nation' along with Welsh RTPI members and colleagues to celebrate the RTPI's Centenary in 2014. Roisin split the path into manageable sections and challenged herself and her partner to walk the whole thing within the year. It took them 10 months to walk the 870 miles (and a further 180 miles of the Offa's Dyke Footpath), utilising weekends, holidays and spare moments to tick off chunks of Wales' coastline. With 2014 one of the wettest and stormiest years on record in the UK, the pair braved the wet, wind and sunshine in 348 hours of walking!

What were your favourite stretches of the coast?

That is a really difficult one. Anglesey was wonderful, but there was something amazing in every stretch. I particularly enjoyed walking under the Severn Crossing; it's not a view that people often see.

What would be your top tip for anyone wishing to do the same?

Get comfortable, sturdy boots and if you can, take your time enjoying the coastline - don't rush the experience!

What was your must have piece of equipment that you couldn't have done without?

Really good decent boots. I went through 4 pairs of boots over the year, so be prepared to replace kit! I also used a walking pole; this provides protection for your hips whilst walking and also helped when walking the steeper sections of the path.

Was there anything that you didn't enjoy about your journey?

There were particularly boring stretches, the stretches that were most challenging were often the most exciting and a more positive experience. The last stretch of the path from the Queensferry Bridge to the Chester border is 4 miles of cycle path next to a canalised part of the River Dee. It is completely flat and very easy going but there was no view or wildlife to watch as we went.

Could you tell me a bit about the wildlife that you saw along the way? Was there anything that you hadn't seen before, or was perhaps a standout moment?

We walked a lot of the coast path with our heads down, persevering to get the miles in. At one point in Ceredigion a couple of people rushed up to us and asked if we had seen the dolphins. Sure enough there were dolphins swimming along the coastline. I always joke that the dolphins had followed us all around the coast of Wales, but that we only looked up to see them in Ceredigion! We also saw some seals, but we mostly encountered lots of chickens and cows!

What surprised you about the challenge?

I was surprised by a particularly nice stretch behind the sewerage works in Cardiff. It was a cold but sunny winter day; the tide was going out and the views across the Severn Estuary were just amazing. The sun was glinting on the mudflats and it was a really fantastic moment. I would say that overall, the Wales Coast Path shows you life throughout Wales. You walk through train stations, industrial estates, residential areas but also through some amazing natural scenery. This really gives you a snapshot of life.

Some useful sources:

WALES COAST PATH WEBSITE - you can download free OS maps of the path area and print them off before you go.

pelow the Second Severn Crossing © Roisin Willmot

Ports and Shipping on the Severn Estuary:

By Katie Havard-Smith, SEP Officer

The Severn Estuary has historically been a hub of shipping activity for the UK. The 6 ports on the estuary are an integral element of the UK's shipping network. Christine Nelson from Associated British Ports and Anne Hayes from Bristol Port Company chatted to us about shipping in the Severn Estuary over the last 25 years and provided an insight into the future of ports and shipping.



What is your main role in the Port?

AH: I am the Environment Manager at The Bristol Port Company which owns and operates Avonmouth and Royal Portbury Docks. My role is very varied, but primarily I ensure that we meet our responsibilities as a statutory harbour authority to take account of the environment when undertaking port operations, including commercial shipping, cargo handling, and managing the port estate and conservation areas. Much of my job involves meeting the ever-growing requirements of environmental legislation and obtaining licences and permits for both our everyday marine operations, such as maintenance dredging and disposal, and Port developments.

W: My main role is Environment Manager for the 'Wales and Short Sea Ports' region of ABP. This covers 16 ports across England, Scotland and Wales – including Newport, Cardiff and Barry on the Severn Estuary.

I advise my colleagues on a wide range of environmental matters including, biodiversity and biosecurity, air quality, ships waste management, cargo handling, environmental permits and energy management.

What are the main cargoes and activities of the port?

AH: Bristol Port is the largest commercial port in the south west, handling around 8

million tonnes of cargo and over 2,000 vessels annually. The Port covers around 2.600 acres and is recognised as a strategically important national asset, providing facilities to move cargo by sea, road and rail to national and international destinations. The Port is also an integral part of local life, directly employing around 600 people from surrounding communities and beyond, with some 12,000 people employed within the Bristol Port Estate. The Port handles a wide variety of trades, including, motor vehicles, bulk energy products (petroleum and biomass), animal feeds, containers, forest

products, aggregates and metals. Bristol Port is the muster Port for EDF's Hinkley Point C Project.

Bristol Port's Statutory Harbour Area covers over 62 square miles of the Severn Estuary and the tidal River Avon up to the Cumberland Basin. Day to day we undertake activities to provide a safe harbour area include managing shipping traffic, providing pilots for larger commercial vessels, surveying the main navigation channel and harbour, maintaining lights and buoys, and undertaking maintenance dredging to ensure there are safe navigable depths around the Port.

DID YOU KNOW? Bristol Port handles 25% of the UK's animal feed imports and 25% of the UK's imports of aviation fuel which serves the UK's major airports, including Heathrow and Gatwick.



protect
and enhance the
diverse range of wildlife and habitats in the
area. This includes managing over 100ha
of environmental corridors and green
areas in accordance with a Port Ecological

Management Plan and promoting a range of conservation projects to improve local biodiversity, such as an owl conservation

© Bristol Port Company

programme in an area of Royal Portbury Dock known as "Vole City" and the introduction of grazing by sheep to improve the diversity of our saltmarshes in Avonmouth.



cover a wide range of activities – different at each of our 3 Severn Estuary locations. For example, Newport covers 685 acres and provides 25,000sqm of multi-purpose covered storage, handling around £1 billion in trade every year – that's 1.8 million tonnes of cargo. The port handles a wide variety of trades, including agri-bulks, construction, containers, rail freight and more! Due to its excellent links to the nearby M4 and direct rail connections, the port occupies a prime location to service the UK's main

port, the Port of Newport supports 4,100 jobs nationally and annually contributes £275 million to the economy. Like many of our sites, Newport has undergone a number of developments in recent years, including a recently upgraded bulk terminal, computerised stock control and a wide range of different services.

Moving further along the Estuary, the Port of Cardiff handles 1.8m tonnes of cargo every year accounting for £400m of total trade and contributing £180m to the UK economy on an annual basis. Cardiff is one of the leading ports in South Wales and the UK, with excellent road and rail links. The port builds on a rich heritage of international trade and continues to serve businesses throughout Britain, supporting 2,600 jobs nationally. Today, the main services available at the port include; construction, containers, cruise, bulk, energy, forest products, liquid bulks, rail freight, project cargo, steel and other metals. Additionally, three berths are approved for cruise liner calls are situated less than 5 minutes away from the centre of Cardiff and its world-class tourist attractions. The port has extensive storage and handling

facilities, with transit and distribution shed capacity of 40,000sgm, and more than 12ha of open hard-standing storage area. More recent investments in Cardiff includes over £4 million for warehouse improvements and handling equipment to support customers in the steel, forest products and general cargo

Finally, our 3rd port is Barry - covering 531 acres, it is a key facility for the region's chemical industry, handling liquid bulks. The port handles around 300,000 tonnes of cargo, contributing over £340 million to the economy every year and supporting around 5,000 jobs. With over 4.5km of quay side, the Port of Barry can accept a wide range of vessels, and regularly handles Scandinavian and Baltic timber, steel cargoes, coal, cement, and aggregates as well as specialist liquid bulks to serve the UK's chemical industry. With a long history and extensive expertise in handling an array of different cargoes, the port is also contributing to renewable energy goals, with Barry Solar Farm which covers 37 acres and generates clean energy for ABP, its port tenants' operations and the National Grid.

Other activities include maintenance dredging - we recently obtained 10-year dredge licenses for all of our South Wales ports – and we have also worked in partnership with South West Wales Wildlife Trusts to support habitat management and biodiversity enhancement schemes. We have compensatory habitats across our ports to

mitigate certain port developments such as our two wind turbines in Newport and solar array in Barry.

How long have you been a member of ASERA?

AH: The Bristol Port Company was one of the founding members of ASERA back in 1994. Although not around from these early days, both Louise Hemmings, ASERA treasurer, and I have been involved for around 20 years.

CN: I'm unsure of the exact length of time, but it's at least 15 years now.

What do you see as the main advantage of networking at an estuary scale?

AH: Through ASERA we work with other authorities in the Severn Estuary to implement a management plan to protect the important designated habitats and wildlife. This provides a framework within which we can manage our activities to achieve the nature conservation objectives of the site, which helps us meet our statutory







duties under the Habitats Regulations in a co-ordinated and efficient way. A key benefit is in getting together (albeit virtually these days) to share information, news, relevant guidance, and good practice in order to develop a better understanding of both conservation features and activities taking place in the estuary.

CN: Getting all the stakeholders together in one place is a great opportunity for me to catch up with people. ABP has built up good relationships with NRW, Bristol Port Company and the local authorities of Newport, Cardiff and the Vale of Glamorgan. The meetings are a good opportunity to share information and build up relationships outside of the normal work conversations.

How has the port industry changed in the last 25 years in the Severn Estuary? And what have been the main drivers for this change?

AH: Bristol Port has changed considerably over the past 25 years. Since privatisation in 1991 there has been over £600 million investment made, creating a modern, thriving business and attracting a wide range of trades. This investment is from the private sector. Ports are constantly evolving in response to customer needs and changing national and international markets. There have been huge technological advances within the port sector during this time providing more efficient, safer and cleaner port operations. The environment has always been an important consideration for ports, however with increasing regulation and growing awareness of environmental issues over the past few decades the need to improve port environmental performance and sustainability has become a much higher priority.

Another key driver for change is the everincreasing size of ships. With the need to maximise efficiency, and the widening of the Panama Canal, vessels are still becoming larger and larger. Even with the largest lock in the UK at Royal Portbury Dock, modern ultra large containerships are too big to pass through them. Looking to the future, the UK Government has given consent for the construction of Bristol Deep Sea Container Terminal which will be able to handle the next generation of containerships.

What do you think is going to be the greatest challenge for the Severn Estuary ports in the next 25 years? And how can an estuarywide perspective help?



AH: One of the biggest challenges facing Severn Estuary Ports and the Port and Shipping sector in general is the transition to a net zero emission future. Bristol Port is preparing our first Air Quality Strategy, and as part of this we are implementing energy efficiency schemes, delivering an ongoing programme to electrify our Port vehicles and cargo handling equipment, and planning further onsite renewables, in addition to the existing three wind turbines in Avonmouth. UK Ports are investigating the use of alternative fuels and considering the provision of shore-side power to vessels, which present very significant challenges at present.

A key challenge facing the Severn Estuary is finding a sustainable means of tapping the estuary's considerable potential for generating tidal power. An estuary-wide perspective will be essential in providing a co-ordinated approach to meeting this challenge and avoiding the mistakes of past proposed large scale tidal-energy initiatives that would have resulted in serious damage to both the environment and ports.

How is shipping in the Severn **Estuary different to other areas?** What are the challenges?

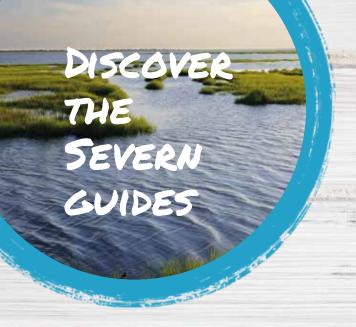
AH: The very large tidal range and extreme physical regime of the Severn Estuary makes it different from other UK estuaries, presenting both benefits and challenges. It provides self-scoured deepwater approaches, allowing unusually deep-draught vessels easy access to the Estuary's ports. However, challenges include fast-moving currents and highly mobile sandbank features which present navigational risks and require frequent surveying. Furthermore, the extremely high suspended sediment loads in the water column provide an inexhaustible supply of muds to deposit in the sheltered dock entrances and basins, requiring almost continual maintenance dredging to ensure safe navigation.

CN: The Severn Estuary has such a unique tidal range and cycle, which has to be managed by every vessel coming into our ports! This makes it both beneficial and challenging for all vessels at each of our three ports, and means we need to ensure we understand the Estuary, and that we manage and maintain safe access at all times.

What is your favourite place on the Severn Estuary?



AH: That's a tricky one, there are too many wonderful places to choose from. I may be a bit biased, but I don't think you can beat a Portishead sunset! I've been lucky enough to see some breath-taking sunsets during my lockdown walks and runs. There is also something special about seeing large ships passing so close to the headland at Battery Point in Portishead. (Like many local residents, I have become a secret ship spotter, but don't tell anyone!)



Take a look at our Discover the Severn quides by clicking on the front covers below!





The Severn Estuary Partnership receives in-kind support from Cardiff University and core funding from Bristol City Council, Cardiff County Council, Forest of Dean District Council, Gloucestershire County Council, Newport City Council, Somerset County Council, South Gloucestershire Council, Environment Agency South West, Natural Resources Wales and Natural England.























Established in 1995, the Severn Estuary Partnership (SEP) is an independent, estuary-wide initiative led by local authorities and statutory agencies, engaging and connecting with all those interested in the Severn Estuary. We work with all stakeholders to promote a sustainable approach to the planning, management, and development of the estuary for all who live and work here and for our future generations.



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