Solent News

The newsletter of the Solent Forum

Issue 52: Summer 2022

Inside this issue

Solent Summit Launches Solent Freeport

The Solent Summit took place on 8 June to launch the Solent Freeport, and to present the vision and ambitions of the Solent 2050 Strategy, positioning the Solent region's aspirations for the future. This Freeport is one of eight announced by the government at the March 2021 Budget. A Freeport is an area that has special conditions and exemptions applied to it which create additional economic activity.

The objectives of the Solent Freeport include establishing the area as a hub for global trade and investment, promote productivity and regeneration, and create jobs. It also aims to create centres of innovation and skills, pioneer approaches to climate change adaption and decarbonisation, and accelerate the transition to a net zero economy.

The Solent is recognised as a global leader in the marine and maritime sector and plays an important international gateway role for UK trade and investment. With a population of around 1.3 million people and 41,600 enterprises, its strengths include advanced manufacturing, aerospace, digital and computer science.

The benefits of the Solent Freeport are being closely aligned to the Solent LEP's long term economic strategy called Solent 2050. This has seven priorities:

1. A world-leading marine and maritime economy, building on our existing assets and global competitive advantages to strengthen the UK's international trading relationships.
2. Pioneering approaches to climate change adaptation and decarbonisation.
3. The UK's capital of coastal renaissance, harnessing new technologies and approaches to revitalise and level up economic opportunity across coastal communities.
4. A thriving visitor, creative and cultural economy, capitalising on the Solent's natural beauty and rich maritime history.
5. Developing a world-class talent base, helping people at all stages of their career build the skills they need to respond to new technology and drive an innovative knowledge-based economy.
6. An outstanding business environment that encourages innovation, fosters collaboration and enables businesses of all sizes and sectors to thrive.
7. Health and wellbeing at the heart of economic success, through a focus on building strong, healthy and resilient communities that can prosper in a fast-changing world.

News from the Forum

Chairman's Column

Peter Barham

Once again Solent News shows just how much is going on in the Solent. The really exciting thing is that this is not just confined to a single sector, but across conservation, industry, wider groups and many others.

Also extremely rewarding is that so much of the work we are all doing is increasingly targeted at improving biodiversity or acting to help achieve net zero. After many years of research and campaigning to highlight the climate change and biodiversity crises, we are all beginning to see that addressing these is increasingly becoming an essential part of everyone's world.

Importantly, this is not just happening because legislation requires it, but because many organisations are realising that they have a responsibility to act for both. Legislation will help, but willingness to act is far better and shows that we are all starting to work for a more secure future and for the right reasons. Much more needs to be done, of course, and the next few years will be critical, but it seems to me that the proverbial oil tanker (excuse not the most appropriate analogy) is turning around and we are all beginning to move in the right direction.

I have seen many industries promote restoration of the environment and moves towards net zero as part of their corporate approaches; this is clearly evident in the Solent with the actions of ABP and Solent Gateway amongst others. The opportunity to do this in partnership and with the help and advice of conservation bodies shows now important it is that we all work together.

One such area is the move towards net gain, which I discussed briefly in the last issue of Solent News. The Government is currently consulting on marine net gain and Kate and Karen have written to let you know this is happening. Your views will be important in informing the way that Government determines the policies and principles, so please make sure you respond. Solent Forum will be responding and we are hoping to take actions on identifying net gain targets in the Solent in the coming months. Your views are therefore particularly important to us as well as to Government.

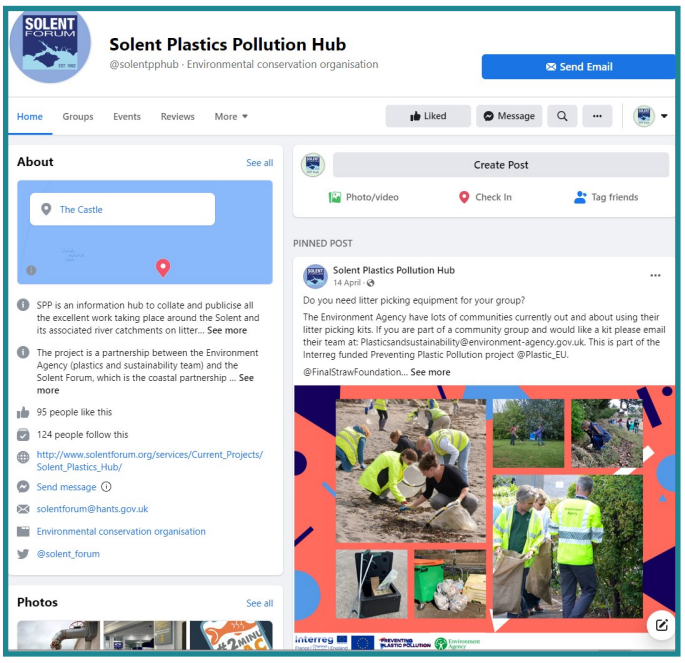
Similarly, those of us who judged the projects entered by students for the Professor Mike Clark Bursary Award were impressed by the depth and quality of all the submissions. These show just how important it is that we have access to such a great breadth of academic experience around the Solent, and how we need to work with researchers to find better ways of managing the environment to combat climate change and restore biodiversity. In my discussion with Government, and others, we all increasingly refer to the need for innovation and creativity if we are to do things better, research has a massive role to play in helping us to do this.

Solent Plastics Pollution Hub Grows

We continue to grow our Solent Plastics Pollution hub (SPP), which collates and publicises all the excellent work taking place around the Solent and its associated river catchments on reducing litter and preventing plastic pollution.

We would like to further develop the involvement of the Solent's coastal and river catchment communities. We would love to hear from anyone who is running or coordinating litter collecting events, or those who are passionate about reducing plastics and litter in the water environment. The hub is free to access for all. You can like our page on Facebook at Solent Plastics Pollution Hub to keep posted on issues and work happening on litter and plastics.

The Hub also has a series of webpages that are full of information on best practice and resources for those litter picking around our beaches and rivers.



FCERM

Isle of Wight Coastal Defence Scheme

The Environment Agency, in partnership with the Isle of Wight Council, is working to reduce the risk of flooding and coastal erosion to homes and businesses, vital infrastructure and over 300 hectares of protected habitat.

The scheme will see four projects at Embankment Road (Bembridge), Yaverland, Shanklin and Ventnor being progressed thanks to government funding. The coastal defences are ageing at these locations and investigations are taking place as to the best future options.

The scheme includes proposals for slope stabilisation measures at Ventnor, refurbishment of the sea wall and defences at Yaverland and Culver Parade in Sandown, refurbishment of the sea wall and defences at Shanklin Esplanade and repair to the sea defences at Embankment Road, between St Helens and Bembridge.

Yaverland Beach © @ronsaunders47

To receive the project newsletter please email: IOW_FDschemes@environment-agency.gov.uk.

FCERM Strategy Roadmap to 2026

At least one in six people in England are at risk from flooding from rivers and the sea. Sea levels will continue to rise and the frequency and severity of floods and storm surges is only going to get worse.

Creating climate resilient places lies at the heart of the new Environment Agency's Flood and Coastal Erosion Risk Management (FCERM) Strategy. Its vision is for "a nation ready for, and resilient to, flooding and coastal change – today, tomorrow and to the year 2100".

The Strategy has 3 long-term ambitions:

1. Climate resilient places: working with partners to bolster resilience to flooding and coastal change across the nation, both now and in the face of climate change.
2. Today's growth and infrastructure resilient in tomorrow's climate: making the right investment and planning decisions to secure sustainable growth and environmental improvements, as well as infrastructure resilience to flooding and coastal change.
3. A nation ready to respond and adapt to flooding and coastal change: ensuring local people understand the risks posed by flooding and coastal change, are responsible for managing the impacts and know how to take action.

The strategy also incorporates the government's £200 million Flood and Coastal Resilience Innovation Fund.

Coastal Partners Win National Award

Coastal Partners, with friends and partners at Portsmouth City Council and Mackley, won the 'Coastal Management' award at the Environment Agency's Flood and Coast Awards for their North Portsea Island scheme.

The scheme will reduce the risk of flooding and erosion from the sea to 4,200 homes, 500 businesses and critical infrastructure including the Eastern Road over the next 100 years.

The award was for the development of an environmental innovation called an 'Ecoformliner.' This is a textured sea wall that protects communities from flooding and creates habitats for marine animals and plants.

The concrete sea defence has been textured using an 'Ecoformliner' mould, which imprints into the wall during construction. As such, the texturing is part of the actual sea defence rather than a "bolt on" and has a 100-year design life.

Photo courtesy of Mackley

Coastal Management

Championing Coastal Coordination (3Cs)

Earlier this year, three coastal partnerships in the south, the Solent Forum, Dorset Coast Forum, and Isle of Wight Estuaries Partnership, worked together on the Environment Agency funded Championing Coastal Coordination project (3Cs) project. It was a component of a larger project bid from the national Coastal Partnership Network (CPN). A handbook was produced that showcases the work of coastal partnerships to government agencies and wider coastal stakeholders. It makes recommendations for improved coastal integration, funding, and governance.

The work showed that the south Coastal Partnerships successfully play a key role in facilitating the integration of coastal and marine management at a regional level; sharing multi-sector information and improving access to evidence. Their ability to be flexible and politically independent is a key strength allowing the open sharing of ideas and mutual support across a wide range of stakeholders. The following observations were made:

- Coastal Partnerships need more engagement from national government to provide an effective vehicle to bring stakeholders together to collaborate and deliver key policy.
- Improved sectoral integration across land and sea in England would be better achieved by partnership working and delivery rather than strategic aspiration.
- There are real opportunities for better integration of environmental governance and policy including a government framework and guidelines for an integrated ecosystems approach, based on natural capital understanding and the stacking of benefits.
- The development of effective Nature Recovery Strategies is important, and it is hoped that the government will set ambitious strategic coast and marine net gain targets. There is also a need to solve the barrier of additionality at designated sites.
- Coastal partnerships can help bring together a range of stakeholders including the Defra family to support consensus building. An improved system of streamlined consents is required as currently this is a significant barrier to restoration projects in terms of complexity and funding.
- The national Coastal Partnership Network (CPN) already provides a valuable service to coastal partnerships in England, but it requires funding and a more formal footing to deliver additional services and increase partnership working and collaboration.
- The national CPN should work with regional coastal partnerships, supplementing their strengths and recognising that a centralised national model may not be the best approach for them given their strong independence and neutrality.
- Government should recognise (and remedy) that the structure and hosting arrangements for existing local coastal partnerships can place barriers to them from bidding for national funding streams.

Defra's Marine Net Gain Consultation

Defra is consulting on marine net gain (MNG) until the end of August 2022. The consultation invites respondents to consider the implications of introducing a MNG approach to Marine Protected Areas. It will be a new requirement for developers; it will not replace or supersede existing requirements relating to environmental protection.

With marine habitats and the marine environment being highly dynamic and interconnected, the consultation recognises that focussing on habitat loss alone may not provide the most comprehensive means of characterising a development's impacts. It proposes some account should be given of the impacts on individual species (or groups of species) and that MNG assessments should include impacts on both habitats and species.

Defra have committed to ensuring that MNG is coherent and consistent with land-based Biodiversity Net Gain. MNG will only apply below the low water mark; land-based Biodiversity Net Gain will apply to onshore and intertidal developments, down to the low water mark.

Photo © Defra

Water Quality

Blue Flag and Seaside Awards for Solent Beaches

Keep Britain Tidy has announced the winners of the prestigious Blue Flag and Seaside Awards for summer 2022. In total, 151 beaches in England were presented with an award. The Blue Flag is one of the world's most recognised voluntary awards for beaches, marinas, and sustainable boating tourism operators.

In order to qualify for the Blue Flag, a series of stringent environmental, educational, safety, and accessibility criteria must be met and maintained.

Seaside Awards are presented to the beaches that have been assessed for safety and services, environmental management, water quality and information. Award winners in the Solent include:

West Wittering. © aurélien

Seaside Awards

St Helens, Seagrove, Springvale, West Wittering.

Blue Flag Awards

Hayling Island Beachlands, Sandown , West Wittering Beach.

CHASM: Crustaceans, Habitat And Sediment Movement

The fishing grounds near Selsey Bill, West Sussex, have traditionally been well managed and productive. Fishing in the area has been dated back to the Bronze Age, but the fishing grounds have now changed. A good understanding of the nearshore area and associated water column is needed to understand what the changes are, why they happened, and whether mitigation measures are possible. Impacts may include recent environmental inputs including sediment increase, sewage discharge and contaminants in land runoff. Partnerships between the fishing industry, academic institutions, local authorities, government agencies, special interest groups and NGOs are essential in order to explore these issues and this is what the CHASM project was set up to do.

The project recently held its first stakeholder network event, where speakers presented the complex backdrop of change that has coincided with reductions in the coastal crustacean fisheries around Selsey Bill.

Image © CHASM

Presentations from key project partners, Channel Coastal Observatory and University of Brighton, provided the project background and introduced the stressors which might be influencing the underwater zone. In addition, neighbouring organisations talked about the work they are doing in adjacent areas on the south coast.

Following the presentations many delegates joined the Solar Boat operated by Chichester Harbour Conservancy. Live demonstrations in Chichester Harbour provided a hands-on experience of the sampling techniques being used on the project to explore marine habitats.

Find out more on the project website.

Hayling Island Water Quality Monitoring

A water quality monitor that bathers will be able to use before they visit Hayling Island is set to be installed in what is believed to be a UK first. Havant Borough Council and Southern Water said their pilot scheme would provide residents with live updates. The monitor will be fixed to a buoy around 400 metres offshore, west of Beachlands. It will automatically take regular water samples, then upload the results to a website where they can be checked online.

Once the calibration period is successfully completed, residents will then be able to check the website and see the condition of the water for themselves.

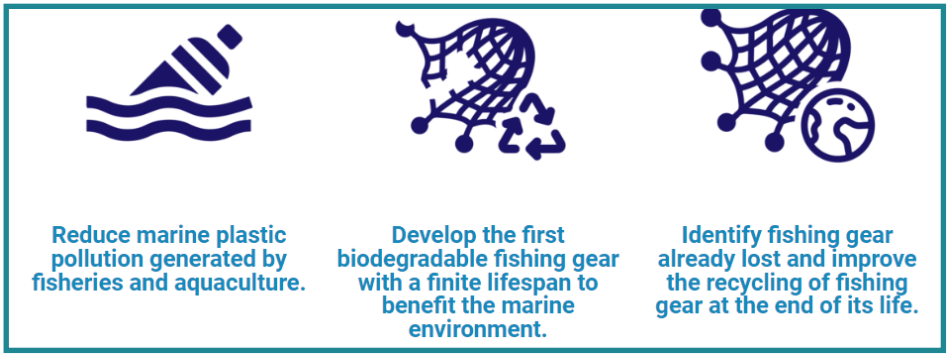
Fisheries

INnovative Fishing Gear for Ocean (INdIGO): Survey of Biodegradable Gear

More than 200 French and English fishermen participated in a survey conducted by the INdIGO project between December 2020 and August 2021. The results showed that the majority of the participants (73%) would like to use biodegradable fishing gear. The performance criteria was the essential requirement, a biodegradable net must be as effective as a traditional one, i.e. resistant and strong. The results also showed that better promotion of catch caught by biodegradable gear to customers could encourage their use.

Abandoned, lost or discarded fishing gear is a major threat to the oceans. The Food and Agriculture Organisation of the United Nations (FAO) estimates that it accounts for ten percent of marine litter and it has increased significantly in recent decades. An INdIGO survey of 150 fishermen conducted in early 2021, found that nearly ninety percent said they came across abandoned fishing gear at sea.

The consequences of lost gear are numerous and varied. The best known is ghost fishing, which results in the capture and death of fish and other species such as dolphins, seals or turtles. Marine species also face the risk of ingestion of gear components. Fragmentation of gear causes toxins and microplastics to be dispersed and transferred into the marine food chain. Gear litter on beaches presents health and safety risks to people and wildlife who use the coastline.



INdiGO project objectives

Find out more at: INdIGO – INovative fIshing Gear for Ocean (indigo-interregproject.eu).

Byelaws Introduced for Offshore MPAs

Fishing activity will be prohibited in four Marine Protected Areas (MPAs), the government has announced with byelaws coming into force in June 2022. They are being introduced using new powers under the Fisheries Act, the UK's first major domestic fisheries legislation in nearly 40 years. The new measures will prohibit fishing activities in MPAs where there is evidence that they harm wildlife or damage habitats.

The Marine Management Organisation (MMO) is responsible for making byelaws in English waters to protect MPAs from activities that may harm them, and to manage fishing for conservation purposes.

They will ban the use of bottom trawls, dredges, demersal seines and semi-pelagic trawls, collectively known as bottom towed gear, over certain areas. There are also additional restrictions in two of the sites preventing the use of certain static gears such as pots, nets or lines over especially sensitive areas.

The four MPAs where fishing is prohibited are:

- Dogger Bank Special Area of Conservation
- Inner Dowsing, Race Bank and North Ridge Special Area of Conservation
- South Dorset Marine Conservation Zone
- The Canyons Marine Conservation Zone

The Scallop Disco

A new method for catching scallops has been developed using funding from the Government's Seafood Innovation Fund (SIF). Pioneered by scientists at Devon-based company Fishtek Marine, it uses illuminated pots dubbed 'scallop discos' to attract and catch scallops.

Scallops have 200 eyes and were found to be particularly receptive to the lights and naturally moved towards them, making the lights an effective means to catch large quantities without trawling the seabed. Findings indicate this could replace traditional dredging methods which can have a damaging effect on valuable marine habitats.

The next steps involve optimising the trap design, and developing and manufacturing a new, low-cost light specific to the operational needs of crustacean fishers. Further sea-trials will then be conducted with the new designs, focusing on crucial factors such as fishing region, light intensity, light colour, flashing rate and trap efficiency.

Photo © FishtekMarine and Cefas

Marine Industries

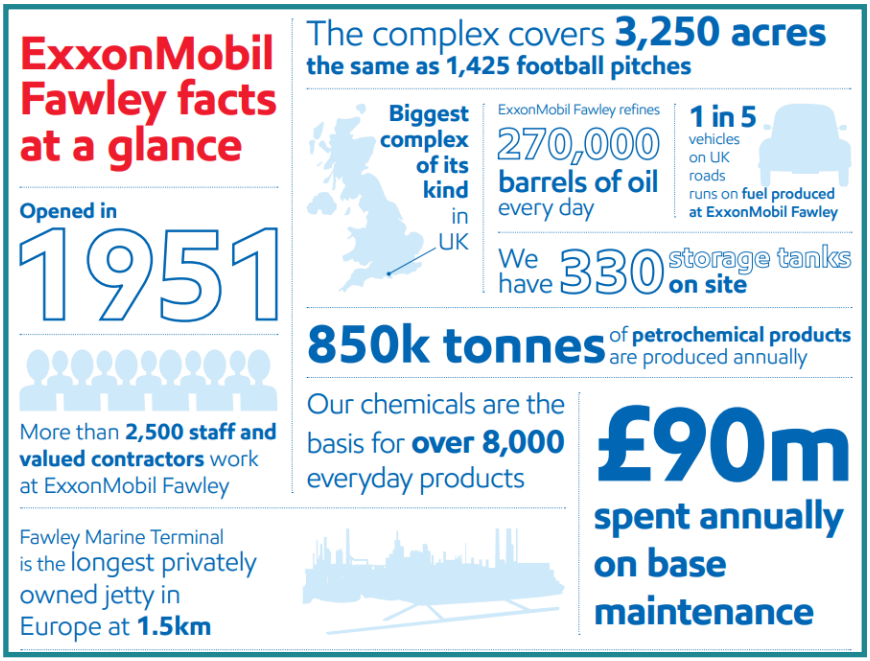
Fawley Facts: New Infographic

Fawley Refinery and Petrochemical Plant is the largest in the UK, it opened in 1951. Covering 3,250 acres on Southampton Water it is the largest in the UK, and one of the most complex in Europe.

Today the refinery processes 270,000 barrels of crude oil every day, providing twenty per cent of the UK's total refining capacity. Over 2,000 ships visit its marine terminal each year, delivering more than 22 million tonnes of crude oil and transporting other products from the site.

Some of the processed oil from the refinery is used as feed for the neighbouring chemical plant, which manufactures over 850,000 tonnes of petrochemical products every year.

About eighty per cent of Fawley Refinery output is pumped through underground pipelines to distribution terminals as far afield as London, Bristol and Birmingham. In total, 450 miles/700km of pipeline transport around 25 million litres of product every day.



ExxonMobil have recently published a new infographic about the Terminal which can be seen in the image.

Sennebogen Material Handler

Portico, the international cargo terminal based at Portsmouth International Port, have taken delivery of a Sennebogen material handler, which will allow them to handle an even wider range of cargoes.

The Sennebogen 870 Mobile Special "E" series Port specification material handler is equipped with a banana boom and stick with 24 metre reach, this will allow for easy loading and unloading of vessels with a range of cargoes, such as grain and aggregates.

It is also equipped with the Sennebogen 'Green Hybrid' energy recovery system, which reduces the engine power required and provides up to thirty percent savings on energy use. This fits with its commitment to cutting carbon use and improving air quality across the port terminal.

© Portico

Columbine Building in East Cowes

Contractors have begun preparing the iconic Columbine Building in East Cowes for the start of a major investment from the Isle of Wight Council supported by the government's levelling up fund. The whole south elevation of the structure is to be restored and weatherproofed as part of the council's plans to create more working space and jobs in and around the East Cowes Marine Hub. Once the windows and sidewall are restored, two whole internal floors of the historic building will be accessible again. The next phase of the works is to refurbish the newly-accessible working spaces inside which are currently out of use.

The main tenant of the building, Wight Shipyard Company, has commenced piling works in the nearby harbour to create a new marine hoist dock. This will allow the company to work on larger vessels, delivering the next generation of sustainable high-speed ferries and crew transfer boats, as well as being available to other marine engineering businesses.

The new structure should be completed in summer 2022.

Plastics and Litter

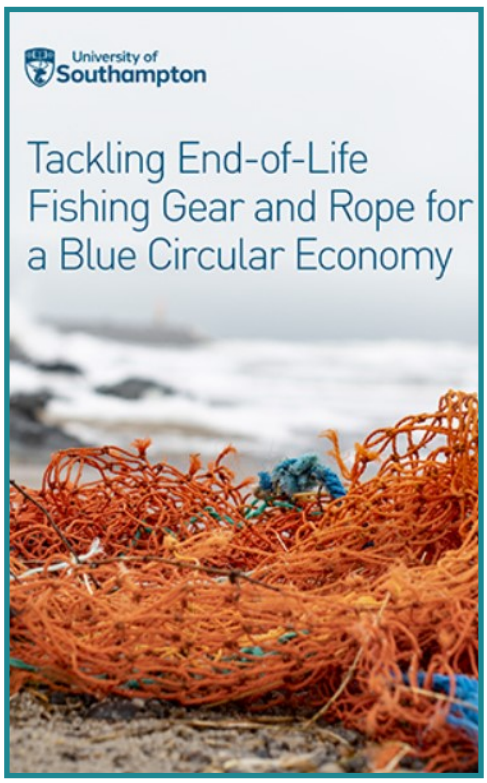
New Forest District Council's Crabby Coastal Litter Intervention

The 'Look Out for the New Forest' framework was developed to address the behaviours and attitudes to littering among residents and visitors. Interviews and workshops were conducted with partners, council staff and members, food retailers and local interest groups. Focus groups with young people and an online public survey of attitudes were undertaken alongside observational research.

To test the framework at the coast the 'Crabby Coastal Litter' intervention was undertaken at Milford on Sea, Barton on Sea and Calshot. Free refuse sacks were supplied alongside posters on large advertising trailers. The intervention ran for a month over summer 2020, when people flocked to the beaches causing a significant increase in coastal litter. It sought to challenge behaviours such as 'polite littering', where litter is left by the side of an already full or overflowing bin and to make the desired behaviour (disposing of litter in bags) easy for people by providing them with bags. Based on available weighbridge data, the intervention reduced the amount of litter discarded by 10.8 tonnes over the intervention period. This represented a reduction in litter of twenty nine percent and realised savings for the council in litter collection costs by over £10,000.

The success of the 'Crabby Coastal Litter' campaign, and the noticeable reduction in coastal litter along with positive public perception, means the council will now look at the possibilities of repeating this work at the coast, as well has how it can be adapted to help with problems in town centres or parks and open spaces.

Understanding Ecosystem Level Impacts of Plastic Pollution



A University of Southampton PhD study has been investigating the ecosystem level impacts of plastic pollution, as well as the policies and opportunities available to help mitigate marine plastic pollution. It is widely accepted that derelict fishing gear is one of the most detrimental forms of plastic pollution to marine organisms. It is some of the most commonly surveyed marine litter globally and can be made from hundreds of different polymers, making collection, sorting and recycling extremely challenging.

The Study led a coastal plastic survey around the UK on a tall ship, the Pelican of London, finding fishing gear and rope to be among the most common items. It has been investigating, from a policy perspective, how we can improve the management of end-of-life fishing gear and rope in the UK.

When the project was launched a global review was conducted to identify circular economy solutions for plastic waste. A round table event discussed the common set of policy and economic barriers faced by organisations trying to maintain a circular business model. Two key challenges are:

1. We don't have appropriate waste infrastructure or the logistics to sustainably manage all the materials produced and;
2. Virgin plastic is cheaper to produce than recycled material, even though the associated emissions to recycle are substantially less than producing new material.

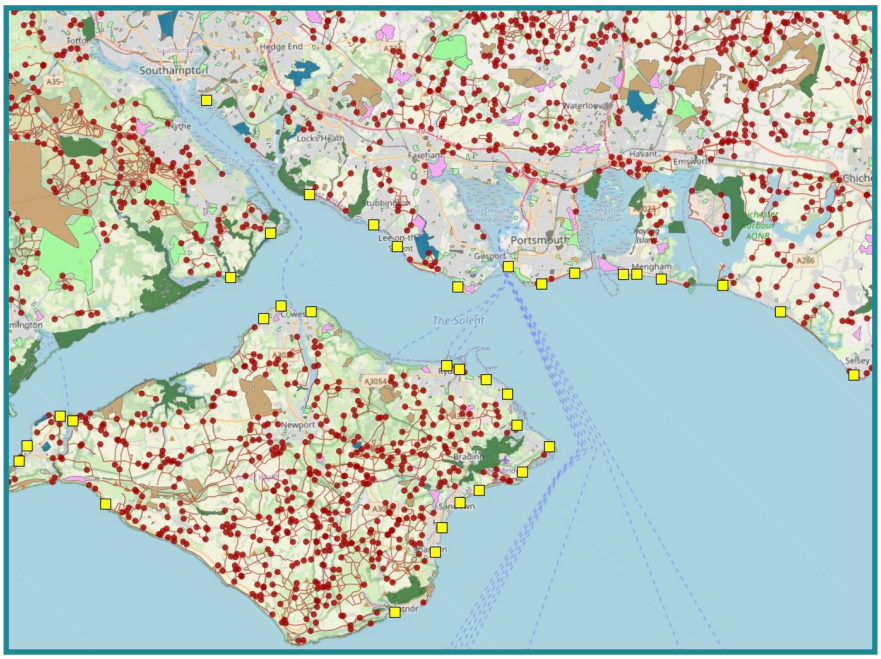
Recreation & Leisure

Outdoor Recreation Valuation tool (ORVal)

The Outdoor Recreation Valuation tool (ORVal) is a web application developed by the University of Exeter with funding support from Defra. Its primary purpose is to provide information that might be useful to government, businesses and communities in understanding the benefits that are derived from accessible greenspace in England, for example, as part of strategic or project appraisal, policy evaluation or natural capital accounting.

It has three key functions;

- It allows users to explore the usage and welfare values that are generated by currently accessible greenspaces.
- It allows users to estimate how usage and welfare values might change if the characteristics of a recreational greenspace were changed.
- It allows users to draw new recreation sites on the map, define their characteristics and estimate the usage and welfare values that might be generated by creating that new greenspace in that particular location.



Recreation sites in the Solent, incl. paths and beaches.

Source: ORVal Outdoor Recreation Valuation

Access the tool at: ORVal Outdoor Recreation Valuation (exeter.ac.uk).

Studland Bay Voluntary No Anchor Zone

A voluntary no anchor zone was introduced on 17 December 2021 in Studland Bay to help reduce damage caused by boats dropping and weighing anchors. The zone became a permanent larger area in June 2022.

The zone was introduced to provide protection for Studland Bay's long-snouted seahorse (Hippocampus guttulatus) and seagrass beds.

In May the MMO South Team were on-board the Southern Inshore Fisheries and Conservation Authority Patrol Vessel 'Endeavour' in Studland Bay to raise awareness amongst users of the new measures. Approximately twenty percent of people engaged with said they were unaware of the no anchor zone.

Vessels were also making use of the advanced mooring systems (AMS) installed by Boatfolk and The Seahorse Trust. AMS (also known as eco-moorings, or eco-friendly moorings) avoid the placement of large mooring blocks on the seabed and chain abrasion through the use of alternative mooring systems. There are different fixing methods available as well as the use of floats or elastic lines to avoid chain abrasion.

Find out more at: Managing marine non-licensable activity in Studland Bay Marine Conservation Zone .

New Pump Out Facility for the Hamble

Southern Water has provided investment to the River Hamble Harbour Authority to enable Hampshire boaters to keep the waters clean.

The joint initiative to install a 'black water' pump-out station at the Harbour Master's jetty at Warsash will mean boat owners can responsibly dispose of human waste stored aboard cleanly and conveniently, without the need to travel three miles clear of the coast before discharging holding tanks legally.

Around 3,200 sailing yachts and motor cruisers on private moorings and in a dozen marinas and boatyards on the eight-mile Hamble river, as well as visiting vessels, will now have the opportunity to discharge waste through the facility and help in reducing discharge levels into coastal waters.

There are few pump-out facilities in the Solent; until the construction of the Warsash facility, there was only one facility to pump out toilet tanks from boats on the Hamble at Premier Marina, South of the A27 bridge crossing.

Since 2016, new yachts and motorboats are required under the Recreational Craft Directive to have facilities to fit a holding tank for black water. Boats with tanks should either pump out into a facility like that at Warsash or at least three miles out to sea.

Conservation

Hayling Island Ringed Plover Project

The Hayling Island Ringed Plover project at Gunner Point, on the Hampshire coast, aims to reduce (and ideally eliminate) the impacts of human recreation on ground nesting birds, specifically Ringed Plovers. The impacts on nesting birds come in two primary forms: trampling and disturbance by people (walkers and beach-goers) and disturbance and destruction by dogs.

A permanent 'stock-mesh' fence has been installed between the main area of public recreation and the primary zone that is used by the nesting Ringed Plovers. Permanent signs will be erected to inform the public about the project and a volunteer team will be recruited to enlighten by word of mouth.

In addition to protecting nesting birds, the fencing is likely to have other conservation benefits. Gunner Point is a winter high-tide roost for waders, notably Dunlin but also Ringed Plovers and other species; these are vulnerable to disturbance by people and their dogs at a time when they need to rest.

Stock mesh fencing, © Trevor Codlin

Hampshire and Isle of Wight Natural Wealth Report

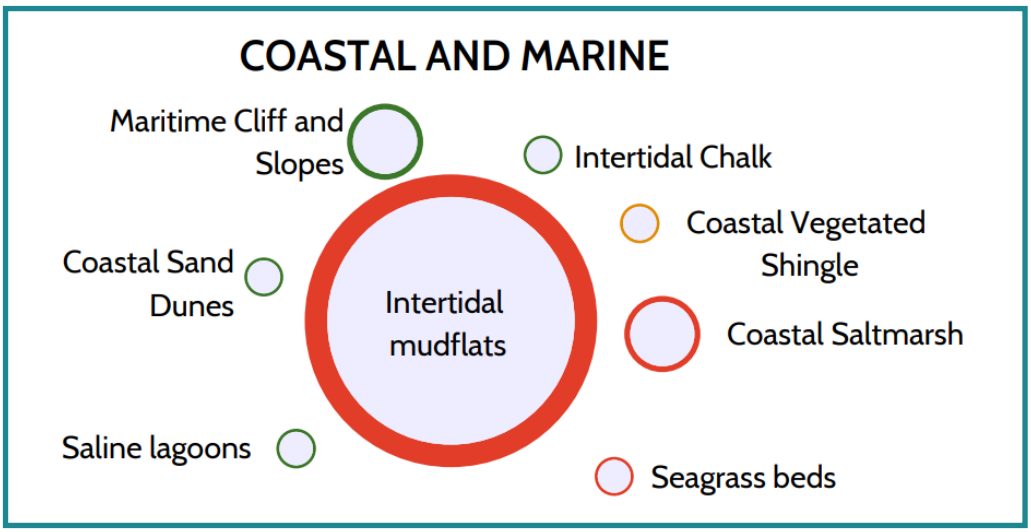
A new report from the Hampshire and Isle of Wight Local Nature Partnership, provides a high-level overview of some of the area's most important natural assets. It draws out risks and opportunities, highlights the importance of the wider countryside, and recognises that natural capital cannot be preserved and enhanced by focusing solely on our protected areas.

The document has been developed as the beginning of an important initiative to plan and coordinate collective investment in the natural capital of Hampshire and the Isle of Wight. It provides an evidence base to define the direction of travel and the vision and direction for a wider programme of work.

The report provides a Natural Capital asset register of habitats. For coast and marine, seagrass beds, intertidal mudflats and saltmarsh are all classed as high risk from factors such as erosion, disturbance, pollution and development.

The report also shows that twelve percent of coastal SSSIs are in favourable condition in Hampshire, forty nine percent are in unfavourable recovering. Sixty four percent of coastal and marine SSSIs are in favourable condition on the Isle of Wight, thirteen percent are in unfavourable recovering condition.

View the report at: 2022_04_natural-wealth_lnp_final-1.pdf (wordpress.com).



Report infographic illustrating the extent and risk of coast and marine assets. Size of the bubble is approximate to total extent of the priority habitat across Hampshire and the Isle of Wight. Colour denotes risk, with green equalling low risk, orange equalling medium risk and red equalling high risk.

Heritage & Archaeology

Fort Victoria Pier Development

A shellfish and fish landing processing facility, as well as a shop and a restaurant, could be built at the former Fort Victoria Pier near Yarmouth on the Isle of Wight. Five four-bedroom houses are also proposed on suspended rafts on land in front of the pier.

The proposals, which are part of the Westhill Beach development, have been submitted to the Isle of Wight Council. The pier sits next to the Grade II listed Fort Victoria which was formerly used as part of military operations.

The pier, its tramlines and ancillary structures were used to move, store and load marine mines, but the site was partially dismantled once the military use stopped.

In the mid-80s, it became part of a small boat-building yard but following the redevelopment of the area into a tourism destination in the late 90s, it has been untouched.

Fathoming the Future

The Maritime Archaeology Trust (MAT) has received a grant from The National Lottery Heritage Fund for a project called 'Fathoming the Future'. It focuses on MATs archive and collections which will be used to tell new stories for a range of audiences through digital resources.

Using MATs information, drawings, photos, video and 3D models recorded from archaeological sites over the past 30 years it will deliver stories on how prehistoric people lived at times of lower sea level, through to global ships and seafaring and life at sea. It will also be looking at how archaeologists work with techniques and methods from the depths of the underwater world to detailed laboratory analysis.

There will be lots of opportunities for volunteering throughout the project, both remotely and in person, including digitising and cataloguing archive material, undertaking research, and creating digital resources.

The project will create new online resources including 3D models, audio articles, and online tours to enable people to engage with heritage, wherever they are. A new 'Discovery Hub' will bring together MATs archive of education and outreach materials and make them available for students, parents, teachers, and educators to use freely.

Digital resources already available from MAT include:

- 3D models on Sketchfab
- YouTube videos

Find out more at: Fathoming the Future - Maritime Archaeology Trust.

Harbours & Business

Shore Power Facility Commissioned at ABP Southampton

Associated British Ports (ABP)'s Port of Southampton has successfully commissioned the use of its shore power facility for cruise ships. Shore power-enabled ships can now plug in at the port's Horizon Cruise Terminal and Mayflower Cruise Terminal, for zero emissions at berth. Powercon was the main contractor to implement the scheme on site.

AIDA Cruises' brand-new AIDAcosma and Cunard's iconic Queen Mary 2 can now use the power. Further cruise ships are scheduled for commissioning this month and throughout the year. They include Celebrity Cruises' brand-new ship Celebrity Beyond and Norwegian Cruise Line's Norwegian Prima, who will make a number of calls in the summer and autumn.

The total shore power project cost was £9m, supported by a grant from the Solent Local Growth Deal, arranged through the Solent Local Enterprise Partnership (LEP).

AIDAcosma connects to shore power at Horizon Cruise Terminal

© ABP Southampton

Portsmouth Port Masterplan

Portsmouth Port launched its Masterplan in February 2022, focussing on the next 20 years and how the port can adapt to successfully support the future of UK trade and travel. As they head towards 2042 the port will follow four key themes: environment and sustainability, society and economy, resilience and security and innovation and technology.

A priority for the port is to keep developing its green credentials, it aims to become a zero emission port. Plans to introduce further green initiatives across the site include:

Within 12 to 24 months

- Lithium-ion battery for energy storage
- Shore power for small cruise ships

Over 24 months

- Smart freight
- Smart passenger booking

Over 5 Years

- Reach carbon net-zero by 2030, and become the UK's first zero emission port by 2050
- Alternative power generation technology, such as hybrid LNG barges and shoreside power
- Net energy provider from whole site solar PV and wind turbines, including solar car ports

© Portsmouth International Port

The Port has also teamed up with scientists and academics to turn it into a living laboratory to trial the latest in environmental power prototypes.

More News

Mapping Invasive Alien Species in the Solent

The Solent, much of which is designated as a Special Area of Conservation (SAC) and Special Protection Area (SPA), is noted as a key entry point for Invasive Alien Species (IAS) into the UK, due to its high volumes of international shipping and recreational boating; both are major vectors of IAS. These IAS pose a threat to the Solent's native biodiversity, recreation and fishery industries, especially shellfisheries, due to their potential to threaten native species, habitats or whole ecosystems.

Natural England conducted rapid assessment surveys of 14 'clusters' of three sites, one marina/harbour site, one nearby shore and one more distant shore, in the Solent. They recorded alien species (AS) and native species (NS) from target lists. This new data was compared with previous surveys of IAS in Solent marinas, to provide a timeframe for assessment of the risk of colonisation of natural shores by IAS from nearby marinas.

Site-specific species guides were sent to marinas/ harbour masters to help them identify IAS.

As a result of these surveys a biosecurity plan is already in preparation for the North Solent National Nature Reserve. MDL marinas, a large marina operator in the Solent, is also using this data to help inform the biosecurity plans that they are developing.

This exploration of the association between IAS in marinas/harbours and intertidal areas will help to inform policy and provide a baseline of IAS within the Solent Maritime SAC. Find out more at: Mapping Invasive Alien Species in intertidal habitats within Natura 2000 sites in the Solent - JP042 .

HIWWT Rewilding on Isle of Wight

A scheme to support wildlife recovery on the Isle of Wight has been extended with the acquisition of 144 hectares (355 acres) of land. Hampshire & Isle of Wight Wildlife Trust have completed the land deal at Nunwell, near Brading. The area will now be rewilded to further protect and support nature with funding support from the Solent Local Enterprise Partnership (LEP).

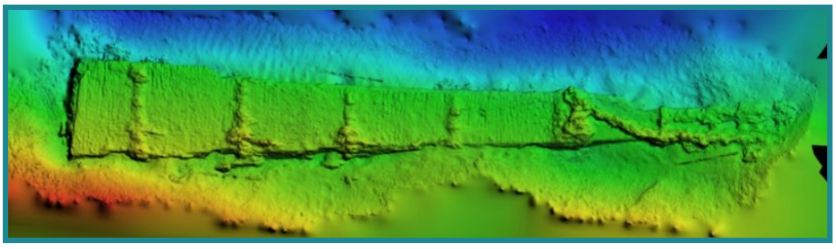
Since the Trust's acquisition at Little Duxmore in 2019, the site has seen wildlife bounce back with 36 bird species recorded, including nationally threatened species such as linnet and song thrush. Invertebrates have also made a recovery with 19 butterfly species, including the endangered wall brown, and six of the UKs 'Big Eight' bumblebee species recorded on site. Internationally important plants have also been recorded. It is anticipated that many of these species will also recover and thrive at Nunwell over the coming months and years.

The scheme was set up to demonstrate how nature-based solutions can be used to help mitigate and reduce the impact of nitrates on the Solent from planned housing developments. Nature reserves are created on former intensively managed land, making new habitats for local wildlife and helping nature to recover.

HMS Invincible's Rudder Found

The lost rudder of a warship that sank in the Solent in 1758 has been discovered on the seabed, sixty metres (200ft) away from the main shipwreck. The 74-gun ship was lost when the rudder jammed and it ran aground on a sandbank between Langstone Harbour and the Isle of Wight, capsizing three days later. The rudder is due to be protected with sandbags to prevent it being eroded, but bringing it to the surface and conserving it could cost up to £80,000.

A major excavation project, carried out by Poole's Maritime Archaeology Sea Trust (MAST) and Bournemouth University experts, began on the wreck site in 2017. Among the artefacts discovered were a gunpowder barrel, swivel guns, a bottle of corked rum and woodworking tools. Many have since gone on display at the National Museum of the Royal Navy in Portsmouth.



© Bournemouth University

More News

Modern-day Great Repair for HMS Victory

HMS Victory, has reached a significant conservation milestone with the announcement that the ship will go under wraps and be partially enclosed by temporary scaffolding.

© National Museum of the Royal Navy

A century since Vice-Admiral Lord Nelson's flagship at the Battle of Trafalgar was moved into dry dock in 1922, scaffolding specialists, PHD Access, have been awarded a £4 million contract to enable the next phase of conservation work. This is akin to a modern-day Great Repair that echoes the tradition of large-scale work carried out on a First-Rate line-of-battle ship in the 18th and 19th century.

Specialist 160-tonne cranes will erect a multi-level temporary covered access and work platform around the 257-year-old ship which sits in a dry dock, itself an ancient monument. A temporary building will be constructed over Victory by PHD Access, in stages, to start the process of drying the ship and keeping her weathertight during conservation works. Platforms will eventually surround the ship in phases, encasing it in a secure structure that in phase one will run from the mizzen mast to the fore mast then moving, in phase two to cover the bow, and stern at stage three.

The decade-long project will ensure the ship is protected for the next half century, as the ship's rotten outer shell is removed and replaced with new oak. Repairs will be made to the ship's structural framework and she will be fully re-rigged, in a process lasting ten to fifteen years and costing £35 million. Victory's ceremonial function as flagship of the First Sea Lord will continue and the white ensign will still be flown from the ensign staff.

Secrets of the Solent Murals

ATM Street Art has completed all six of the marine wall murals for Hants and Wight Wildlife Trust's Secrets of the Solent project. Ocean Village car park, Southampton, is now the proud host of a short snouted seahorse and the River Hamble Harbour Office, Warsash, hosts a lobster. There is a harbour seal in Newport, seagrass and spiny seahorse at the Isle of Wight Distillery and a thresher shark on the Langstone Harbour Board office. A spider crab can be viewed at Hythe Pier.

© River Hamble Harbour Authority

The Secrets' team worked with Strong Island Media to produce a film about all the murals, this was launched on World Oceans Day on 8th June.

More information on the wider work of Secrets of the Solent can be found on the Trust's website.

Marine Natural Capital Ecosystem Assessment

The Marine Natural Capital Ecosystem Assessment (mNCEA) project research is being undertaken by Natural England. It aims to compile information about marine nature recovery projects across England to help people understand the national picture, particularly in terms of best practice, barriers and opportunities. The research is being funded by the Department for Food and Rural Affairs until March 2025.

Natural England are particularly interested in understanding how different projects are considering the benefits they provide to society: how concepts such as ecosystem services were used in project development and communication, and how the success of the project in terms of nature recovery and benefits to society may be measured. Specifically:

- The factors that lead to the development of marine nature recovery projects.
- The stakeholders involved in marine nature recovery projects, their role and what motivated them to engage.
- The beneficiaries of marine nature recovery projects and/or any groups that may be negatively affected.
- The challenges to the implementation of marine nature recovery projects.

News & Snippets

Bird Aware Solent's Great Solent Birdwatch

Brent geese scooped the top spot in this year's Great Solent Birdwatch count with more than 2,000 spotted by volunteers. The annual count is organised by Bird Aware Solent.

Now in its third year, this research programme takes place on the Solent coastline with members of the public recording their shorebird observations over a sixty minute period.

Other shorebirds with high numbers include more than 1,400 black-headed gulls, 1,000 oystercatchers and over 500 wigeon. Rarer sightings include six white-tailed eagles, which were reintroduced to the Isle of Wight, and a single whimbrel: a wading bird on the highest conservation priority list.

A total of more than 9,000 birds were spotted during the event with the next Great Solent Birdwatch scheduled to take place from 22 to 30 October 2022.

Bird Aware Solent is a partnership of local councils, the RSPB, the Wildlife Trust and Chichester Harbour Conservancy. It raises awareness of the ducks, geese and wading birds that spend the winter on the Solent coastline, an area of worldwide importance for wildlife.

Rank	Species	Number	Status
1.	Dark-bellied brent goose	2,092	Amber
2.	Black-headed gull	1,418	Amber
3.	Oystercatcher	1,070	Amber
4.	Wigeon	555	Amber
5.	Dunlin	535	Red
6.	Canada goose	324	None
7.	Black-tailed godwit	254	Red
8.	Turnstone	237	Amber
9.	Redshank	235	Amber
10.	Golden plover	110	Green

Snippets

- Secrets of the Solent's first Great Solent Seafood cookery workshop was a great success. South Coast Cookery, Portsmouth, showed participants a fantastic crab ravioli recipe and how to stuff and roast a whole plaice. The seafood was provided by a locally based fisherman and fishmonger; it was landed just two hours before the workshop.
- At the North Portsea Island FCERM scheme most of the piling work is now complete. A 'Portadam', a portable water dam, is currently being trialled and once installed it will help the team stay dry whilst they work, no matter what the tide height.
- The 91st edition of the Island Sailing Club's Round the Island Race started with a bang from the Royal Yacht Squadron's starting cannons. Over 1,100 boats competed in the 50 nautical mile race around the Isle of Wight, often known as 'Britain's Favourite Yacht Race'.
- It is now a condition of the Solent Bathing Water Quality Awards that a Bathing Water Profile is provided for each beach and that information about it, as well as the potential for short term pollution events, is displayed.
- The Environment Agency has released a map tool that shows where native oyster beds and fisheries were once found along the English coast. The aim is to help local authorities, community partnerships and environmental groups make a case for restoration projects.
- UKSA announced that during 2021, it funded 3,275 young people on water-based adventures, a record for the charity. This includes 1,400 Year 6 students from the Isle of Wight who took part in its Test the Water programme.
- National Marine Week is The Wildlife Trusts' nationwide celebration of all things marine. It takes place from the 23rd July to 7th August.
- The Environment Agency are progressing the Shoreline Management Plan (SMP) refresh; each of the 20 SMP groups are busy working on reviewing the health checks, updating action plans and improving links with planning. A new digital SMP explorer tool will bring more visibility and accessibility to SMPs. Work should be completed by April 2023.

Solent News

Supporting Student Research in the Solent

One of the aims of the Solent Forum is to further the research knowledge and evidence base of the Solent. To assist this aim, the Forum has a bursary scheme where funding of up to £300 is available to help support dissertations undertaken by both undergraduate and graduate students. The award is named in honour of Professor Mike Clark, the second chairman of the Forum. As part of the award, the winners also have an opportunity to give a short presentation at a Solent Forum meeting and have their research publicised to the Solent's coastal community.

In 2022, the following awards were made:

1. Emily Price (PhD) UoP - The use of heart rate monitors to determine the effects of environmental stressors in the common shore crab (Caricinus maenus).
2. Bronwen Paxton, MRes UoP - Assessing the blue carbon potential of seagrass restoration in the Solent.
3. Charlie Mountain, PhD UoP - Greening the Hamble - a trial of biodegradable structures in the intertidal to mitigate saltmarsh erosion and increase bivalve settlement rates within the Hamble estuary.
4. Kate Dey, PhD UoP - The impact of the non-native Asian date mussel (Arcuatula senhousia) in the UK and Europe.
5. Martha McKee, BSc UoS - Quantifying microplastics in jellyfish populations inhabiting marinas and ports of the Solent.

The Solent Forum

Since 1992, the Solent Forum has provided a platform to deliver Integrated Coastal Zone Management in the Solent sub-region of the southeast. It operates at a strategic coastal management level, providing a network for closer working relationships, information dissemination and discussion of topical coastal issues. The Solent Forum members meet twice a year and will next meet on 13 October 2022.

Solent News is prepared and edited by the Solent Forum Officers. It is a biannual publication and issue 53 will be produced in winter 2022/23. To find out more about the publication, how to submit articles or be included on the mailing list, please visit http://www.solentforum.org/publications/solent_news/.

Contact Information

Solent Forum
c/o Hampshire County Council
Waste, Planning and Environment
Ell Court West 1st Floor, The Castle
Winchester
SO23 8UD
Tel: 03707 795206

Email: solentforum@hants.gov.uk. Twitter @solent_forum

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Isle of Wight Council
Environment Agency
University of Portsmouth
ABP Southampton
Natural England
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RYA
New Forest National Park
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