

Solent News

The newsletter of the Solent Forum

Issue 47: Winter 2019/20

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Shaping the Solent Forum for the Next Five Years

The Solent Forum is preparing its Business Plan (2020 to 2025) for the next five years. Forum staff began development of the new Plan in February 2019. Work to date, includes discussions and consultation with Solent Forum members to evaluate the successes of the previous business plan (2015 to 2020), and identifying future work and issues that the Forum should address. In 2019, we conducted a members' survey and held a business planning workshop to gain member feedback. The key theme that emerged during this consultative work was 'Valuing the Solent in Partnership'.

Solent Forum members expressed the view that they highly value the Forum's core members' services; they wish the new Business Plan's emphasis to be on improving and expanding these services. A summary of members' views is illustrated below.

- Maintain and improve the current core member services offered by the Forum.
- To be adaptive during the five year business plan cycle, by undertaking an annual Horizon Planning exercise with Solent Forum member input to build on topical opportunities.
- To reference the importance of valuing the Solent's natural capital and address climate change issues.
- To focus on the retention of existing members and bring in new organisations.
- To emphasise working with our members as partners, to utilise the knowledge and experience of all those working in the Solent.
- To continue to improve links with higher education institutions to utilise the student and research networks in the Solent.
- To explore how the Solent Forum can be more 'business ready', to effectively manage income from projects and events.

The draft Business Plan will be finalised in early 2020; it will adopted by March 2020. Full details about the Plan and its supporting documents can be found at: www.solentforum.org/about/business_plan/.

News from the Forum

Chairman's Column



Peter Barham

In September, I attended the English Coastal Challenge Summit and the Coastal Partnership Network Annual Forum in Southampton. This is an important occasion that brings together people from a whole range of coastal organisations, to discuss coastal management issues and to plan for the future.

We already know the importance of making everyone more aware of the value of coastal partnerships, this is an important aspect of our work. There were also some fascinating discussions on other topics, which demonstrated that we still have a lot of work to do both nationally, and within our own partnership.

There were some excellent talks about coastal deprivation, with statistics showing that although tourism is often important in these areas, it is usually seasonal, which has its own consequences. Alongside this there is increasing understanding that, in addition to economic growth, well-being is an essential component of life. A well managed coast is one of the best ways of providing this. Well-being is more than just being healthy; it is characterised by health, happiness, and prosperity and where we live is a massively important part.

Southampton and the surrounding area remain relatively affluent, but this does not mean that where we live is not important. Coastal management, that continues to improve the local environment, remains an important goal for the Solent Forum. We need to maximise the benefits from coastal living and well-being.

Mirroring this, is the growing idea that coastal partnerships could be delivered in a similar manner to the approach taken in many rivers,

through the catchment based approach (CaBa). There are discussions about this at national level, and these, potentially, reflect a growing understanding by government that greater commitment is needed to ensure we all do the best for the coast and coastal communities.

If the idea of national guidance grows, Solent Forum will play its part in shaping its development, and we will keep you posted. We will continue to ensure that the Solent and its contribution to our well-being remains at the heart of our work.

Building Biodiversity in the Solent (BBS) Hub

The Solent Forum, with partners, is developing a resource hub for Solent Forum members to collate information and case study material on how to improve the biodiversity of coastal infrastructure.

A BBS Working Group has been set up to guide the Hub and an inaugural meeting was held to agree the basis for the work programme. A terms of reference has also been finalised.

The Hub will be officially launched in spring 2020, and in the meantime the Forum will be gathering information for it. We will be sending out an online pro-forma to organisations with experience of building biodiversity into coastal infrastructure. The results will be used to develop practical case studies for how to undertake infrastructure enhancements in a range of coastal environments.

The topics of net gain and natural capital are currently outside the scope of this work, but Forum Officers will still be collating resources on these topics for use by Solent Forum members. They will be added to the BBS Hub webpages.

Find out more at: www.solentforum.org/services/Member_Services/Building_Bioiversity_hub/.

MMO ESEP Project

The Solent Forum is working with the Dorset Coast Forum and Devon Maritime Forum on the final task of the Marine Management Organisation (MMO) Enhancing Stakeholder Engagement Programme. For this task, we will be producing an animation that shows why and how people across the south coast need to be aware of the South Marine Plans and how to use them.

A similar animation, that was produced for the Solway as part of plan engagement and consultation, can be viewed at: https://www.youtube.com/watch?v=bE_9AOyInKU.

If you have other ideas that could be developed into short videos to help with Plan engagement please let us know, and we will pass them on to the MMO.

The animation will be available in early spring.

News from the Forum

Coastal Challenge Summit and Coastal Partnership Network Conferences

In October, Solent Forum staff helped to organise and facilitate two national conferences that were held in Southampton. The Solent Forum Chair, Peter Barham, chaired the Coastal Challenge Summit.

The Coastal Challenge Summit looked at three key issues:

1. Exploring what we have, want and need in existing policies and what we would ask for in a national coastal strategy.
2. Exploring the challenges of working at the coast in a changing climate.
3. If we were to have a national celebration of the English Coast in 2021, what activities, messages and projects would we be able to activate and celebrate.

At the second event, the Coastal Partnership Network Conference, the Solent Forum staff heard from national colleagues about the work they are undertaking and the issues they face in their area; we presented on some of the work that we have undertaken in the Solent.



We also explored in more detail how individual partnerships would like to get involved with the Year of the Coast and the potential for regional groupings and opportunities for collaborative funding bids. Finally, we discussed opportunities around obtaining communities funding for climate adaptation work. The Forum will inform its members of progress on all this work in due course so that they have the opportunity to get involved.

Solent Forum Meeting October 2019

Solent Forum members met in October at Cowes on the Isle of Wight. The meeting was very well attended, delegates heard from a range of speakers on topical issues and had the opportunity to network with colleagues throughout the Solent. The meeting presentations have been uploaded to: www.solentforum.org/networking/meeting/ and include:

- Solent Forum Work Update
- Beneficial Use of Dredgings in the Solent - Phase 2
- Seas the Day - Selsey Heritage Fisheries Project
- SARCC: Sustainable and Resilient Coastal Cities
- Total Ecosystem Management of the InterTidal Habitat (TEMITH)
- Highly Protected Marine Areas Review
- Bird Aware Solent Update
- The Green Blue - new website launched
- Portsmouth University Centre for Blue Governance

The Forum will next meet on 11 March 2020 in Southampton, members that would like speaker or hot topic slots please contact the Forum Office at: info@solentforum.org.

SEMS and NEG Update

The Solent European Management Scheme (SEMS) management group met in September and agreed the Annual Management Report for 2019 (AMR) and its actions.

In October, the Forum's Natural Environment Group (NEG) met to discuss the strategic actions from this AMR, which it takes on and delivers. Key actions include:

- Reviewing the issue of bait digging and the Solent bait digging collectors code.
- Progressing the Clean Solent Seas and Shores project.
- Working with Natural England to deliver a workshop on the new Solent coast path.
- Looking to improve data collation on land based recreational use around the coast.

We have also uploaded a project tracking document to the NEG website to record local environmental projects, see: www.solentems.org.uk/natural_environment_group/Tracker/.

View the SEMS AMR, 2019 at: www.solentems.org.uk/sems/AMR/SEMS_2019_AMR_Final_Web.pdf.

Information on the work of NEG can be accessed at: www.solentems.org.uk/natural_environment_group/.

Plastics & Litter

New Seabin for Ocean Village Marina

A new Seabin has been installed in Ocean Village Marina, Southampton. The award-winning piece of technology is located in the north east corner of the marina, where prevailing winds cause the most litter to accumulate.

This Seabin represents a collaboration between several local organisations as part of the Hampshire and Isle of Wight Wildlife Trust's Secrets of the Solent project, which will install a network of Seabins across the area.

This bin has been funded by DP World Southampton and it will be maintained by MDL Marinas, who operate Ocean Village Marina. An information board will be installed explaining the technology.

The Seabin sits in the water, attached to a pontoon, and moves up and down with the tide. By drawing in water from the surface and passing it through a fine mesh bag, it can catch floating litter such as plastic bottles and microplastics as small as 2mm in diameter.

A single Seabin can collect up to 1.4 tons of litter each year (the equivalent of 90,000 plastic bags or 35,700 disposable cups) while costing as little as 80 pence a day to run.

Find out more at: <https://www.hiwwt.org.uk/news/new-seabin-ocean-village-marina>.



Nurdles on the New Forest Coast

Since April, Coastal Ranger Chris Marshall, from the New Forest National Park Authority (NFNPA) and Jane Cartwright, a member of The Friends Of Lepe Group, have regularly collected nurdles. These pre production raw plastic pellets have been washed up at the top of the spit at Lepe Country Park.

The presence of these nurdles was first noticed during the 2019 Spring Clean Campaign, when hundreds were picked up by volunteers in a couple of hours.

Throughout the summer at least a further 6,000 nurdles have been collected from the beach. Chris has been using them to raise awareness at coastal events and school assemblies. She ran a workshop at The UK National Parks Education Conference, to highlight the impact of these microplastic pieces in our rivers and marine environment.

She has also led two survey sessions with staff from the NFNPA to contribute to the work being carried out by Portsmouth University with The Big Microplastic Survey.

By monitoring and collecting the nurdles over last summer, it appears likely that these were washed up during a storm event last winter. The area will be monitored over the current winter months to see if further batches wash up.

Great British Beach Clean, 2019

Over 10,000 volunteers took part in the Great British Beach Clean, 2019. They cleaned and surveyed 437 beaches from the Shetland Islands all the way to the Channel Islands and across the Irish Sea to Northern Ireland. A total of 10,833 kilogrammes of litter was removed in one weekend. Around thirty percent of the UK beach litter could be directly sourced to the public

There were, on average, 558 items of litter on every 100 metres of beach that were cleaned and surveyed. In England this was a four percent decrease since 2018.

The average number of items found were as follows:

- Plastic/polystyrene (0-50 cm) - 143.0 /100m
- Cigarette stubs - 42.6 /100m
- Glass (other) - 33.4 /100m
- String/cord (thickness 0-1 cm) - 32.6 /100m
- Packets (crisp, sweet, lolly, sandwich) - 30.9 /100m
- Fishing net (small) - 21.3 /100m
- Caps/lids - 20.4 /100m
- Wet wipes - 19.2 /100m
- Fishing line - 18.8 /100m
- Plastic/polystyrene (other) - 16.0 /100m

See: <https://www.mcsuk.org/media/mcs-gbbc-2019-report-digital.pdf>.

Environmental Quality

BlueHealth: Coastal Proximity and Mental Health among Urban Adults in England

A new study found that living close to the sea could support better mental health in England's poorest urban communities. Researchers from the BlueHealth team, at the European Centre for Environment and Human Health, University of Exeter, used survey data from nearly 26,000 respondents in their analysis.

After taking other related factors into account, the study revealed that living near to England's coastline is linked with better mental health for those in the lowest earning households.

The research used data from the Health Survey for England and compared people's health to their proximity to the coast; from those living less than one kilometre away, to those more than fifty kilometres away. Its findings add to the growing evidence that access to blue spaces, particularly coastal environments, can improve health and wellbeing. Listen to the project podcast at: https://www.youtube.com/watch?time_continue=6&v=IXE4eetHTbo.

The report comes at a time when Natural England prepares to open access to all of England's Coast Path by 2020. With everywhere in England being within 70 miles of the sea, more people could harness the wellbeing benefits of living near to the coast thanks to this improved access.

BlueHealth is also developing an Environmental Assessment Tool (BEAT) that will help community members and planners to identify and understand the factors that can maximise the health and wellbeing benefits of blue spaces. It will provide a comprehensive method of assessing any outdoor space that prominently features water, a space in which individuals may experience water, or where people interact indirectly with water, such as by viewing it. Access the tool at: <https://beatbluehealth.wixsite.com/site>.

BlueHealth is a pan-European research initiative investigating the links between environment, climate and health. The programme is specifically focused on understanding how water-based environments in towns and cities can affect health and wellbeing. See: <https://bluehealth2020.eu/>.

World Wetlands Day 2020

'Wetlands and Biodiversity' is the theme for World Wetlands Day 2020. Wetlands are rich with biodiversity and provide a habitat for numerous varieties of plant and animal species.

The 2 February each year is designated World Wetlands Day; which aims to raise global awareness about the vital role of this habitat for people and our planet. This date also marks the day in 1971 of the adoption of the Convention on Wetlands, in the Iranian city of Ramsar on the shores of the Caspian Sea.

The latest global estimates show wetlands disappearing three times faster than forests. This year's theme gives an opportunity to highlight wetland biodiversity, its status, why it matters and to promote actions to reverse its loss.

People can become involved with the Day as an event organiser, educator or participant. Resources to download are available at: <https://www.worldwetlandsday.org/materials>.

See: <https://www.worldwetlandsday.org/>.



Green Waste Disposal

Engineers are testing a green waste disposal system on Britain's newest aircraft carrier, reducing the rubbish aboard by one hundred fold.

During the latest phase of HMS Prince of Wales' sea trials in the North Sea, sailors tested her state-of-the-art pyrolysis plants; these plants are already fitted to the ship's older sister HMS Queen Elizabeth. The plants keep the tonnes of rubbish generated by the 600 sailors and 400 industry engineers on board to a minimum.

The two pyrolysis plants cause material to decompose under extreme temperatures. Waste such as food, sewage and oils can be processed by the plants, which can deal with 150 kilogrammes of rubbish every hour. Metals and glass cannot be processed, however the ships are fitted with glass processing equipment which crushes and compacts leftover glass products for subsequent recycling.

The waste produced then becomes the fuel; the burner switches off and the plant becomes self-sustaining using minimum fuel.

The end result of the process is grey-blackish ash, known as char. This is stored in drums until the ship puts into harbour again and it can be offloaded.

Fisheries

Maritime Fisheries Fund (MFF)

The Marine Management Organisation (MMO) will administer a new Maritime Fisheries Fund. The fund in England is open to applications that:

- Deliver productive investment in the processing of fisheries and aquaculture products.
- Support innovation in technologies to enhance economic growth, increase energy efficiency, reduce environmental impact and improve fishing safety.
- Improve port infrastructure.
- Boost coastal communities.
- Help the sector adjust to new arrangements on access and fishing opportunities by improving capacity and capability to exploit new export opportunities and markets.
- Improve safety on fishing vessels or on shore.

This fund is in addition to the existing European Maritime and Fisheries Fund (EMFF). The government has guaranteed that all EMFF projects, approved before 31 December 2020, will continue to be fully funded. Submissions for the new fund are made through the MFF E-system, see: <https://mffs.marinemangement.org.uk/>.

Fishery Protection Squadron

The Portsmouth-based Fishery Protection Squadron (FPS) undertakes an annual exercise in the Solent.

Last autumn, two of the squadron's offshore patrol vessels (OPVs) took part, including, for the very first time, a Batch 2 River-class OPV, HMS Medway, which was recently commissioned at Chatham Dockyard.

With origins that have been traced back to 1379, the FPS is the oldest operational squadron in the Royal Navy.

The exercise provided an opportunity to demonstrate the range of activities that the ships are expected to conduct; from fishery protection duties in support of the Marine Management Organisation, to supporting maritime counter terrorism, and maintaining national security in UK waters.

The squadron's vessels and crews are at sea longer than any others in the Royal Navy. Currently they do eight months out of twelve away from home, and due to their role are working all year round.

UK Sea Fisheries Statistics

The Marine Management Organisation has published its annual UK Sea Fisheries Statistics, 2018. It includes details on the UK fleet, the number of fishermen, the quantity and value of UK landings, international trade, worldwide fishing and the state of key stocks. Key findings include:

- The quantity of sea fish landed by UK vessels has decreased by four percent. However, the value of landings has increased by one percent in value from 2017.
- UK vessels landed 698,000 tonnes of sea fish into the UK and abroad with a value of £989 million.
- UK fleet landings abroad fell to 272,000 tonnes compared with 291,000 tonnes in 2017, almost entirely down to a decrease in mackerel landings.
- The UK fishing fleet remained the seventh largest in the EU in terms of vessel numbers, with the second largest capacity and fourth largest engine power.
- Seventy four percent of the quantity landed by the UK fleet was caught by vessels over 24 metres in length, which accounted for four percent of the total number of UK vessels. These vessels tend to catch lower value pelagic fish.
- Around 12,000 fishermen were active in the UK. Approximately 2,400 were part-time.
- Imports of fish were down by 31,000 tonnes to 674,000 tonnes. Exports also fell, by 12,000 tonnes to 448,000 tonnes.
- World figures for 2017 showed that China caught the largest amount of fish at 13 million tonnes.

The full report can be seen at: <https://www.gov.uk/government/statistics/uk-sea-fisheries-annual-statistics-report-2018>.

Developing Biodegradable Fishing Gear

Marine South East is a partner in a new EU Interreg co-funded project to develop prototype biodegradable fishing gear. INdiGO (INnovative fishing Gear for Ocean) will run until 2023 with an total budget of Euro 4.2 million. Fishing gear is estimated to represent twenty seven percent of marine litter with more than 26,000 kilometre of gear lost in the English Channel area each year. With an estimated lifetime of several hundreds of year, the impacts on marine wildlife can be devastating. The persistence of lost and discarded fishing gear in the environment could be reduced by the use of biodegradable equipment with a controlled life span, however, there is currently a lack of such products for use in the fishing and aquaculture sectors.

Marine Industries

Wightlink's Green Agenda

Wightlink's fleet is a familiar sight on the Solent, carrying more than 4.5million people every year. Although ferries have sailed these waters for centuries, new technologies are now transforming the world of shipping.

Wightlink's Green Agenda began with the arrival of its new £30million flagship, Victoria of Wight, in 2018. England's first hybrid energy ferry combines conventional engines with powerful batteries. Carrying up to 178 cars and 1,000 passengers on every trip, the ship is now using up to seventeen percent less low sulphur marine gas oil than Wightlink's next largest ship, St Clare. Wightlink's Green Agenda's initiatives include:

- Improving water quality by inspecting quays and shores every day and removing any rubbish.
- Recycling fifty percent of waste by the end of 2020.
- Reducing ship and vehicle emissions by five percent by the end of 2020.

In November 2019, the company received the People Environment Achievement Award for sustainable travel. It was also a finalist in the National Transport Awards Ferry Operator of the Year. It holds a Gold award from Visit Isle of Wight's Green Star sustainability scheme and a Gold Star from Wight Marque for reducing food miles by using and selling local produce.

Wightlink's environmental partners include the Hampshire and Isle of Wight Wildlife Trust's Secrets of the Solent initiative to educate local people about marine wildlife, and Island-based Artecology which has installed innovative artificial rockpools, known as 'Vertipools' on its harbour wall at Fishbourne. The company is also involved with Blue Marine Foundation's programme to restore oysters to the Solent. Find out more at: www.wightlink.co.uk/green.



Photo courtesy of Wightlink

Portsmouth Port Air Quality

Shore power, wind turbines and solar panels are just some of the projects Portsmouth International Port is proposing as part of its Air Quality Strategy, to reduce emissions and become the UK's first zero emission port.

Ambitions are for the port to be carbon neutral by 2030; contributing towards the national clean maritime plan for the UK which seeks to have net zero shipping emissions by 2050.

The most significant initiative is to offer shore power as an alternative energy source for ships when they visit Portsmouth. Ships, with the ability to use shore side power, can plug-in to the port's electrical supply. This means they do not have to run their engines and burn fuel.

In order to understand the impact of the initiatives, the port will work with Solent University to interrogate the data on emission levels.

Find out more at: <https://www.portsmouth-port.co.uk/about-us/sustainability>.

ABP Southampton Air Quality Work

The Port of Southampton is committed to leading the way in accelerating improvements in air quality across the city. It released its Air Quality Strategy last summer, committing to a number of targets.

It has been working hard with its partners across the port since and has provided an update on its progress against these commitments:

- 3600 solar panels installed last year
- 33 new electric forklift trucks introduced
- 52% of vehicle fleet is now electric
- 5 air quality monitors installed
- 12 new hybrid straddle carriers
- 550m cycle dedicated highway
- 9% increase in rail capacity
- 30 µg/m³ average annual NO₂. Its continuing work with port partners means the annual average NO₂ concentration across the year has reduced to below the UK National Objective of 40 µg/m³.

Find out more at: southamptonvts.co.uk/Port_Information/Sustainability.

Ecological Enhancement

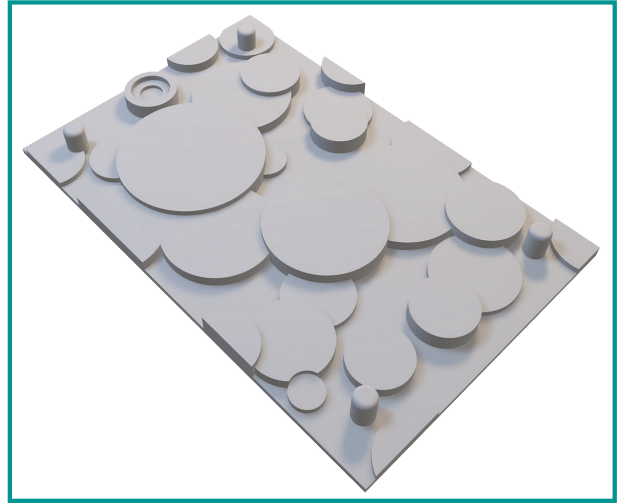
Environmental Improvements to Hard Engineered Structures

Exo Environmental are working with partners on environmental improvements to hard engineered structures and coastal defences. Its research under the SARCC (Sustainable And Resilient Coastal Cities) project is leading the way for ecological surface textures, imprinted onto conventional concrete or eco-concrete.

They are currently looking for areas and/or organisations that are willing to host a pilot study to showcase the concept and monitor the long-term benefits to ecosystem services.

These bespoke surface textures include a variety of indentation, crevices and orientations that aim to increase the surface area and complexity of a wall face. These can be created and fitted retrospectively to existing hard-engineering structures or created during the design process for optimal results.

Studies have shown species richness and diversity to be higher on these specially designed textures than that of conventional seawalls or rock-armour. This greening of otherwise “grey” infrastructure will also aid the local environment through associated ecosystem services, whether this is by improving the local water quality through filtering or prolonging the lifetime of coastal defences it is adjoined to through bio-armouring.



Please contact Luke Bryant for more details at: luke.b@exo-env.co.uk.

MARINEFF Workshop on Isle of Wight

The Marineff project, funded by the European Regional Development Fund, hosted its second workshop at Dinosaur Isle on the Isle of Wight in November 2019.

Marineff partner, Bournemouth University, and eco-engineering innovators, Artecology, gave presentations on the overall project with a focus on artificial rockpools in the morning. This was followed by a visit to the artificial rockpools installed at the Science Beach in Sandown, part of the Isle of Wight UNESCO Biosphere Reserve, and a tour of Artecology’s workshop where design and aesthetic meet ecological functioning.

Attendees included BCP Council, Mott MacDonald, and Exo Environmental and strong representation from Portsmouth University.

This important networking event gave attendees the opportunity to learn about pioneering eco-engineering solutions, and to make promising links.

The next Marineff workshop will be part of the Young Coastal Scientist and Engineers Conference 2020, to be held from April 6th to 7th 2020, hosted at Bournemouth University.

For more information on the project please see: <http://marineff-project.eu/en/>.

Estuary Edges

Enhancement of riverside public open space along the Thames and other UK rivers, for people and wildlife, is highlighted in updated guidance for planners and developers, now available online for the first time.

The Estuary Edges handbook has been co-ordinated by the Thames Estuary Partnership, in collaboration with the Environment Agency. Its transfer to the web was provided by the Port of London Authority.

It gives planners and developers detailed advice on how to boost biodiversity, by replacing foreshore infrastructure made from brick, concrete and metal with more eco-friendly materials, providing vital new habitats for wildlife, such as fish, birds and insects. Currently only two percent of the edges of the tidal Thames are natural.

It also promotes greater public awareness of improved river areas, and the opportunities linked to the placement of artistic and educational installations, including benefits for well being.

The guidance includes information on: full set back/creek erosion management, intertidal vegetated terraces, wall options, encroachment, masterplanning, archaeology and heritage, education, aesthetics and art, wildlife, planting and greenspace, fish, safety and navigation, monitoring and maintenance, litter, sustainability and adaptability and the use of timber.

View the guidance at: <https://www.estuaryedges.co.uk/>.

Coastal Management

Explore Marine Plans

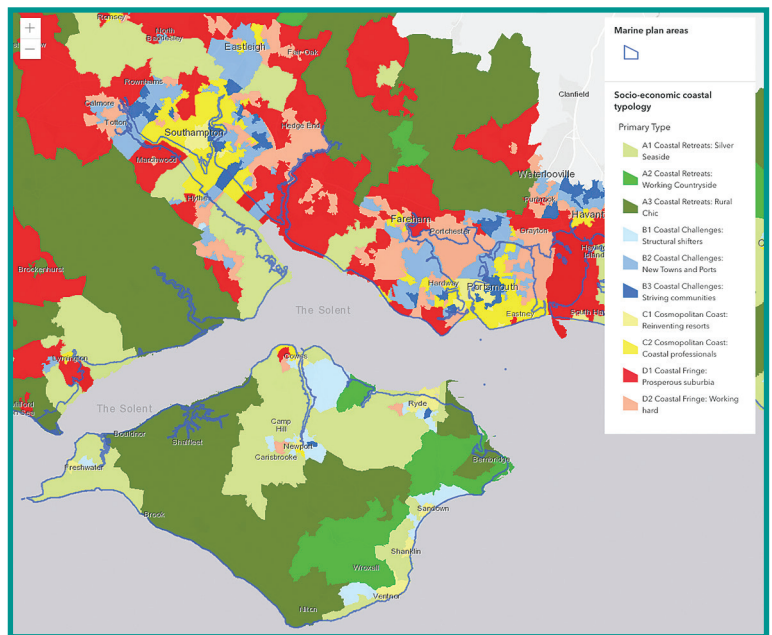
The Marine Management Organisation's (MMO) Explore Marine Plans digital service is now live. After nearly two years of user testing and development, the service replaces the previous Marine Information System (MIS). It delivers improved functionality for the user including spatially integrated Marine Plan policies, relevant data layers and Marine Licensing information.

Use this service to find and view:

- Marine data on a map of the English marine area
- Information on marine planning licences relating to a specific area
- Policy information from the marine plans

To access marine plan policies you draw a polygon of your area of interest and then the policies that apply are displayed.

Access the system at: <https://explore-marine-plans.marineservices.org.uk/>.



Sample map of Socio-economic coastal typology in the Solent from Explore Marine Plans

Social Baseline Data for Marine Planning

The MMO has published three reports under its 'Social baseline data for Marine Planning (MMO1132)' project. Initial work on this project structured and prioritised social evidence needs and gaps to support marine planning in England. It also progressed three priority research topics:

- Health and wellbeing benefits of coastal recreation and barriers to access.
- Seascape value, quality and links with sense of place.
- Exploring the social impacts of emergent marine sectors in deprived coastal communities.

Key findings from the project include:

- Visiting the coast for recreation with children is widely seen to be a desirable activity and one that is associated with positive memories and values.
- Seascapes (in northern Devon) generate a range of feelings associated with sense of place among coastal residents. This includes feelings of restorativeness, connectedness to nature, and place attachment including place identity and place dependence.
- Emergent sectors can have clear impacts on local economies and employment and wider community infrastructure. This has the potential to bring significant changes in local perceptions of an area, and opinion on future prospects.

View at: <https://www.gov.uk/government/publications/social-baseline-data-for-marine-planning-mmo1132>.

Environment Bill Progresses

The forthcoming Environment Bill seeks to provide a framework for maintaining and strengthening environmental standards as the UK leaves the EU.

It will create an independent statutory body to hold the government to account, embed a set of environmental principles across Whitehall and place the 25 Year Environment Plan on a statutory footing.

A new independent Office for Environmental Protection will scrutinise environmental policy and law, investigate complaints and take enforcement action against public authorities. Its remit will include all climate change legislation, allowing the office to hold the government to account on its commitment to reach net zero emissions by 2050.

The Chancellor's Spring Statement for 2019 confirmed that the government will also use the forthcoming Bill to mandate net gain for biodiversity on new developments in England.

Monitor the Bill's progress at: <https://services.parliament.uk/Bills/2019-20/environment.html>.

Find out more about biodiversity net gain for development at: <https://cieem.net/i-am/current-projects/biodiversity-net-gain/>.

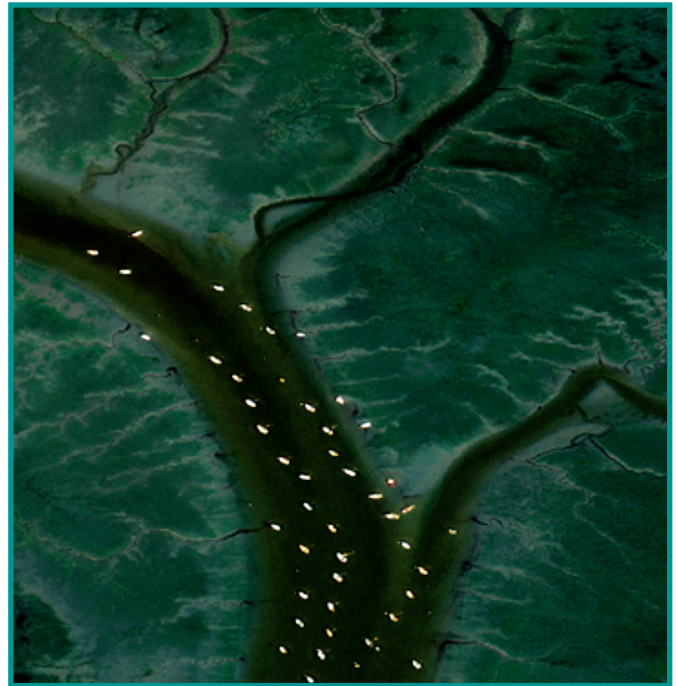
Conservation

Total Ecosystem Management of the InterTidal Habitat (TEMITH)

The University of Portsmouth is collaborating with Deimos Space UK, based in Harwell, on a European Space Agency funded project called Total Ecosystem Management of the InterTidal Habitat (TEMITH).

Intertidal habitats are highly productive habitats of key conservation value, achieving Total Ecosystem Management requires extensive habitat monitoring and assessment of pressures. Drone and satellite technologies have the exciting potential to offer high spatial and temporal resolution data on local (drone) and the broadest (satellite) scales of coverage. If simply accessed, these Earth Observation data can support comprehensive assessments and effective decision-making.

The TEMITH project aims to develop a one-stop prototype web-based platform to determine the feasibility of using satellite and drone imagery to monitor key pressures in the intertidal zone; namely opportunistic macroalgal mats, sediment disturbance (e.g. digging, dredging, boat scars), and wastewater plumes. Machine learning techniques will be employed to carry out feature extraction from Earth Observation data; the quality of the results will be evaluated by potential platform end-users in a workshop planned for the end of February 2020.



*WorldView-2 satellite image of intertidal sediments.
Image © 2018 DigitalGlobe, Inc.*

Natural England and the Southern Inshore Fisheries and Conservation Authority are key partners associated with the project as potential end-users of the platform. With the project's focus specifically on the Solent region, feedback from Solent stakeholders is vital for developing a platform that is useful to a broad range of user groups. For further information on the TEMITH project, or if you are interested in participating in the evaluation workshop, please contact Shannon White at the University of Portsmouth at email: shannon.white@port.ac.uk.

Resilient Landscapes and Seas

One of Natural England's goals, arising from its priorities set out in Government's 25 Year Environment Plan, is to develop resilient landscapes and seas. Two key pieces of work are linking its marine conservation advice to habitat maps and Defining Favourable Conservation Status (DFCS).

The habitat sensitivity maps will help policy makers, regulators, and stakeholders, manage wider seas issues. The maps combine existing Advice on Operations information with habitat maps and detailed sensitivity information. Linking these datasets will help to improve understanding of the sensitivity of the wider seas to pressures exerted by marine activities.

DFCS definitions will set out Natural England aspirations for these species and habitats in England. The subsequent strategies will guide and improve its nature recovery work.

Natural England has also recently refreshed its Historic Environment Strategy, to enable it to fully meet its ambitions to help deliver the 25 Year Environment Plan.

Wilder Solent

The Hampshire & Isle of Wight Wildlife Trust has launched a campaign, Wilder Solent, dedicated to building a brighter future for our marine environment. We often think of the sea as distant from our lives on land, but in reality most of the problems it faces have terrestrial origins.

By making small lifestyle changes at home, at work, on the shore, or on the water, the Trust hopes we can all give our marine wildlife a chance to truly thrive. You can take part as an individual or even get a club, group, or workplace involved, find out more at: www.hiwwt.org.uk/WilderSolent.

Wilder Solent has been launched as part of Secrets of the Solent, a Wildlife Trust project supported by the National Lottery Heritage Fund. Learn more at: www.hiwwt.org.uk/SecretsoftheSolent.



Harbours & Business

Buckler's Hard Yacht Harbour Reconfiguration Works

Works are now underway on the £2 million redevelopment of Buckler's Hard Yacht Harbour to reconfigure and extend the Beaulieu River marina. The marina, located near the 18th century shipbuilding village of Buckler's Hard in the heart of the New Forest, sits within the New Forest National Park and is encompassed by significant environmental and ecological designations.

Buckler's Hard Yacht Harbour was opened in 1971 and has remained largely unchanged since 1980, while the nature of vessels and demands of boat owners has significantly changed in this time. The ageing life of the pontoon equipment, and the need for either replacement or refurbishment, provided an opportunity to consider the most appropriate design solution for present and future demand.

Beaulieu Enterprises Ltd commissioned Marina Projects Ltd to undertake a feasibility study. This reviewed the site's constraints, activity, market demands, natural advantages of the location and business case to identify concept design options that were sympathetic to the character of Buckler's Hard Yacht Harbour and stakeholder feedback. Refinement of this process identified a layout that provides 66 additional berths, along with improved provision of walk-ashore visitor berthing.

Marina Projects also developed a comprehensive consent strategy. This considered the proposals within the context of the significant estuary-wide designations and built upon early advice and engagement with advisors and statutory bodies. This approach facilitated in-depth impact assessments that considered the footprint and influence of the project within each habitat component of the designated site; it demonstrated a net increase in designated habitat could be created. The strategy also identified areas of the river within Beaulieu Estate's stewardship that offered potential for environmental enhancement.

The reconfiguration project will run over the next two winters with completion in early 2021.



England's Coast Ambassadors

England's Coast is a new tourism initiative being delivered by the National Coastal Tourism Academy with partners. The South Coast is one of eight key regions featured.

It has developed a free customer service module, that has been designed for people working in coastal tourism businesses, focusing on welcoming international visitors.

The lessons explore the importance of customer care and its impact on the local and national economy. It highlights a few basics of customer service which can be implemented in business or places of work straight away. It presents facts and figures about international visitors, describes the key source markets for England's coast and discusses some ideas about what people need to do to attract and satisfy international guests.

Find out more at: <https://www.englishcoastambassador.co.uk/>.

Awards for DP World Southampton

DP World's UK terminals took home two prestigious awards at the Lloyds Loading List Global Freight Awards (2019).

The Port Operator of the Year award was awarded to the company's UK business units, London Gateway and Southampton, which have enjoyed another year of high productivity and growth.

DP World Southampton also won the Product Innovation award for its hand tablet. The product uses the latest mobile device and advanced technology to provide DP World's leading hand operators, who are based on vessels, with access to live operational data.

Operators can interact with the loading and discharging of a vessel in real time to make onsite decisions, improving productivity for customers and lowering costs.

Development Proposals

Mayflower Quarter

Southampton City Council has revealed development proposals for the city's Mayflower Quarter. The 84 hectare site is one of the largest city centre regeneration opportunities in the UK, extending from Southampton train station to the waterfront.

Master planners will be appointed in January 2020 to help realise the vision. The preparation of the masterplan is expected to take up to twelve months, completing in December 2020. This will coincide with the culmination of the Mayflower 400 celebrations.

The masterplan will lay out a long-term vision, linking in with the city's Local Plan, which sets out the future development of new homes, work spaces and facilities across the whole of the city over the next 20 years. Investment in sustainable transport will be key; the Southampton City region is one of 12 areas shortlisted for a share of the national £1.2 billion Transforming Cities Fund from the Department for Transport.

A final bid was submitted to this Fund in November 2019, it includes projects that have the potential to transform the public realm in the city centre, connecting people with the places they live, work and go for leisure. See: <https://transport.southampton.gov.uk/media/1254/southampton-tcf-sobc-final-for-website.pdf>.



Image courtesy of Southampton City Council

Fawley Waterside

Fawley Waterside Ltd, have submitted outline planning applications to New Forest District Council and the New Forest National Park Authority for a major development centred on the old Fawley Power Station site adjacent to Southampton Water.

The key elements of the proposal are:

- The demolition of the power station buildings
- A mixed use development including 1,500 homes
- 103,000 square metres of new commercial, civic and employment space
- The creation of a canal and dock and a boat stack
- A two form entry primary school
- Public open space
- Habitat mitigation land
- The creation of a new access road off the B3053

It is proposed to commence infrastructure development after the removal of the power station buildings in 2021, with the first homes being available by 2023.

See: <http://www.fawleywaterside.co.uk/>.

Tipner West

Plans to build the UK's first 'car-free community' have been unveiled, as Portsmouth City Council proposes to build a 4,000 home neighbourhood accessible for just pedestrians or bikes.

The development, that will include land reclamation, will provide one million square feet of marine employment land and c. 4,000 homes. It will also see over 200,000 square metres of green space and around 2,250 metres of accessible waterfront. The proposed reclamation elements will be linked to the rest of the city by a new bridge adjacent to the existing M275.

The 140 acre site, on the eastern side of Portsmouth Harbour, currently hosts a MOD firing range, two boating clubs and a school.

The Council has included proposals to compensate for any land to be reclaimed from intertidal mudflats. Details of the compensation and justification under the Habitat Regulations are being developed in consultation with the key conservation bodies.

The proposals have been sent for planning permission and will go to public consultation in the New Year. If planning permission is awarded, work could begin in 2023.

See: <https://tipnerwest.portsmouth.gov.uk/>.

Heritage

Mayflower 400

The year 2020 marks the 400th anniversary of the historic voyage of the Mayflower ship from the UK to the 'New World' of America.

The International Mayflower Compact partnership, has been created to bring together eleven core UK member destinations, alongside the United States of America, the Native American community and the Netherlands. One of the UK destinations is Southampton.

In the build up to and during 2020, various locations have created an international Mayflower Trail. An accompanying cultural programme will unite communities, inspire creativity, drive economic growth and promote understanding. Over 400 'moments' will take place, ranging from international civic ceremonies to local community events.

The Southampton Maritime Festival will help to celebrate the city's role in the story; it will take over Southampton's historic docks with a whole host of activities and attractions that hark back to port's past, celebrate its maritime roots and explore the future of our seas. It will run from 14th to 16th August 2020.

See: <https://www.mayflower400uk.org/events/2020/august-2020/southampton-maritime-festival/>. For details of national events and resources, see: <https://www.mayflower400uk.org/>.



HMS Invincible

One of Britain's most important shipwrecks has been removed from a list of endangered sites, after a multimillion-pound restoration project funded mostly by fines from the Libor scandal.

HMS Invincible, a 74-gun warship once captured by the French, ran aground in the Solent in 1758. It was lost when its rudder jammed and it stranded on a sandbank between Langstone Harbour and the Isle of Wight, capsizing three days later. No lives were lost.

Hundreds of artefacts have been rescued from the 18th century warship. Among the finds are a gunpowder barrel, swivel guns, woodworking tools and a sandglass used in calculating the ship's speed. The excavation was a race against time to rescue the artefacts for as the sandbank recedes, it exposes the wreck to the elements and attacks from shipworm and gribble.

After conservation at Poole's Maritime Archaeology Sea Trust (MAST), the artefacts will go to the National Museum of the Royal Navy in Portsmouth.

Archaeologists hope the finds will help them build a clearer picture of what life was like for sailors more than 200 years ago.

The project is being led by MAST, National Museum of the Royal Navy and Bournemouth University, and is officially endorsed by the Duke of Edinburgh.

Shipwreck Dive Trails

The 53 protected wreck sites off England are historic shipwreck sites of the highest significance. Very few of these wrecks lie above water. Marine archaeology usually lies deep beneath the waves and out of sight of the majority of the population. To enable the public to access submerged cultural heritage, Historic England has supported the creation of:

- Virtual dive trails - for everyone to explore wrecks online
- Physical dive trails - for divers to access protected wrecks

Virtual dive trails use new technologies such as multi-image photogrammetric recording and virtual reality techniques. The new techniques allow viewers to see a clear 3D image of a site. Not only do they bring maritime archaeology to life for the non-diver, they're a lot easier to interpret than more traditional geophysical survey techniques or photographs taken in poor visibility. They can even aid archaeologists' work on land by allowing measurements to be taken and analysis to be carried out post-dive.

Dive trails are run by licensees and charter boat skippers, they enable interested divers to get responsible access to protected wreck sites. Historic England has supported the development of these dive trails and the interpretation materials they include. Divers visiting the trails get the benefit of the insight and orientation provided by the trails and also the experience of the licensed teams and their archaeologists.

View the trails at: <https://historicengland.org.uk/get-involved/visit/protected-wrecks/#Section1Text>.

More News

D-Day at Lepe Reconstructed

On D Day, 6 June 1944, thousands of troops with their vehicles and supplies left locations such as Lepe Beach in the New Forest for the beaches of Normandy. Today at Lepe, you can still access some of the last remaining and best-preserved monuments relating to this key event in British military history. Half a mile east of the car parks are concrete and brick structures used for two different D-Day elements; construction of the six Mulberry Harbours Caissons, and embarkation hard Q2 where 7,986 men and 2,329 vehicles departed.

Following severe storms in early 1990, the Royal Commission on the Historical Monuments of England (RCHME) undertook a detailed survey of the site. It was hoped that engineering work could be carried out to stabilise the monument and protect it from further damage. However, this was not to be the case and the three most easterly Caisson construction platforms were deliberately broken up and left to act as coastal defence for the surviving platforms.

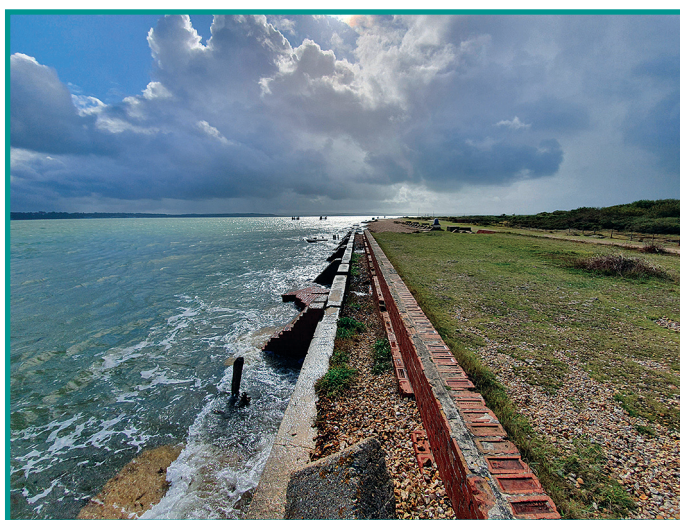


Image courtesy of New Forest National Park Authority

Recently, with funding from the National Lottery Heritage Fund through the 'Our Past, Our Future Landscape Partnership Scheme', archaeologists from the New Forest National Park Authority worked with the Friends of Lepe volunteers to clear vegetation from the structures, before the Channel Coastal Observatory and New Forest District Council undertook detailed laser scanning of the foreshore. Wessex Archaeology were then commissioned to use the laser scan data alongside drone survey data captured by CITIZAN to re-construct Stanswood Bay (Lepe) as it would have been seen in May 1944. The data and models will be used to monitor the site, promote it and also become important educational tools. Please see more at New Forest Knowledge: <https://nfknowledge.org/contributions/d-day-at-lepe-beach>.

RYA Wins Sustainability Award

The Royal Yachting Association has been crowned winner of the World Sailing 11th Hour Racing Sustainability Award, at the World Sailing Awards in Bermuda.

The award celebrates the effective execution and ongoing delivery of high-impact, highly-replicable sustainability initiatives, aligned to the World Sailing Sustainability Agenda 2030.

The RYA has, through The Green Blue, its joint environmental initiative with British Marine, been delivering cutting-edge sustainability advice to the recreational boating sector since 2005.

Phil Horton, the RYA's Environment and Sustainability Manager, explained how the prize money will be spent: "This additional funding will be used to support The Green Blue's development of a national volunteer team, who will be fully trained to deliver the environmental programme's outreach work through educational activities, talks, instructor training and events. This will ensure that the RYA and The Green Blue remain at the forefront of sustainability for recreational boating in the UK."

To find out more about The Green Blue, please visit: www.thegreenblue.org.uk.

Wholescape Approach to Marine Management

The Rivers Trust and the Coastal Partnerships Network have recently begun a 16-month project, funded by the European Maritime and Fisheries Fund (EMFF), to support a more integrated and collaborative approach to the management of estuarine and coastal waters nationwide.

The Wholescape Approach to Marine Management 'WAMM' project will explore how Coastal and Catchment Based Approach (CaBA) partnerships can work more closely to address water issues from land to sea. Training workshops and webinars will be held to build knowledge and expertise across a range of issues.

Morecambe Bay has been selected as the primary pilot study location. The Morecambe Bay Coastal Partnership and the three River Catchment Partnerships have begun a programme of collaborative working with a focus upon plastics and their presence within the coastal and estuarine environment.

The project will be hosting a series of workshops in Spring 2020 and the Solent Forum will be attending to put forward the views from our Coastal Partnership. Please contact the Forum office at: info@solentforum.org if there is anything you would like us to raise.

News & Snippets

ReMEDIES Project

Recreation ReMEDIES (Restoring and Mitigating Erosion and Disturbance Impacts affecting the Seabed) seeks to improve the condition of subtidal and intertidal habitats such as seagrass and maerl in five Special Areas of Conservation (SAC) in southern England:

- Isles of Scilly
- Fal & Helford
- Plymouth Sound & Estuaries
- Solent Maritime
- Essex Estuaries

It will achieve this by working with a number of partners, including the Marine Conservation Society, Ocean Conservation Trust (National Marine Aquarium's charitable arm), Plymouth City Council and the Royal Yachting Association. It seeks to deliver improved management of recreational impacts and better stakeholder awareness. It will demonstrate habitat restoration/management techniques including seagrass restoration and infrastructure improvements in key sites.

The project is EU LIFE funded and led by Natural England.

England's Coast Path Usage

New figures reveal the huge popularity of England's coastal paths with 29.1 million walking trips made over a six-month period, boosting local economies and bringing health and wellbeing benefits to visitors.

The data was collected by Natural England. It shows the significant value of coastal walking for health and wellbeing, with ninety seven percent of people feeling refreshed and revitalised as a result of their visit.

Analysis shows that half of the visitors to coastal paths are local day visitors, living within 10 miles of the path. The smallest user group were non-local day visitors (thirteen percent), with the remaining thirty eight percent being overnight visitors.

The data also revealed that visits boosted the economy by £350 million, with day-trippers spending on average £8.65 per day in coastal shops and overnight visitors spending on average £36.73. This supported more than 5,900 full-time equivalent jobs along the English coast.

The full report, 'The economic and health impacts of walking on English coastal paths: A baseline for future evaluation' can be viewed at: <http://publications.naturalengland.org.uk/publication/6476962745024512?category=50007>.

Snippets

- The Calshot Spit was a well-known landmark in the city of Southampton for many years when it guarded the gates to Ocean Village. The Lightship will now be restored and opened for the public to enjoy at the Solent Sky Museum.
- Nanotechnology will play a crucial role in the future management of vessel corrosion and biofouling, according to a major maritime study. These coatings are capable of providing superior protection because they involve substances which form and interact on previously unreachable scales, in which the corrosion and biofouling processes begin.
- The Environment Agency's Water Quality Archive provides data on water quality measurements. Samples are taken at sampling points around England and can be from coastal or estuarine waters, rivers, lakes, ponds, canals or groundwaters. They are taken for a number of purposes including compliance assessment against discharge permits, investigation of pollution incidents or environmental monitoring. The archive provides data on measurements and samples dating from 2000. See: <https://environment.data.gov.uk/water-quality/view/landing>.
- Four sailors from the Southampton and New Forest areas were presented with one of the Royal Yachting Association's most prestigious awards by HRH the Princess Royal, President of the RYA, in recognition of their commitment to their sailing clubs.
- British Marine is to move its head office to Ocean Village, Southampton. It is anticipated the new office in Tagus House will be operational by Spring 2020.
- A new initiative has been launched this year by Bird Aware Solent. It is a citizen science project called 'The Great Solent Bird Watch'. The project seeks to raise awareness of the overwintering birds that visit the Solent and help people to become more connected to their local environment.
- An £8.13m project to transform eight junctions on the A326, the road connecting the coastal communities along the New Forest Waterside of Southampton Water, will now commence in 2020, eight years ahead of schedule, following approval by the Solent Local Enterprise Partnership of a £5.691m grant.
- The Southampton-based Maritime Trust are evaluating sea level rise by looking at submerged cultural heritage. See: https://www.youtube.com/watch?v=k2F_kVW0lrk&feature=youtu.be.
- The 2 Minute Beach Clean has just become a charity, The 2 Minute Foundation. Its mission is to empower, educate, inspire and enable everyone to take part in simple actions to contribute to the planet's wellbeing, as well as their own. See: <https://beachclean.net/>.

Solent News

HMS Prince of Wales Arrives in Portsmouth

In November, HMS Prince of Wales sailed into her home port of Portsmouth for the first time. The carrier sailed from Rosyth, where she was assembled, with a mixed ship's company of Royal Navy sailors (600-plus) and around 300 civilian contractors on board to take her through trials in the North Sea.

She is one of the most powerful surface warships ever constructed in the UK. Her flight deck is 70 metres wide and 280 metres long and she holds 45 days' worth of food in stores. She will have a crew complement (minimum crew) of around 700, increasing to around 1,600 with aircraft onboard. She can embark 36 F-35B and four Merlin Helicopters.

HMS Prince of Wales' arrival means Portsmouth Naval Base is now home to two aircraft carriers. The yard has been modernised to accommodate the two ships, with £30 million spent on strengthening and upgrading the base's Victory Jetty.

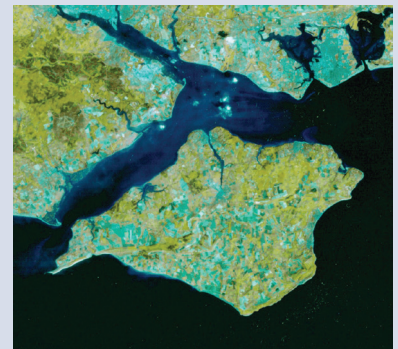
The Solent Forum

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 11 March 2020.

Solent News is prepared and edited by the Solent Forum Officers. It is a biannual publication and issue 48 will be produced in summer 2020. To find out more about the publication, how to submit articles or be included on the mailing list, please visit www.solentforum.org/publications/solent_news/.

Contact Information

Solent Forum
c/o Hampshire County Council
Economy, Transport and Environment Department
EII Court West 1st Floor, The Castle
Winchester
SO23 8UD
Tel: 01962 846027
Email: info@solentforum.org. Twitter [@solent_forum](https://twitter.com/solent_forum)



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