



Welcome to the third edition of the Yaverland Coastal Defence Scheme Newsletter.

OCTOBER 2023 – ISSUE #3

We aim to share all the latest news and information about the work currently proposed for the **sea wall and groyne refurbishment** along **Yaverland seafront** in this newsletter. You can find more information at our website:



<https://consult.environment-agency.gov.uk/solent-and-south-downs/yaverland-coastal-defence-sche/>

WHY WE NEED THE SCHEME...



The **sea wall and groynes are ageing and reaching the end of their useful life**. If nothing is done the timber and concrete groynes will continue to degrade resulting in a loss of the beach material. This would make the sea wall **vulnerable to erosion** leading to **possible failure of the sea wall by 2042**. The Isle of Wight Council and the Environment Agency are working together to find ways to **reduce coastal erosion and flooding** from the sea in Yaverland. The project

will better protect over 500 properties as well as key infrastructure, local businesses, heritage assets and designated sites that are currently protected by the ageing defences.

WHATS BEEN HAPPENING?

Since our last newsletter in December 2022 there has been lots of work carried out to help us gain a better understanding of the condition of the coastal defences.

In January this year we completed a series of **below ground explorations** ranging from the digging of excavation pits to the use of drilling rigs to install **several boreholes (wells to monitor groundwater levels)**.



The findings from the below ground explorations have been used to inform the Short List of options for refurbishing the defences. The findings from the below ground explorations have been used to inform the Short List of options for refurbishing the defences.

The exploration work required careful monitoring by **palaeontologists from Dinosaur Isle Museum** because the area of foreshore in front of Yaverland car park is part of the Yaverland **Regionally Important Geological/ Geomorphological Site**

(RIGS) due to its geology. It is also identified as a site containing dinosaur footprints. As a result of the monitoring, **additional dinosaur footprints were discovered on the beach** in a trench in front of the centre of Yaverland car park. A sample of material taken from in front of canoe lake was also recovered that appears to confirm the presence of an ancient river channel.



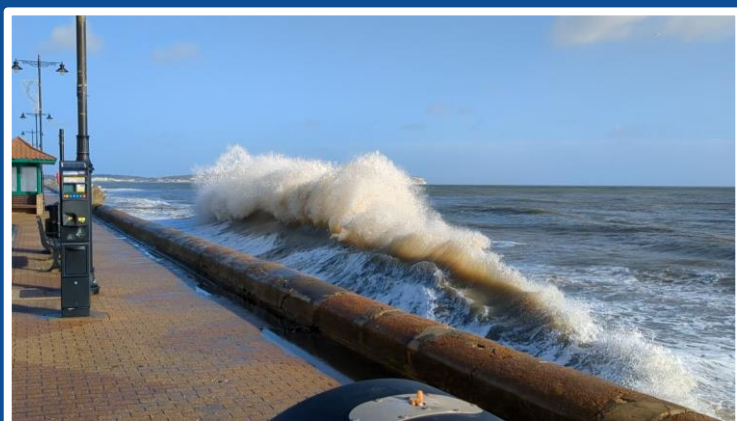
We completed a **coastal processes assessment** to get an understanding of the sediment movement across the beach. We looked back at past storm events and found that some have **caused the level of the beach to drop by up to one metre**. We found that the existing groynes play a vital role in trapping sand and keeping it in place. Seasonal changes in beach level have been well documented by Swim the Wight which has provided useful evidence to support our investigations.

We also looked at how coastal processes may change with sea level rise. We estimate that beach levels will **reduce by up to three metres by 2125** based on the latest sea level rise predictions and **historic evidence**. Our wave modelling showed that a lowering beach results in bigger waves and increased wave action against the sea wall.

We have used our updated wave modelling, coastal process findings alongside new survey data to improve our understanding of the risk of flooding from the sea. The existing height of the sea wall provides a **good standard of protection** however during storm events our model shows that **waves may splash over the sea wall** and onto Culver Parade **impacting seafront infrastructure and buildings**. This risk is greater at two sections of the sea wall where the height of the sea wall is lower. The number of properties impacted by waves overtopping the sea wall is expected to **increase in the future** as sea levels rise and storm events become **more extreme**. The flood depths experienced on Culver Parade in these extreme events may mean the road is **impassable** and **unsafe for vehicles to use**.

Flood risk from the sea could be reduced at Yaverland by **increasing the height of the sea wall** where needed and by increasing the amount of beach material in front of the sea wall. This has been **considered in the Short List of options which we will be asking for your views on at our public exhibitions**.

Natural England have provided advice on the short-listed options to make sure the options do not have an adverse impact on the Marine Conservation Zone and other important coastal designations.



FIND OUT MORE AT OUR EXHIBITIONS!

We are excited to bring you an exhibition to showcase how we plan to restore the Shanklin and Yaverland coastal defences over the next few years. As well as having informative display boards, **the project team will be on hand to tell you about the five leading options.** We will have coastal experts in the room who can answer your questions.

We would like to hear your views on the options we have been investigating as well as general feedback to help make sure we have considered all possible options before developing a design.

Join us for a free cup of tea or coffee and light snacks. Bring your children along as we are running a free **LEGO® building competition with fantastic prizes up for grabs.**

You can find us at the following locations:

DATE	TIME	LOCATION
Wednesday 25 October	2pm - 7pm	Café at Wildheart Animal Sanctuary, Yaverland Road, Sandown, PO36 8QB
Thursday 26 October	2pm - 7pm	Café at Wildheart Animal Sanctuary, Yaverland Road, Sandown, PO36 8QB
Friday 27 October	10am - 3pm	Broadway Centre, The Broadway, Sandown, IPO36 9GG
Wednesday 8 November	2pm - 7pm	The Clifton, 1 Queens Road, Shanklin, PO37 6AN
Thursday 9 November	10am - 3pm	The Clifton, 1 Queens Road, Shanklin, PO37 6AN
Friday 10 November	10am - 3pm	The Clifton, 1 Queens Road, Shanklin, PO37 6AN

All of our venues are accessible but if you have any questions please do get in touch with us and we will be happy to support your visit. Friday events have been designed for those who would benefit from a quieter space.



IOW_FDschemes@environment-agency.gov.uk



FOCUS ON CONSERVATION AND SCIENCE FESTIVAL

Members of the Project team and the Environment Agency's Flood Resilience Team attended the **Wildheart Animal Sanctuary's Focus on Conservation and Science Festival** on 1 July. We had a great time engaging children and young people in **STEM** (science, technology, engineering and mathematics).

Despite fierce competition for attention against the Sanctuary's occupants, our Flood Tank drew many young minds who, now better understand the dangers of flooding and what should be in their emergency flood bags. A **big thank-you to Wildheart Animal Sanctuary for inviting us.**



PRIDE 2023

Environment Agency colleagues attended **Pride in Ryde** on a sunny August weekend. Our zero emissions vehicle made its way down Ryde High Street in the parade, which was in good company alongside an NHS ambulance, a Sainsburys delivery van and a Tuk Tuk! Members of the Isle of Wight Coastal Defence Scheme also ran a stall in the community village. Visitors enjoyed a tour of the **Incident Command Unit** which is used by the Environment Agency in flood events to **better support their response to flooding events on the ground**. The vehicle is equipped with recording devices so those working remotely in our incident room can better understand what resource and equipment might be needed.

