

Frequently Asked Questions (FAQs) in relation to the Rogerstown Outer Estuary (Portrane – Rush) Coastal Defence Project

1. What is the Council doing about the erosion at the back of the Chip Shop and the corner of Quay Road?

A rock revetment has been installed along the Quay road to prevent any undermining of the road. Extra Seabees were placed at the back of the Pipers and the adjoining cottage to slow down erosion in and to limit the possibility of overtopping in the short term.

2. The design for the Groynes shown on the maps shows a big gap between Quay Road and the first groyne. Would this not leave the area exposed to more storm damage?

The groynes shown in the artists impression in the consultation material was based on a high-level design. The exact location and extent of these structures will be subject to detailed design that will ensure that effective protection is afforded in the relevant areas, including at Quay road.

3. What impact will the groynes and beach supplementation have on erosion at Rush South Beach?

Based on the analyses to date, the preferred scheme at the Burrow will have little impact on the beach at Rush South. This is because the sand which is transported from the Burrow is not transferred to Rush beach due to strong tidal currents that leave Rogerstown estuary. These tidal flows effectively separate the two beaches under most tidal conditions.

In addition to this, there will be a net increase to the sediment system in this area from the proposed beach nourishment scheme.

The potential for impacts to adjacent areas will be fully explored and quantified in the Environmental Impact Assessment.

4. Where does the eroded sand go?

Modelling studies of the beach along the Burrow has found that eroded sand is generally transported offshore and lost to the wider sediment cell. Little of this sand is actually transported to Rush south under most tidal conditions.

5. Will putting coastal defences in place at Portrane lead to more housing development behind it, thereby putting more properties at risk of coastal flooding because of sea-level rise?

Planning applications for housing in Fingal are assessed based on zoning and policies as set out in the Fingal Development Plan, relevant national and regional guidance in addition to

Section 28 Guidelines issued by the Minister for Housing, Planning and Local Government. Such policy may be broad in nature, such as that relating to housing design, or area specific, such as that which relates to development in sensitive landscapes. Each planning application is considered on its merits, having regard to aforementioned policy and site context

6. Why do we have to wait so long for the permanent coastal defence measures to be implemented?

Firstly, before a scheme that is located within an environmental designated area such as the Rogerstown estuary is submitted for planning approval, it is a legal requirement to undertake an Appropriate Assessment and Environmental Impact Assessment. The purpose of this work is to determine if the proposed scheme will have negatively impact on the natural environment and if other more sustainable options are available. This work would take until c. late -2021 to complete due to the need to collect and analyse up-to-date seasonal survey information on bird populations etc.

If these studies conclude that the preferred scheme will impact the designated areas, the scheme must demonstrate *Imperative Reasons of Overriding Public Interest (IROPI)* before planning permission can be granted. To provide some context, only one scheme in Ireland has ever been granted planning permission under The Habitats Directive IROPI planning process. This was for a Wastewater Treatment Works in County Sligo. Importantly, it was RPS who supported Sligo County Council with the delivery of this landmark ruling.

7. Why are the Seabees not working?

An assessment of recent survey data found that erosion rates behind the seabee units was approximately 50% less than erosion rates in areas not protected by erosion.

Despite this it should be noted that the purpose of the seabees is reduce wave energy and coastal erosion, but not to completely stop erosion. Completely stopping erosion using traditional hard defences would be in contravention of the EU habitats Directive and would therefore require planning permission.

8. Why is Fingal County Council not taking this problem serious?

Fingal County Council are taking this problem very seriously and understand the frustration and concern of local residents who are at the forefront of this unprecedented issue.

As described in the available consultation material, in conjunction with RPS, the Council have developed robust coastal management schemes for the Rogerstown estuary area. These schemes will be progressed through the relevant planning process, which involves an Appropriate Assessment and an Environmental Impact Assessment as swiftly as possible.

9. How much are the proposed coastal defence structures going to cost and have we got a guarantee that funding for these schemes will be provided by central government?

As described in the available consultation material, the preferred scheme for the Burrow is expected to cost approximately 16 million euros (with additional on-going maintenance costs). It is the Council's aim to reduce these costs by re-using the existing seabed units during the construction of the groyne structures.

The preferred scheme for Rush south is expected to cost approximately 4 million euros (with additional on-going maintenance costs).

Fingal County Council will explore all avenues of funding, including those provided by central government. However, as the proposed scheme is yet to progress through the planning process, it is not possible to guarantee that this scheme will be granted funding at this stage.

10. Does the Council have a responsibility to protect houses from erosion under the Local government Act?

The Council has no responsibility under any legislation to protect private property from coastal erosion.

11. Will Fingal County Council pay compensation to homeowners whose houses have fallen into the sea due to lack of action by the Council?

No, currently no requirement exists under Irish legislation

12. What happens if planning permission is not granted? Is there a plan B?

If planning permission for the preferred coastal defence option is not granted, the Council will re-evaluate previously considered options.

13. Can the Council extend the revetment at the back of Pipers and the Brook Pub along the beach as a short-term solution?

Completely stopping erosion using traditional hard defences such as a revetment would be in contravention of the EU habitats Directive and would therefore require planning permission and can therefore not be used as a short-term solution

14. What is the Council doing about the damage caused by storms to the harbour walls in Rush?

Addressing damage caused by storms to the harbour walls is outside the scope of this study and the related proposals.

15. Has the Balleally landfill and the associated infilling of the inner estuary contributed to the flooding and erosion of the Burrow?

The Consultants study of the Rogerstown estuary has found that Balleally landfill has not contributed to erosion. Erosion along the outer beaches is governed primarily by large energetic waves. Any work within the inner estuary, i.e. at Balleally, would not change these waves or indeed the risk of flooding or erosion.

16. Are there any plans in place to protect the Rush Golf Club from coastal erosion?

At the moment there are no plans to protect Rush Golf Club. This is because a scheme to protect a private golf club at the expense of impacting a nearby environmentally designated areas would very likely be rejected under the habitat's directive. That is to say it would not be possible to demonstrate Imperative Reasons of Overriding Public Interest (*IROPI*).

17. Can the Special Area of Conservation designation be removed to allow for coastal defence measures being taken?

An environmentally designated site can only be delisted (i.e. removed) if it has lost its conservation value due to natural developments and cannot be restored by management measures. However, it is important to bear in mind that the mere degradation of the site, due for example to inadequate management, would be a breach to Article 6.2. Such sites cannot be declassified simply because they have been allowed to deteriorate and have not been managed correctly in accordance with the requirements of the two Nature Directives. Sites that have been destroyed and duly compensated for in application of Article 6.4 of the Habitats Directive can be removed from the list.

Also, sites for which it appears that the initial designation or delimitation was based on erroneous scientific information can be modified or delisted. Any proposal for such modification by a Member State will only be authorised by the Commission if it is scientifically duly underpinned.

18. Why does the Habitats Directive prevent more effective short-term erosion control measures being taken?

It is well established that traditional hard defences such as rock armour or seawalls, i.e. "effective short-term erosion control measures", have a detrimental impact on coastal processes and thus the natural environment. These impacts can include but are not limited to increase erosion along adjacent shorelines, a reduction in beach levels and thus a reduction in useable beach area at high tides.

Any hard defence would therefore be in contravention of the Habitats and Wild Birds Directives, the purpose of which is to restore and maintain Europe's biodiversity by protecting its most important habitats and species.

19. The erosion predictions for Portrane and Rush seem to be underestimated based on the rate of erosion witnessed over the last couple of years. Can you explain why that this?

It is well recognised that the rates of erosion with the Rogerstown Estuary have increased significantly since approximately 2013. Unfortunately, such changes are not unique to Ireland, with many sites in the UK, Europe and America reporting increased rates of coastal erosion. This is in part attributed to climate change that is increasing the frequency and magnitude of damaging storm events. Indeed, there are little reports of extreme storms such as the recent Storm Francis and Ellen impacting Ireland as early as August. *This is just one indication that climate change is beginning to have a very real impact on coastal communities.*

But in line with best practice and guidance from relevant statutory authorities, RPS have estimated erosion rates using **all** available shoreline data in the Historical Trend Analyses. Despite this, a Sensitivity Analyses of the method used for this study found that average erosion rates could be up to x3 greater if historical data prior to 2013 was excluded. More information of this Sensitivity Analyses is presented in Appendix B of the main technical report.

The important point is that RPS' studies have recognised and a significant erosion and flooding risk in the Rogerstown estuary area and has proposed suitable management plans to mitigate these risks. In any instance, a preferred coastal defence scheme would have to be progressed through the same planning process.

20. What plans are there for preventing flooding of the Channel Road area in Rush?

As described in the available consultation material, the plan is to reduce the flood risk in this area by constructing seawalls, installing flood gates and constructing culvert structures to reduce flood risk from rivers.

21. Why are no measures taken to tackle the erosion at the back of the houses east of the sailing club in Rush?

RPS have assessed the erosion risk in this area using all available information. From a historical perspective, this data has demonstrated that there has been very little change in this area. However, it is recognised that this may no longer be the case. That is why RPS have recommended that the coastal management plan for this area is reviewed and amended if necessary, based on the findings of the OPW's ongoing shoreline monitoring programme.

But, without data to demonstrate an ongoing, continuous erosion issue in this area, it is not possible to justify any other coastal management plan other than no active intervention. The Council is considering the most appropriate response to the dumped waste materials having regard to all relevant legislation and the coastal defence proposals.

What is the anticipated line of erosion by 2023, when the coastal defence scheme might start at the earliest?

Based on recent survey data, i.e. from around 2013, the current rate of erosion along undefended areas of the shore is estimated at approximately 2 metres per year. Erosion rates behind seabee units are approximately 50% less at c. 1 metre per year.

It is important to note that coastal retreat during this time will be determined by the magnitude and frequency of future storms events, which cannot be predicted with confidence.

22. What is the timeline for obtaining planning permission for coastal defence scheme and getting the scheme constructed?

It is anticipated that an Appropriate Assessment and Environmental Impact Assessment could be completed by late 2021 (subject to the procurement of season dependant survey data etc). Following this, an Imperative Reasons for Overriding Public Interest (IROPI) case would be prepared and progressed through the Habitats Directive IROPI planning process during 2022. There are many factors that could affect the progress of this process, but it in a best-case scenario it could be 2023 before planning was granted and the scheme could be progressed to the construction phase.

Appointing a contractor and the construction of the proposed schemes would take approximately 12 months once planning permission and funding has been obtained.

23. Are coastal erosion prevention measures proposed for the carpark at Rush South Beach were locals have witnessed a lot of erosion over the last two years?

No additional coastal erosion measures have been proposed for the carpark at Rush South. However, this asset is currently protected by rock armour and our consultants would recommend that the Council continue to maintain this defence in the future.

24. Why do the recommendations in the current coastal management report deviate from the 2013 coastal erosion management report, in particular the installation of a long stop on the Burrow beach?

Over recent years it has become increasingly evident that coastal change is affecting much of the coastline along the Burrow and is likely to continue to do for many years unless mitigative action is taken. The Longstop proposed in the previous study was identified as a possible solution to what was then considered a much more localised issue.

Furthermore, Option 3 which has been identified as the preferred solution for the Burrow is considered to be a much more sustainable scheme. This is because the beach re-

nourishment scheme in combination with the groyne structures work with the natural environment to reduce coastal erosion and flooding.

25. Was the OPW erosion reports on South Beach since 2015 been taken into account?

All available data, including aerial imagery and mapping from 1973 to 2019 was included in the Rogerstown Coastal Flooding and Erosion Risk Management (CFERM) study.

26. Based on the topology of South Beach, and the estimated 64m erosion, the main dune line will disappear, and Crescent Road will be subject to flooding. Can you comment please

Even with the projected erosion at Rush south, there is still sufficient high ground to prevent tide and surge activity inundating this area and flooding crescent road. This high ground is approximately +0.7m higher than a 1 in 200-year water level with +1.0m of sea level rise.

27. Have any studies been carried out as to predicted erosion in the Burrow after the fishtail groynes are installed? Are certain properties still at risk? If they happen to survive until the IROPI is carried out and planning permission granted, and funding raised?

Studies have confirmed that the increased beach levels as a result of the beach re-nourishment campaign and the construction of fishtail groynes would successfully mitigate the erosion risk to properties currently at risk of erosion along the Burrow. Periodic beach nourishment would be required to ensure the on-going effectiveness of the scheme.

The number of properties at risk between now and the construction of the scheme will depend on the duration and outcome of the planning process which is beyond the control of the Council and RPS.

28. Has the Council had any consultation with Ireland Insurance agencies and will these flood defences negate current inability to obtain house insurance for flood plain areas?

No, there has been no consultation with Irish insurance companies on the basis outlined.

29. Could you elaborate on the flood defences on the estuary side of the burrow

The proposed coastal flood defences on the estuary side of the Burrow includes the construction of c.100m of seawall at Marsh Land. Strategically placed embankments totalling c. 1,430m are also proposed along the western extent of the Burrow to prevent flooding from the estuary. The location of the proposed flood defences, including example pictures of what these structures could look can be found in the available consultation material.

30. Do the Seabees require ongoing maintenance and relocation because they seem to sink?

As the purpose of the Seabee units is to reduce, not prevent erosion, the coastline is expected to gradually retreat further from the seabee units. Given that RPS has identified an

optimum position for the seabee units in relation to the coastline, it is expected that the units will need to be re-located to ensure the ongoing effectiveness of the units.

The performance of the Seabees will be monitored on an ongoing basis by Fingal County Council and as part of the OPW's shoreline monitoring programme and re-positioned if necessary.

It should be noted that the original design for the seabee units included a foundation system. But it was not possible to install this foundation system due to the environmental constraints of the site.

31. If the Seabees units are working at replenishing behind them, why are they not being reset after every winter. The following winter storms are just going over the now lower Seabees

The performance of the Seabees will be monitored on an ongoing basis by Fingal County Council and as part of the OPW's shoreline monitoring programme and re-positioned if necessary.

32. Has there been correlation between the erosion in Portrane and the building and dredging of the Malahide Marina?

Malahide marina and Portrane are in two separate sediment cells. As such, the construction of Malahide marina or the dredging of the harbour area has had no impact on the accelerating erosion at Portrane.

33. Who makes the economic over technical decision and when does this happen?

The purpose of the optioneering process is to identify the most sustainable option. Sustainability refers to how a scheme balances the economics of a scheme with technical effectiveness and the potential impact on the natural environment.

As such, the economics of a scheme is only one of three parameters used to identify a preferred scheme. But in respect of this scheme which is located close to an environmentally designated area, the decision whether a scheme is granted planning permission will most likely be elevated to An Bord Pleanála.

An Bord Pleanála is an independent, statutory, quasi-judicial body that decides on appeals from planning decisions made by local authorities in the Republic of Ireland

34. Can you clarify again what proposal is proposed for area from Rush Sailing club up to Rush south beach (Rush side)

The proposal for this area is to remove any dangerous structures from the beach (i.e. loose debris or other items which present a hazard to beach users).

Beyond the entrance to the estuary along the main beach, RPS have recommended a policy of no active intervention. This policy should be reviewed approximately every five years based on the findings of the OPW's shoreline monitoring programme and amended if

necessary. This would enable statutory authorities to gather and record more data which is essential to support informed policy making decisions.

Please also see response to Question 21.

35. What monitoring is being done with the Seabees?

Consultants are assessing the effectiveness of the Seabees and making arrangements to adjust the Seabees as appropriate

36. Why is there a gap between the Seabees?

It was necessary to leave a gap in the array of the seabee units for Health and Safety reasons. Without these gaps, beach users could become “stranded” on the seaward side of the units during a rising tide. These gaps provide beach users convenient points of access to higher ground.

37. Can extra Seabees be added in front or at the back of the existing line of Seabees to provide more protection.

RPS undertook extensive testing of the seabee units in conjunction with the Queen’s University of Belfast to determine the optimum layout of the array. This testing found that adding an additional row of seabee units did not increase the wave attenuation properties of the array. i.e. adding an additional row would not significantly improve protection.

38. Why not install the Seabees as they should be installed about 30m out from the existing dune face and then backfill the area?

RPS undertook extensive testing of the seabee units in conjunction with the Queen’s University of Belfast to determine the optimum layout of the array. This testing found that the seabee units were significantly more effective if placed in shallow water.

Backfilling the area behind the seabee units would require planning permission and would therefore be subjected to the same obstacles as the proposed scheme (i.e. Option 3).

39. Will the groynes form a barrier for beach users?

The groynes and beach nourishment scheme will be designed so that the groynes are partially submerged by sand material. In addition to this, continuous access between groyne structures will be ensured by the installation of steel steps (or similar). The position and design of this steps will be refined during the detailed design phase of the project.

40. Has a definite decision has been made on option 3 for the Burrow?

Option 3 has been identified as the most sustainable scheme and was therefore put forward as the preferred option. As such, this option has already received high level support from the relevant statutory authorities and was subsequently brought forward to public consultation in September 2020.

Certain aspects of this scheme may be refined during the detailed design phase of the study, but the overall nature of the scheme is unlikely to subject to any significant material change.

41. What supports are available to local homeowners whose houses are affected by erosion

The Council responds to housing needs in line with its remit.

42. Will the existing seawall at Marsh Lane, the Burrow, be replaced?

The preferred scheme for the Burrow includes a seawall along Marsh Lane. Subject to the findings of geotechnical investigations, this existing seawall may be modified or replaced to ensure effective flood protection is provided.

43. Are there any interim measures planned to prevent flooding of properties at Marsh Lane?

No. Any interim measures would be subject to the same planning constraints as the preferred scheme for the Burrow. The Council are therefore focusing all efforts to progress this scheme which would mitigate coastal erosion and flooding.

44. Will the toilets at the beach on the Burrow be removed?

Yes, but new ones will be provided nearby.

45. Can we fast track the planning process for these erosion and flood control measures?

The Council has implemented interim works on an emergency basis in line with its remit and has initiated a process to address the issue of coastal change at Portrane and Rush. The long-term coastal defence option has to go through the necessary planning process and cannot be fast tracked.

46. Why would it take a year to prepare an IROPI case?

Preparing an IROPI case would be a relatively quick process (i.e. a matter of months). It is the time required to progress the coastal defence project through the statutory planning process which could delay the construction of the scheme.

47. What will happen to temporary defence structures already installed by some residents which are having a detrimental effect on nearby properties.

The Council is considering the most appropriate response to the defence structures installed by residents having regard to all relevant legislation and the final coastal defence proposals.

