

Environmental Assessment

The Flood Protection Scheme could have some impacts on the environment, during construction and in the longer term. As part of the development of the scheme design, we are assessing the impacts on people and the natural environment, and identifying ways to minimise these impacts. We will continue to consult with you as part of the environmental assessment process and take your views into account as the scheme is developed.

An Environmental Impact Assessment (EIA) will need to be completed, because the scheme will change the marine environment. Flood Protection Schemes have a single statutory consultation and approval process which includes planning consent. So the Environmental Statement will be one of the Flood Protection Scheme documents.

Feedback from the last community consultation confirmed that the potential environmental impacts were important in the selection of the preferred option. Environmental surveys and desk-based assessments have been carried out and the findings have helped us to develop our understanding of the local environment. We then prepared an Interim Environmental Assessment which identifies the possible impacts of each offshore scheme option.

The Interim Environmental Assessment showed that the most important issues for selection of a preferred option related to impacts on the human environment, including visual appearance, impacts on tourism and the economy, and changes to navigation in Millport Bay. The importance of these issues is reflected by the investment from North Ayrshire Council in consultation, and the changes that have been made to the scheme proposals based on consultation feedback.

Predicted impacts on the physical environment and natural habitats have been assessed as relatively limited, particularly after construction is complete. These impacts can be mitigated through appropriate design and construction methodology.

Further assessments and interpretation, for both the offshore and onshore works, will be undertaken as part of the EIA, which will consider the significance of the impacts. The EIA will be reported as an Environmental Statement.

Stage	Aim	Outcome	Involvement
Screening	Is an EIA needed?	An EIA is required.	We consulted: Scottish Environmental Protection Agency (SEPA), Scottish Natural Heritage (SNH), Marine Scotland, Historic Environment Scotland, Local Planning Authority (NAC)
Scoping	Agree which impacts should be assessed.	The main impacts are on tourism, heritage, landscape, traffic and noise.	We are conducting surveys and desk studies, and consulting with you and other relevant stakeholders.
Environmental Studies & Interim Assessment	Assess existing environment and scheme impacts, informing selection of preferred option. Identify how impacts can be reduced.	Determine the negative and positive impacts of the scheme on Millport's people and nature.	We will publish newsletters and hold meetings and design workshops.
Design Modifications	Adapt the designs to minimise impacts.	Flood protection scheme with minimised environmental impact.	We will consult: Marine Scotland, SEPA, SNH, Historic Environment Scotland, Local Planning Authority, Clydeport, Northern Lighthouse Board, other relevant local organisations and community groups.
EIA & Environmental Statement	Report all environmental information including impact assessment, mitigation and a Non Technical Summary.	Environmental information about the scheme will be made publicly available.	
Pre-Application Consultation	Inform the people of Millport of the outcomes of the design process.	Ensure the public and stakeholders understand and have influenced the designs.	

Planning the construction works

There will be further consultation after the preferred scheme has been confirmed, which will include discussion of how best to minimise impacts during construction.

Tourism and recreation

We understand your concerns that the construction works could affect your businesses. We will work with you to design the scheme and plan the construction works so that the effects are minimised. For example, the timing of the construction works will be planned to avoid the summer period. The contractor will have to stick to agreed working hours and take a best practice approach to site management to minimise visual impact during construction.

The preferred option does not include works to Millport Pier. Future plans for the harbour area (including Millport Pier and the potential for a marina) will continue to be discussed with the Millport Pier and Harbour Users Group and taken forward as separate projects.



All of the proposed options will reduce wave activity in the nearshore zone, which may result in an improved and safer environment for recreational sailors, sea kayakers, swimmers and canoeists who use the coastal waters at Millport.

Navigation and moorings

We have considered the possible impacts of the scheme on navigation and moorings for small vessels. We have discussed these with The Crown Estate Scotland, Northern Lighthouse Board, Royal Yachting Association Scotland, the pilot of the PS Waverley and the Millport Pier and Harbour Users Group. This consultation will continue as the design is developed. Appropriate aids to navigation will be installed during and after construction and the existing moorings buoys will be moved if necessary. A navigation risk assessment will be completed.

Traffic & transport

We know that there will be an increase in traffic on the ferries and around Millport during construction. We will work with the contractor to make sure that most construction materials are delivered by barge. A Traffic and Transport Management Plan will be prepared including requirements for construction that will help to minimise disruption and keep you safe.



For more information about the Millport Coastal FPS please visit the Flooding page on North Ayrshire Council's website: <http://www.north-ayrshire.gov.uk/MillportFPS>

Managing impacts on nature

During construction there is a risk that we may disturb areas where animals and birds live. To know how to protect animals, birds, and nature we must first understand what needs protecting. As well as the surveys and assessments that we are doing now, before construction starts, we will do another ecology survey to be sure that habitats, birds or animals will not be affected. We are consulting with Marine Scotland and SNH to agree protection measures.

On land and on the shore

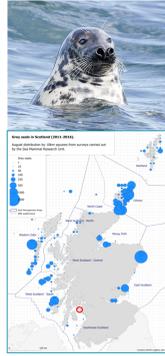
A habitat survey has been completed on land and in the intertidal zone. The survey identified the habitats present in the scheme area, including any rare or protected species. Otters are present around the coast of Great Cumbrae, so during the survey we looked for evidence of their presence. Before construction starts we will do another survey to check for otter resting sites that may be disturbed.



We assessed the predicted effects of the options on coastal processes, using the wave modelling results, beach samples, and a video survey of the sea bed. Construction works could increase sediment in the water, but this would be temporary. We will consult with Marine Scotland to agree methods for disposing of dredged sediment. The offshore breakwaters were assessed to have limited impacts on tidal currents and exchange of water in Millport Bay. The rock armour structures will be designed using best practice methods and Millport Bay will remain fully open to waves and tidal currents on the east and west sides.

In the sea

Grey seals live in the bay and use the Eileans to haul themselves out of the sea. Seals could be disturbed during construction works around the Eileans, so we will agree mitigation measures with SNH and these will be included in the Construction Environmental Management Plan which the contractor must comply with.



Fish and shellfish could be disturbed during the construction works but the impact would be low and over a short time period. Impacts on coastal processes after construction were assessed to be limited, and only a small part of the sea bed in Millport Bay will be affected, so there are unlikely to be significant impacts on fish and shellfish. The offshore breakwater could provide new habitat for fish. A further assessment and consultation with local fisheries organisations will begin soon to assess possible impacts on landing facilities for commercial fishing, and how any impacts should be addressed.

Birds

Many birds use the Millport coast. Monthly surveys of breeding birds using the nearshore and offshore waters in Millport Bay were carried out during spring/summer 2018. Monthly surveys of wintering birds are ongoing and will be completed in March 2019. Measures to minimise impacts on birds during the construction works will be included in the Construction Environmental Management Plan.



On the sea bed

The offshore breakwaters will be built quite close to shore, where the seabed is rock covered by a layer of sand. Waves breaking close to the shore mean this area is not very suitable for ecology. Although construction works will disturb the sea bed the impacts will be limited. We have done video surveys of the sea bed to check for protected sea bed habitats, which were not found. The breakwaters will reduce wave action inshore which could improve the habitat for creatures that live on the sea bed.

The Ground Investigation (2017) identified the ground conditions within the scheme area. A further investigation will be undertaken this summer which will look at the properties of the offshore sea bed sediments. Samples will be tested to assess the potential impact of the breakwaters on marine water quality and sediment quality. We are consulting with Marine Scotland about this issue.

Archaeology & cultural heritage

A site walkover survey and assessment was completed to establish the archaeological and cultural heritage baseline. The potential for there to be buried archaeology where the scheme is to be built is low. There could be shipwrecks offshore but they were not found by the offshore geophysical survey.



The methodology for archaeological mitigation and monitoring will be agreed with the archaeological adviser to North Ayrshire Council and Historic Scotland. This is expected to comprise an archaeological Written Scheme of Investigation (WSI) which will include a protocol in case unexpected archaeological material is identified during construction.



We are working to develop the scheme design to fit in with the existing character of Millport and its setting. Discussion of the potential impacts of the scheme on the landscape and seascape of Millport is included in the 'Onshore Works' information.

Noise and air quality

Construction works and vehicles could cause noise, vibrations and dust. We will assess construction traffic noise and air quality, based on current best practice, to inform the EIA. Working hours will be restricted and the contractor will be required to keep noise and dust below acceptable levels.

