Environment faq's

How will you prevent the flood defence proposals damaging the environment of Looe?

Looe is rightly renowned for its diverse environment. The challenge for the project is balancing a flood defence scheme which protects the town from frequent and severe flooding and damage over the next 50 to 100 years, with protecting the environment.
Given the diversity and sensitivity of the environment, any of the potential options, including do nothing, would likely result in some level of impacts. However, in line with the mitigation hierarchy, the project will aim to avoid impacts where possible.
Potential environmental impacts of each of the options are currently being assessed at a high level as part of the Environmental Options Appraisal (refer to the Environment Article for more details on this). The outcomes of this exercise will feed into the Outline Business Case along with other considerations such as Economics, Engineering and Engagement in order to reach a preferred option.

What is an Environmental Impact Assessment (EIA)

An EIA is a systematic process to identify, predict and evaluate the environmental effects of projects.
The purpose of EIA is to:

- Provide information for decision-making on the environmental consequences of projects.
- Promote environmentally sound and sustainable development through the identification of appropriate enhancement and mitigation measures.

Due to the existing designations and environmental conditions, it is likely that the majority of options proposed for the project would require an EIA, as well as potentially a Harbour Revision Order and a Marine Licence.

What, if any, work has been done to help understand the baseline environment and help inform the future Environmental Impact Assessment (EIA).

Given the complex and diverse nature of the environment in and surrounding Looe, it is critical that an understanding of the environment is sought in advance of both selection of a preferred option (to help inform decision making) and any future EIA. In order to help build this picture, extensive baseline environmental surveys have been carried out by the project team over the last few years. These include but are not limited to:

- Hydrodynamic Modelling (including Water Quality).
- Wave Modelling.
- Water Framework Directive Walkover Survey.
- River Condition Assessment Surveys.
- East and West Looe Electric Fishing Surveys.
- eDNA Surveys.
- Intertidal Surveys.
- Subtidal Surveys.
- Stalked Jellyfish Survey.
- Seagrass Surveys.
- Underwater Noise Survey.
- Acoustic Doppler Current Profiler (ADCP) Monitoring.
- Terrestrial Preliminary Ecological Appraisal.
- Bat Surveys.
- Heritage Walkover Survey.
- Contaminant Analysis.
- Landscape Viewpoint Surveys.
- Transport survey

What about the impact of a flood defence scheme on carbon emissions?

The project would likely create additional carbon emissions during the construction of the majority of the proposed options, as well as during the operation and maintenance of them. However, the project could also reduce future carbon emissions by preventing flood and storm damage to buildings, property and infrastructure, which would otherwise require materials and energy to repair or replace.

The design team is actively exploring ways to reduce carbon in construction and operation of the project in line with PAS2080 (the global standard for managing infrastructure carbon). This includes:

- ***Build less*** **-** for example identifying ways in which each option could reduce material use.
- ***Build clever*** **–** for example looking at lower carbon alternatives to traditional Portland cement in concrete.
- ***Build efficiently*** – for example using modern methods of construction to reduce waste.

Will the scheme affect water quality

The Environment Agency tests the water quality at East Looe from May – September. Water quality has improved in recent years, and it is now classified as good.

However, pollution caused by Combined Sewer Overflows (CSO's) into Looe's bathing waters has been identified as a problem by South West Water (SWW) in the Fowey-Looe-Seaton Drainage and Wastewater Management Plan. Multiple spills were reported in the period 2019-2021. (You can read more here)

The project has the potential to reduce the impact from CSO discharges by protecting the ageing sewerage system and risks from flooding.

By reducing the risk of flooding and the risk of pollution caused by CSOs, the project could help mitigate the risks identified, and meet the aims of the following:

- SWW Storm Overflows Discharge Reduction Plan.
- Environment Act 2021.
- SWW Drainage and Wastewater Management Plan.
- SWW Vision 2020-2050.
- Government's Ten Point Plan for a Green Industrial Revolution. A high density of blockages have been identified by SWW in Looe.

Will a flood defence help to enhance the environment ?

As part of any EIA, opportunities to enhance the environment would be explored and implemented where practical. Whilst an EIA has not been completed to date, potential opportunities for enhancement have already begun. An example of this is the series of reef cubes supplied by a local Cornish company, ArcMarine, which are currently being trialled off Banjo Pier. Each reef cube is made from a special low-carbon, marine-friendly concrete alternative, with nooks and crannies designed to create an ideal home for marine wildlife such as seaweeds, barnacles and limpets, as well as larger species such as lobster and crab.

Tidal Barrier & Sedimentation

Based on our outputs from the modelling carried out and our understanding of design and operation of the gate, we are able to infer at this time that there is unlikely to be a significant permanent change to the sediment regime to the river particularly upstream of Looe Bridge. Localised siltation might occur around the tidal barrier when closed but this would be flushed clear when re-opened. The assessments we have undertaken suggest that sediment transport patterns/siltation locations would not be significantly altered as the barrier abutments do not substantially change the existing flow regime.