



## Position Statement

### The Current Approach to Flood and Erosion Risks and Responsibilities in Managing Selseys Aging Seawalls

July 2023

#### Executive Summary

Chichester District Council / Coastal Partners, proactively monitor and maintain the Selsey coastline using powers under the Coast Protection Act. However, is under no duty to do so. It is known that the defences here are aging and fragile, and there are finite resources to maintain them. Future defence failures should be anticipated, and this position paper and appendices set out the steps to be taken to hopefully avoid loss of property. However, given the timescales for replacement defences, funding difficulties and challenging site conditions, the residual risk of major defences failure and loss of property should not be discounted.

#### Background

Coastal defences reduce the risk of coastal flooding and erosion to the town of Selsey. The Selsey peninsula is an exposed coastline with a long history of managing coastal flood and erosion risk. Many of the linear defences (seawalls) were constructed in the 1950's and have reached, or are reaching, the end of their design life. The challenges faced here include:

- The increased frequency, magnitude and complexity of the works required to maintain the existing aging coastal defence structures.
- Predicted sea level rise and increased storminess due to climate change.
- Public expectation of ongoing maintenance and repair

These are challenges shared by many local authorities nationally, with fragile aging assets and increasing risks from climate change.

The Council has adopted the North Solent and South Downs Shoreline Management Plans and the Pagham to East Head Coastal Defence Strategy (2009) for this frontage, which have a policy of 'Hold the Line'. However, the strategy recognised the need to manage coastal erosion and flood risk along the Selsey frontage, its aging defences and its low priority at the time for national funding for replacement defences.

Chichester District Council in partnership with Coastal Partners are currently engaged in a feasibility study looking at the future of these defences. A change in funding approach to partnership funding (along with other changes in guidance) brings opportunity to further investigate a defence scheme at Selsey, but any potential scheme is unlikely to be ready to begin construction for at least five years (2028+). It will be subject to securing financial contribution, a number of gateway stages, demonstrating a robust business case and securing the required funding. This position statement has

been developed for the interim period and to establish the position regarding the current aging defences.

## Ownership and Maintenance

Ownership and maintenance of the seawall structures at Selsey is complex. Particularly on the west beach side of Selsey, where there are various private defences with private properties in very close proximity to these defences. Who maintains these defences can vary.

Appendix A shows the land ownership along the seawall.

Appendix B shows the seawall maintainer. The owner and maintainer are often not the same. Many of the existing defences were constructed by Chichester District Council (CDC) using permissive powers for the landowner. The maintenance of the shoreline defences (seawalls) can be broadly split into three categories. The categories are:

- CDC owned and maintained assets
- CDC constructed and maintained assets
- Private/Unknown assets

(Note: These maps are for use as a guide only. Land registry information should be sought for specific locations.)

## Responsibilities

The following section sets out the roles and responsibilities of the different stakeholders.

### **Environment Agency (EA)**

The EA is responsible for the strategic overview of the management of all sources of flooding and coastal erosion in England. They are tasked with administering Flood and Coastal Risk Management Grant in Aid funding (FCRM GiA) on behalf of DEFRA. They are a Risk Management Authority (RMA) and have permissive powers to undertake defence works (where there is a wider public benefit, clear economic benefit and an achievable solution), but there is no legal obligation for the EA to undertake any works to protect property from flooding or erosion.

### **Chichester District Council (CDC)**

The Council are a Risk Management Authority (RMA) and have permissive powers to undertake works (where there is a wider public benefit, clear economic benefit and an achievable solution) under The Coast Protection Act 1949 and Land Drainage Act 1991. These are permissive powers and not a legal obligation or responsibility on the Council to undertake any works (maintenance or new defences) to protect property from flooding or erosion. Where CDC are the asset owner, they have a responsibility to manage health and safety risks effectively.

### **Landowner / Private Asset Owner**

Private Landowners have ultimate responsibility for protecting their own property from flooding and erosion, but must act within statutory planning regulations and other applicable legislation e.g.

Coast Protection Consent. Where accessible to the public, owners also have a legal duty of care to maintain public safety under the Occupiers Liability Act.

## Funding

The EA provide capital Grant in Aid to Risk Management Authorities under section 16 of the Flood and Water Act Management Act 2010. This bid-based funding is for initial capital construction of defences.

Post construction, councils need to maintain these assets using general Council revenue funds.

Funding can be sought for emergency coast protection works from the EA, usually where there is an immediate health and safety risk to people or property. This will depend on the funds available, and whether the project is considered eligible. There is no guarantee of funding. Once works have averted the imminent risk, more permanent works would need to be funded by CDC or as part of a capital scheme.

## Risks

Appendix C & D shows the most up to date understanding of present day and future flood and erosion risk at Selsey. The following risks should be noted when considering the existing coastal defences at Selsey:

- **Flooding** - Where there is a defence failure with risk of flooding behind, multiple properties may be at risk. There is also a risk to life as a result of extreme flood events. Over 200 properties have been identified at risk from a 1 in 20yr event, present day.
- **Erosion** - Where there is a defence failure with erosion risk behind, close proximity of properties and catch-up erosion can lead to multiple properties at risk. This also poses a risk to life.
- **Wider impacts** – Flood and erosion risk can have much wider impacts on critical infrastructure, roads and utilities serving the community. Alongside this it can impact on health and wellbeing of residents both before and after an event and have knock on effects in terms of the wider economy of an area.
- **Funding** – There can be no guarantee of emergency works funding through the Environment Agency.
- **Fragility** – due to their age and construction, the defences are at or near the end of their design life leading to a risk of sudden and unexpected failure.
- **Funding up Front** – Repairs may need to be actioned quickly and significant funding (hundreds of thousands to millions of pounds) committed with no certainty of emergency works funding reimbursing these costs later.
- **Private Defences** – Owners may be unable to repair defences leading to risk to multiple properties. Or private owners may attempt to take matters into their own hands causing issues for their neighbours.
- **Cumulative Failures** – Cumulative failures could lead to significant repair costs and insufficient funds. For example, where a number of separate failures occur along the 4km frontage in quick succession due to increasing defence fragility.

- **Expectations** – Previous action to repair defences may raise expectation that this will always be the case, when funding is not guaranteed and permissive powers are utilised.
- **Access** – Access to undertake repairs particularly on west beach is increasingly challenging due to the low beach and short tidal window, adding further cost and time.

## Defence Failures and Actions

With age there is an increasing residual risk of a failure of the defences, and the impacts could quickly become significant.

This is managed through risk-based inspections and monitoring of the Selsey coastline by Coastal Partners, with the objective of ensuring any failures (minor or major) or issues are identified early.

There is a focus on not missing opportunities to undertake swift minor repairs which have the potential to avoid more significant failures (repairs). However, this is not always possible in the winter months. For more significant failures, where properties are at risk in the short term, the Council may endeavour to seek funding for emergency works.

There can be no guarantee of an outcome that avoids losses in all cases, and no guarantee of emergency works funding and CDC and residents should be prepared for this scenario.

The focus of this position statement is the linear defences (seawalls). However, the coastal defences for Selsey are made of a number of elements; seawalls, revetments, groynes and beach. Over the last decade the Council has undertaken a very successful programme of beach management through shingle replenishment, and Grant in Aid funding is currently in place to continue these works until March 2026. Without shingle replenishment beach levels would reduce, and this would increase the risk of undermining of defences. The groyne field helps keep the material where it's needed by slowing the movement of beach material along the frontage, however the groynes are also at, or reaching, the end of their design life and will need to be considered as part of any future capital works. In the meantime, the same approach is taken to maintaining the groynes.

Due to the complexities of the frontage any failure will present different challenges however for clarity the flowcharts in Appendix E set out the proposed response of the council for 4 key scenarios...

1. Small Localised Failure of Private Defences
2. Small Localised Failure of CDC Maintained Defence
3. Significant Failure – Where there is a risk of loss associated with 1 or more properties.
4. Major Failure – Where a significant storm leads to multiple failures and properties at risk.

The viability of and plans for a scheme at this location are at early feasibility stage at present. This makes it very challenging to bring forward or accelerate part of a scheme in response to increased risk. However, this may change over time if scheme development is successful, and closer to understanding a holistic and affordable solution at Selsey.

The position statement should be reviewed annually to consider any changes.

# APPENDIX A – LAND OWNERSHIP ALONG SEAWALL





## APPENDIX B – SEAWALL MAINTAINER



## APPENDIX C – FLOOD RISK

(Do nothing scenario, to inform understanding of risk)



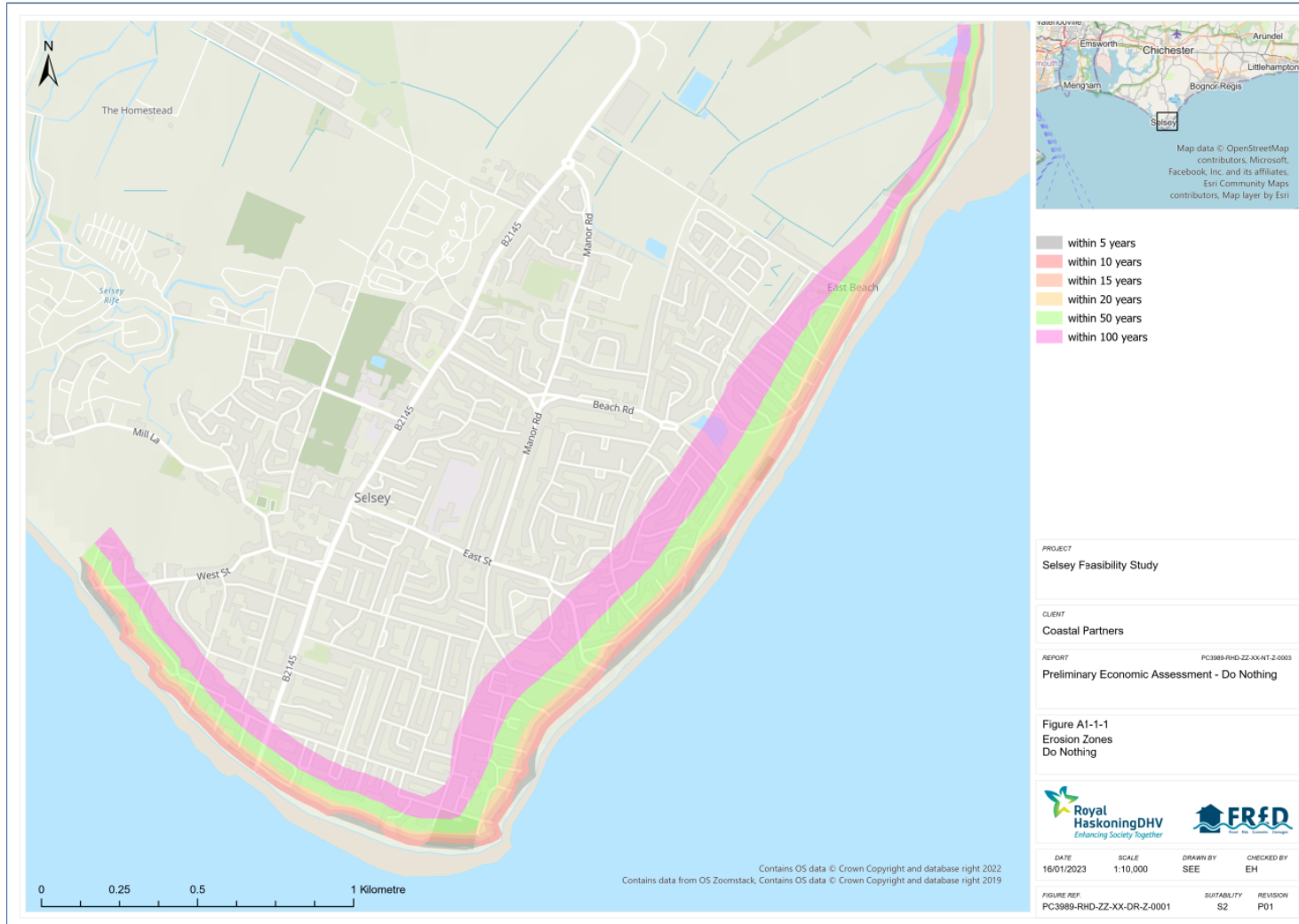
Present Day (2022)



100yrs (2122)

# APPENDIX D – EROSION RISK

(Do nothing scenario, to inform understanding of risk)

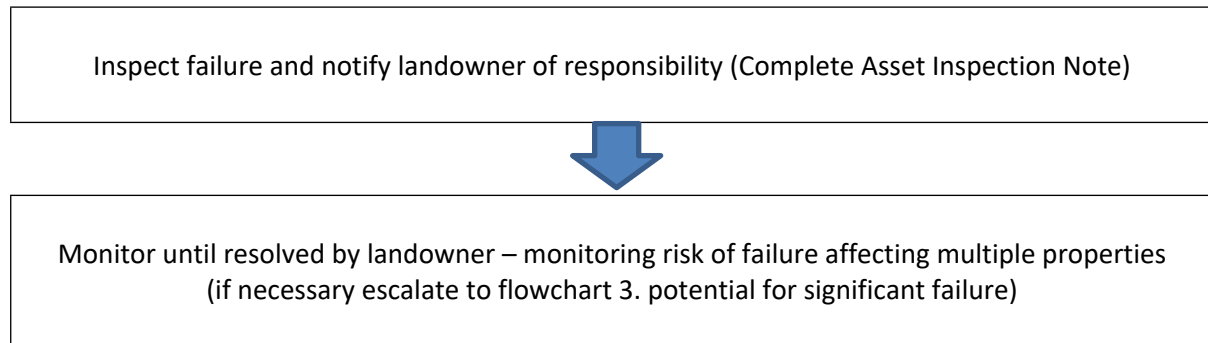




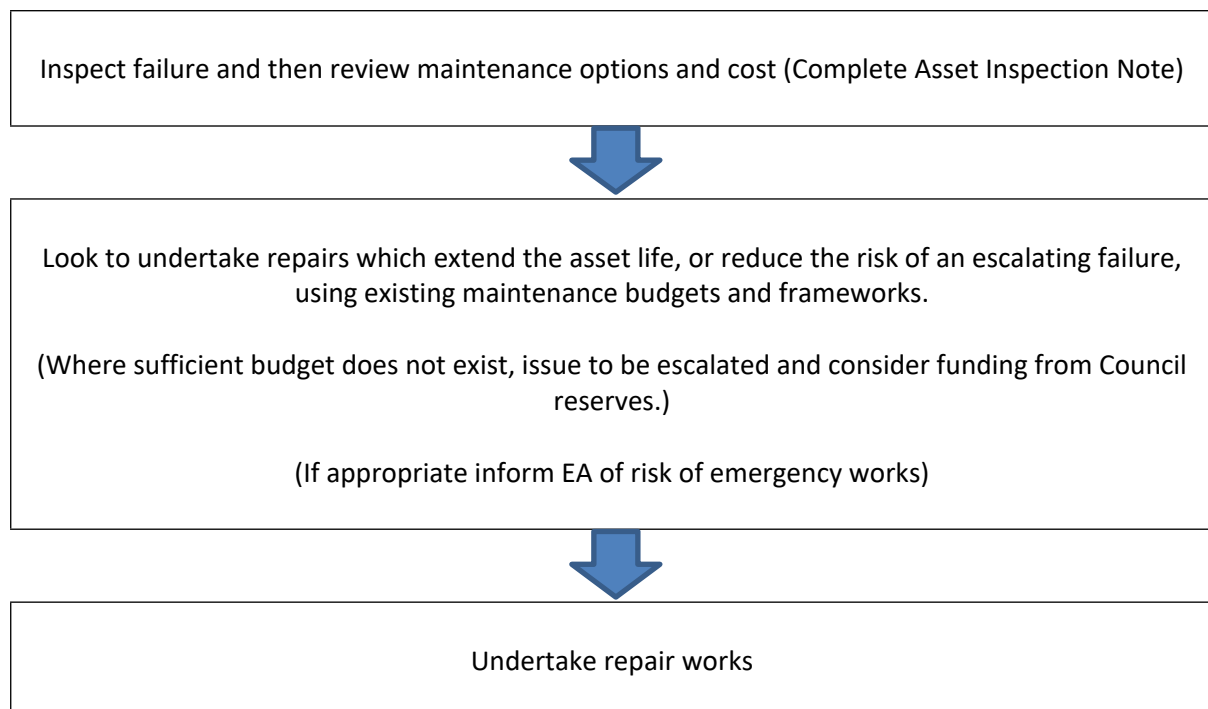
## APPENDIX E – RESPONSE FLOWCHARTS & FAILURE CASE STUDY

Under all scenarios targeted communications would be needed with political members and affected parties to keep them updated on the planned response. This would utilise existing communication channels via CDC and Coastal Partners.

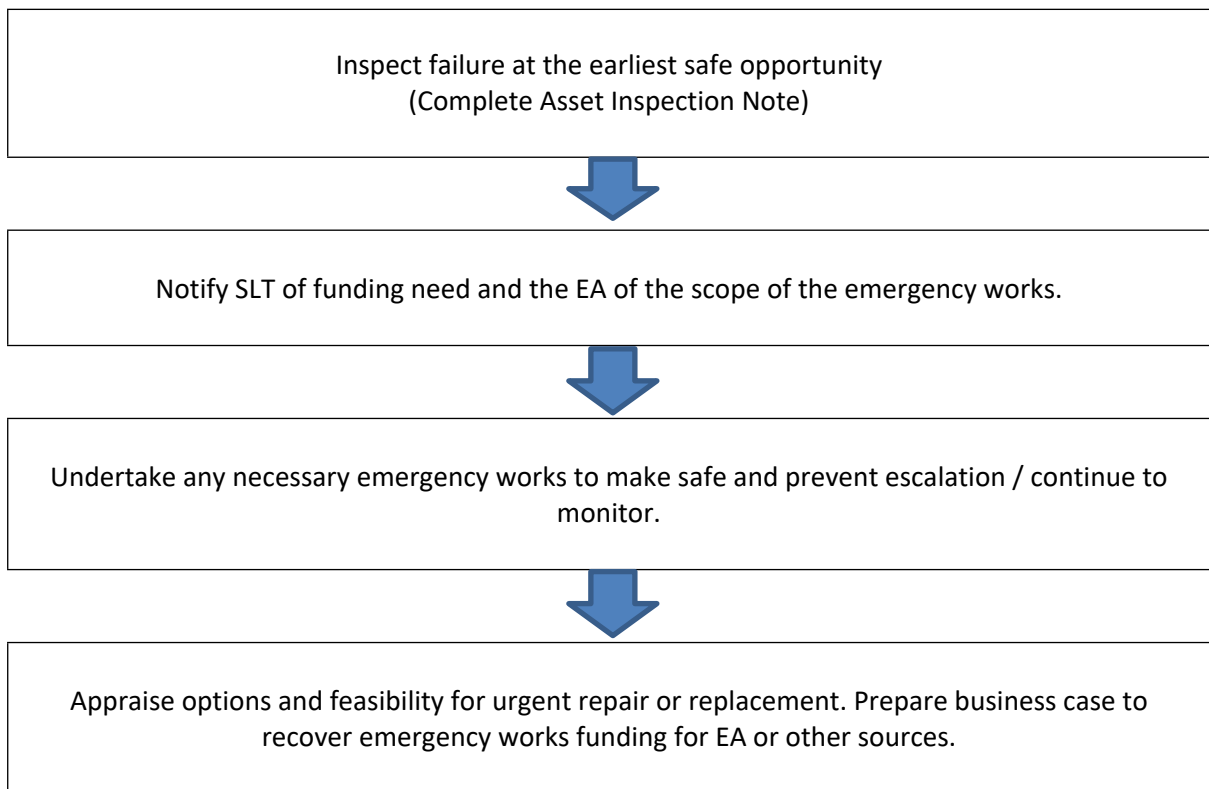
### 1. Small Localised Failure of Private Defences:



### 2. Small Localised Failure of CDC Maintained Defence

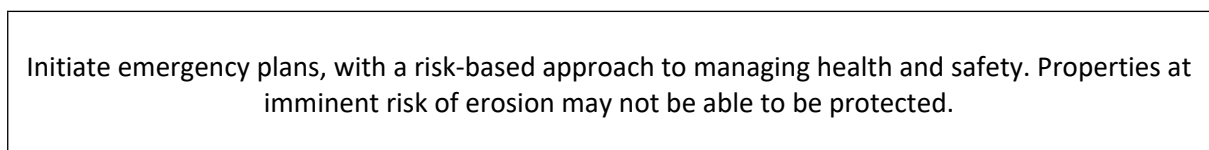


### 3. Significant Failure – Where there is a risk of loss associated with 1 or more properties



***\* Works will be subject to approval of spend in accordance with CDC Constitution. Where appropriate funding for emergency works will be sought from the Environment Agency in parallel. There is no guarantee of emergency works funding.***

### 4. Major Failure – Affecting multiple defences and properties



### Case Study: Defence Failure, Jan 2023



*Emergency repair works were carried out to a 75m section of defences following two failures to the concrete apron, located on Selsey West Beach. Following failure of the seawall apron, washout of material caused significant voids behind the sea wall. Multiple properties were at risk from the failure, with some properties situated just 10-12m behind the wall.*

*Cost: ~ £440,000*