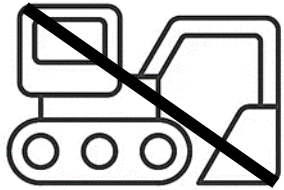
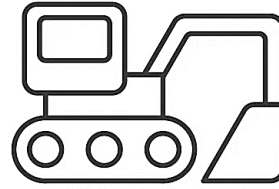


# Key



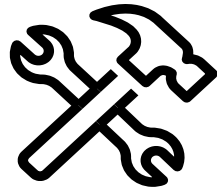
## Do Nothing

No further investment in existing coastal defences. Defences would be allowed to fail over time and natural processes to continue.



## Upgrade Defences

Sustaining / Improving existing coastal defences by raising the height or constructing additional lengths, to upgrade the standard of protection. This could include beach nourishment, raising of crest levels or construction of new hard defences.



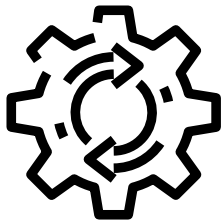
## Small Scale Maintenance

Maximise the life of existing coastal defences through patch/crack repair and scheduled maintenance.



## Property Level resilience (PLR) and adaptation

Aiming to reduce flood risk to assets on a property by property basis. This could include property flood resilience measures, early warning systems, relocation of assets and risk informed land planning.



## Proactive Maintenance

Refurbishment/ maintenance of existing coastal defences and/or beach management (recycling)



# ODU 1: Hengistbury Head East

2025 - 2044

2045 - 2074

2075 - 2124

## Key



Do nothing



Proactive maintenance



Upgrade defence

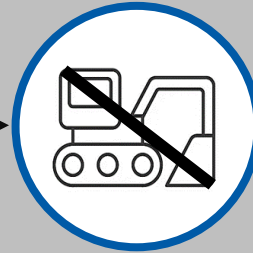
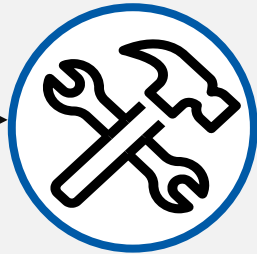


Small scale maintenance

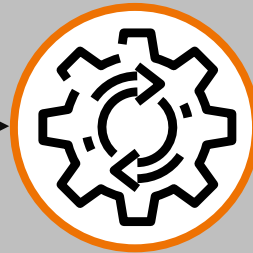
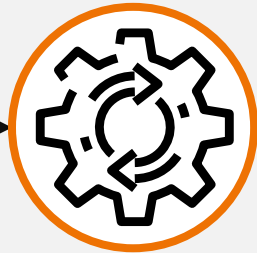


Property Level Resilience (PLR) and adaptation

## National Economic Leading Option



## Local Aspirational Option



Short Term

Medium Term

Long Term

**Do Minimum:** initially extend the life of the defences through small scale maintenance. However, over time the defences will reach the end of their service life and ongoing small scale maintenance would not be sustainable. Once the existing defences fail no further action would be undertaken in the medium and long term (i.e. Do Nothing).

**Managed Realignment:** control the rate of cliff erosion by maintaining / refurbishing existing defences at the toe of the cliff and undertaking beach recycling to help sustain beach levels.

# ODU 2: Mundeford Sandbank

2025 - 2044

2045 - 2074

2075 - 2124

## Key



Do nothing



Proactive maintenance



Upgrade defence

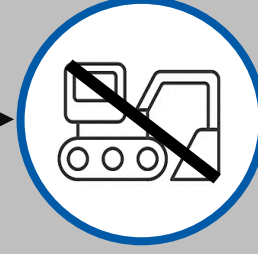
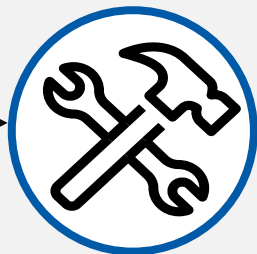


Small scale maintenance



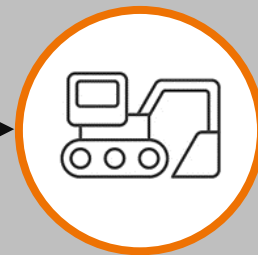
Property Level Resilience (PLR) and adaptation

## National Economic Leading Option



**Do Minimum:** initially extend the life of the defences through small scale maintenance. However, over time the defences will reach the end of their service life and ongoing small scale maintenance would not be sustainable. Once the existing defences fail no further action would be undertaken in the medium and long term (i.e. Do Nothing).

## Local Aspirational Option



**Maintain with Adaptation:** aim to sustain the FCERM service and form of the Sandbank over time. This would be achieved through maintenance / refurbishment of existing defences and beach management (e.g. encouraging sand dune creation). In the long term, with projected sea level rise, a large scale beach nourishment scheme may be required to top-up the beach level of the Sandbank. Property level resilience to permanent properties on the Sandbank may also be undertaken to reduce flood risk.

Short Term

Medium Term

Long Term

# ODU 3: Christchurch Harbour South

2025 - 2044

2045 - 2074

2075 - 2124

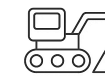
## Key



Do nothing



Proactive maintenance



Upgrade defence



Small scale maintenance



Property Level Resilience (PLR) and adaptation

### National Economic Leading Option



### Local Aspirational Option



Short Term

Medium Term

Long Term

Adaptation / Resilience: undertake property level resilience to properties at risk from flooding in the short, medium and long term. Explore opportunities for saltmarsh restoration / creation. This option is Adaptation / Resilience A in the Leading Options report.

Adaptation and Resilience with erosion defences: In the short term maintain / construct erosion defences adjacent to the access road to Hengistbury Head and subject to findings of contaminated land assessments, also construct erosion defences adjacent to Wick historic landfill site. Undertake property level resilience to properties at risk from flooding in the short, medium and long term. This option will also explore opportunities for saltmarsh restoration / creation along the frontage in this location. This option is Adaptation / Resilience C in the Leading Options report.

# ODU 4: Wick

2025 - 2044

2045 - 2074

2075 - 2124

## Key



Do nothing



Proactive maintenance



Upgrade defence

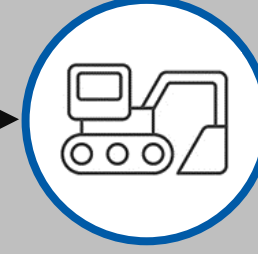
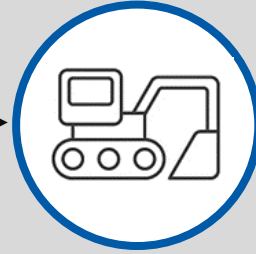
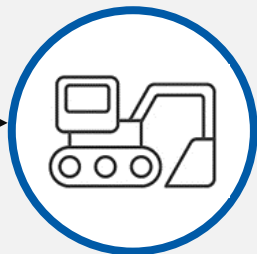


Small scale maintenance



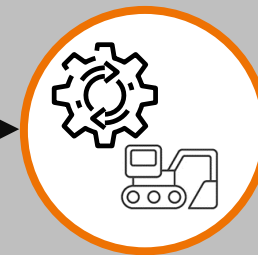
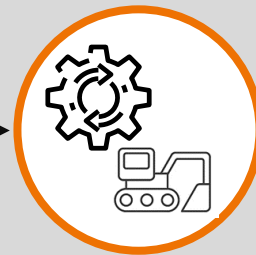
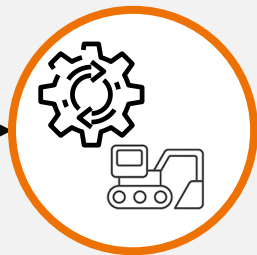
Property Level Resilience (PLR) and adaptation

## National Economic Leading Option



**Sustain:** raise and lengthen the existing flood defence embankment in the east part of the unit over time to improve the standard of protection against flooding and sea level rise. This is the Sustain C option in the Leading Options report.

## Local Aspirational Option



**Sustain with frontline maintenance:** raise and lengthen the existing flood defence embankment in the east part of the unit over time. In addition, undertake maintenance/ refurbishments on the frontline quay wall to prevent erosion of the land behind (including the historic landfill site). This is the Sustain B option in the Leading Options report.

Short Term

Medium Term

Long Term

# ODU 5: Willow Drive and the Quomps

2025 - 2044

2045 - 2074

2075 - 2124

## Key



Do nothing



Proactive maintenance



Upgrade defence

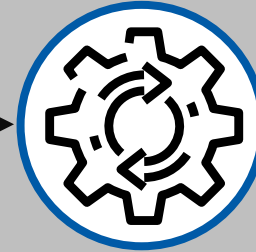
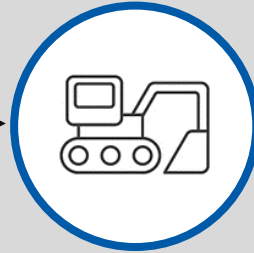


Small scale maintenance

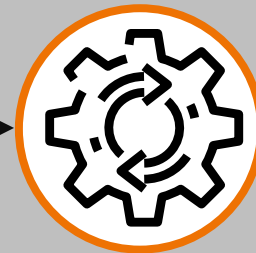
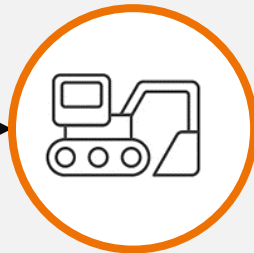


Property Level Resilience (PLR) and adaptation

### National Economic Leading Option



### Local Aspirational Option



### Backup Option



Short Term

Medium Term

Long Term

**Improve (intervene later):** raise / upgrade the existing defences in the medium term to improve the standard of protection against flooding (the alignment of the defences is still to be determined). Over the short term maintain the existing defences and undertake property level resilience to the properties at risk from flooding. This is the Improve D-F option in the Leading Options report.

**Improve (intervene sooner):** raise / upgrade the defences in the short term to improve the standard of protection against flooding through to 2124 (the alignment of the defences is still to be determined). Once constructed, maintain the upgraded defences to the end of the strategy period. This is the Improve A-C option in the Leading Options report.

**Adaptation / Resilience:** maintain frontline defences but do not raise / upgrade the defences. Over time due to sea level rise the standard of protection against flooding would reduce. Undertake property level resilience to properties at risk of flooding throughout the strategy period.

# ODU 6: River Avon West Bank

2025 - 2044

2045 - 2074

2075 - 2124

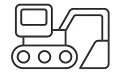
## Key



Do nothing



Proactive maintenance



Upgrade defence

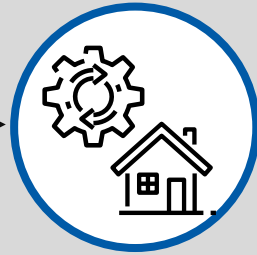
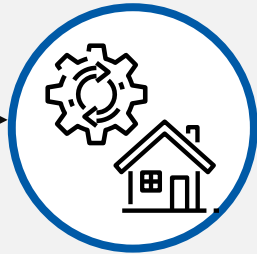


Small scale maintenance



Property Level Resilience (PLR) and adaptation

**National Economic Leading Option**



Short Term

Medium Term

Long Term

Adaptation / Resilience: maintain the frontline quay walls and undertake property level resilience to properties at risk from flooding in this unit. This is primarily at two locations; Priory Quay / Convent Meadows and the area around Castle Street.

# ODU 7: Rossiters Quay

2025 - 2044

2045 - 2074

2075 - 2124

## Key



Do nothing



Proactive maintenance



Upgrade defence

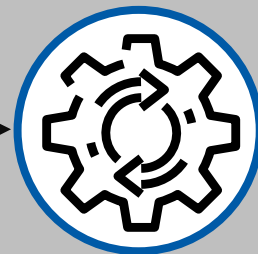
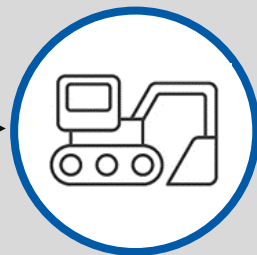
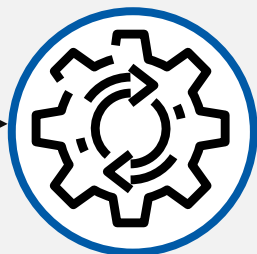


Small scale maintenance



Property Level Resilience (PLR) and adaptation

## National Economic Leading Option



## Backup Option



Short Term

Medium Term

Long Term

**Improve (intervene later):** construct new flood defences in the medium term to improve the standard of protection against flooding. In the short term undertake maintenance of existing defences to extend their service life until the construction in the medium term. This is the Improve A option in the Leading Options report.

**Adaptation / Resilience:** maintenance / refurbish existing defences over the strategy period but do not raise / upgrade the defences. Over time due to sea level rise the standard of protection against flooding would reduce. Undertake property level resilience to properties at risk of flooding throughout the strategy period.

# ODU 9: Stanpit

2025 - 2044

2045 - 2074

2075 - 2124

## Key



Do nothing



Proactive maintenance



Upgrade defence

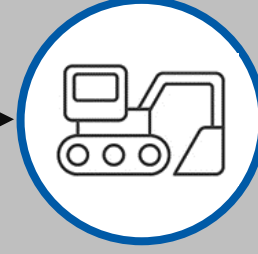
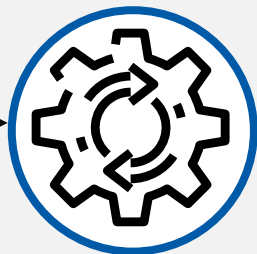


Small scale maintenance



Property Level Resilience (PLR) and adaptation

## National Economic Leading Option



## Backup Option



Short Term

Medium Term

Long Term

**Sustain (intervene later):** initially carry out proactive maintenance to extend the life of the existing defences in the short term. In the medium term raise / upgrade the defences to improve the standard of protection against flooding. The upgraded defences will be further lengthened and raised over time to keep pace with sea level rise. This option will reduce erosion risk to the historic landfill sites at Stanpit and will also explore opportunities for environmental enhancements, such as opportunities for restoring saltmarsh habitat. This is the Sustain A option in the Leading Options report.

**Adaptation / Resilience:** maintain / refurbish existing defences over the strategy period but do not raise / upgrade the defences. Over time due to sea level rise the standard of protection against flooding would reduce. Undertake property level resilience to properties at risk of flooding throughout the strategy period.

# ODU 10: Mundeford

2025 - 2044

2045 - 2074

2075 - 2124

## Key



Do nothing



Proactive maintenance



Upgrade defence

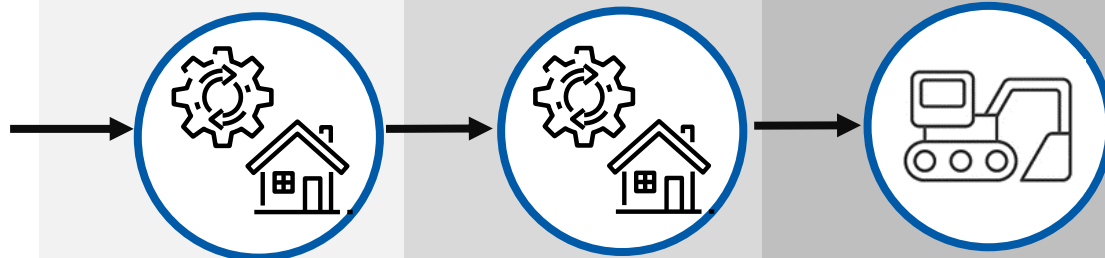


Small scale maintenance



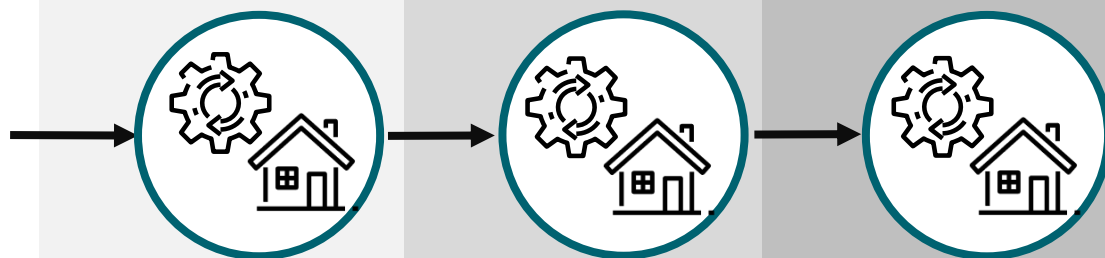
Property Level Resilience (PLR) and adaptation

## National Economic Leading Option



Improve (intervene later): in the short and medium term maintain / refurbish existing quay walls to extend their service life and also undertake property level resilience measures to reduce flood risk to properties at risk from flooding. In the long term, construct new flood defences to provide a more robust defence and reduce risk of flooding to properties. This is the Improve A option in the Leading Options report.

## Backup Option



Adaptation / Resilience: maintain / refurbish existing quay walls over the strategy period but do not raise / upgrade the walls. Over time due to sea level rise the standard of protection against flooding would reduce. Undertake property level resilience to properties at risk of flooding throughout the strategy period.

Short Term

Medium Term

Long Term

# ODU 11: Mundeford Quay

2025 - 2044

2045 - 2074

2075 - 2124

## Key



Do nothing



Proactive maintenance



Upgrade defence

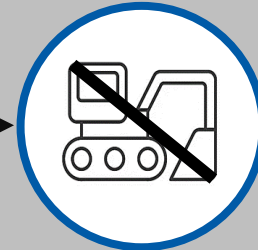
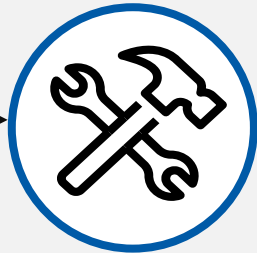


Small scale maintenance



Property Level Resilience (PLR) and adaptation

## National Economic Leading Option



**Do Minimum:** initially extend the life of the quay walls and defences through small scale maintenance. However, over time the quay walls / defences will reach the end of their service life and ongoing small scale maintenance would not be sustainable. Once the existing defences fail no further action would be undertaken in the medium and long term (i.e. Do Nothing).

## Local Aspirational Option



**Adaptation / Resilience:** maintain / refurbish existing quay walls / defences over the strategy period and undertake property level resilience to properties at risk. Property level resilience may not immediately be required in some locations due to buildings already having local flood defences.

Short Term

Medium Term

Long Term

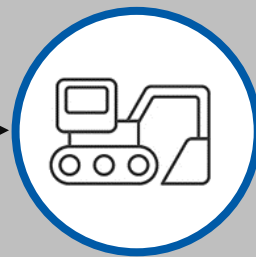
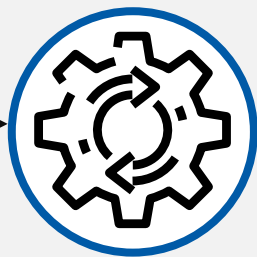
# ODU 12: Avon Beach and Friars Cliff

2025 - 2044

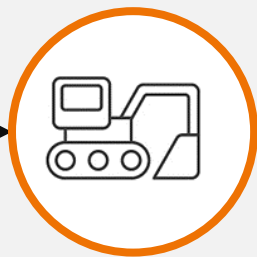
2045 - 2074

2075 - 2124

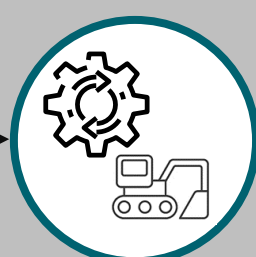
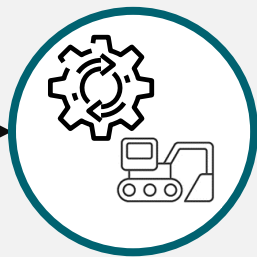
**National Economic Leading Option**



**Local Aspirational Option**



**Backup Option**



Short Term

Medium Term

Long Term

## Key



Do nothing



Proactive maintenance



Upgrade defence



Small scale maintenance



Property Level Resilience (PLR) and adaptation

**Improve (intervene later):** in the short term, maintain / refurbish the existing defences. In the medium term undertake beach nourishment and construct new groynes to retain beach material. In the long term periodic beach nourishments may be required, as well as localised property level resilience to reduce flood risk. This is the Improve A option in the Leading Options report.

**Improve (intervene sooner):** in the short term undertake beach nourishment and upgrade the defences. When upgrading the defences, consider incorporating broader public realm improvements such as promenade raising. Periodic beach nourishments may be required in the medium and long term. This is the Improve C option in the Leading Options report.

**'Scaled back' / Lower Cost Improve:** similar to the Improve options but with a reduced beach nourishment volume and scale of defence improvements to reduce cost and improve the affordability.

# ODU 13: Highcliffe

2025 - 2044

2045 - 2074

2075 - 2124

## Key



Do nothing



Proactive maintenance



Upgrade defence

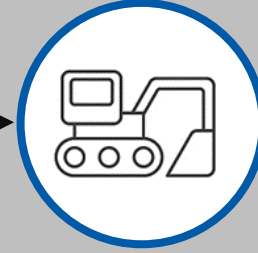
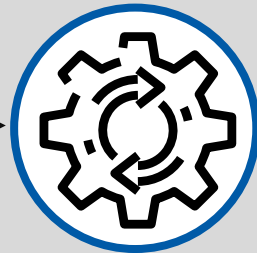
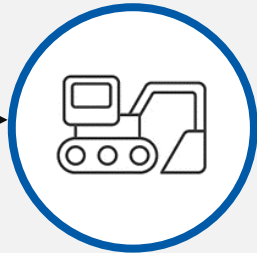


Small scale maintenance

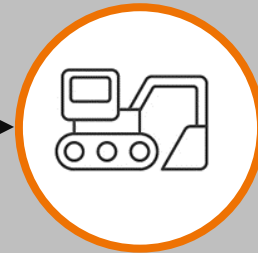
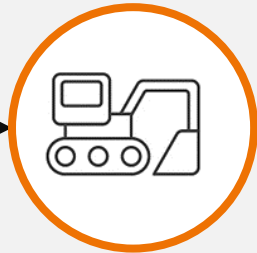


Property Level Resilience (PLR) and adaptation

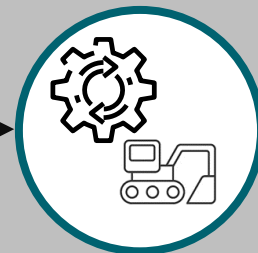
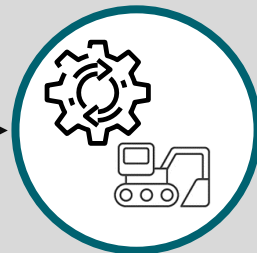
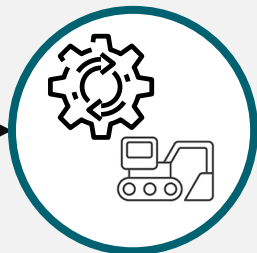
### National Economic Leading Option



### Local Aspirational Option



### Backup Option



Short Term

Medium Term

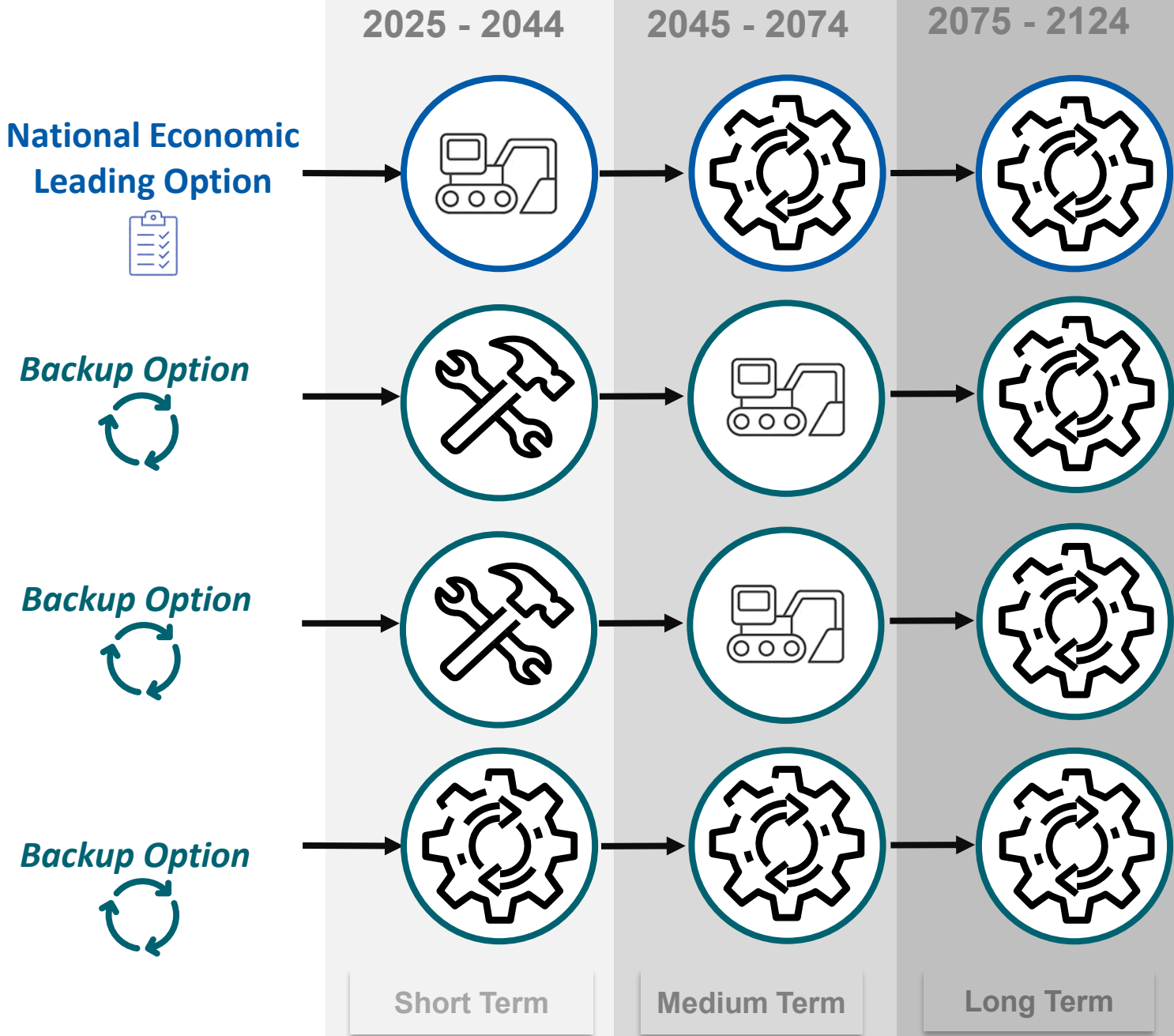
Long Term

**Improve (beach nourishment in the long term):** in the short term construct outflanking defences at the eastern end of the unit. In the short, medium and long term maintain / refurbish existing defences and beach management. In the long term, a beach nourishment scheme would be undertaken to improve beach levels and to help mitigate sea level rise impacts. This is the Improve C option in the Leading Options report.

**Improve (beach nourishment in the medium term):** in the short term construct outflanking defences at the eastern end of the unit and maintain existing defences. In the short, medium and long term maintain / refurbish existing defences and beach management. In the medium term undertake a beach nourishment scheme to improve beach levels and in the long term periodic nourishments may be required. This is the Improve A option in the Leading Options report.

**'Scaled back' / Lower Cost Improve:** similar to the Improve options but with a reduced beach nourishment volume to reduce cost and improve affordability.

# ODU 14: Naish Cliff and Barton on Sea



## Key



Small scale maintenance



Proactive maintenance



Upgrade defence

Managed Realignment (intervene sooner): in the short term upgrade the defences. This would include an upgraded rock revetment at the toe of the cliffs as well as improved cliff slope drainage / stabilisation. Cliff top erosion would still occur with this option, but in a controlled manner. Some property loss may occur. This is the Managed Realignment A option in the Leading Options report.

Managed Realignment (intervene later): in the short term undertake small scale maintenance to extend life of existing defences where possible. In the medium term upgrade the defences (rock revetment and cliff drainage / stabilisation) and undertake beach nourishment at Naish Cliff. Cliff top erosion would still occur with this option, but in a controlled manner. Some property loss may occur. This is the Managed Realignment B option in the Leading Options report.

Managed Realignment (intervene later with shorter length): in the short term undertake small scale maintenance to extend life of existing defences where possible. In the medium term upgrade the defences along a shorter length of frontage (rock revetment and cliff drainage / stabilisation) and undertake beach nourishment at Naish Cliff. Cliff top erosion would still occur with this option, but in a controlled manner. Property loss would occur and Marine Drive West would remain undefended. This is the Managed Realignment D option in the Leading Options report.

Maintain: proactive maintenance / refurbishment of the existing defences at the cliff toe to slow erosion rates (but not stop erosion). Small scale maintenance would also be required for the drainage system but this does not include failed sections. Rates of cliff erosion would be expected to be greater with this option relative to Managed Realignment, but it is lower cost and may be more achievable to fund / deliver. More property loss would be expected with this option.

# ODU 15: Barton on Sea to Hordle Cliff

2025 - 2044

2045 - 2074

2075 - 2124

## Key



Do nothing



Proactive maintenance



Upgrade defence

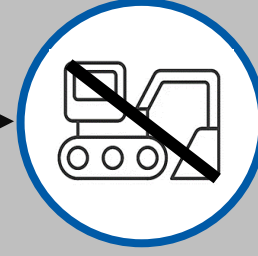
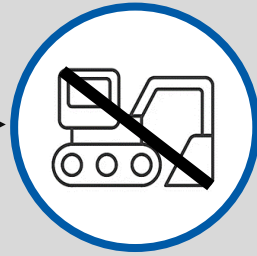
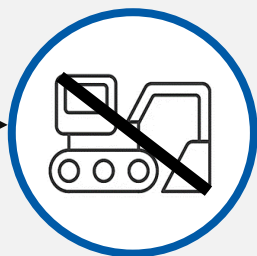


Small scale maintenance



Property Level Resilience (PLR) and adaptation

**National Economic Leading Option**



Do Nothing: no defence maintenance or beach management undertaken. The cliffs will erode over time and more health and safety compliance will be required to make safe public places.

Short Term

Medium Term

Long Term

# ODU 16: Cliff Road

2025 - 2044

2045 - 2074

2075 - 2124

## Key



Do nothing



Proactive maintenance



Upgrade defence

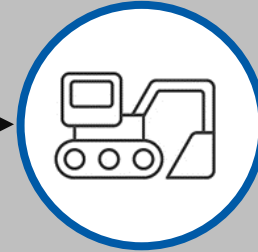
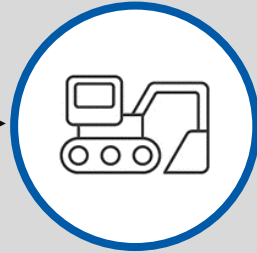
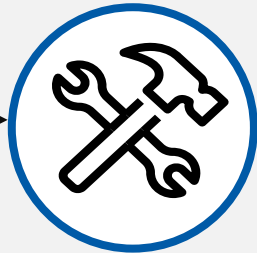


Small scale maintenance

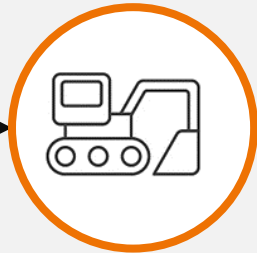


Property Level Resilience (PLR) and adaptation

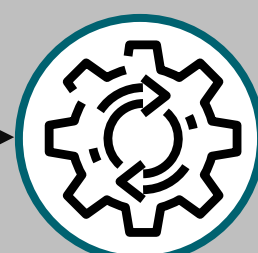
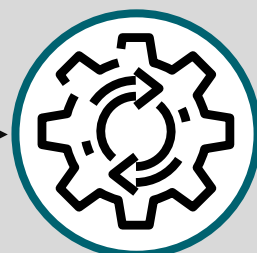
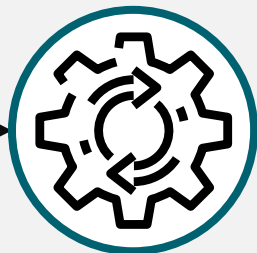
### National Economic Leading Option



### Local Aspirational Option



### Backup Option



Short Term

Medium Term

Long Term

**Managed Realignment (intervene later):** aim to control the rate of cliff erosion and transition the cliff line to a more sustainable position. In the short term this involves small scale maintenance as the cliff erodes. In the medium term a new strong point would be constructed as well as undertaking beach nourishment to increase beach levels and control further cliff erosion. Periodic nourishments may be required in the long term. This is the Managed Realignment C option in the Leading Options report.

**Managed Realignment (intervene sooner):** this is the same approach as the Managed Realignment C option above except the strong point and initial beach nourishment would be undertaken sooner (rather than waiting until the medium term). Periodic beach nourishments may be required in the medium and long term. This is Managed Realignment A or B in the Leading Options report.

**Maintain:** small scale beach management and proactive maintenance / refurbishments to the existing defences in the east of the unit. The rate of cliff erosion is likely to be greater with this option compared to the Managed Realignment Options and could lead to loss of property and key infrastructure.

# ODU 17: Rook Cliff

2025 - 2044

2045 - 2074

2075 - 2124

## Key



Do nothing



Proactive maintenance



Upgrade defence

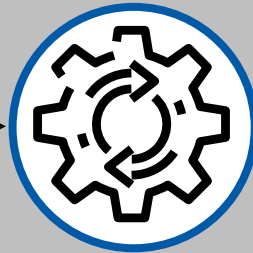
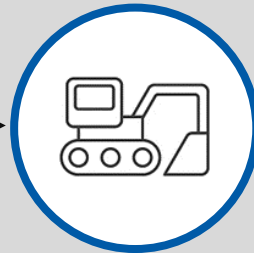
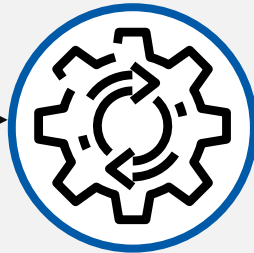


Small scale maintenance

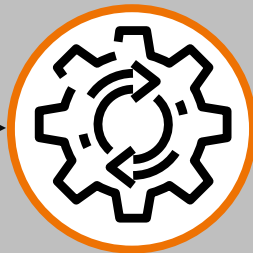


Property Level Resilience (PLR) and adaptation

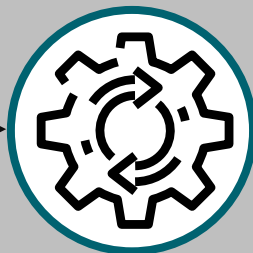
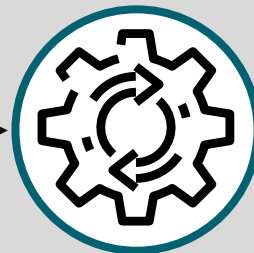
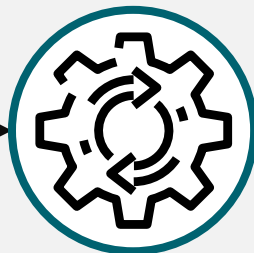
### National Economic Leading Option



### Local Aspirational Option



### Backup Option



Short Term

Medium Term

Long Term

**Improve (intervene later):** aims to minimise erosion of the cliff by upgrading defences at cliff toe in the medium term. In the short term the existing toe defences would be refurbished and then in the medium term they would be upgraded. This would involve making the structures more robust against sea level rise. This is the Improve C option in the Leading Options report.

**Improve (intervene sooner):** same approach as Improve C option above aiming to minimise erosion of the cliff, except the upgrades to the rock structures at the cliff toe would be undertaken sooner. This would provide greater certainty in the short and medium term protection. This is Improve A or B in the Leading Options report.

**Maintain:** proactive maintenance / refurbishments to the existing defences. Due to falling beach levels in this location there is uncertainty as to how sustainable this approach may be in the future and whether long term protection could be provided.

# ODU 18: Milford on Sea

2025 - 2044

2045 - 2074

2075 - 2124

## Key



Do nothing



Proactive maintenance



Upgrade defence

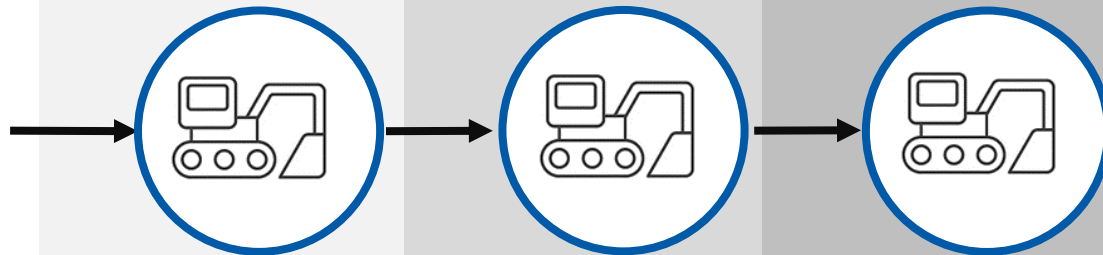


Small scale maintenance

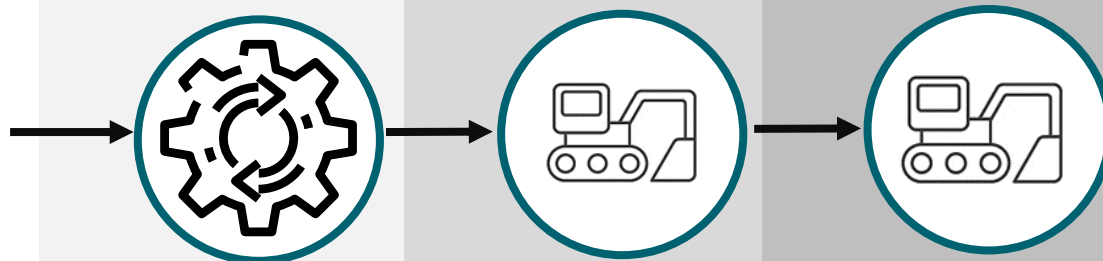


Property Level Resilience (PLR) and adaptation

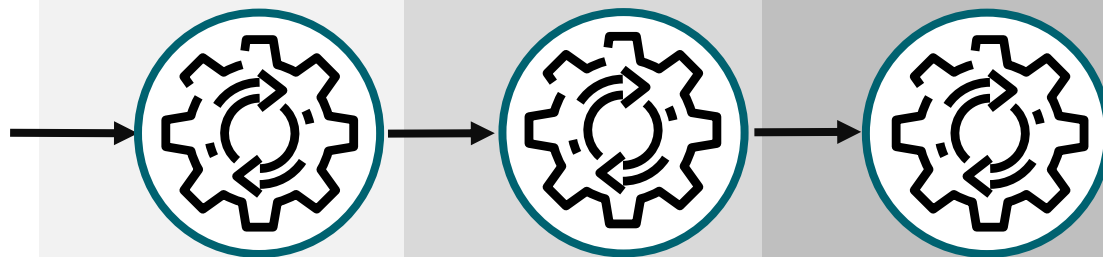
### National Economic Leading Option



### Backup Option



### Backup Option



Short Term

Medium Term

Long Term

Improve (intervene sooner): in the short term upgrade the seawall, construct upgraded beach management structures and undertake major beach nourishment. In the medium term construct setback defences to reduce flood risk from the Sturt Pond direction and undertake property level resilience. Periodic beach nourishments may be required in the medium and long term. This is the Improve A option in the Leading Options report.

Improve (intervene later): in the short term the existing defences would be refurbished and small-scale repeat beach nourishments could be undertaken to help sustain beach levels. In the medium term upgrade the seawall, construct upgraded beach management structures and undertake major beach nourishment. In addition, a setback flood defence would be constructed adjacent to Sturt Pond as well as property level resilience. Periodic beach nourishment may be required in the long term. This is the Improve B option in the Leading Options report.

Maintain: proactive maintenance / refurbishments of the existing defences. Due to a trend of falling beach levels in this location, this approach is likely to be less effective in the future so there is uncertainty about how long the integrity of the defences can be realistically maintained. In addition, sea level rise would lead to a reduced standard of protection against flooding in the future from wave overtopping and tidal inundation via Sturt Pond / Danes Stream.