

01 | Welcome

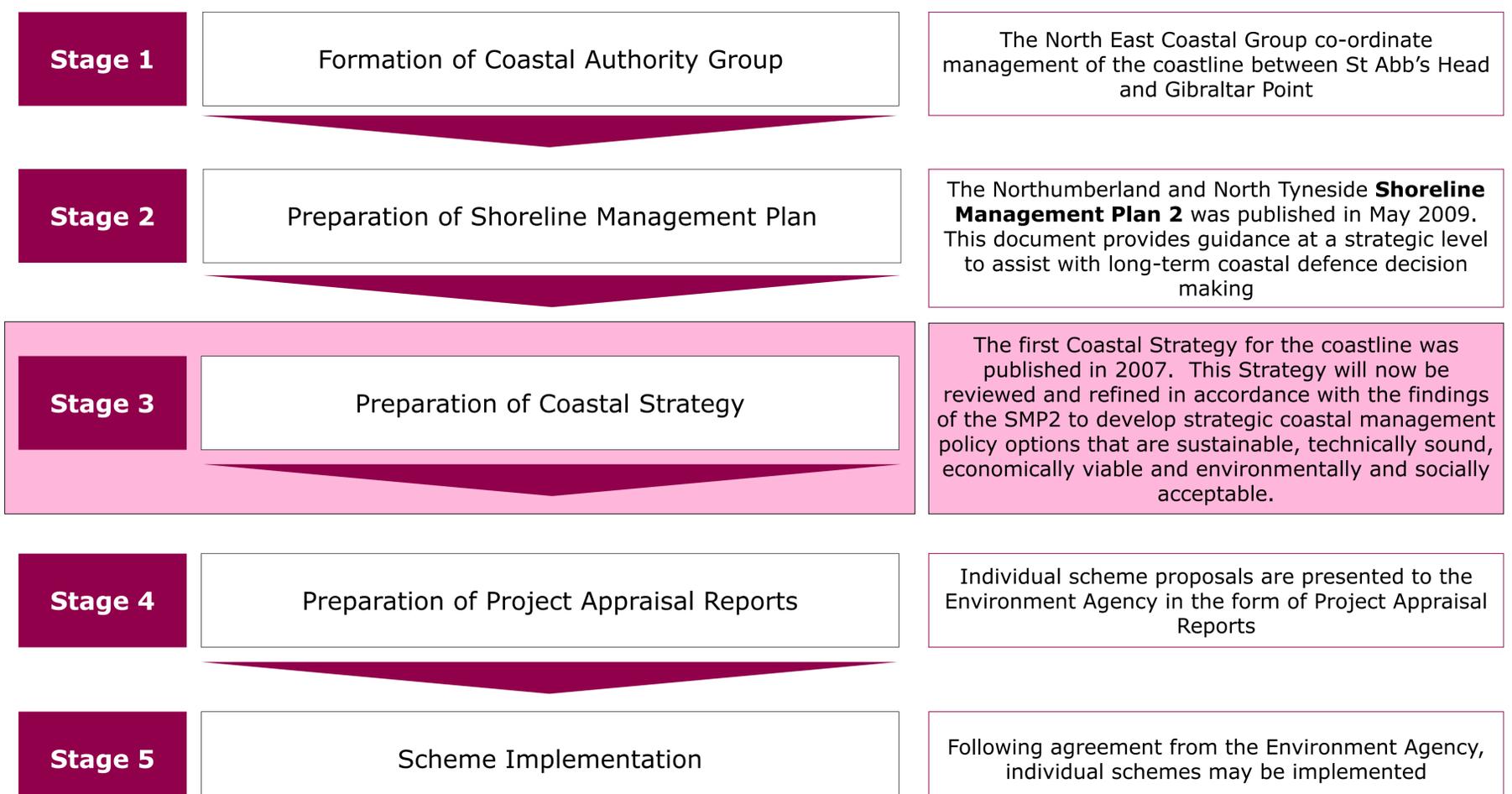
Welcome to the First Public Consultation Event for the Hartley Cove to River Tyne Coastal Strategy Review

The **Coastal Strategy** is a non-statutory document providing a high level basis for decision making on the long term management of the coastline between Hartley Cove and the River Tyne.

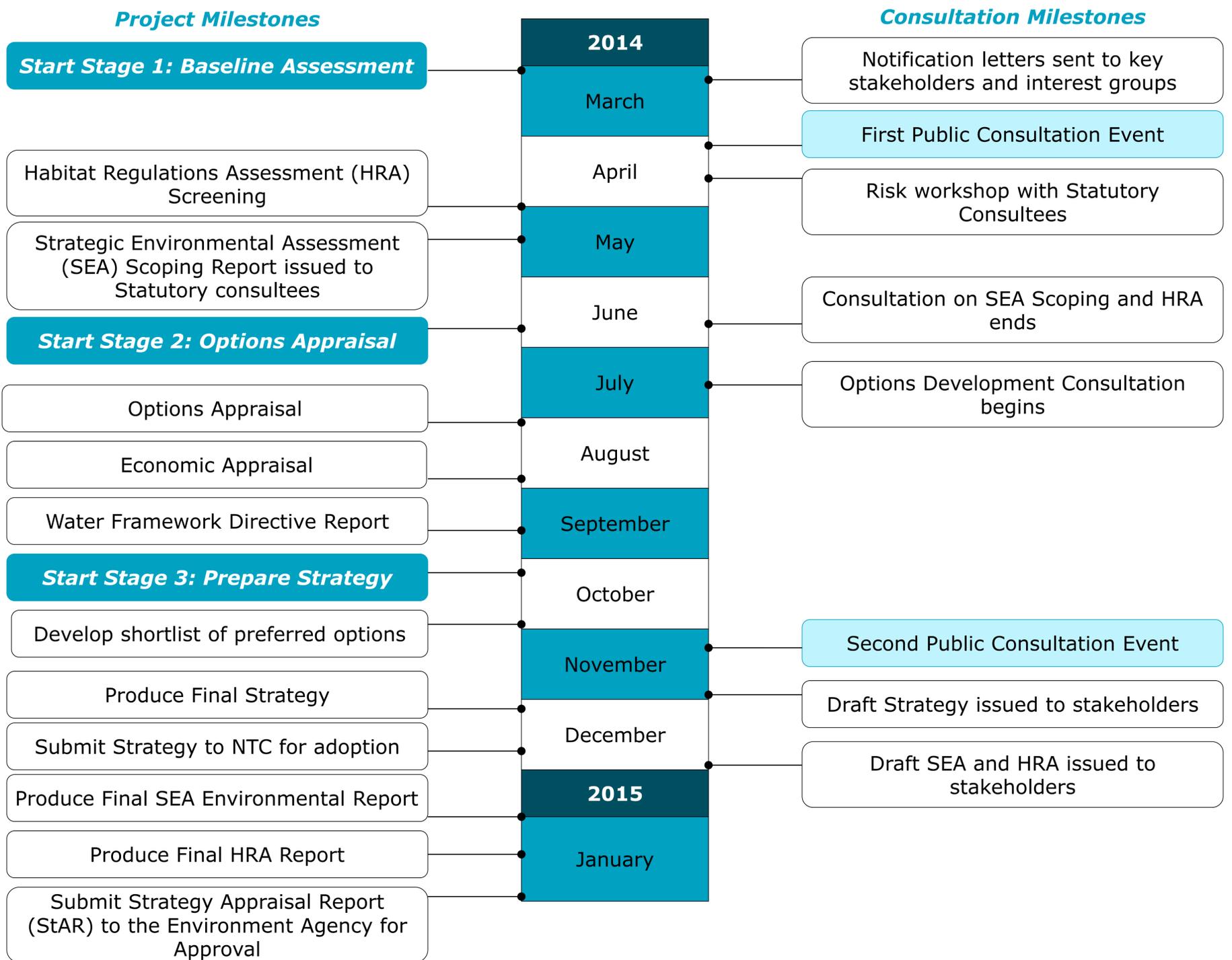
The review appraises a range of coastal defence options to determine the most socially and environmentally acceptable and cost effective method of managing risks such as flooding, erosion and sea level rise.

The first Coastal Strategy for the coastline was published in 2007. Since this initial publication, a revised Shoreline Management Plan (SMP2) has been published and a number of schemes have been completed or identified. The aim now is to develop a revised Coastal Strategy which sets out long term, sustainable solutions for the management of the coastline whilst incorporating a number of changes to legislation since the original Strategy was published.

Coastal Defence Planning Framework



02 | Programme



03 | Coastal Strategy Study Area

The Coastal Strategy covers approximately 10km of coastline between Hartley Cove and the River Tyne at Tynemouth.

The coastal plain supports a wide range of needs and interests. Commercial assets such as the Port of Tyne support the regional economy while local businesses and opportunities for tourism and recreation help to support the local economy. There are also a diverse range of natural environments along the shoreline, many of which are of local, national and international importance because of their unique or rare habitat and geological interest. This is recognised by a number of formally designated and protected sites along the coast.



MU44 | Hartley Cove to St Mary's Lighthouse

MU45 | St Mary's Lighthouse to Whitley Sands

MU46 | Whitley Sands to Whitley Bay

MU47 | Cullercoats to Tynemouth North Pier

MU48 | Tynemouth North Pier to Fish Quay

04 | Hartley Cove to St Mary's Lighthouse

Management Unit 44 is made up of hard cliffs which act as an anchor for softer structures to the north and south.

- North of St Mary's Island is eroding at 0.3 m/year.
- Southern boundary of the Management Unit acts as a boundary for long shore sediment transport.
- The wave direction changes from northerly to north-easterly towards the coastline. The majority of waves are up to 0.5m high.

Environmental and Historical Considerations

- Tynemouth to Seaton Sluice Site of Special Scientific Interest (SSSI) (Geological)
- Northumberland Shore SSSI (Ecological)
- Northumbria Coast Special Protection Area (SPA) and Ramsar Site
- St Mary's Island Local Nature Reserve (LNR)
- St Mary's Island Lighthouse Grade II Listed Building
- Off-road Cycle Route 1 and various Public Rights of Way



Preferred Strategic Option: Selectively Hold the Line

Preferred Policy

- Allow coastline to retreat where undefended.
- Repair identified defects in existing structures and continue to maintain structures.
- Maintain access points.
- Protect existing structures against outflanking by small-scale works.

05 | St Mary's Lighthouse to Whitley Sands

Management Unit 45 is made up of hard cliffs and open beaches. This unit provides recreational facilities.



- Limited amount of sediment able to enter due to St Mary's Island. Transported sediment remains within Whitley Bay.
- The wave direction changes from northerly to north-easterly towards the coastline. The majority of waves are up to 0.5m high.

Environmental and Historical Considerations

- Tynemouth to Seaton Sluice Site of Special Scientific Interest (SSSI) (Geological)
- Northumberland Shore SSSI (Ecological)
- Northumbria Coast Special Protection Area (SPA) and Ramsar Site
- St Mary's Island Local Nature Reserve (LNR)
- Grade II and II* Listed Buildings at Whitley Bay Crematorium
- Off-road Cycle Route 1 and various Public Rights of Way



Preferred Strategic Option: Selectively Hold the Line

Preferred Policy

- Allow coastline to retreat where undefended.
- Repair identified defects in existing structures and continue to maintain structures.
- Maintain access points.
- Protect existing structures against outflanking by small-scale works.

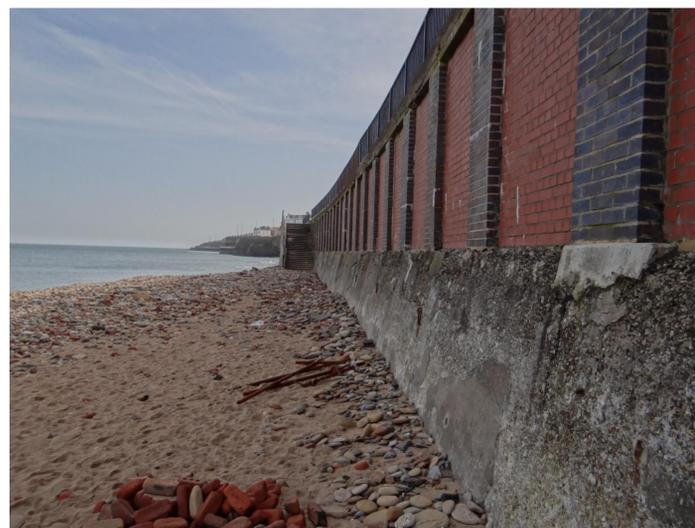
06 | Whitley Sands to Whitley Bay

Management Unit 46 is made up of open beaches and hard cliffs. This management unit is protected by a range of defences.

- Limited amount of sediment able to enter due to St Mary's Island. Sediment tends to remain within Whitley Bay & Long Sands.
- The wave direction changes from northerly to north-easterly towards the coastline. The majority of waves are up to 0.5m high.

Environmental and Historical Considerations

- Tynemouth to Seaton Sluice Site of Special Scientific Interest (SSSI) (Geological)
- Northumberland Shore SSSI (Ecological)
- Northumbria Coast Special Protection Area (SPA) and Ramsar Site
- Various Grade II Listed Buildings including Spanish City



Preferred Strategic Option: Hold the Line

Preferred Policy

- Repair identified defects in existing structures and continue to maintain structures
- Maintain access points
- Undertake improvement works where economically justified
- Operate shoreline, beach level and structure monitoring system

07 | Cullercoats to Tynemouth North Pier

Management Unit 47 is made up of mainly open beaches including Long Sands where there is no existing protection.



- Limited amount of sediment able to enter due to St Mary's Island. Sediment tends to remain within Whitley Bay & Long Sands.
- North Pier acts a barrier to sediment, allowing limited sediment to enter Tyne estuary.
- Cullercoat North and South Piers provide calm water within the Harbour, providing protection to the Dove Marine Laboratory and southern part of the harbour.



Environmental and Historical Considerations

- Tynemouth to Seaton Sluice Site of Special Scientific Interest (SSSI) (Geological)
- Northumberland Shore SSSI (Ecological)
- Northumbria Coast Special Protection Area (SPA) and Ramsar Site
- Church of St George Grade I Listed Building and Cliff House Grade II* Listed Building
- Scheduled Ancient Monument; Tynemouth Castle and Priory

Preferred Strategic Option: Selectively Hold the Line

Preferred Policy

- Allow coastline to retreat where undefended.
- Repair identified defects in existing structures and continue to maintain structures.
- Maintain access points.
- Undertake improvement works where economically justified or strategically important for regeneration or where works offer key environmental enhancement

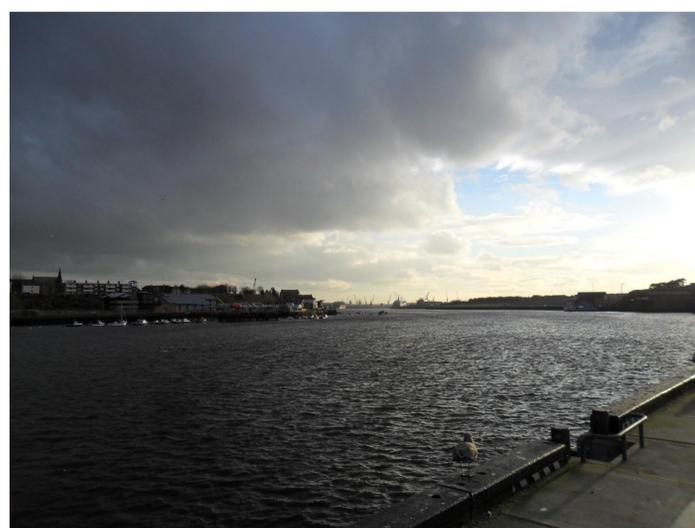
08 | Tynemouth North Pier to Fish Quay

Management Unit 48 contains recreational and residential areas of Tynemouth, SSSI habitats, the lighthouse, and museum.

- The navigation channel is dredged annually, removing approximately 30,000 m³.
- The Tyne (North & South) Piers reflect wave energy, and provide protection to the inner harbour and surrounding areas. Wave energy is diffracted onto area where land use is less critical.
- Historical flood events have been recorded within the Fish Quay area.

Environmental and Historical Considerations

- Northumberland Shore SSSI (Ecological)
- Northumbria Coast Special Protection Area (SPA) and Ramsar Site
- Scheduled Ancient Monuments; Tynemouth Castle and Priory and Clifford's Fort
- Various Grade II and II* Listed Buildings including Clifford's Fort and Collingwood Monument



Preferred Strategic Option: Selectively Hold the Line

Preferred Policy

- Allow coastline to retreat where undefended.
- Repair identified defects in existing structures and continue to maintain structures Maintain access points
- Undertake improvement works where economically justified or strategically important for regeneration
- Operate shoreline, beach level and structure monitoring system
- Continue to operate existing flood warning system

09 | Environmental Assessments

Environmental Assessments will be conducted to gain an understanding of any possible impacts the Coastal Strategy may have on the environment.

Strategic Environmental Assessment (SEA)

Strategic Environmental Assessment (SEA) ensures that the potential environmental impacts of a strategy are considered from the earliest stage. It ensures that any significant negative impacts are identified, assessed, mitigated, communicated and monitored.

The SEA will culminate in the production of an **Environmental Report** and will identify:

- the key environmental issues associated with the proposed coastal defence management options;
- the key environmental objectives;
- the views of any consultees, ensuring they are taken into account when developing the Strategy;
- any impacts associated with construction and operation of the Strategy;
- appropriate mitigation measures and enhancement measures where appropriate; and
- proposals for environmental monitoring of the Strategy.

Water Framework Directive (WFD)

The **Water Framework Directive** requires all water bodies to have both good chemical and ecological status.

Activities or schemes that affect water bodies have the potential to change these conditions; therefore an assessment is required to ensure there is no deterioration in water quality status as result of the proposed strategy.



Habitat Regulations Assessment (HRA)

Habitat Regulations Assessment considers the impacts of proposals upon Natura 2000 sites. These are European sites which are designated for their important habitats or species.

The screening process of the HRA will identify whether the proposed strategy has the potential to significantly affect a Natura 2000 site.

If significant effects cannot be ruled out a second stage Appropriate Assessment will be undertaken to determine the extent of effects and identify potential mitigation measures or alternative proposals.