

The Moors at Arne Project

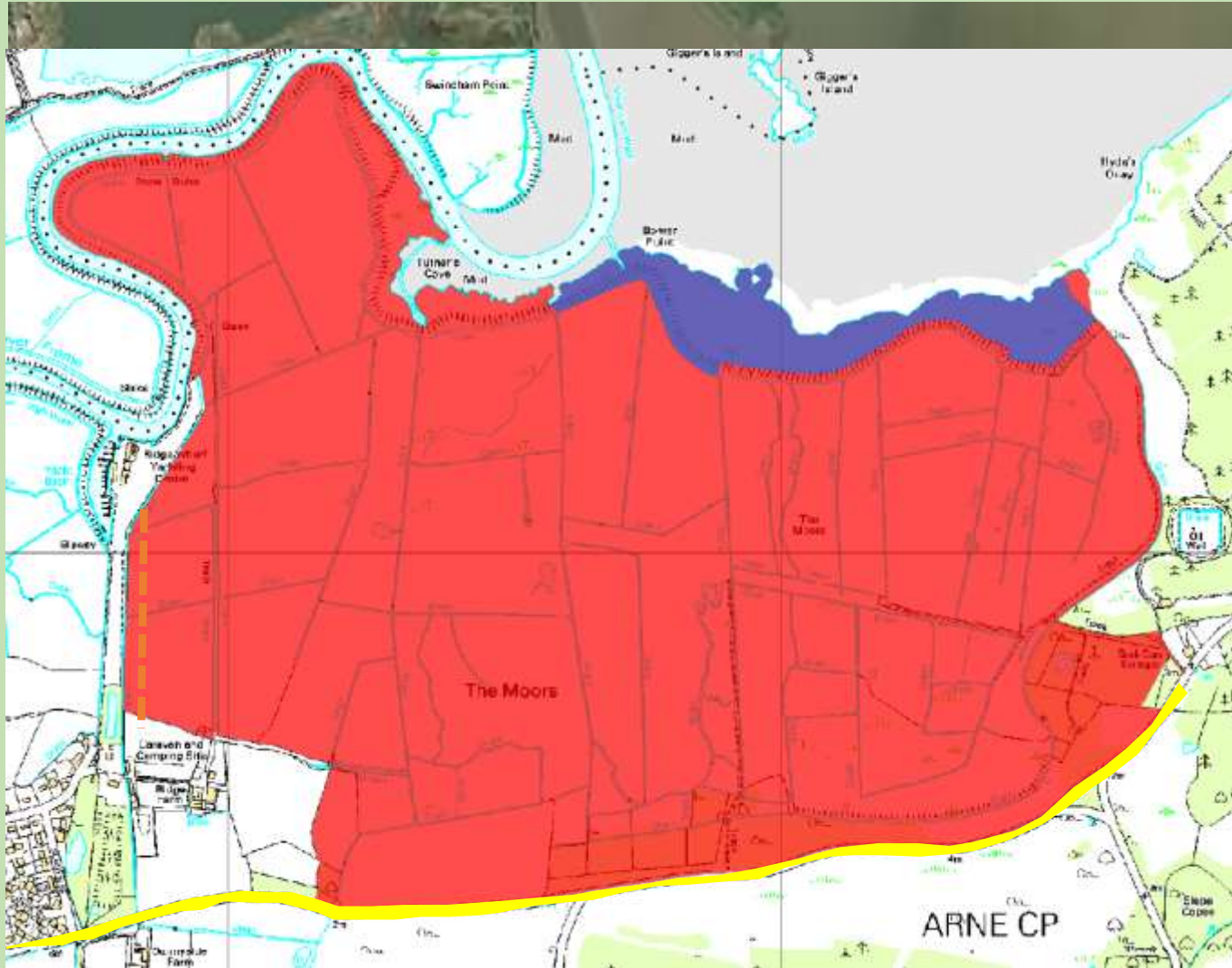


Our Aim Tonight:

To provide context for the project

- **Current Flood Risk**
- **Why a coastal change project?**
- **The Partnership**
- **Options being considered**
- **How we deliver projects**
- **Timescales**
- **Consultation & engagement**

The Moors at Arne Project



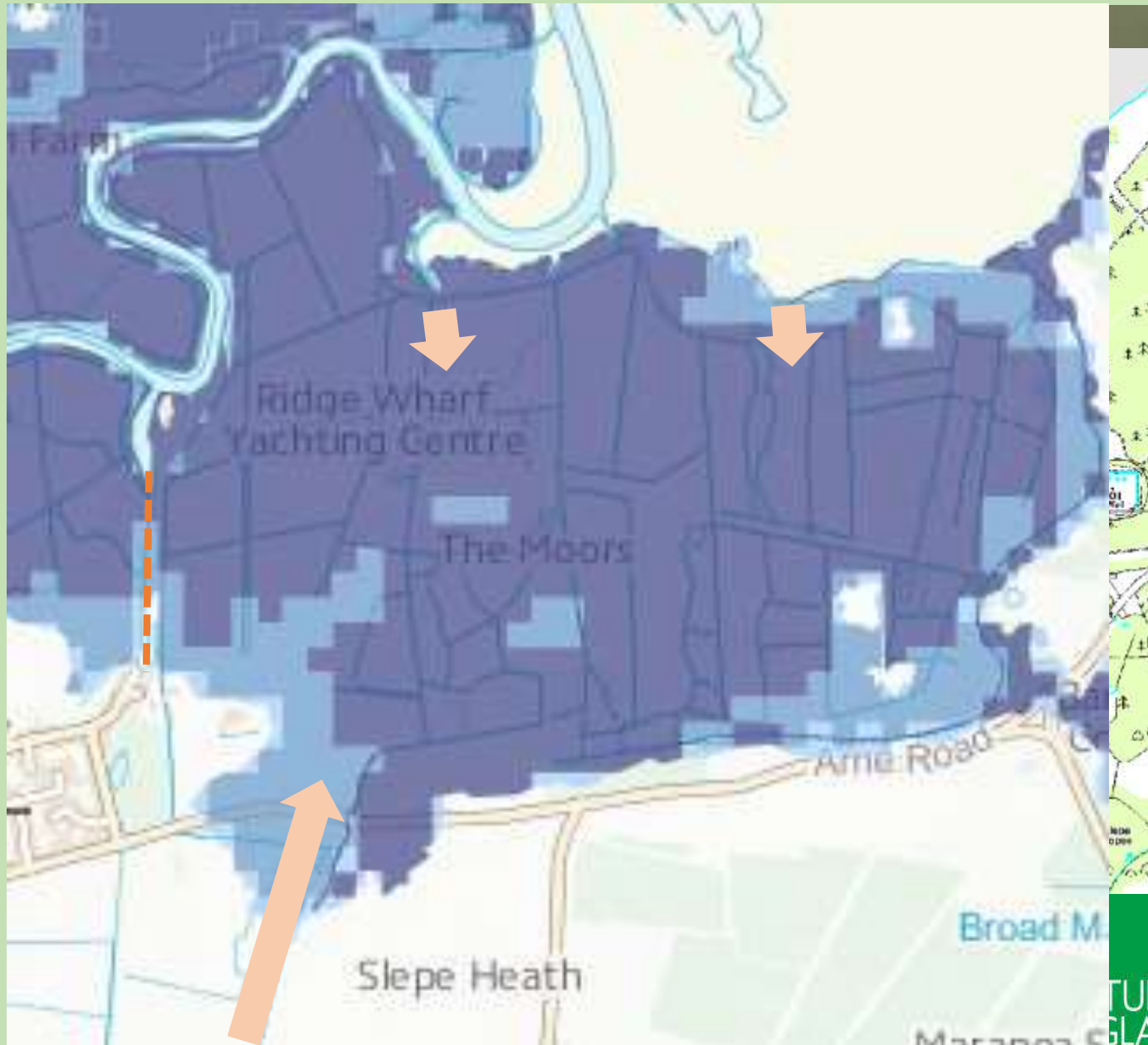
Site Area:

Red = RSPB

Blue = Natural England

Yellow = Arne Road

The Moors at Arne Project



Site Area:

Red = RSPB

Blue = Natural England

Yellow = Arne Road



giving
nature
a home



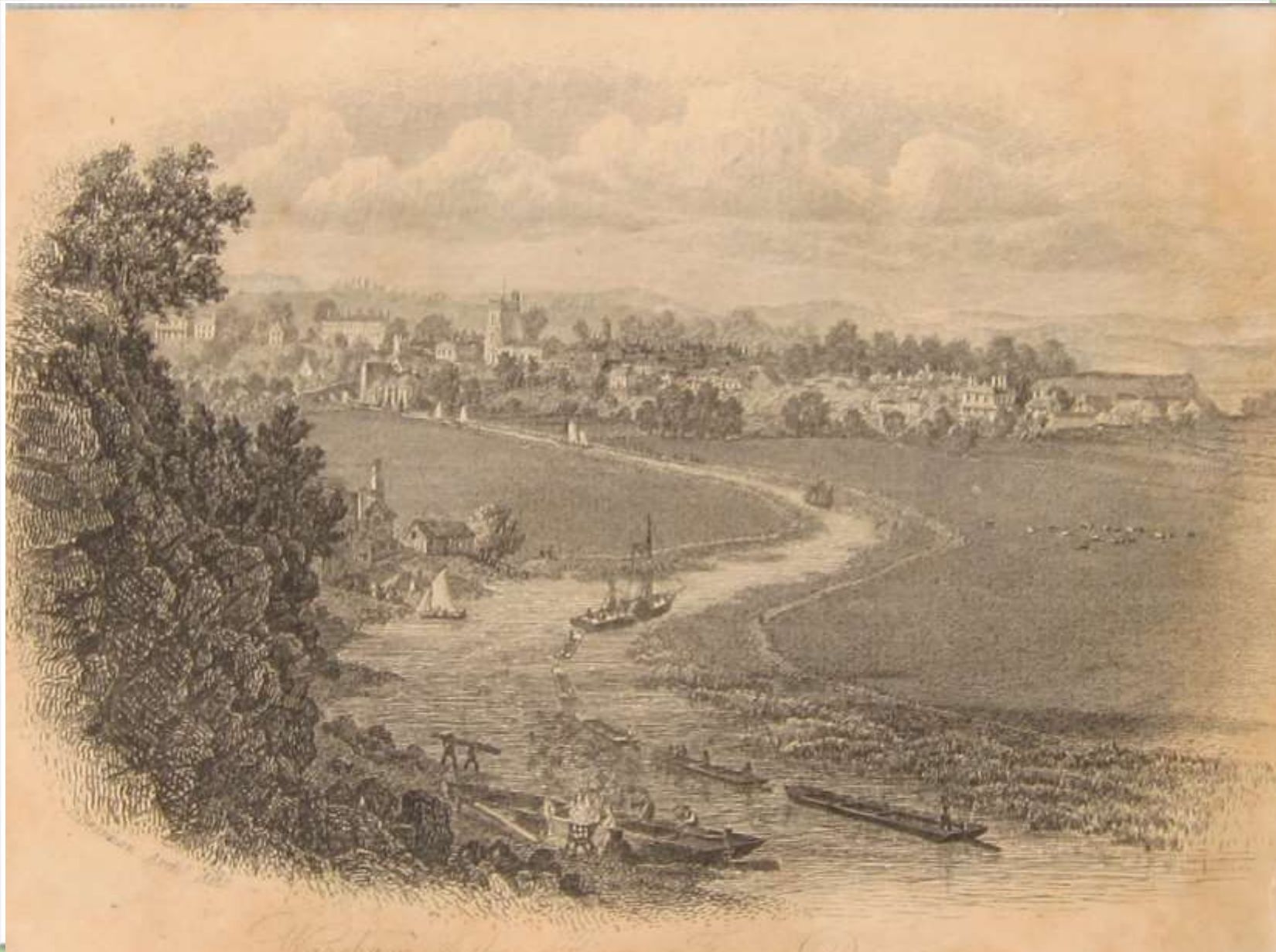
Current Flood Risk

How might coastal change affect Wareham in future?



Historic Tidebanks
Draining the land
for agriculture &
Securing Navigation

Current Flood Risk



Historic Tidebanks
Draining the land
for agriculture &
Securing Navigation

Current Flood Risk



Historic Tidebanks
Draining the land
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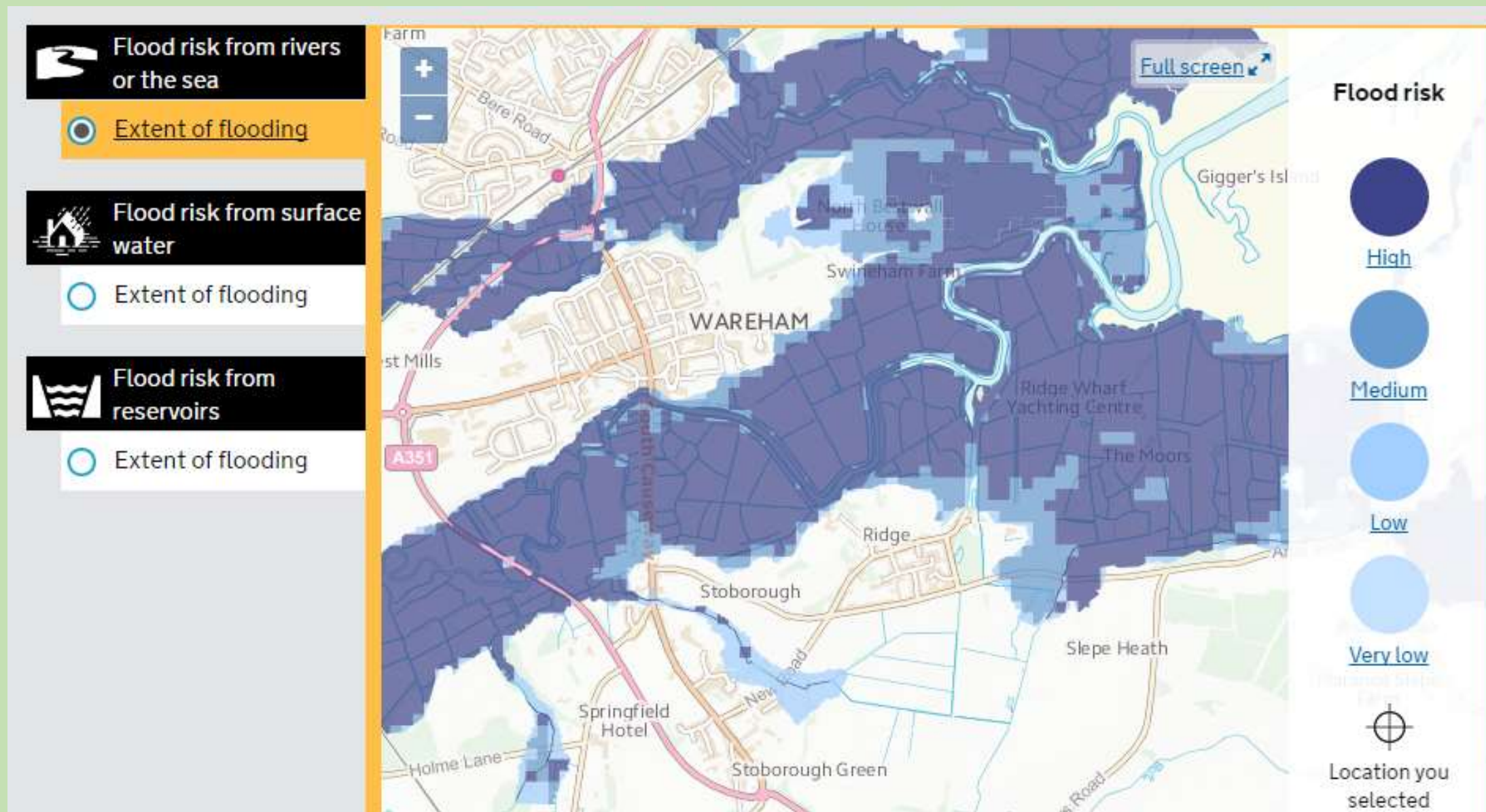
1911 – Clay barges
returning to
Wareham from
Poole Quay

Current Flood Risk



Historic Tidebanks
Draining the land
for agriculture &
Securing Navigation
reforming in 1957

The Current Flood Risk – Stoborough & Ridge



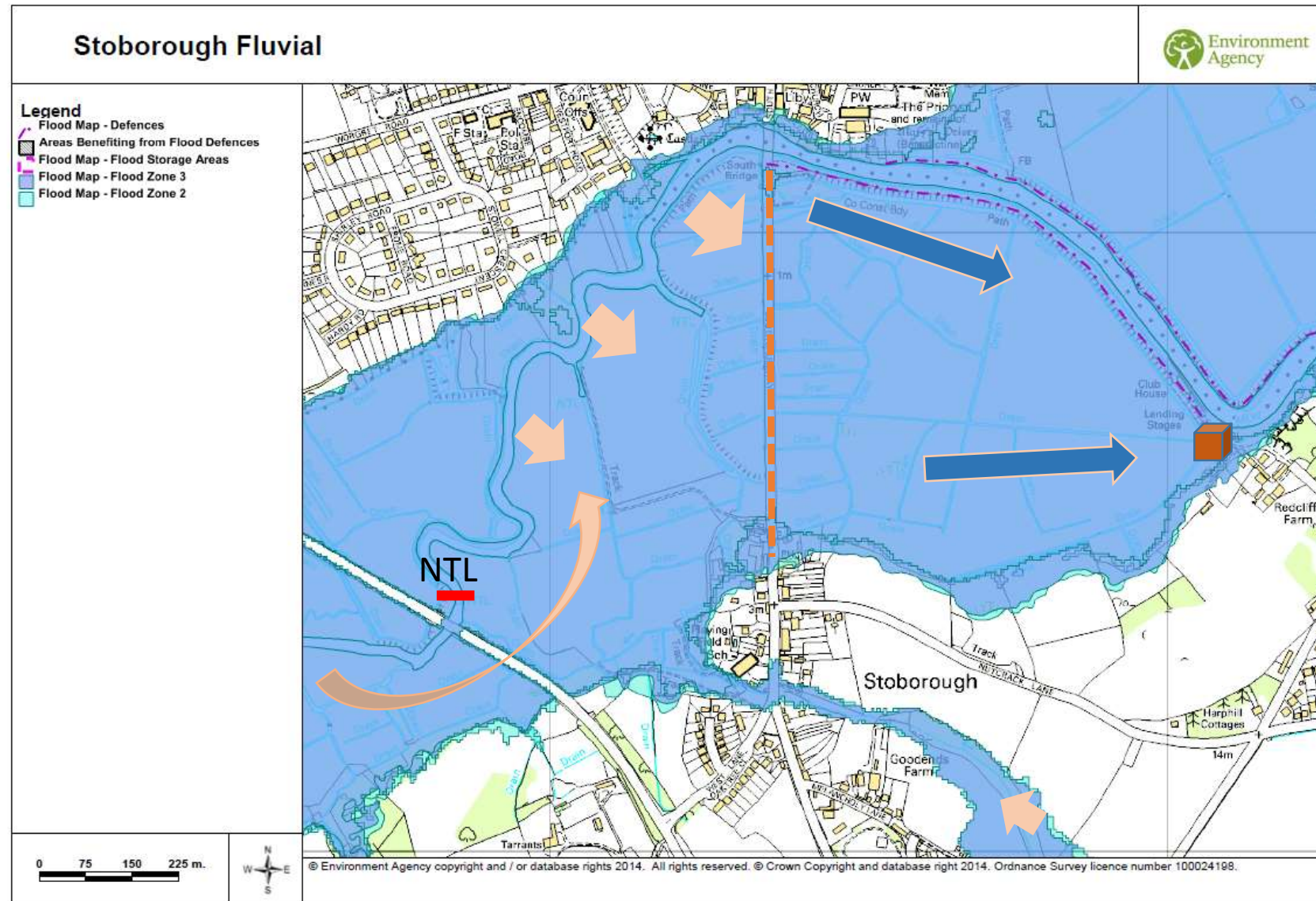
<https://flood-warning-information.service.gov.uk/long-term-flood-risk/map>

The Current Flood Risk – Stoborough & Ridge

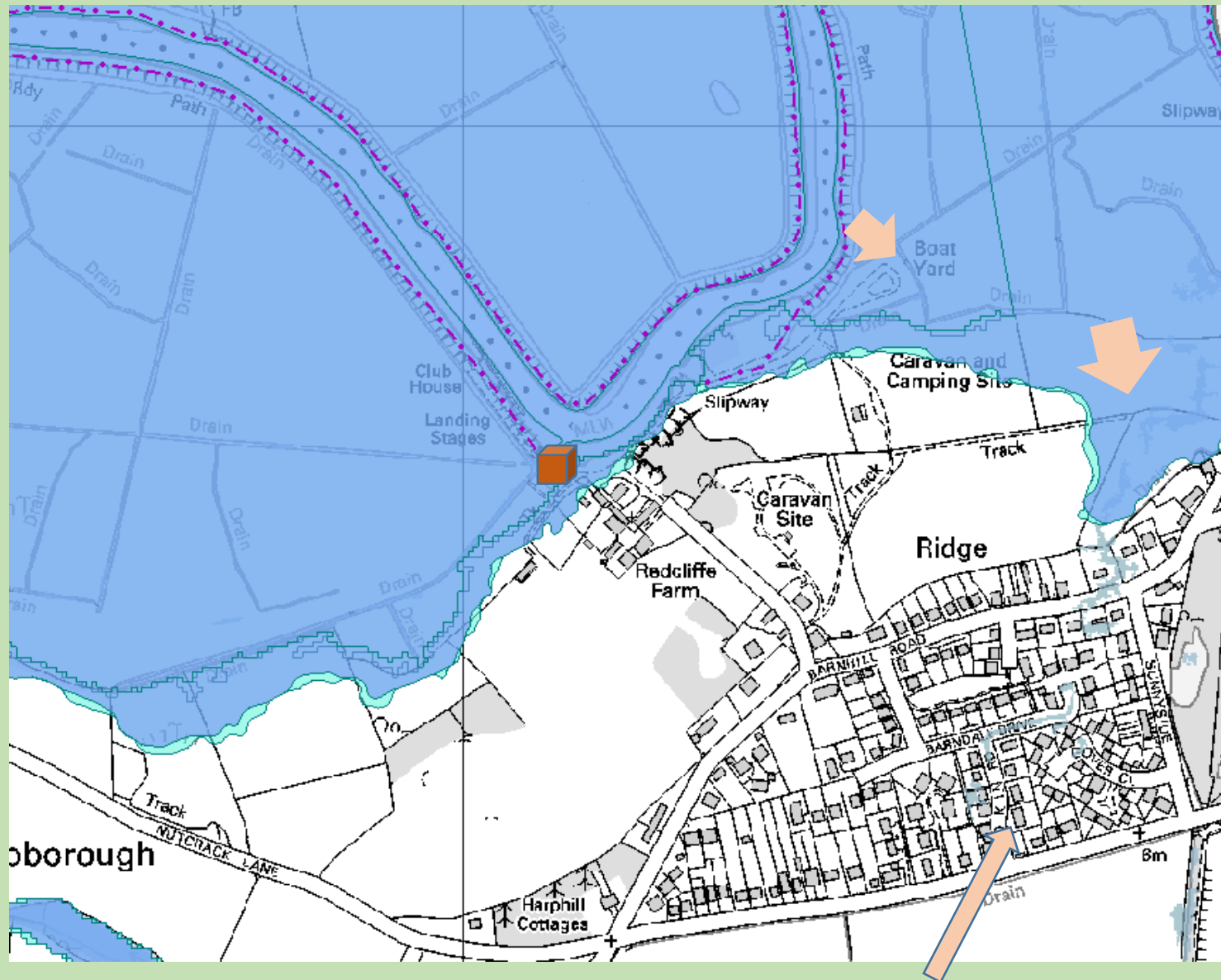


<https://flood-warning-information.service.gov.uk/long-term-flood-risk/map>

The Current Flood Risk – Stoborough



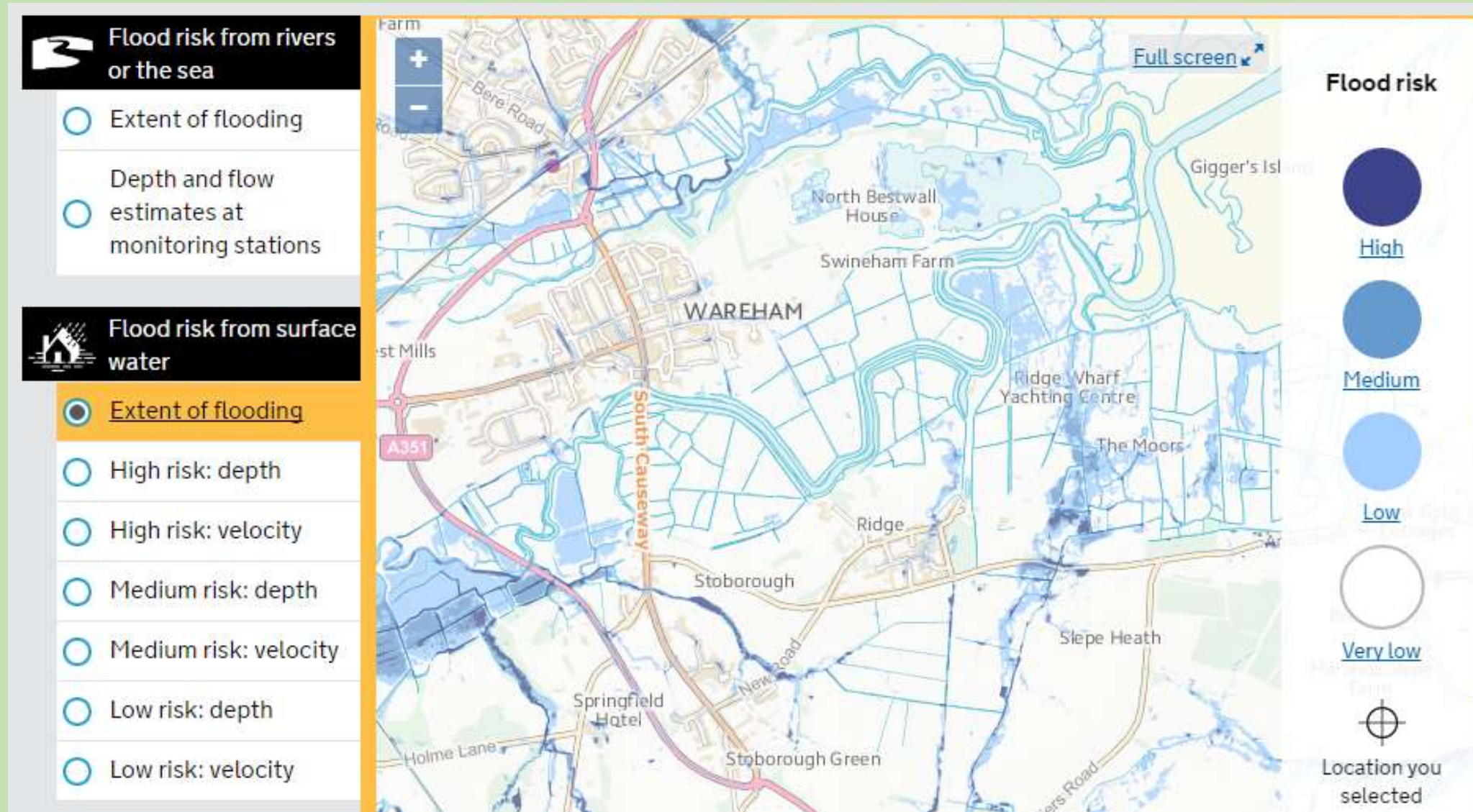
The Current Flood Risk – Redcliffe to Ridge



River Frome occupies the floodplain near Stoborough



The Current Surface Water Risk – Stoborough & Ridge



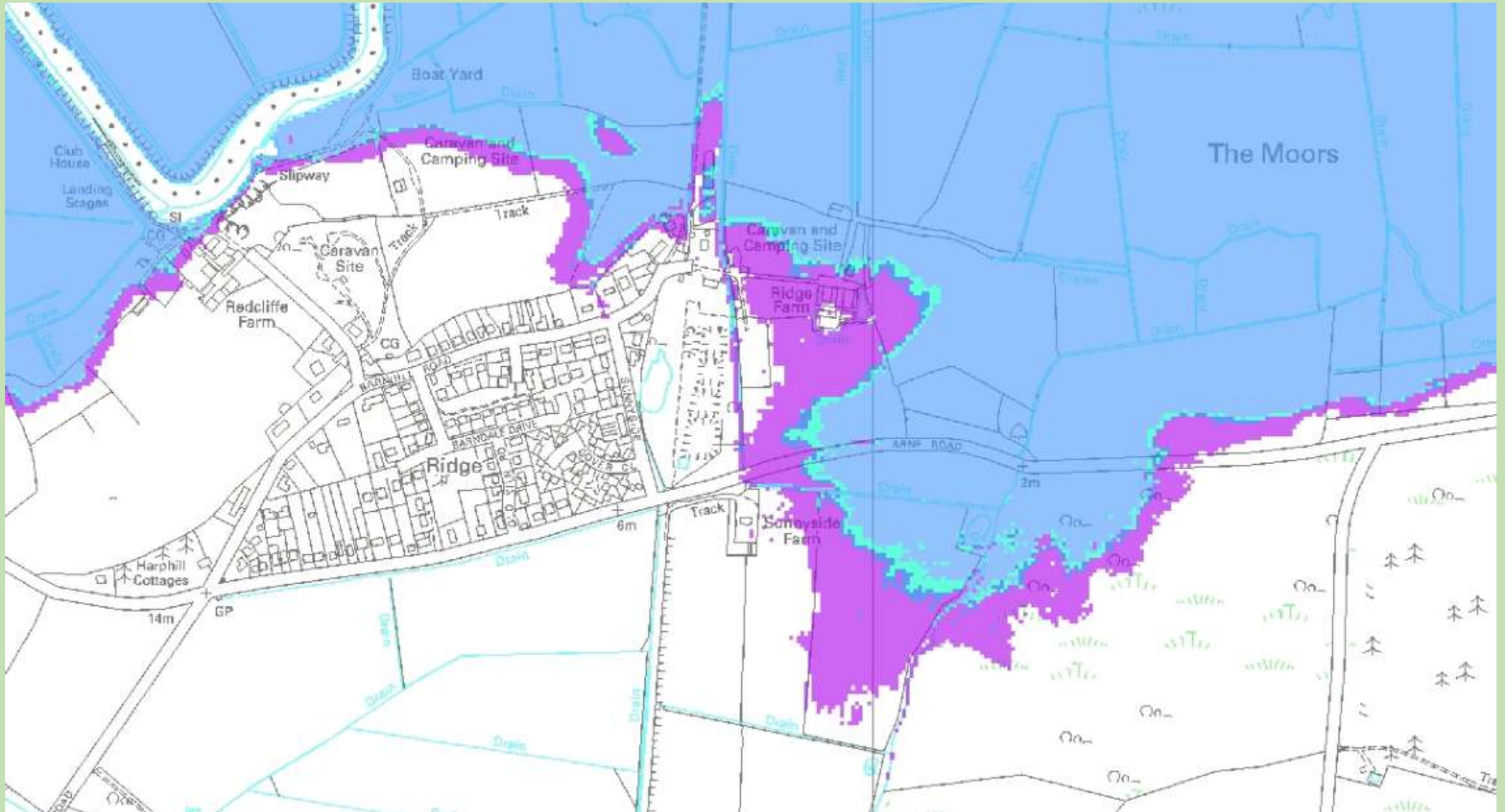
<https://flood-warning-information.service.gov.uk/long-term-flood-risk/map>

The Current Surface Water Risk – Stoborough & Ridge



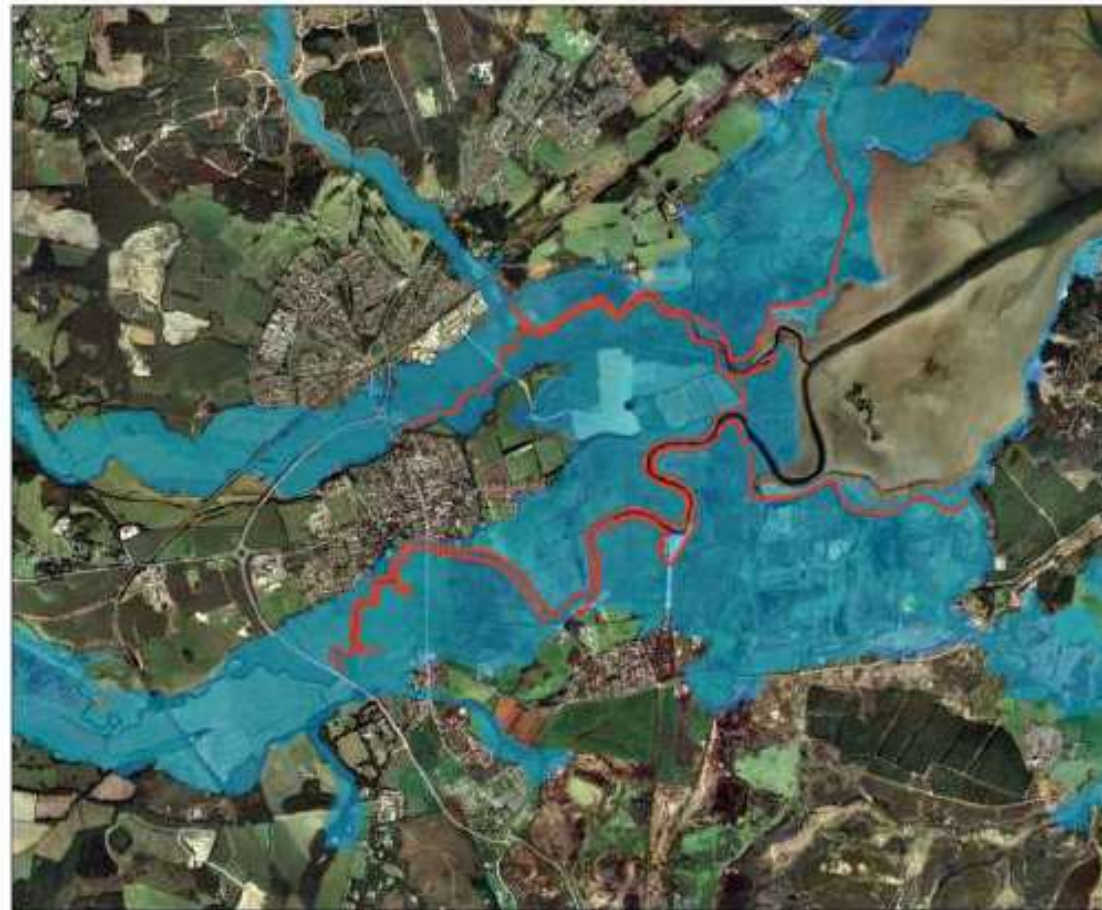
<https://flood-warning-information.service.gov.uk/long-term-flood-risk/map>

The Climate Change Prediction



Coastal change and Wareham:

The Future



**Wareham Tide Banks
& Flood Zones**

- Raised Defences (man made)
- Flood Zone 2 (1000yr)
- Flood Zone 3 (100/200yr)

- The Shoreline Management Plan policy for Wareham is 'Managed Realignment'

0 0.25 0.5
km



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Why a Coastal Change Project? Context within Poole Harbour



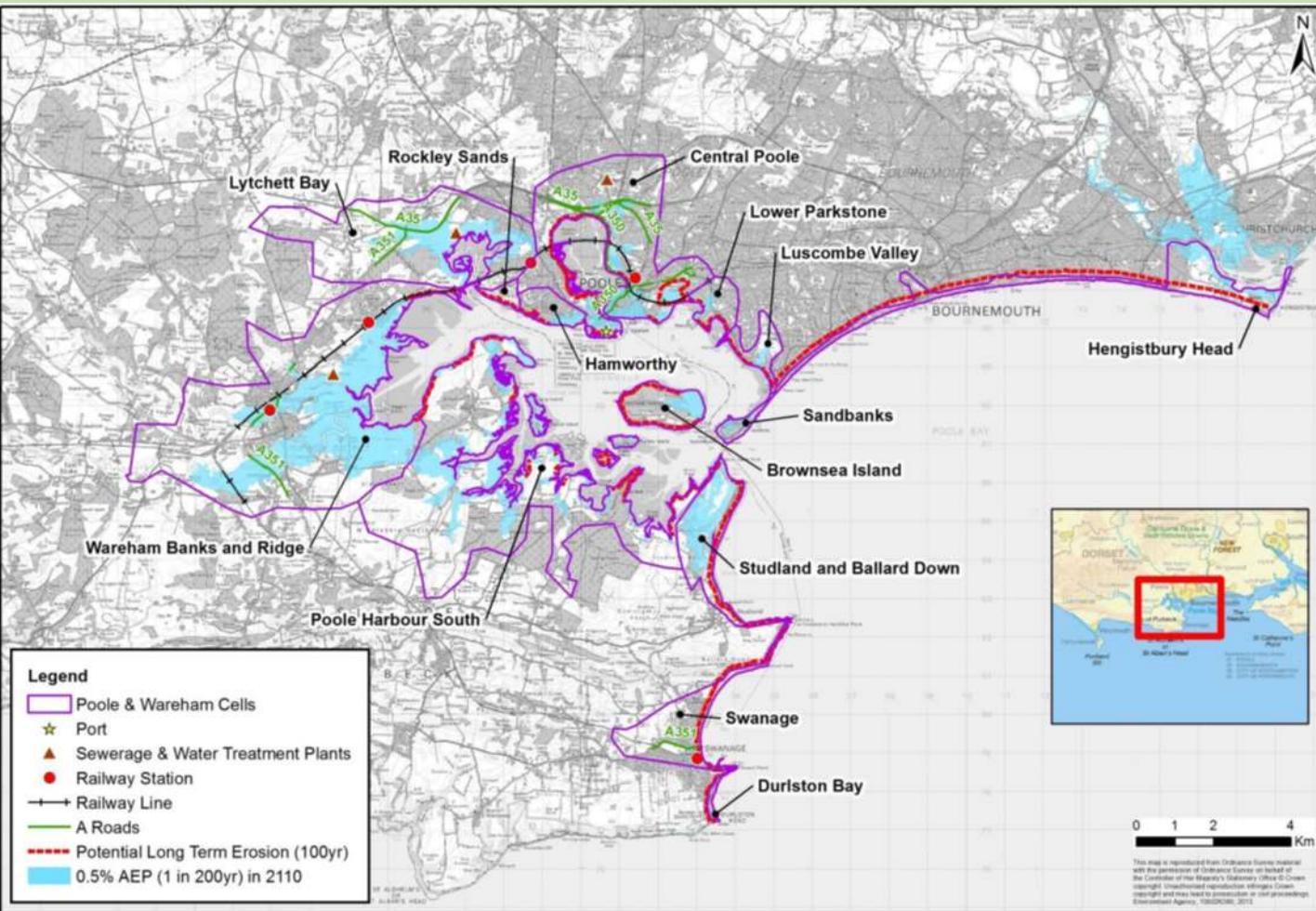
What is 'Coastal Squeeze'?



Poole Quay Tidal Defence Improvements



Poole & Wareham Flood & Coastal Risk Management Strategy



- Adopted March 2015
- Increased flood & erosion risk (700mm SLR by 2100), leading to:
 - Over 10,000 properties at risk by 2100.
 - Present Value of benefits £1.75 billion
- Developed Areas justify Hold The Line Policy.
- Requirement for Compensatory habitat. IROPI case approved.
- Intertidal Habitat Loss Predictions (cumulative)
 - Epoch 1 - 2030 – 44ha
 - Epoch 2 - 2060 – 87ha
 - Epoch 3 - 2110 – 313ha

Habitat Creation Objectives

- Working with Natural Processes
- Developing a mosaic of Intertidal habitats across the site including:

Saltmarsh

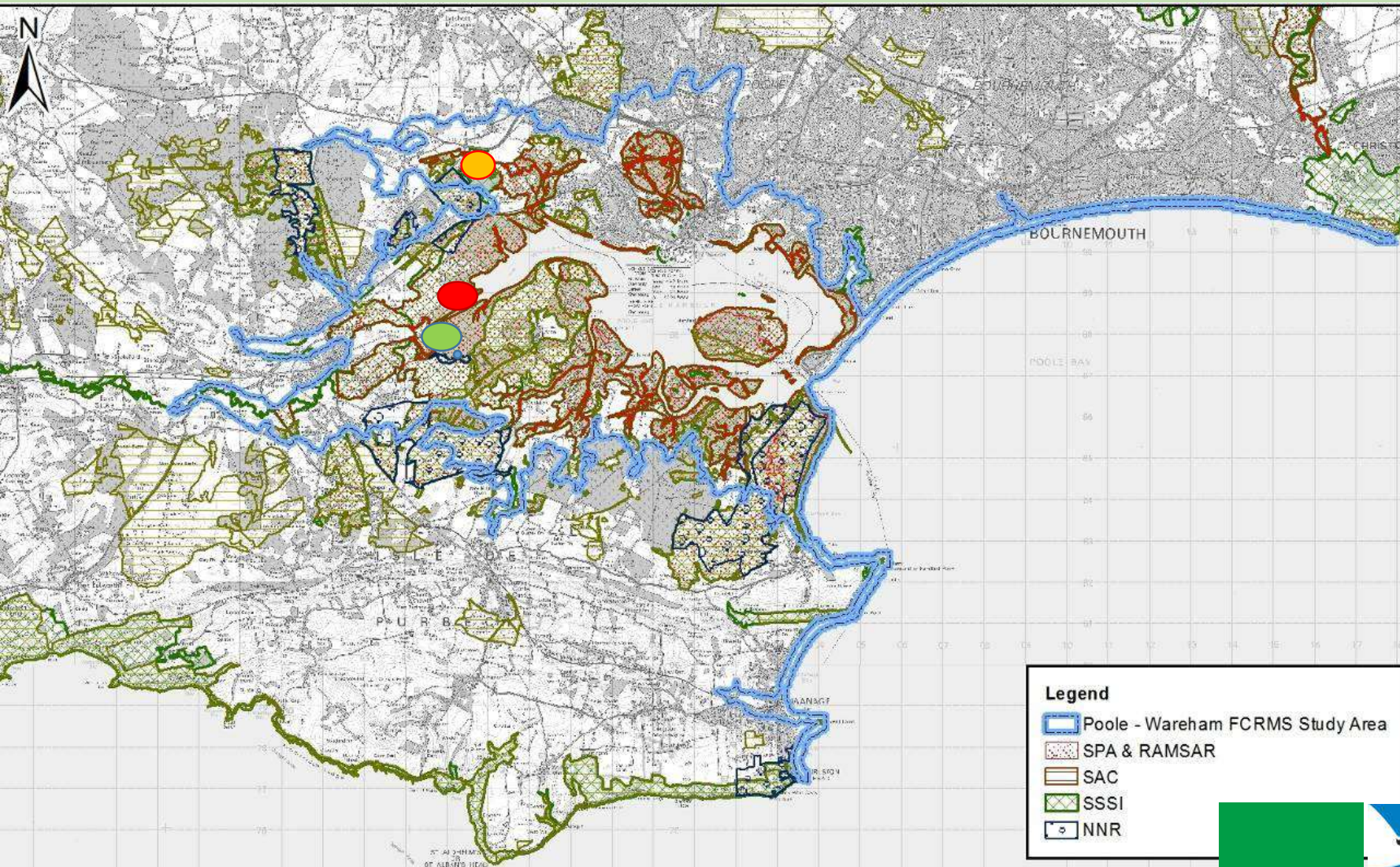
Mudflat

Saline Lagoons



- Protecting rare and irreplaceable habitats in situ – Cladium Fen

Strategic Context – Compensatory Habitat



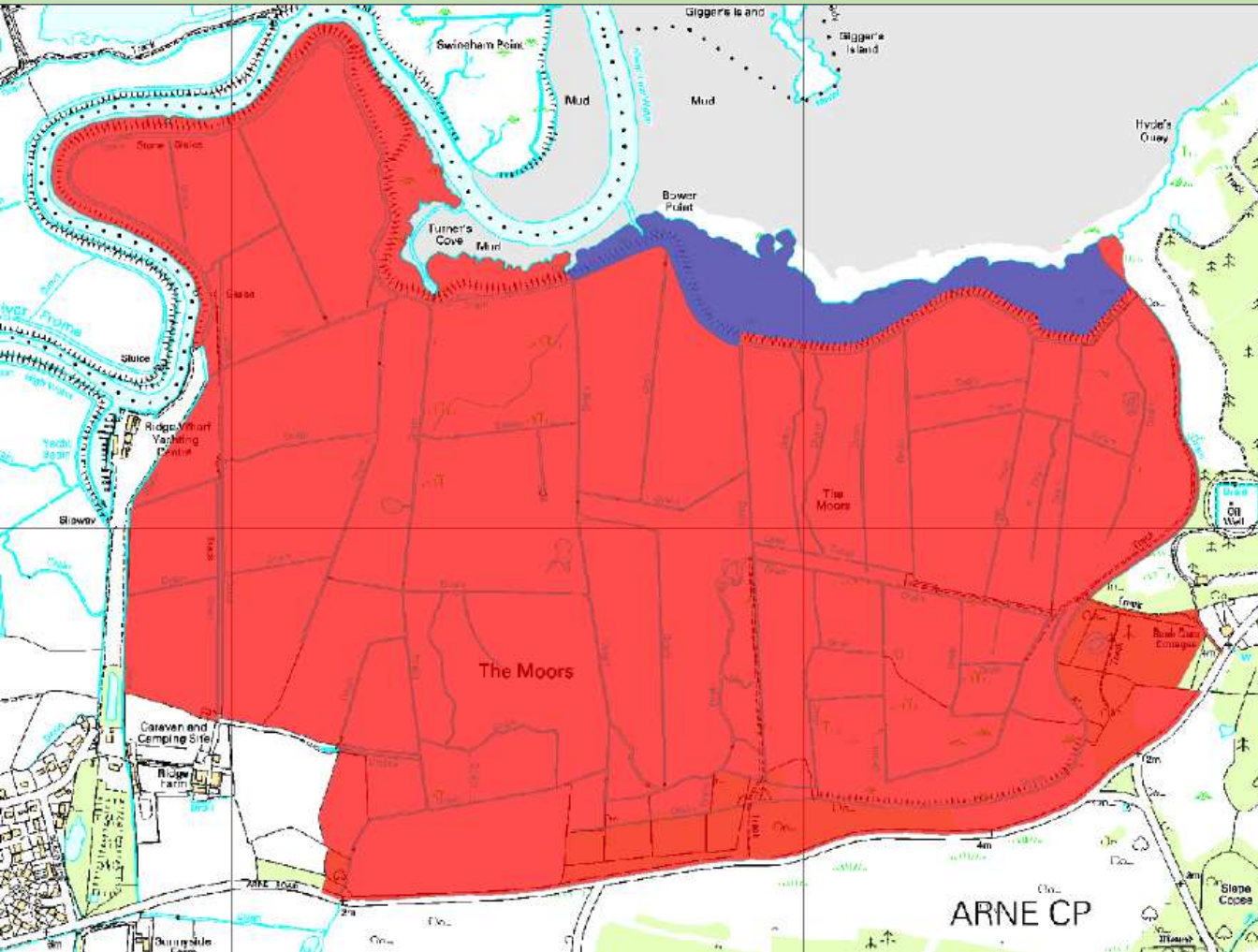
Strategic Challenge

- Finding suitable sites
- Area Heavily Designated, reflecting the special character of Poole Harbour

Options – three sites

- Lytchett Bay – French's Farm
- Keyworth
- Arne Moors

Our Preferred Site - Moors at Arne



- Partnership Project.
- Existing landowners – RSPB & NE.
- Developed a collaborative agreement.
- Secured funding for Detailed Design.
- Awarded a design contract to CH2M.

Doing nothing at Arne is not an option



Turners Cove Sluice 2015

Our Shared Vision – Conceptual Layout



Design Philosophy

- Developing a cost effective scheme – meets all the partners objectives.
- Restoring and working with natural process.
- Maximising the potential of the site – future proofing – lagoons.
- Providing on site mitigation for SPA and Ramsar features.
- Developing the site in a way that benefits people and wildlife – controlled access.

Developing the Scheme

- Consultants team CH2M, ABPmer & APEM
- Use of National & local experts via Technical Advisory Group (TAG)
 - Habitats Regulation Assessments – on site mitigation
 - Preliminary Ecological Appraisal
 - Cultural Heritage
- Consultation with Parish Council, local residents and the general public



Environment
Agency

Minimum Design Components

As a minimum any scheme will provide the following:

- Maintaining flood risk resilience to people, property and infrastructure.
- Sufficient surface capacity to maintain existing levels of land drainage.
- 44ha of open Intertidal habitat with at least one breach.
- Saline lagoons.
- New embankments at the rear of the site to protect the existing SAC features.
- New freshwater habitat with a ditch network behind the new defences to mitigate for the loss of the existing freshwater features.
- On site mitigation for protected species.

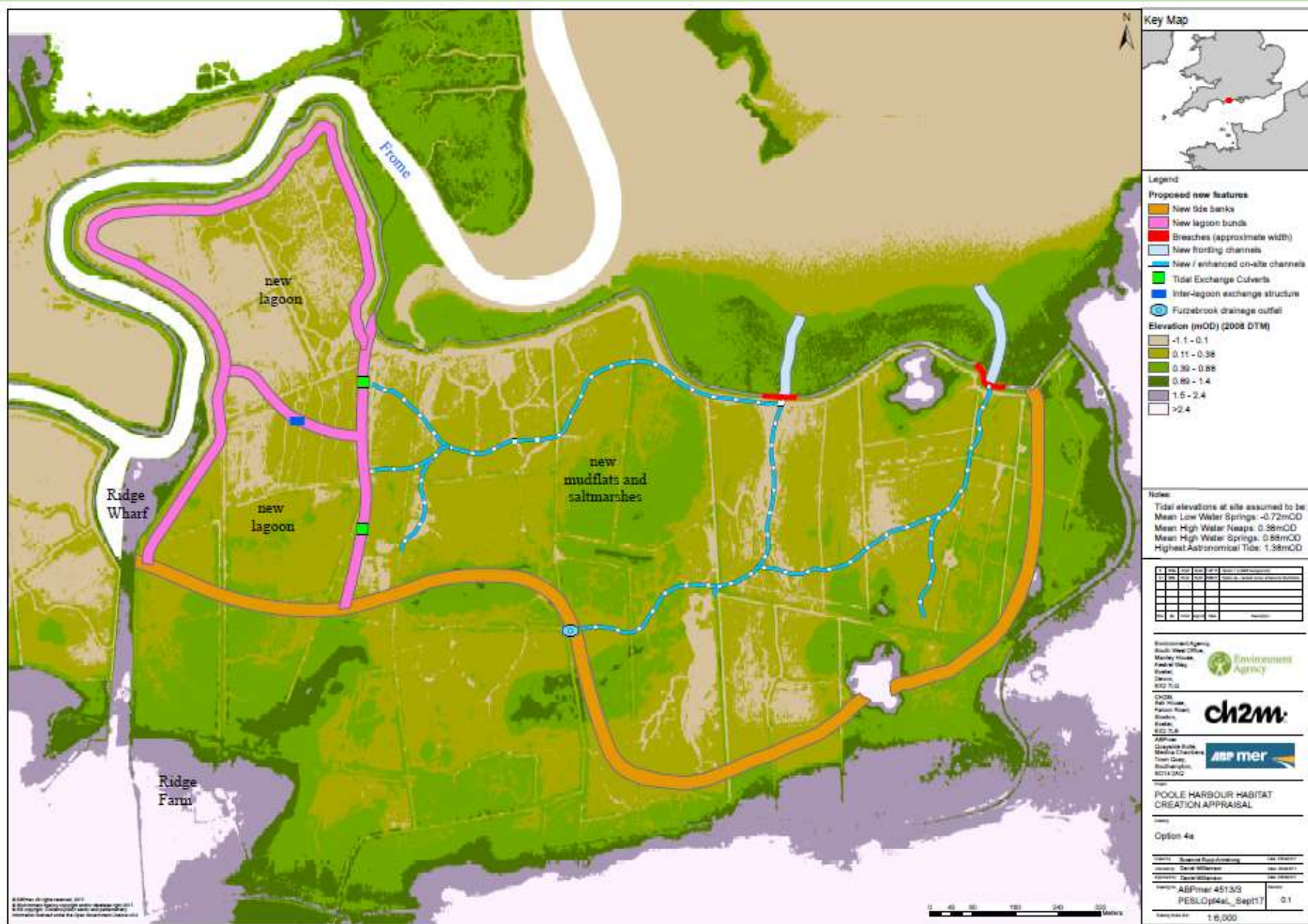
Short Listed Options (1a) - Modelling



Short Listed Options (1b) - Modelling



Short List Options (1c) - Modelling



Fit with Wider Initiatives



Wareham Tide Banks

- Bestwall 2015
- Redcliffe
- Turners Cove

Wareham Royalty

- Moorings
- Navigation

Outline Programme - Draft



Consultation & Engagement



- **Email:**
- **Website:**
- **Clinics:**
- **Arne Parish Council**
- **Stakeholder meetings:**
- **Public Consultation:**
- **Single point of contact:**