

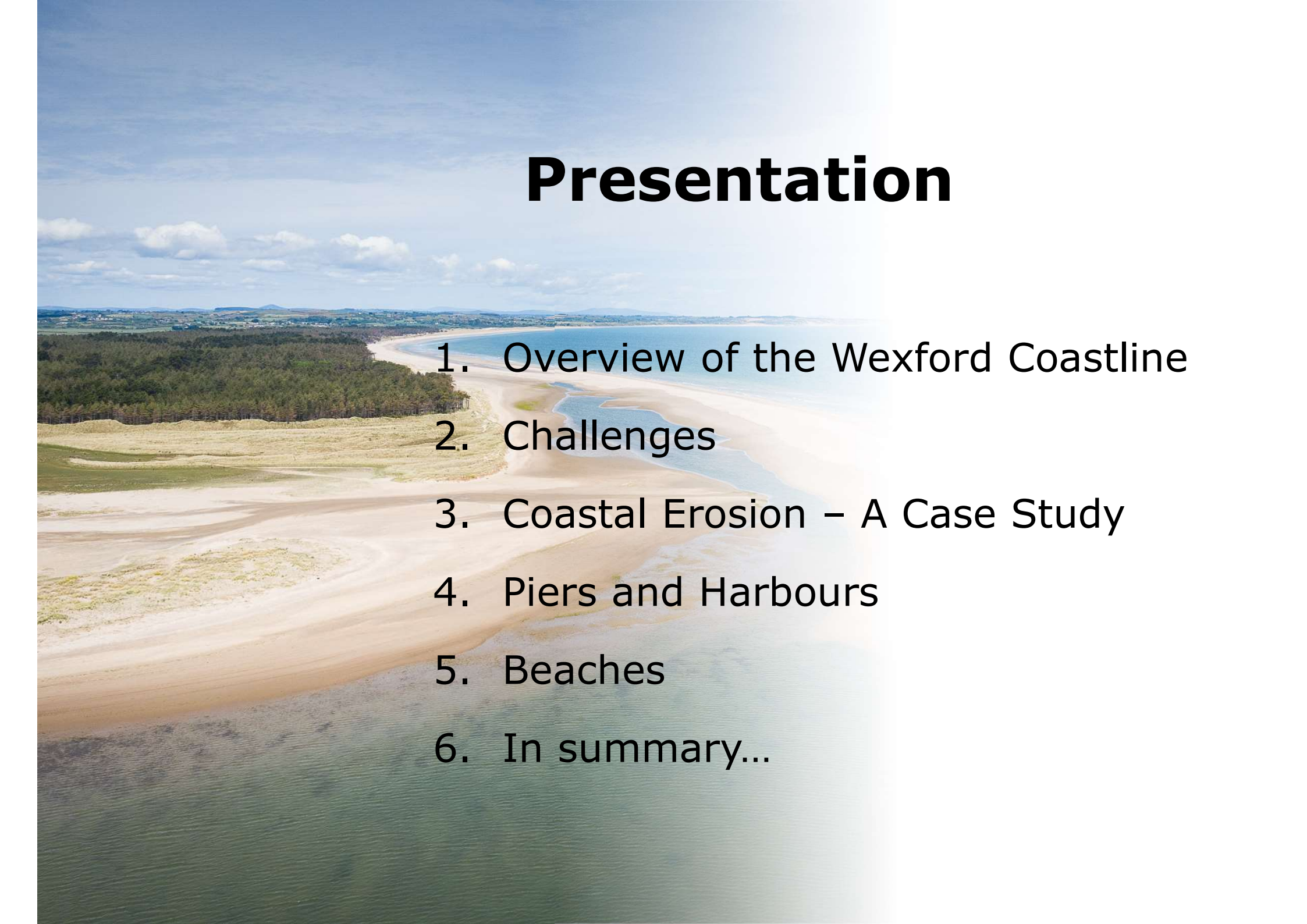


# The Wexford Coastline

George Colfer, Coastal Engineer

15<sup>th</sup> September 2022

# Presentation

- 
1. Overview of the Wexford Coastline
  2. Challenges
  3. Coastal Erosion – A Case Study
  4. Piers and Harbours
  5. Beaches
  6. In summary...



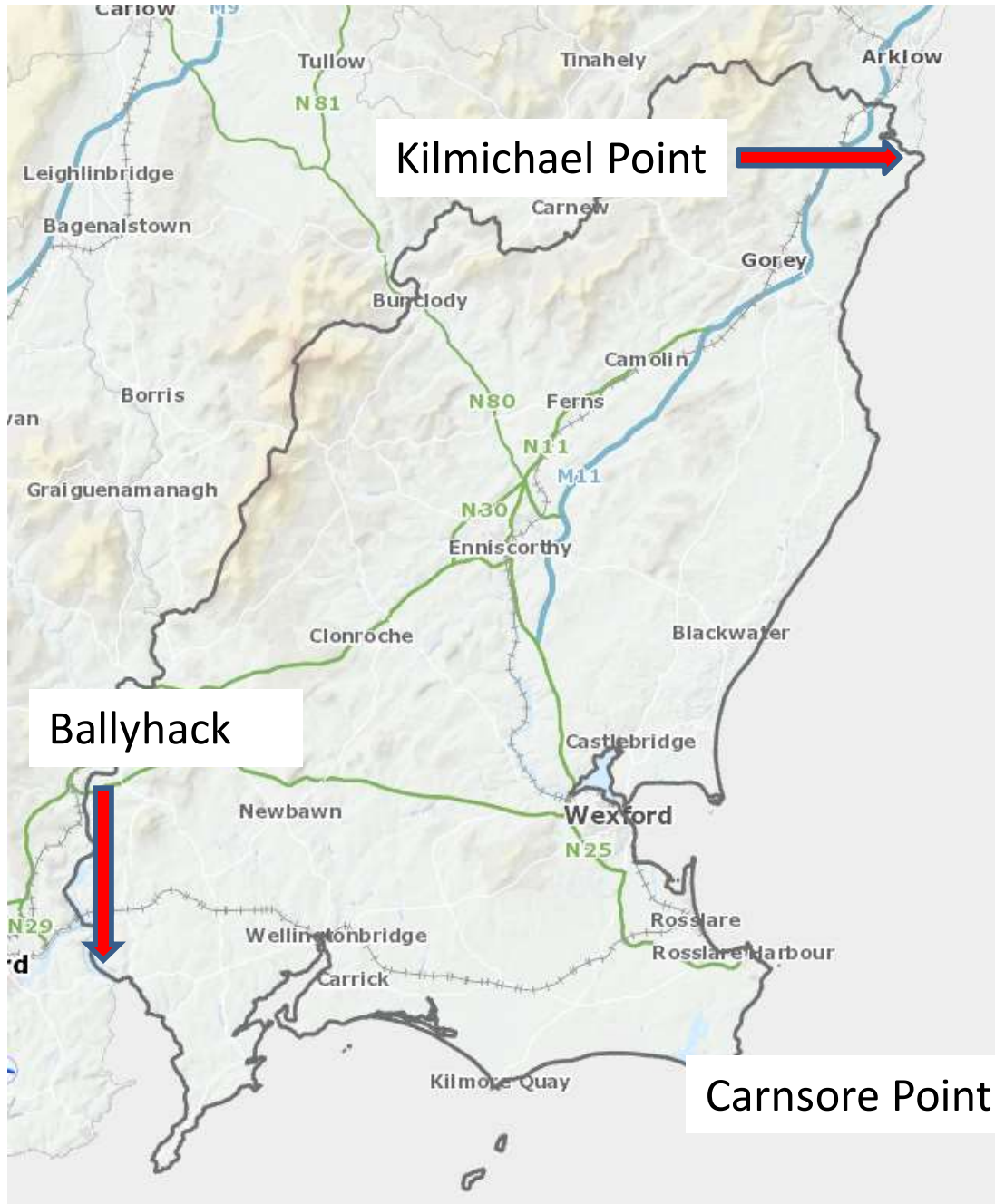
Wexford  
 Ireland County Boundaries

Spatial Reference: IREN95 Irish Transverse Mercator

# 1. Overview

- Long sandy beaches.
- “sunny south east”
- 260km coastline.
- 211km soft coastline.
- Many challenges around erosion and impacts from climate change.

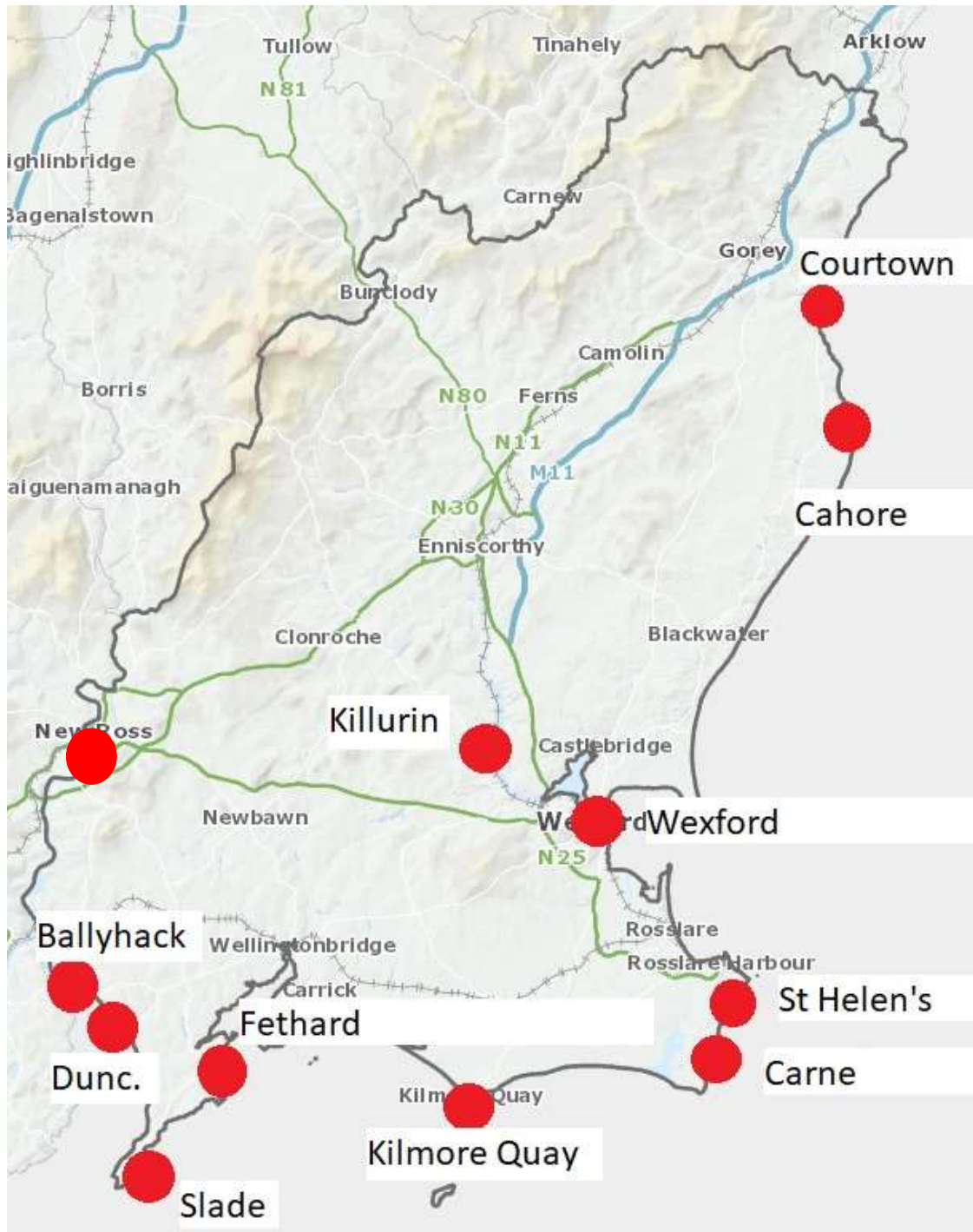
# Overview



- Over 70 beaches
- 6 blue flag beaches
- 2 blue flag marinas
- 9 green coast beaches
- 11 harbours

An aerial photograph of a coastal landscape. In the upper right, a large, multi-story stone building with a dark roof and several chimneys sits on a grassy hill. A paved road runs alongside the building, with a few cars parked nearby. A stone wall separates the building from the cliff edge. The cliff face is steep and eroded, showing layers of dark rock and lighter-colored soil. The sea is a greenish-grey color, with white foam from waves crashing against the base of the cliffs. Several large, dark rock formations protrude from the water. The overall scene is rugged and scenic.

Kilmichael



# Overview

- 11 piers/harbours.
- WCC operates New Ross Port.

# Within 200m of coast...

- 4,355 properties
- 5.8% of 74,107 properties.
- Not all of these properties are at risk.
- Monitor!



Seaview, Kilmore

# Within 200m of coast...

- 65km of public road
- 1.7% of total 3,823km
- Not all of these roads are at risk.
- Monitor!



Hook Head

# Within 200m of coast...

- 177 national monuments.
- 4% of total 4,259.
- Not all at risk.
- Record
- Responsibility of National Monument Service



Clonmines, Wellingtonbridge

# Within 200m of coast...

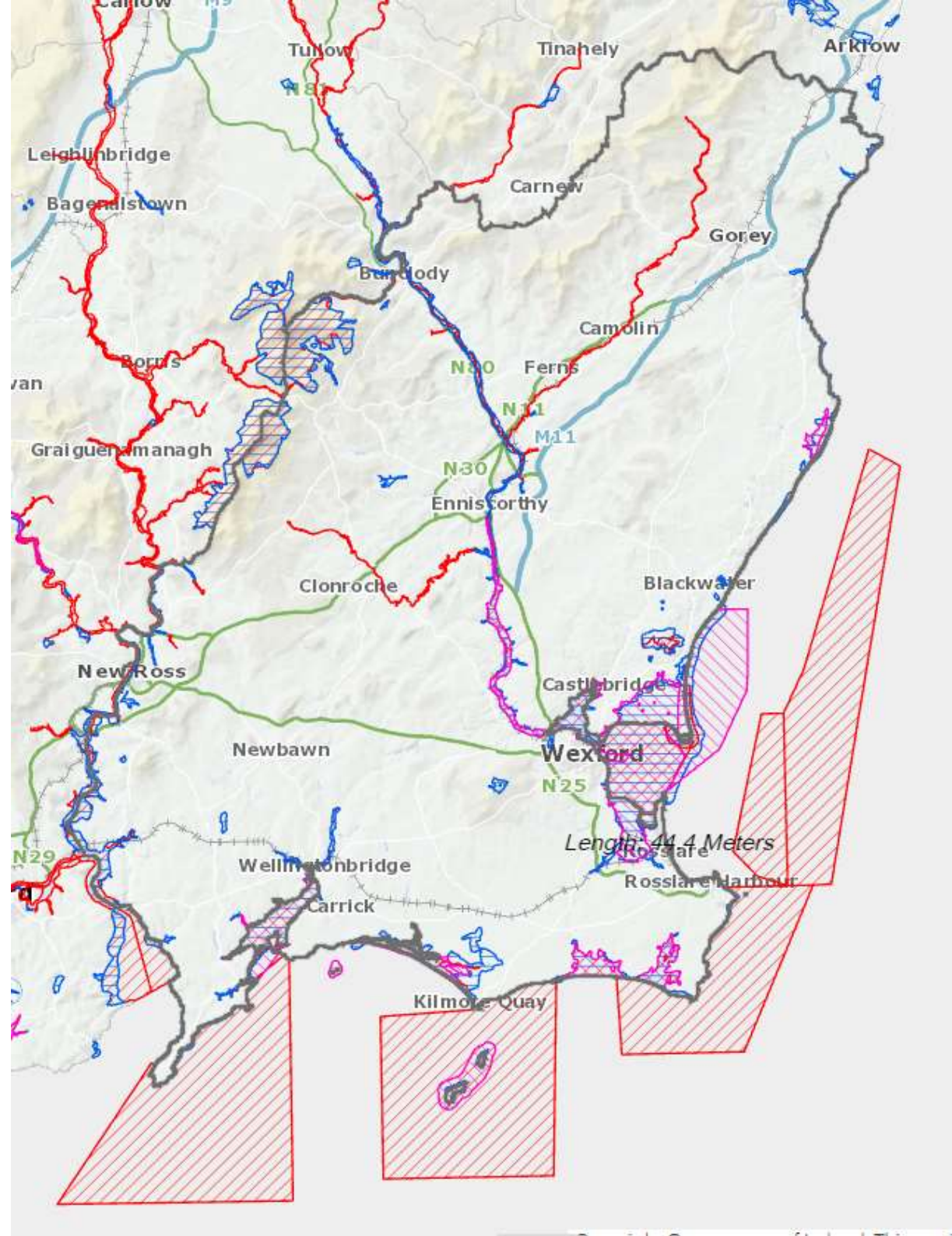
- CHERISH project looks at vulnerable coastal heritage (GSI).
- High resolution surveying.
- Monitors the condition of the site and the impact of erosion and storminess.



Glascarrig Medieval Settlement 1193

# Protected Areas

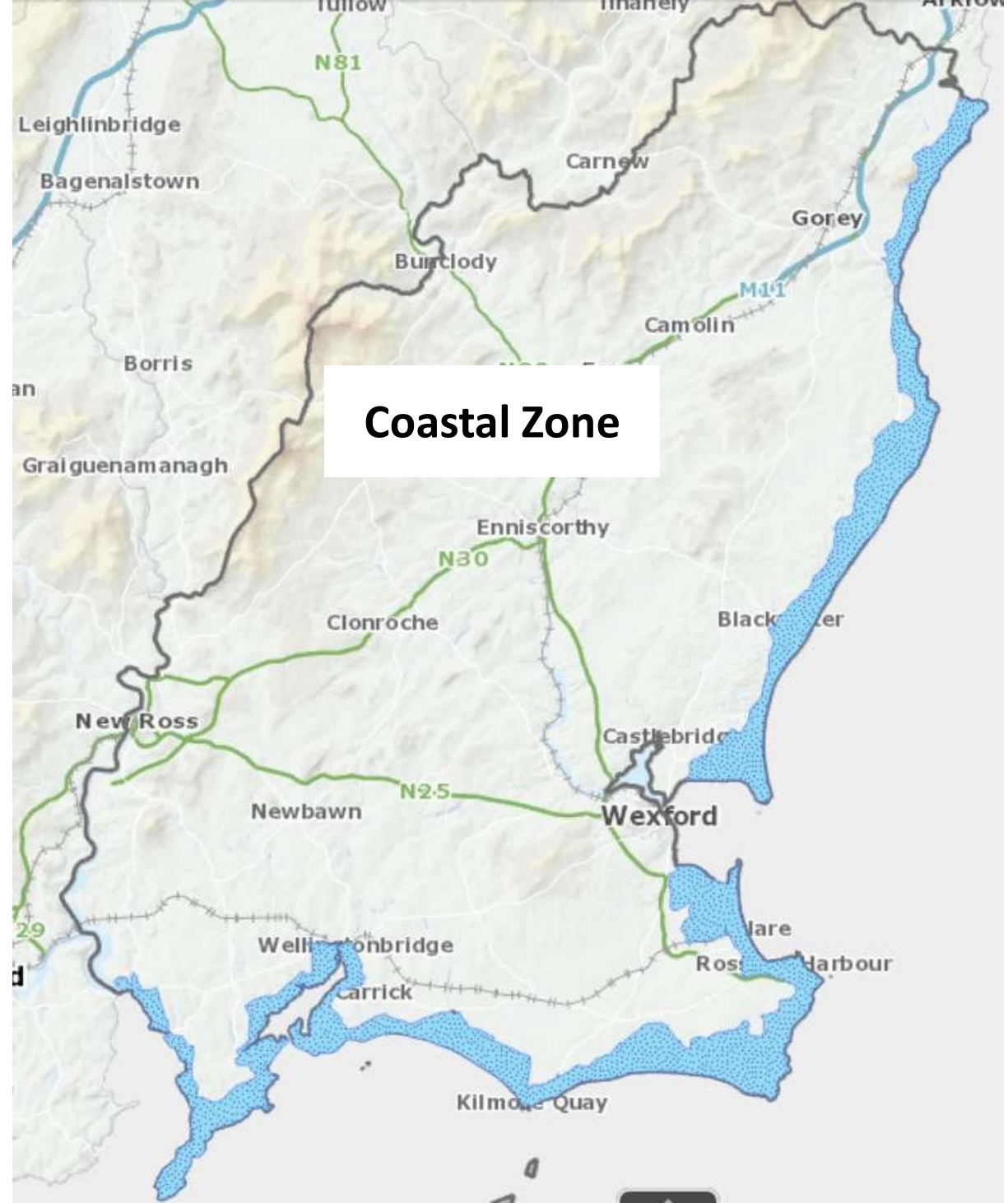
- Environmental areas.
- Natura 2000 sites.
- Work cannot have significant impact on these sites.





# Planning Context

- County Development Plan 2022 – 2028.
- Chapter 12
  - Coastal Zone Management and Marine Spatial Planning.
- Sets out the planning framework for future development in this area.
- Must consider impact of climate change.

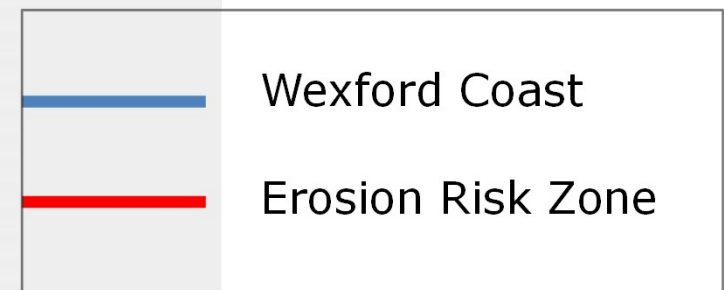
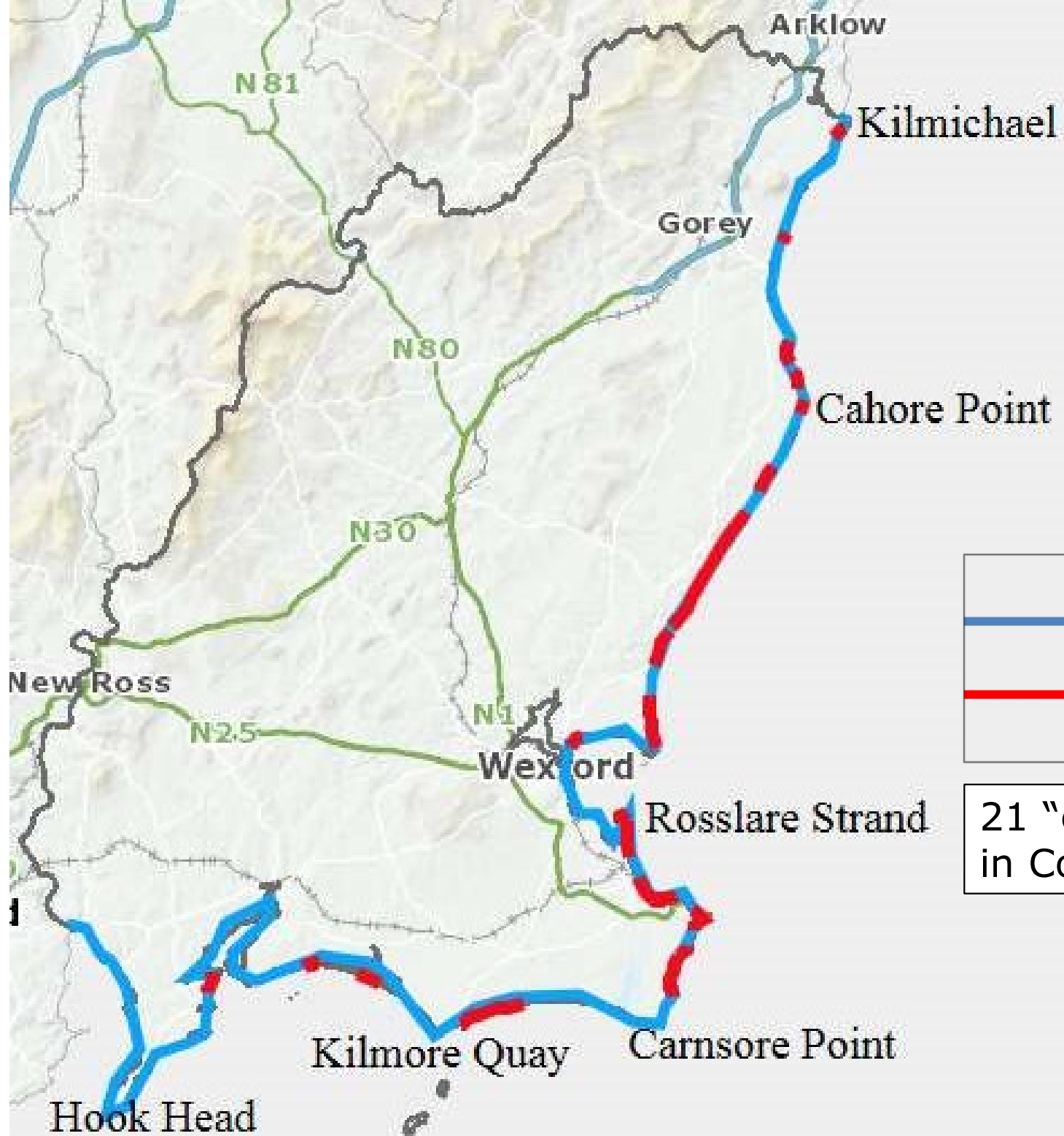


## 2. Challenges

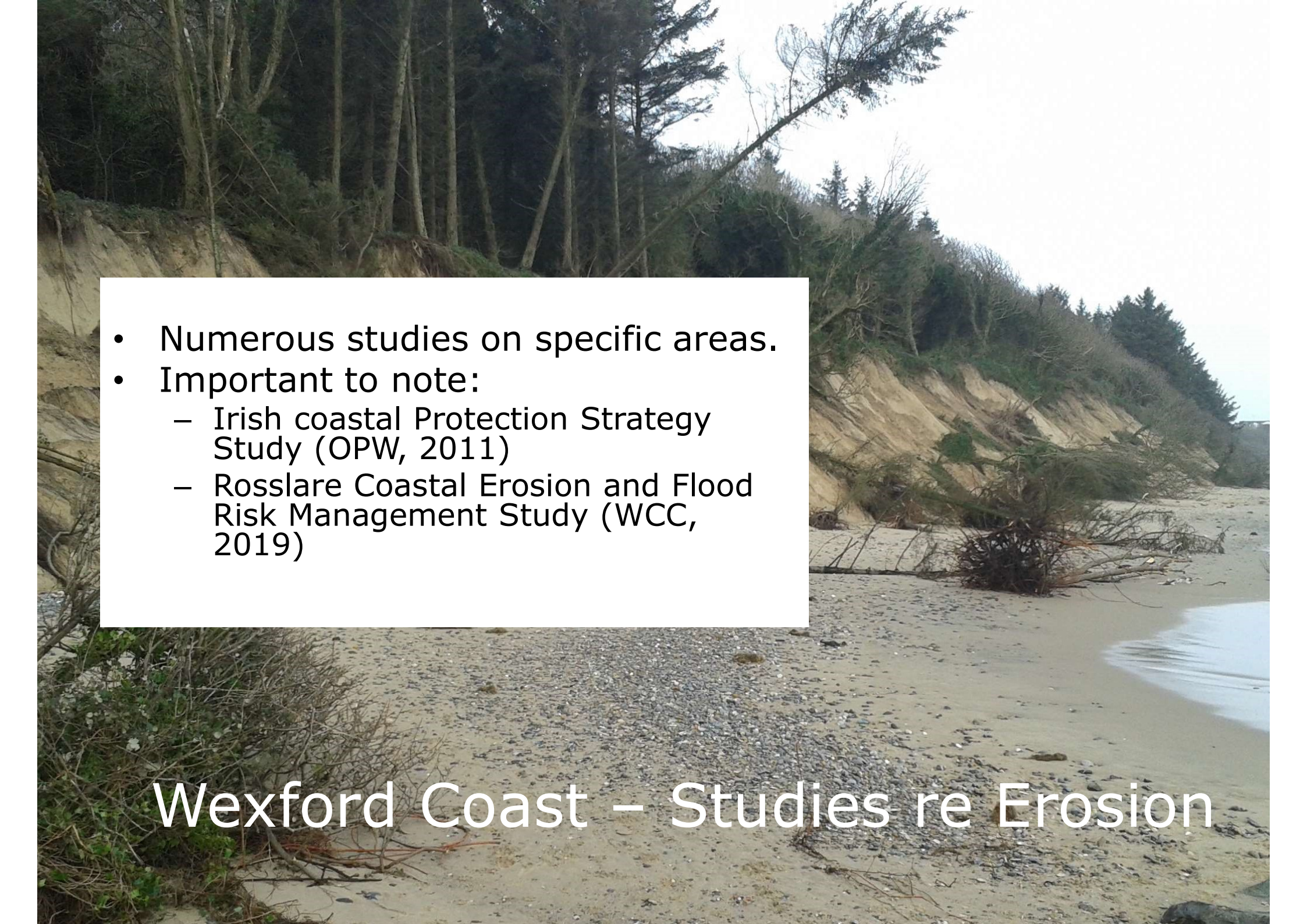
- Coastal erosion (land lost to sea)
- Coastal flooding (low lying areas)
- Sea level rise.
- Increased frequency and intensity of storms.
- Increased risk to assets
  - properties, farms, beach and access, roads, power, telecoms, water...



Seaview, Kilmore



21 "erosion risk zones"  
in Co. Wexford.

- 
- Numerous studies on specific areas.
  - Important to note:
    - Irish coastal Protection Strategy Study (OPW, 2011)
    - Rosslare Coastal Erosion and Flood Risk Management Study (WCC, 2019)

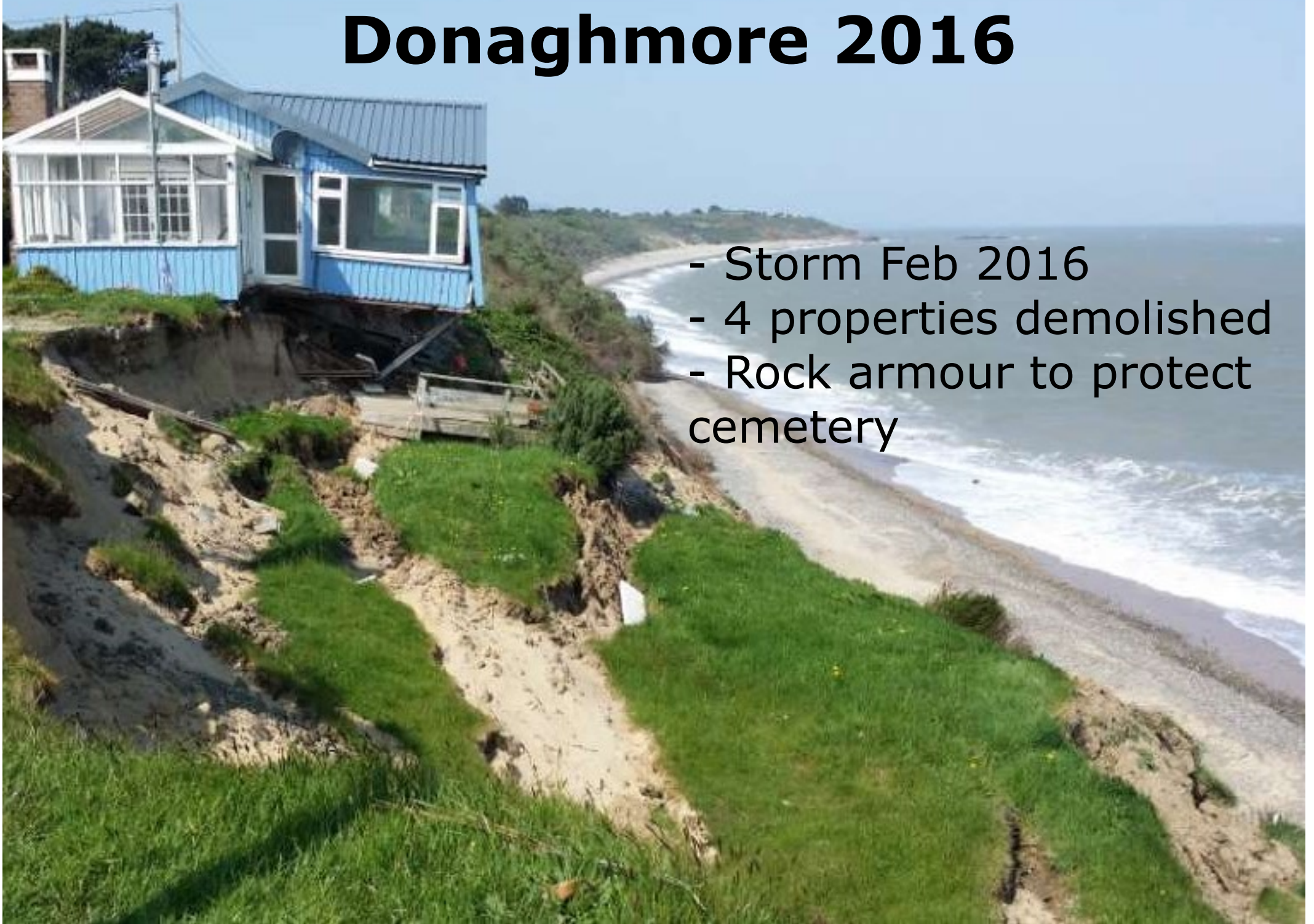
Wexford Coast – Studies re Erosion

- 
- Total 15km of Coastal Protection in Wexford (10km public; 5km private)
  - Must minimise impact on coast.

**Courtown**

# Donaghmore 2016

- Storm Feb 2016
- 4 properties demolished
- Rock armour to protect cemetery



# Donaghmore



# Donaghmore – coastal works



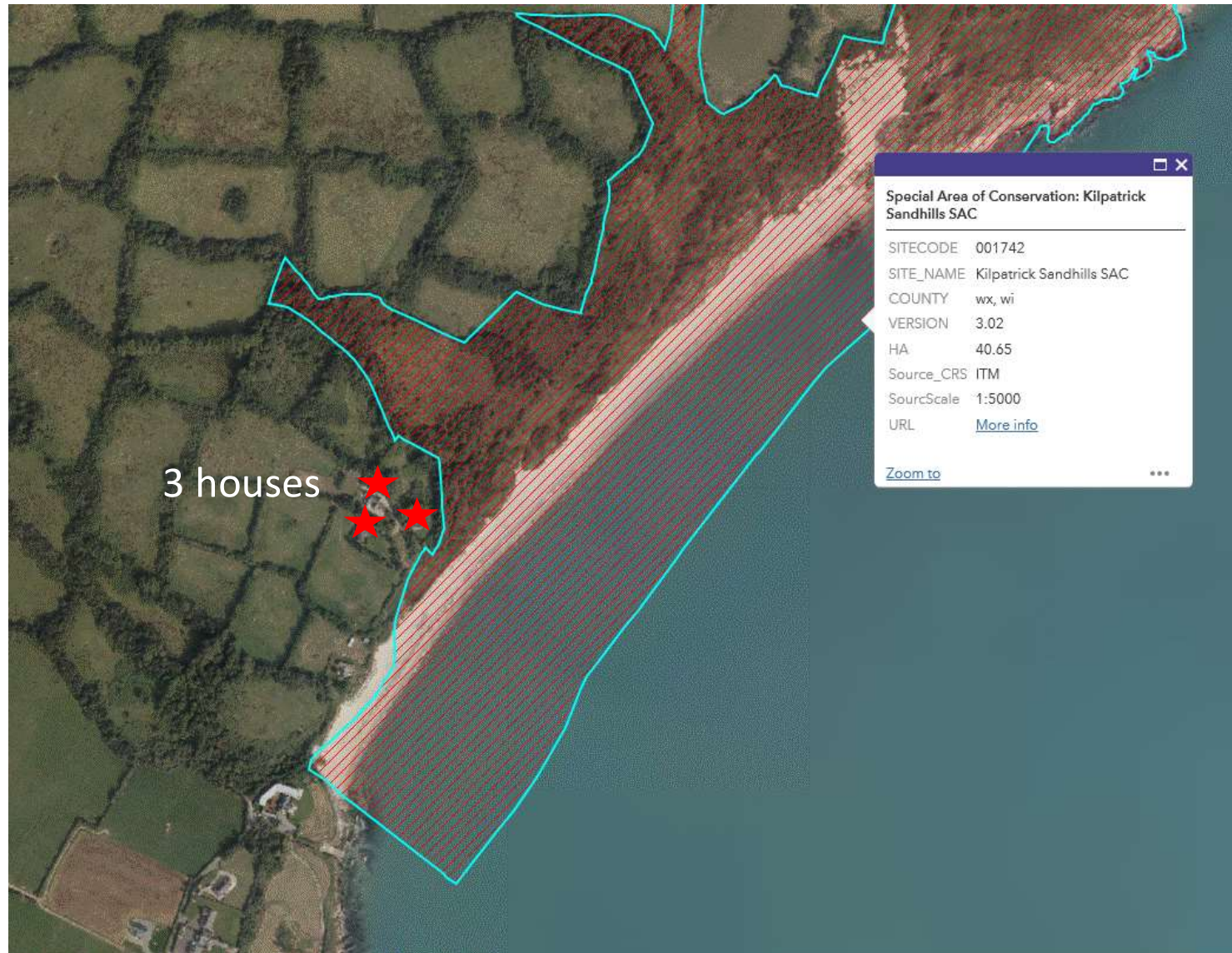
# Kilpatrick



- Private access road to 3 houses lost to coastal erosion.
- Beach area is an environmental area – Special Area of Conservation (SAC).
- Any protection measures would encroach on SAC – therefore difficult to get it approved.



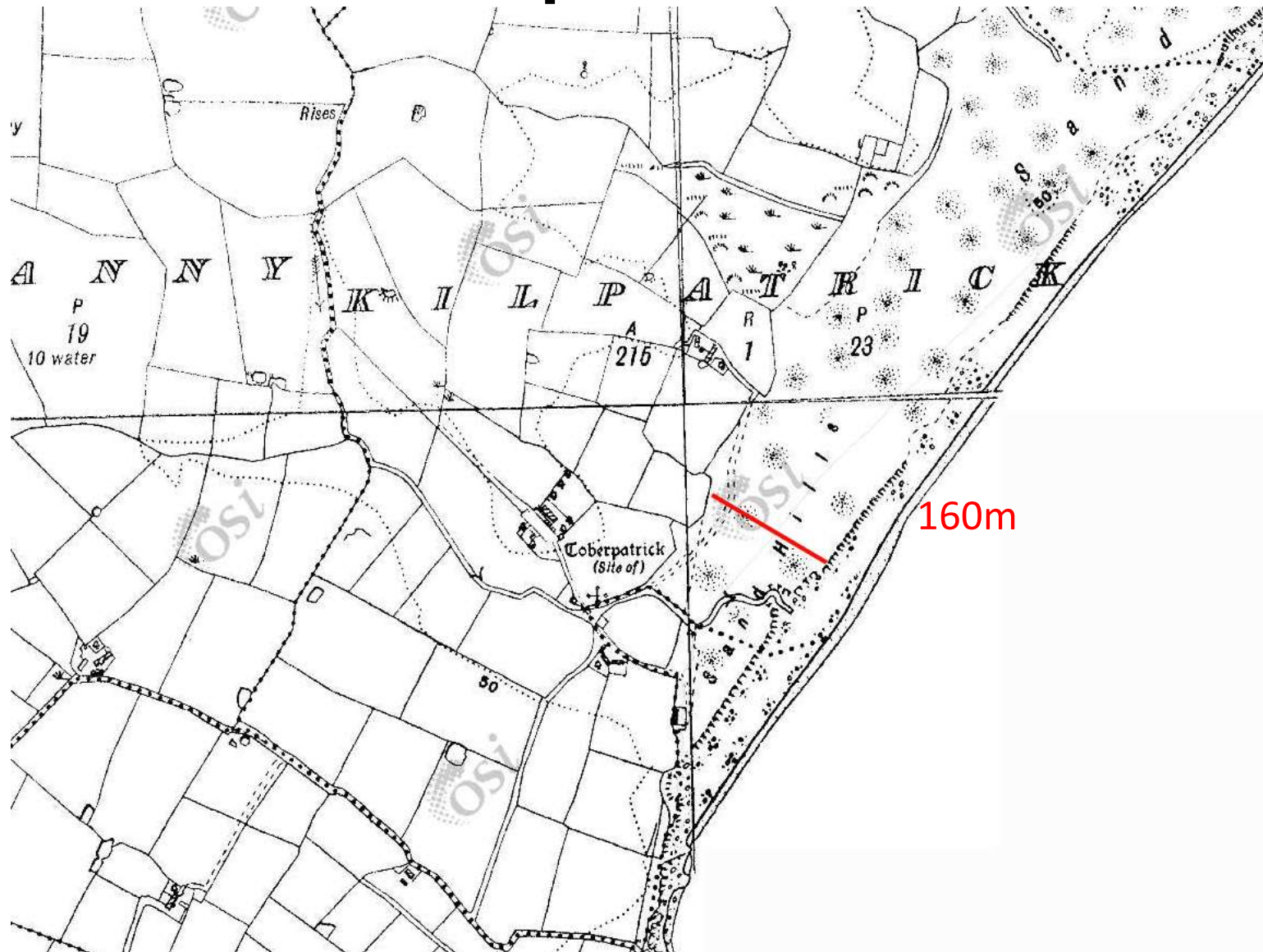
# Kilpatrick Sandhills SAC



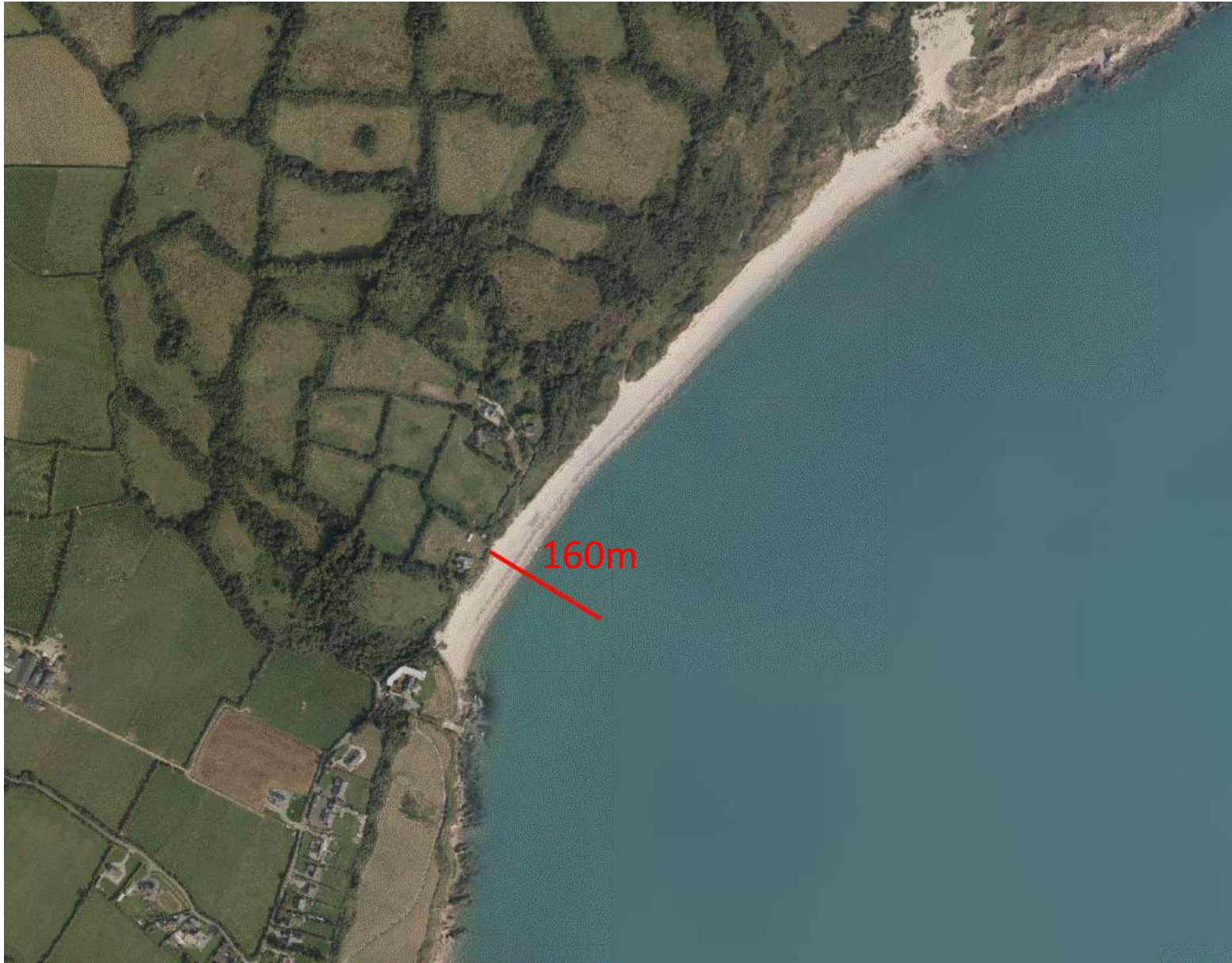
- Land around the houses is separately owned.
- We did consider new road but there were issues with land title.
- Residents of 3 houses have no direct vehicular access to their properties.



# OS Map ca.1900



# OS Map 2019





Dec 2006



Feb 2007



# Courtown



Courtown (J. Hinde) – 1960s



Courtown - 2021

# Courtown 2022





## Wexford beef farmer has lost 40 acres of his farm to the sea

Farmers in the southeast are losing stock and land to coastal erosion and the problem is set to escalate



*William and Brian Barry on their farm in Maytown, Co Wexford. Photo: Pat Moore.*



**Claire Mc Cormack**  

April 8 2017 6:00 AM



Wexford farmer Brian Barry has lost 40 acres of land to the sea since 1975.



# Dune Restoration

- Monitor coast.
- Identify dune restoration projects.
- Protect against storms / erosion.
- Healthy beach – good for wildlife.



### 3. Coastal Erosion – A Case Study

- Rosslare Coastal Erosion and Flood Relief Scheme (CEFRS)



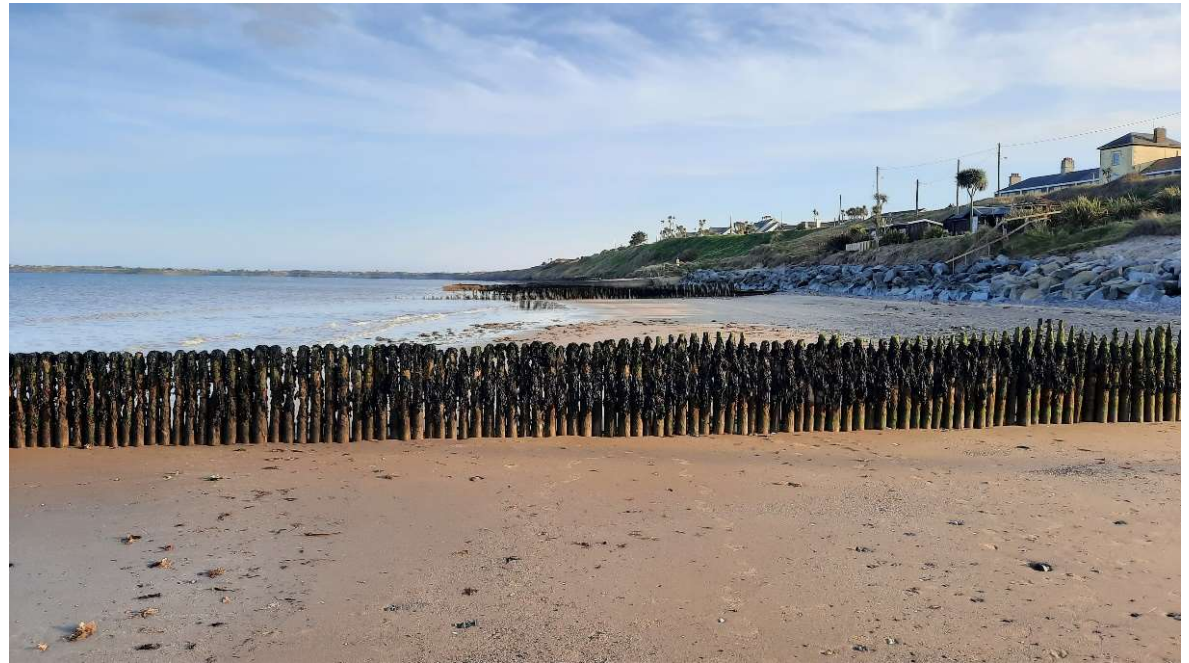
# Rosslare CEFRS

- Problem of shifting sands in harbour documented back to 1709.
- Successful coastal protection 1950s to 1990s.
  - Timber groynes
  - Rock Revetments
  - Rock groynes
  - Import sand 275,000m<sup>3</sup>



# Rosslare CEFRS

- 2014-2019: minor erosion scheme developed in to major erosion and flood scheme.
- 2019 completed;
  - Rosslare Erosion and Flood Risk Mgmt Study.
  - Business Case Analysis Report



Remnants of 1950s timber groynes

# Background to current scheme

- 2020: funding of €8m from OPW.
- 2021: tender / appoint consulting engineers
- 2022: design work underway.

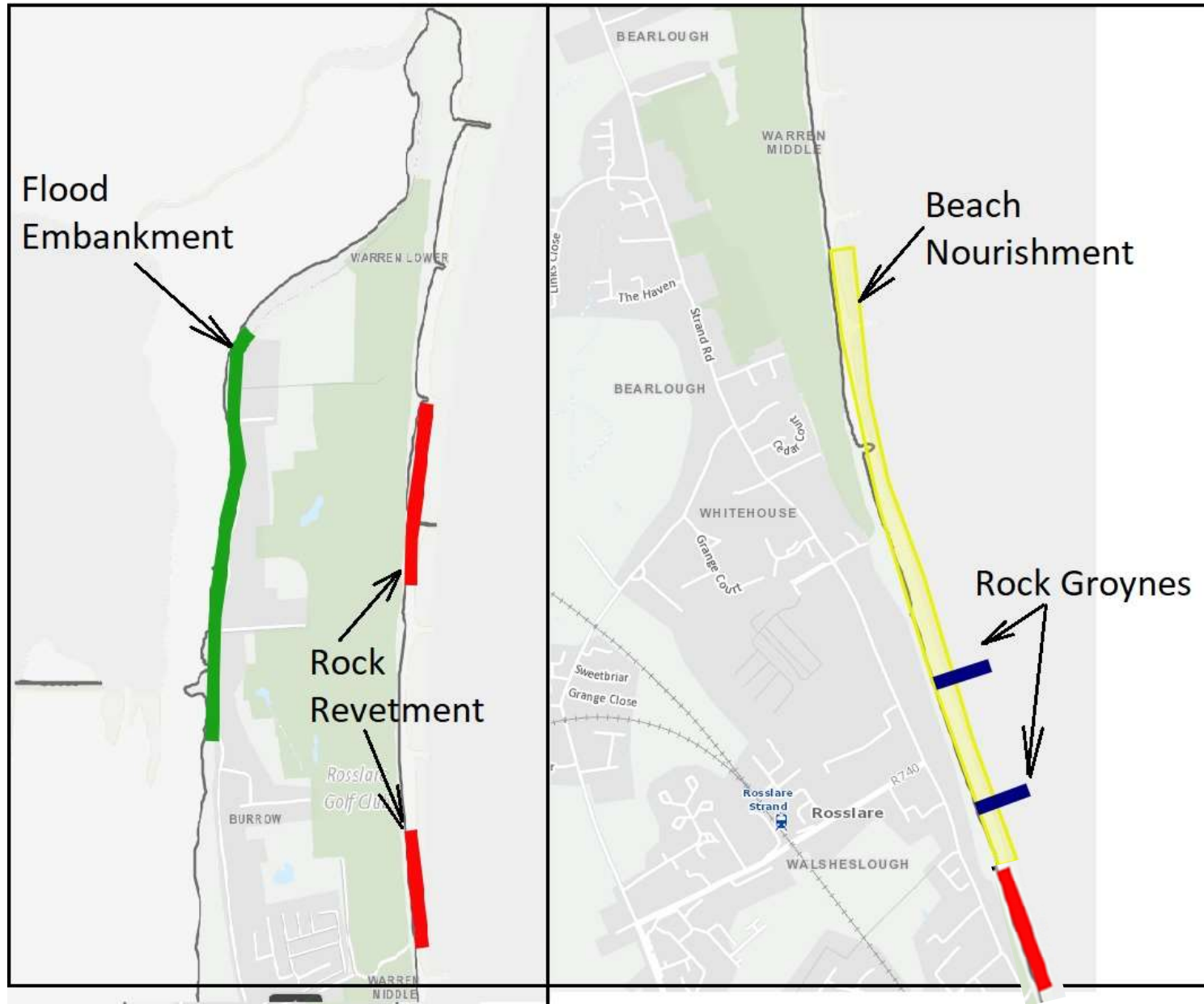


Note the different sand levels at either side of groynes



**enhanced beach in  
area of rock groynes**

# Erosion and Flood Options



# Rosslare CEFRS Stages...

Stage	Description	Timeframe
Stage I	Options Assessment/ Preliminary Design	2022/2023
Stage IIA	Planning / Development consent	2023
Stage IIB	Detailed Construction Design	2023/2024
Stage III	Tender Process	2024/2025
Stage IV	Construction (ca. 18 months)	2024/2026
Stage V	Handover of Works	2026/2027



## Dune Management

- Periodic maintenance as required (e.g. after storms)
- Work with natural environment and coastal processes to protect shoreline.
- Sustainable and cost effective.
- Fencing and dune reconstruction/re-profiling.



## 4. Piers / Harbours

- Repair and upgrade works.
- Dredging.
- Development works
- 2022: €1.5m funding from central government to carry out harbour works.



# Harbours – Civil Eng. Works

- Identify repair works.
- Coastal Engineer – inspect and assess.
- Statutory consents – e.g. foreshore, dumping at sea, planning, environmental.
- Apply to Dept of Ag, Food & Marine for funding.



Kilmore Quay Dredging of Approach Channel



# Harbours – Civil Eng. Works

- Depending on complexity (structural, tidal, H&S, environmental) – appoint consultants.
- Design and prepare tender documents.
- Tender and contract award.
- Construction and sign off.
- Funding – recoup monies from Dept.





# Kilmore Quay – Dredging of approach Channel

- To improve navigation and safety at approach to harbour.
- 2020: Removal of 15,600 tonnes of sand/gravel at Kilmore Quay hbr.
- Material was placed in sea off Baginbun.
- Foreshore consent, dumping at sea permit, archaeology, mammal observation.



# Kilmore Quay – Dredging Approach Channel



# Slade Harbour – Remedial Works to Middle Pier



Cost: €100,000

# Duncannon – Structural Repair Works





# Courtown Harbour Dredging

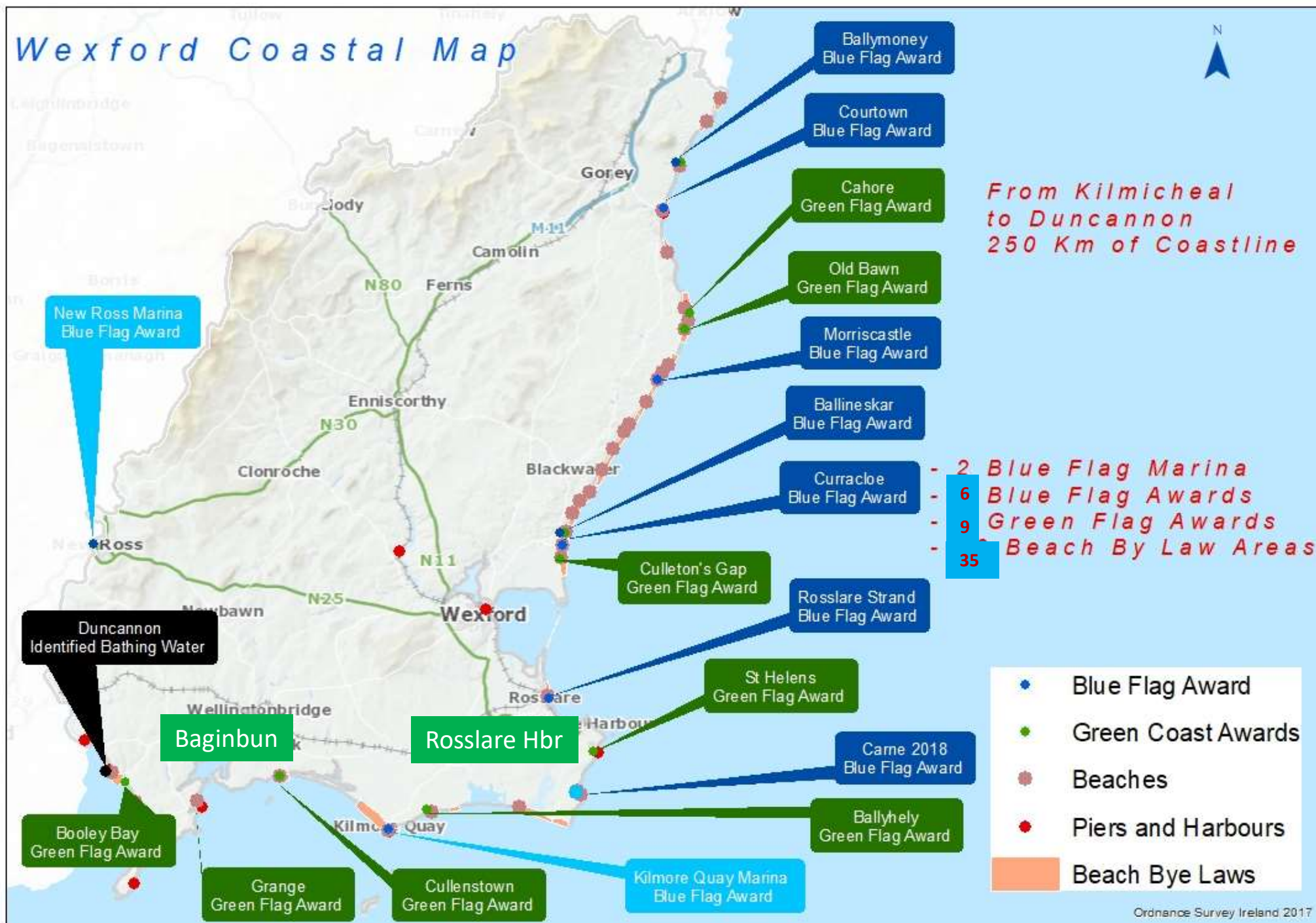
Cost: €600,000



## 5. Beaches

- Over 70 beaches
- 6 blue flag
- 9 green coast

# Wexford Coastal Map



# Who Does What?

Organisation	Duties
Wexford County Council (WCC)	Manages bathing waters. Water quality sampling. Issues notices re quality and restrictions on swimming.
Environmental Protection Agency (EPA)	Environmental Regulator. Maintains Beaches.ie website and publishes updates by WCC.
Health Service Executive (HSE)	Provides advice on public and environmental health issues relating to bathing waters.
Public	Can make representations to WCC to identify new bathing waters. Can also keep beaches clean!



# Classification of Beaches

- Designated: covered by legislation, water quality, Wexford CC report to EPA (8 no.)
- **Blue Flag**: awarded by An Taisce (6 no. 2022)
  - Environmental Education and Information
  - Water Quality
  - Environmental Management
  - Safety Services
- **Green Coast**: awarded by An Taisce (9 no.)
  - Water Quality
  - Community involvement
- Bye Law Beaches (35 no.)

# Wex CC – Role and Responsibility

- Bathing water quality
- Access / boardwalk
- Water safety
- Signage
- Toilets
- Traffic and car parking
- Regulate area (e.g. beach bye laws)
- Litter
- Etc...





# WCC – Liaison and Co-ordination

Organisation	Organisation
Environmental Protection Agency	Water Safety Development Officer & Beach lifeguards
Health Service Executive	Elected representatives
Gardai	Press queries
National Parks and Wildlife Service	Landowners
Dept of Housing, Local Govt and Heritage	Laboratory
An Taisce	WCC Rapid Response Crews
Dept. of Agri, Food&Marine	Local community groups
Beach/Environment Wardens	Public – complaints/queries



# Curracloe

[View Gallery](#)
[Map](#)
[Report Issue](#)

## Curracloe

Wexford

Regulated Bathing Water 



Water Quality  
**Excellent**  
Sampled on  
29/08/2022

Curracloe is a rural peaceful fine-sand beach with a relatively gentle slope. The sand type is soft and windblown and often covers the wooden walkways. The sand dunes extend between 100m and 300m to the rear (west) of the beach. Curracloe beach is within The Raven Special Protection Area which is an important bird site and part of the Wexford Slob and Harbour complex. Curracloe beach is a popular fishing spot and is also used by a limited number of surfers, windsurfers and canoeists. The bathing area is approximately 1.0 km long and 0.2km<sup>2</sup> in area.

## Bathing Season Awards & Amenities



Blue Flag Award



First Aid



Disability Access



## Weather

## [Met Éireann](#)

## Tides

[Marine Institute](#)

1st High	1st Low	2nd High	2nd Low
05:30	11:30	18:10	

Predictions

## Lifeguard Information

[Click here](#) to view lifeguard information

# Beach Wheelchair – 7 beaches



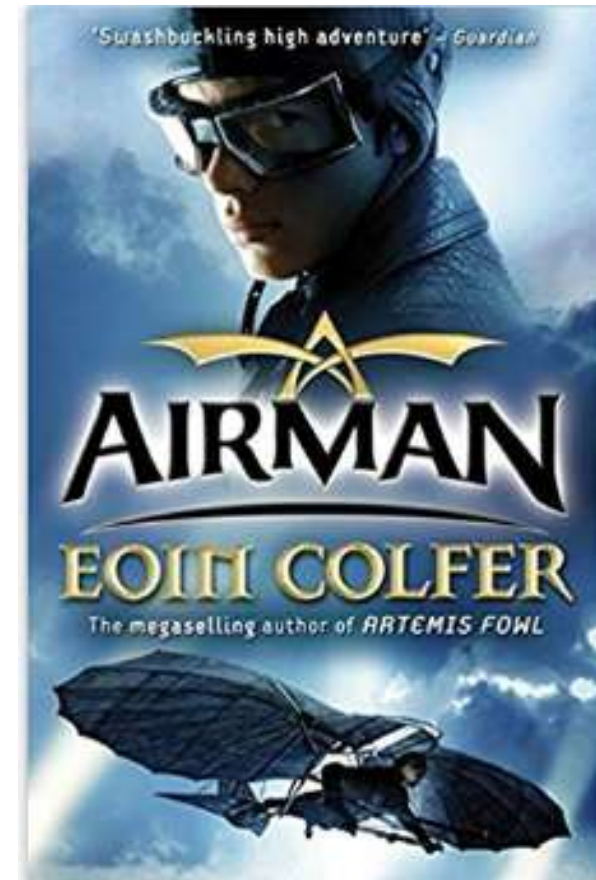
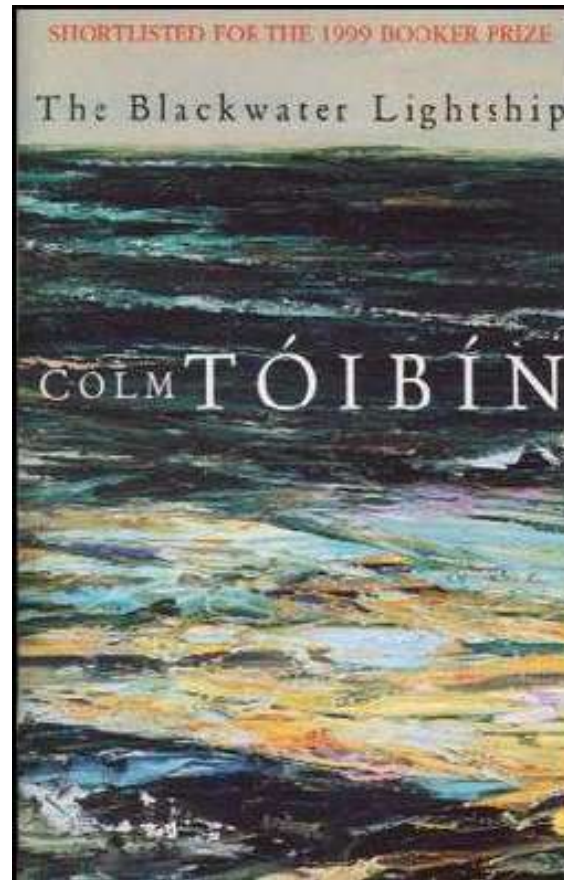
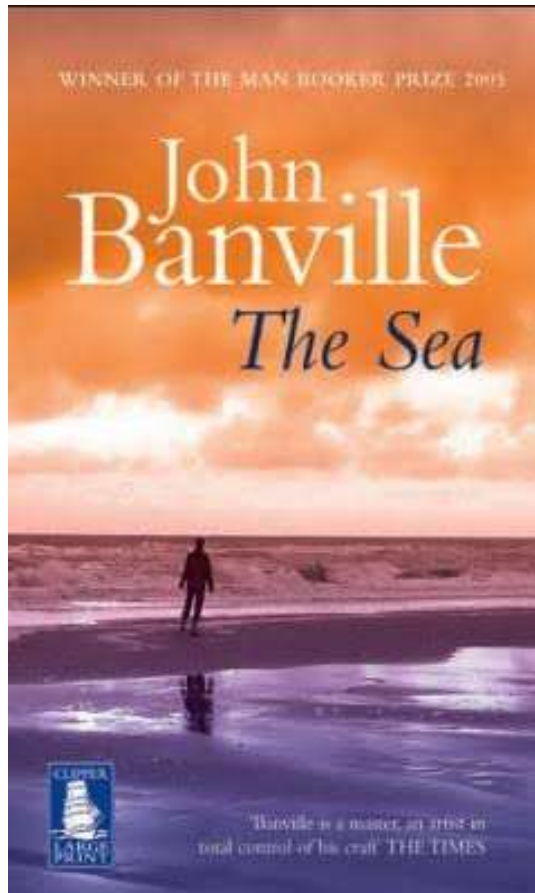
# Rosslare Hbr – beach mat





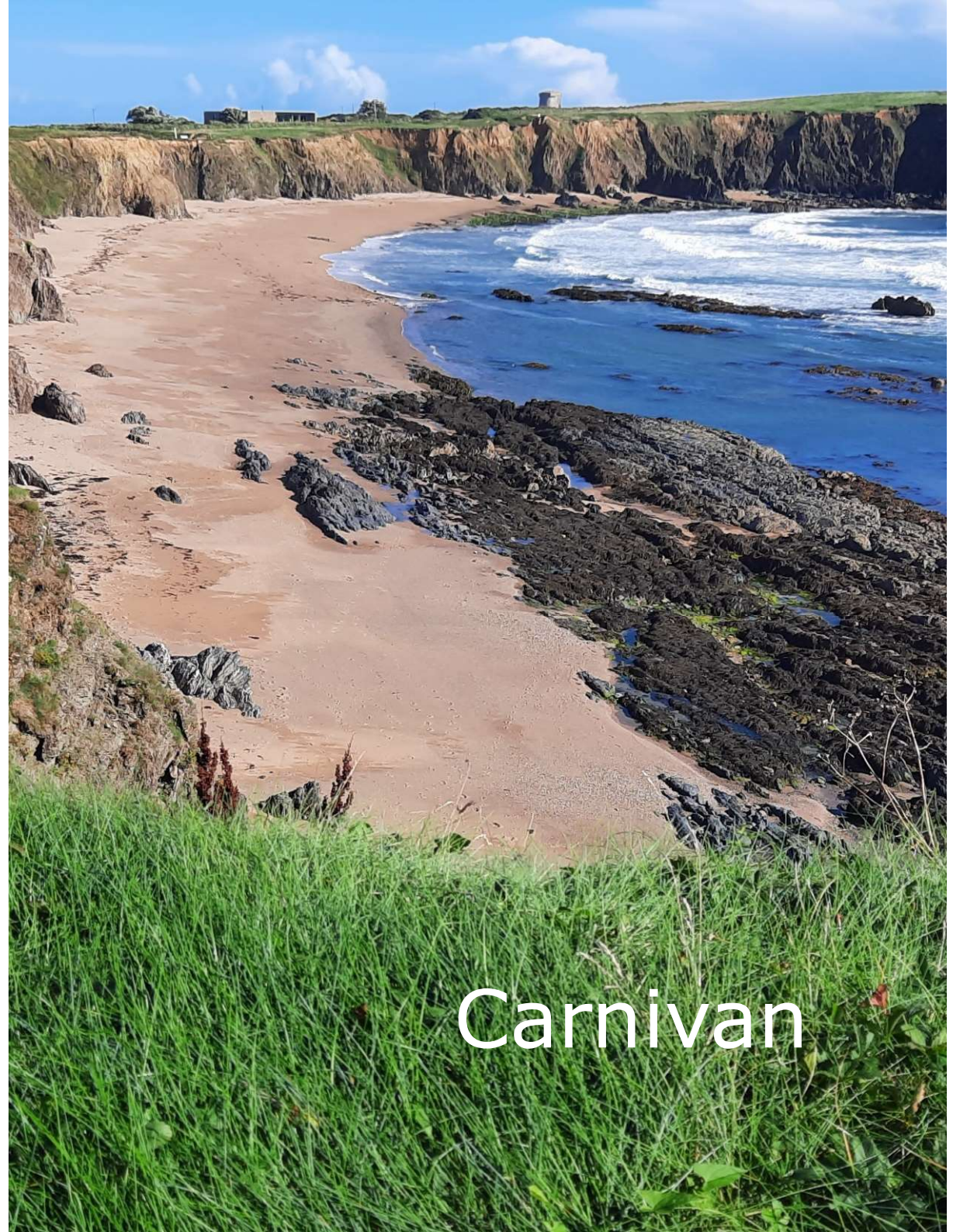
Duncannon

# Wexford's Coast featured in:



# In summary;

- Extensive 260km.
- Used for many purposes – amenity, leisure, work etc.
- Many challenges around coastal erosion.
- **We continuously monitor the coast.**



Carnivan

# In summary;

- We are progressing schemes for at-risk areas (dune restoration).
- There will be some areas where it is not economically viable to carry out coastal protection.





Dollar Bay

**Enjoy it!**