

EXETER HARBOUR BOARD

Monday 17 March 2025

Present:-

Councillor Williams, R (Chair)
Councillors Read, Rolstone, Sheridan and Snow
A Garratt, Lt Col D Marino, J Prescott and C Seddon

Apologies

R Eggleton, J Green and Councillor M. Williams

Also Present

Harbour Master Exeter Port Authority and Democratic Services Manager

Also in attendance:

John Monks - Chair of Friends of Exeter Ship Canal
Paul Craven - River Exe Cafe
Martin Davies - Environment Agency
Rex Harrison - Chair of the Exeter Port Users Group

1

MINUTES

The minutes of the meeting held on 12 December 2024 were taken as read and signed by the Chair as correct.

2

DECLARATIONS OF INTEREST

No declarations of pecuniary interest were made.

3

PUBLIC QUESTIONS

A member of the public, Mr C submitted the following question: -

- Does the Harbour Board have any influence over the business and decisions of the Exeter Quay and Canal Trust?

The Chair advised that the Harbour Board do not have any influence over the business and decisions of the Exeter Quay and Canal Trust.

Mr C, in asking a supplementary question, enquired where there was overlapping membership between the two bodies, whether there were arrangements in place to avoid any conflicts of interest?

The Chair advised that arrangements were in place to avoid conflicts of interest relating to any overlapping membership between the two bodies.

4

CHAIR'S ANNOUNCEMENTS

The Chair provided the board with the following announcements: -

- meetings were scheduled for April 2025 with Bournemouth, Christchurch and Poole Council, and Teignbridge District Council to discuss sea defences;

- there had previously been unanimous approval for the Harbour Master to communicate the Exeter Port Authority's best practice approach to the fire services in relation to the Princess Marina Ferry Fire;
- an emergency action plan for incidents had been written but was waiting to be reviewed the newly appointed Designated Person (DP);
- a visioning event had been held on 1 February 2025 where several suggestions had been made from Members and Waterways team;
- the Chair and Councillor Read had met Tom Watts of West Country Rivers Trust to discuss salmon passages on the Trues Weir and Mill on the Exe and were advised that further work was needed on those passages;
- the Chair had attended the Exe Estuary Management Partnership meeting on 11 February 2025, and further information about the partnership was available on their website;
- at the Exe Estuary Management Partnership meeting, Myles Blood-Smyth had proposed depositing spent oyster shells offshore to create a natural barrier and build up a sandbank, which was being considered by the partnership;
- the Chair and Harbour Master had attended a meeting with Ashford's solicitors regarding the Harbour Revision Order (HRO) and discussions had included Port Authority and Harbour Board governance arrangements, a focus on collaboration between the Harbour Board, the DP, and the Duty Holder and updating the Terms of Reference for the Harbour Board; and
- Board Member Richard Eggleton had resigned from the board due to other commitments, leaving three vacancies on the board. It was intended to fill these positions by June 2025, with information circulated to all members and advertised on the website.

A discussion was held on whether board members could reapply after partial terms and clarification would be sought on whether the limit was six years in total or per term.

5

EXETER PORT USER GROUP UPDATE

The Chair of the Exeter Port Users Group (EPUG), Rex Frost, was in attendance. His update had been circulated to Members and was taken as read and the following discussion points were made: -

- the Exe Estuary Management Partnership included various councils and was well-attended, providing a platform for collaboration across the region; and
- the Exe Estuary Management Partnership participated in organising litter picking activities and residents who had expressed an interest in organising a floating litter pick for the canal would be encouraged to contact the relevant authorities for participation.

6

A STRATEGIC VIEW OF THE CANAL'S FUTURE

The Chair welcomed John Monks, Chair of the Friends of Exeter Ship Canal to the meeting, who provided a verbal presentation on the strategic view of the canal's future. During the presentation, the following points were made: -

- the Port of Exeter had a rich maritime history, dating back to the 17th and 18th centuries when it was a bustling hub for sailors, highlighting the estuary and canal being vital for trade and transportation;
- the port currently supported an active boating and water sports community, with a renewed interest in maritime heritage and restoration of historic boats;
- Dawlish Warren, being a natural breakwater, was eroding and posed a risk to the port's safety, which a Senior Ranger, had highlighted the need for a 'Plan

- B' to manage high water levels, flood risk and impact to loss of moorings;
- the canal was an asset, offering safe moorings and a potential for economic growth, with strategic opportunities available;
- the canal and port needed be integrated into strategic planning, focusing on new enterprises, skills, and investment and boost the stability of the Exeter's resilience over the coming decades;
- encouraging boatyard businesses in exploring clean propulsion technologies, would support the enhancement of the canal and boost Exeter's resilience, and prosperity, while offering benefits for locals, traders, and visitors;
- the canal could also support water-based passenger transport and commercial activities;
- there were concerns about current plans that could hinder future opportunities, such as the end of boat building on the canal and the earmarking of Grace Road Fields for industrial use;
- the canal and port needed to be viewed as integral to Exeter's strategic planning, requiring partnerships with communities and various authorities;
- as a comparative analysis, the canal was compared to the Kiel Ship Canal in Germany which demonstrated how inland waterways can thrive with marinas, pedestrian walkways, and cultural attractions; and
- viewing the canal and port as integral to Exeter's future was important and a high-level strategic feasibility study was proposed to explore the canal's potential as a future asset for Exeter, which could attract outside funding and consultancy support.

In response to questions and points raised, John Monks advised: -

- it was not proposed to abandon areas south of Turf Lock and the remit of the Harbour Board was acknowledged;
- a need for a contingency plan was being requested to address increasing costs and difficulties in providing winter mooring, which was crucial for the port's income;
- the cost of a waterway's feasibility study for climate change and development impacts of Water Lane were not known; and
- conducting a feasibility study with consultants to assess the potential of the waterways was important for Exeter's future planning and potential grant funding from the Inland Waterways Association (IWA) was a possibility.

The Chair advised that future changes and increased powers from the Harbour Revision Order (HRO), would influence future operations and partnerships. She thanked John Monks for his presentation. A copy of the presentation is appended to the minutes.

RIVER EXE CAFE UPDATE

The Chair welcomed Paul Craven, Managing Director of the River Exe Café to the meeting, who provided a presentation and video on a new concept for canal pods. During the presentation, the following points were made: -

- an introduction and background of the River Exe Café which started as a local initiative and had been operational for 15 years;
- the introduction of two pods in the canal, designed to offer a unique experience beyond a typical Airbnb accommodation;
- the pods would be accessible by a specially designed boat that could navigate the canal's swing bridge and travel from Turf Lock to Double Locks for collection;
- the pods would be in the canal for eight months of the year and then moved

downriver for four months during summer season and permission had been granted for the pods to be placed in the river.

In response to questions and points raised, Paul Craven advised: -

- the boat to be used for accessing the pods would also operate as a taxi service between Double Locks and Turf Locks, enhancing accessibility and experience;
- the strong positive reaction from the Visioning Day was welcomed and highlighted the potential to boost tourism in both winter and summer months;
- currently there was a ferry service from Turf Lock to Topsham only operated during the summer, but historically there had never been a service running from Double Locks under the bridge;
- the new ferry would be enclosed, solar-panelled, and equipped with a backup diesel generator for emergencies, but would primarily run on an electric motor;
- trips would take about half an hour to avoid disturbing canal activities like fishing and a schedule would be developed in collaboration with Turf Lock and river users;
- the River Exe Cafe operated six months a year due to weather constraints, with attempts made to extend operations proving to be a challenge;
- the café did not directly compete with the Turf hotel and there was a potential for increased trade if the ferry service operated year-round;
- the service would offer two pricing tiers: affordable rates for the public during winter and higher rates targeting boat owners during the summer season;
- the boat currently accommodated up to 12 passengers, with potential plans to increase this capacity pending further approval;
- a waste boat system was currently in place, which operated in a comparable way to the cafe's operations, ensuring proper waste disposal;
- there was a potential to extend waste services to other vessels in the area, enhancing overall environmental management;
- there were plans to introduce electric people carriers to improve connectivity between Marsh Barton Railway Station and Double Locks, which was subject to demand;
- cycling routes were also being considered to enhance accessibility; and
- the possibility of establishing a floating restaurant / bar at the Quayside in Exeter, had recently been discussed and was pending a site evaluation.

The Chair advised that the Harbour Master would be able to provide further information on establishing a floating restaurant / bar at the Quayside. She thanked Paul Craven for his presentation which was welcomed by the board.

DAWLISH WARREN MANAGEMENT

The Chair welcomed Martin Davies from the Environment Agency to the meeting, who provided a presentation on Flood and Coastal Risk Management at Dawlish Warren and Exe Estuary. During the presentation, the following points were made -

- the Flood and Coastal Risk Management Strategy was initially developed in 2014, projecting changes to rising sea levels and climate change predictions for 100 years;
- in 2014 the Strategy originally planned for a 700mm sea level rise but had since been updated to plan for a 1-meter rise over the next 20 years due to changes in guidance, climate predictions, and legislation;
- completed and ongoing projects included: Exmouth, Topsham, Star Cross and Cockwood, and Clyst St. Mary;
- open coast resilience was being delivered with typical flood defence schemes

which required some site changes for habitat creation, which the Exe Estuary was designated area for compensated habitat creation;

- Dawlish Warren had undergone significant changes over time, with images presented, showing shifts and erosion patterns;
- current monitoring indicated ongoing erosion trends, sand movement and the dominant wave direction and coastal processes, which contributed to erosion and defence challenges;
- erosion and defence strategies included continual beach lowering, and outflanking the relic gabion baskets;
- potential damage would primarily affect the western bank and the mainline railway, with declining impacts further up the estuary;
- the scheme was reviewed in 2020, which acknowledged larger changes than was first predicted and the next strategy update would include a consultation;
- there was a legal requirement to improve the condition of the Sites of Special Scientific Interest (SSSI), and dune features through the removal of some defences;
- the smaller exposed geotube required patch repair and the larger geotube was undamaged and mostly buried providing further resilience;
- the current Environment Agency policy for failing relic gabion baskets was to do nothing, allowing them to fail over time and to removed failing groynes as the beach continued to lower;
- most of the local community preferred visible defences which contrasted with the ambition for broader maintenance and sustainable defences;
- collaborative work was being undertaken with Network Rail, notably a project to set back power banks to create habitat in front of the railway; and
- there were plans to review management positions at Dawlish Warren and assess business cases for Topsham and Powderham.

In response to questions and points raised, Martin Davies advised: -

- the exposure of geotube and gabions interfered with natural processes, which had a negative impact and there was ongoing debate about the responsibility for relic gabions;
- it would be difficult to predict and model channel changes and sediment movement due to historical and future scenarios;
- there was no Council budget available for the Harbour Board to look at additional modelling, but annual surveys were undertaken which were shared with the Port User Group;
- the original flood defence plans for Topsham were envisaged as an embankment, but were reconsidered for property-level protection and was now led by Exeter City Council, focusing on community involvement and economic assessments;
- the strategy included a review of economic, technical, engineering, and environmental aspects to determine feasibility and impact of projects;
- the strategy would also involve engaging with relevant communities and groups, including flood risk groups, to discuss and refine plans;
- the strategy aimed to complete by 2027-2028, covering the entire area discussed in presentation slides;
- there were legal requirements to include comprehensive assessments of economic, technical, engineering, and environmental impacts in the strategy; and
- reporting back to the Exe Estuary Management Partnership would occur annually through the normal channels.

The Chair thanked Martin Davies for his presentation. A copy of the presentation is appended to the minutes.

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GOVERNANCE AND HARBOUR REVISION ORDER UPDATE

The Harbour Master advised that: -

- a meeting had been held with Ashford's Solicitors on 17 March 2025 to receive an update on the Harbour Revision Order (HRO) application;
- the application was one of three applications and was awaiting a 42-day consultation period by the Marine Management Organisation (MMO); and
- there was no fixed date for the consultation period or completion of the revision order, but it was hoped that the consultation would be completed by summer 2025.

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HARBOUR MASTER'S REPORT

The Harbour Master advised that an internal application to adopt MARNIS port risk assessment software for reporting had been approved by Strata.

11

MARINE SAFETY PLAN - MANAGEMENT OBJECTIVES

The Harbour Master advised that: -

- the Marine Safety Plan had been written and was now awaiting sign-off from the new Designated Person (DP), before being published online;
- James Hannan, the new DP, will visit on 26 March 2025 and will be invited to the Harbour Board meeting in June 2025; and
- both the DP and another individual would be involved in MARNIS assessment and would have flexible availability for both in-person and remote interactions.

12

STATUTORY HARBOUR AUTHORITY STATEMENT OF ACCOUNT AND 2024-25 FEES & CHARGES

The Chair advised that the statutory Harbour Authority Statement of Account and 2024-2025 fees and charges were included for members to note and had been compiled from reports to Audit and Governance Committee and the Council Budget.

Attendees were encouraged to email any questions that may arise from the Statement of Account and 2024-2025 fees and charges to the Chair.

(The meeting commenced at 5.30 pm and closed at 7.05 pm)

Chair

Report to the Exeter Harbour Board, March 25.

After the storms in the autumn the weather has been a little kinder on the river in terms of damage and disruption although we have still had storms fairly often. Luckily boats which were most in danger had been moved or their moorings reinforced but the erosion from the end of Dawlish Warren has been quite significant. The usual Stuart line mooring in that area is now subject to the full force of wind and waves and they have moved their largest boat to further up the river in a safer area. The rubber tube which was meant to protect the warren is now washed over at every high tide and it's almost disappeared into the sand so that it fulfills no real purpose at all.

I have met the harbour master two or three times informally to confer over these problems but until the end of the stormy season it will be difficult to tell what the problems will be for the coming boating season.

I have contacted the new Exmouth/ Exeter MP regarding a tour of the river in April and he is at present refining his diary for that time. Hopefully the Harbourmaster and I can give him a good feeling for the problems of river users and the variety of businesses which are based on the river.

Also, I met the new officers for the Exe Estuary Management Partnership and attended their forum in February. I was also asked to speak to the Exeter Canal and Quay trust last week to outline the activities on the rest of the river and to impress on them that their activities are part of the harbour and for the people of Exeter city it is quite an important area for relaxation and leisure activity.

Rex Frost

Chair, Exeter PUG

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Good evening, everyone. I can hear you thinking — Another pitch for maintenance and protection of waterway heritage? Historic ships, traditional skills, defence against inappropriate development?

Actually I'm setting off on a different voyage this evening, a voyage with centuries of maritime tradition behind it, to find treasure. And our chart indicates: set a course for the Port of Exeter. We wouldn't dream of asking, though, would we, 'What is a port'?

'A town or city with a harbour, or access to navigable water,' is one standard dictionary's definition. And a harbour? 'A place where vessels may moor, in shelter either naturally formed or artificially created.'

From Exmouth's shoreline to Exeter's historic canal is how the Port Authority's website defines the Port of Exeter. It's been going for centuries but hasn't always been the same kind of place. Famously 'a hundred sail of ship might once safely ride' there. They came up the estuary and the canal in the 17th and 18th centuries and made fortunes for some.

In the Port Authority's words again, the water now plays host to an active boating and water sports community. And lately we've appreciated a new revival: in the shape of interest in maritime heritage and restoration of historic boats.

Meanwhile, also in these very days, Dawlish Warren, the natural breakwater at the entrance to the estuary, is being washed away. Last month at Exe Estuary Management Partnership's Winter Forum the topic was Flood and Coastal Risk Resilience. One speaker was Stephen Edwards, senior ranger at the Warren and a practical advocate if ever there was one for calling out the human causes of climate change and mitigating their damage.

It is in our power to hold back the destructive forces but not to save Dawlish Warren from being overrun by water. This, Stephen acknowledged, would happen. When? Who knows exactly? But as Stephen mildly put it, 'A Plan B is needed for managing the extra water going up the Estuary', that is, flooding straight into the Port of Exeter.

And this is the nub of it. Dawlish Warren, the breakwater between sea and port, will be lost. As the estuary becomes a tidal inlet and no barrier protects it, the present moorings can no longer be as safe. Eventually, perhaps the only secure winter moorings the Port will be able to offer will be behind the safety curtain of Turf Lock, within the Exeter Ship Canal. The Canal will become one of Exeter's most valuable assets in the future, a potential goldmine.

The warning about the Warren followed an update from the Port Authority by the Harbour Master. Grahame Forshaw showed alarming images of boats damaged by this winter's storms. This is another factor. Because storms are becoming more frequent and severe, customers of the Port who pay for their moorings will require those facilities to be made ever more secure. The Port will need its own plan B for achieving this; or, either the Estuary will lose its customer base or customers will lose their boats.

How do we keep up with what came out at that meeting: what do we do with the information? Even the banks of the canal may eventually need to be raised. Flood and coastal risk resilience is one answer. Another stares us in the face: we should grasp the opportunities that will arise as well as the dangers.

While coastal ports are going to become more dangerous, we have a safe waterway and harbour right here in the Exeter Ship Canal and Basin. It's a ship canal in depth and width with access to the coast — Exeter's port-in-the-storm, in fact. With the basin, it provides the safe and productive harbour that pleasure and working craft will seek in the future. I'm asking you to consider it in this completely fresh light.

It's the treasure I talked of at the beginning if only we would take full advantage: for these are not opportunities just for the Port and Canal. The range of benefits they open will comprehensively boost the stability of Exeter's resilience over the coming decades but once again, only if the city would realise the significance of the amazing asset it possesses.

So forgive me, but what is a harbour board for? Top of its terms of reference from the City Council is maintaining 'strategic oversight and direction of all aspects of the Harbour operation'. Accordingly, plan ahead.

Think in terms of the Port and Canal as a multi-faceted project to deliver new enterprises and skills, inward investment from businesses, and regeneration that's compatible away from the waterside as well as on the water; think how encouragement of boatyard businesses can be combined with the popularity and wider reach of the heritage industry; and how cutting edge technologies and research into water use and clean propulsion can combine with both habitat enhancement and the tourist, shopping and fun industries; and not least of all, think of the Canal providing waterborne passenger transport and commercial carrying again, which will present yet further benefits for locals, traders and visitors.

Do you see the opportunity? Strategic oversight of the Canal is a climate change mitigation measure which can vitalise local and regional economies and people's lives. The Canal and Estuary — including Topsham's public quay — are indivisibly the Port of Exeter.

It is an idea people do not always grasp that the working Canal with its integral harbour is logically part of the framework for the next 25 years and beyond, around which our wider urban, community and commercial prosperity can be built. You can see elements of it now — some interesting projects are using the basin today ... And yet sadly it's happening against a background that goes persistently against the grain of future opportunity.

Boat building has ended because the Water Lane plan will absorb Gabriel's Wharf. It happened even while a new generation of pollution-free vessels, of a size that could well be built here, was being trialled on the Estuary. One of the natural locations for a safe new boatyard and marina—indispensable and indescribably valuable in terms of sufficient secure moorings and the attendant businesses they attract—is at Grace Road Fields which are being earmarked for a heat network centre of industrial scale. There could even be a gin bar actually floating in the Basin, where waterside buildings have lost their water-related uses already.

What is a port that surrenders indispensable elements such as these in the circumstances we have? I think we have reached a turning point.

It is obvious that matters like this need to be realised beyond this Harbour Board as well as within it. I'm not seeking to reopen old issues but much of this is current. I uphold a council's right to make its decisions, and Exeter City Council does, when all's said, own the Canal. But this does not seem like strategic oversight and direction. It does not seem to be integrating our responses to immediate concerns with the chances for the future. It is not the forging of the range of necessary partnerships with communities, other authorities and private enterprises.

Take heart. The world's busiest inland waterway is Kiel Ship Canal in Germany. It's huge. 66 miles long and around 100 boats in transit each day. Yet its locks, like ours, are over 100 years old and can't accommodate larger modern vessels but it still carries barges and cargo boats. Along the way are marinas, pedestrian walkways, toilet blocks (think of that as you pass the closed Welcome Cafe!), a dockyard, viewing platforms and the thriving port and

cultural city of Kiel with its maritime museum of model ships and nautical instruments, and so on. You can't map Exeter onto the Kiel Canal, but you can get a picture.

So, we should start with the idea of working waterway prosperity, commercial, cultural and social. Bring the pieces together until they fall into places that reinforce the city's project as a whole. The ultimate climate change mitigation measure is emerging in the future with a future. There's no getting away from the fact that enhancing the work of the canal and being cognisant of its purposes will bring positive ramifications in many spheres of life and not only along the waterfront.

I don't expect you to accept this without more thought than I've presented just now. A high level, strategic, outline feasibility study would either underpin or demolish the idea that the Canal might be a goldmine for Exeter's future. The Friends can be the channel for receiving outside funding for such a study, and through our contacts with expertise in the Inland Waterways Association we can reach out to consultants who know what they are talking about. But I think the lead starts here at the Harbour Board.

The city can diversify, become more interesting, be on more maps. But it needs its Canal and Port with their heritage harbour status to be viewed as integral to strategic planning, rather than put piecemeal to uses as unconnected as historic vessels and nicely situated waterside homes and bars. Worthy though these are in themselves, you cannot have the trimmings unless the infrastructure is in full working order and working fully.

We support the Harbour Master and his team and understand the backlog they must deal with; and I hope I have not disappointed the risk the chair took in letting me speak. I don't believe we overreach ourselves—not too far anyway—by suggesting to Harbour Board, Port Authority, and City Council in all its various committees and manifestations, a coping, more rewarding and integrated approach. Modest investment in a feasibility study of the Canal's value to the city especially in the context of climate change mitigation is — I was going to say — worth a punt; but it's possibly worth a whole flotilla. Thank you.

John Monks
Chair, Friends of Exeter Ship Canal

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Flood and Coastal Management Risk Dawlish Warren and the Exe Estuary

Martin Davies
Environment Agency Coastal Advisor





Exe Estuary Strategy 2014 identified
and planned for risk

High spring tide in 2014

.. Impact if 700mm higher?

2025 Update ... impact if 1m higher?

2014 Strategy identified defence improvements by 2030

- Exmouth - delivered
- Topsham – not delivered
- Starcross & Cockwood - delivered
- Clyst St Mary (fluvial driven) - delivered
- Powderham Banks – ongoing maintenance and liaison for adaptation with NR
- Open coast railway resilience – delivered by NR

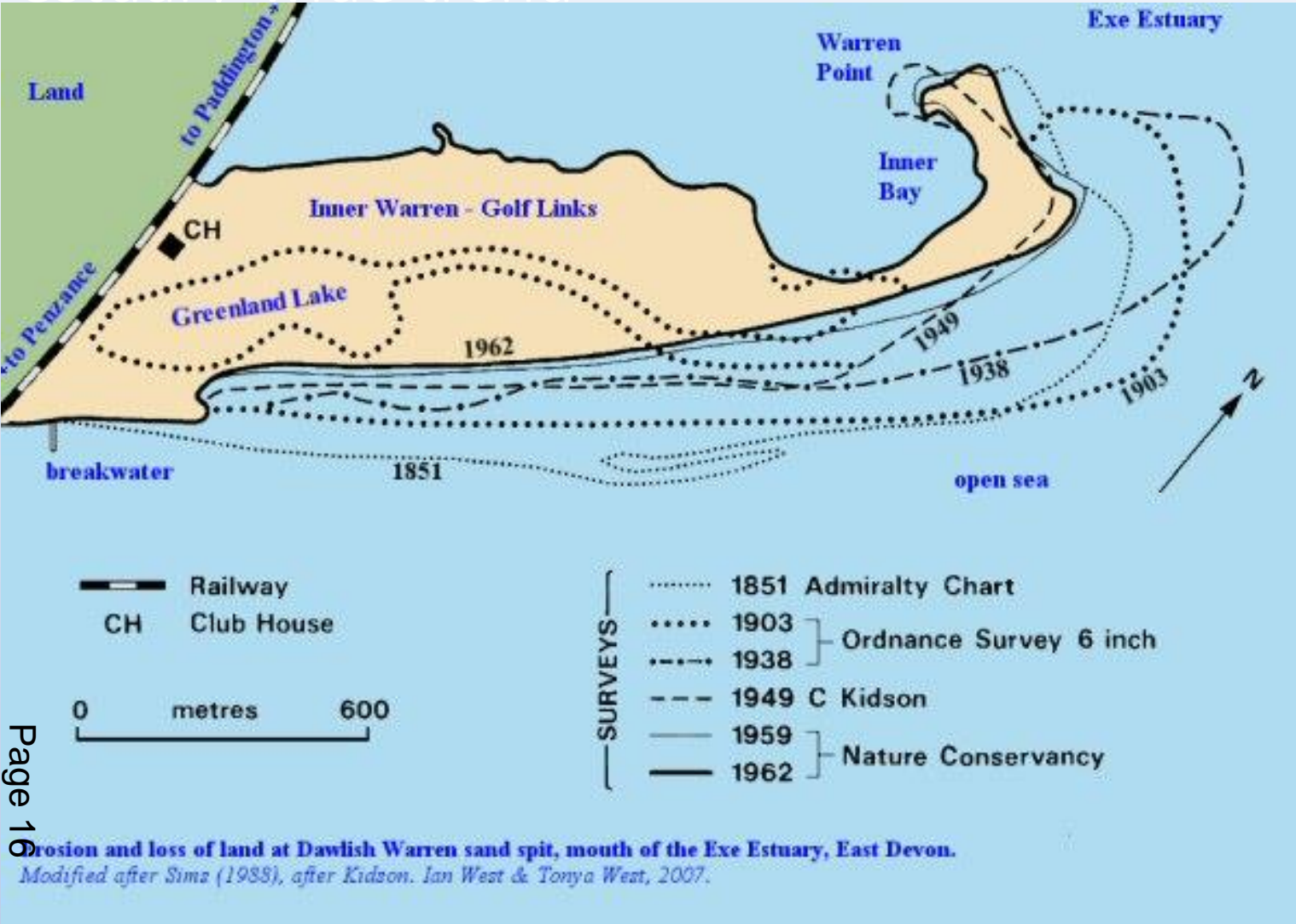
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Identified 'change' sites

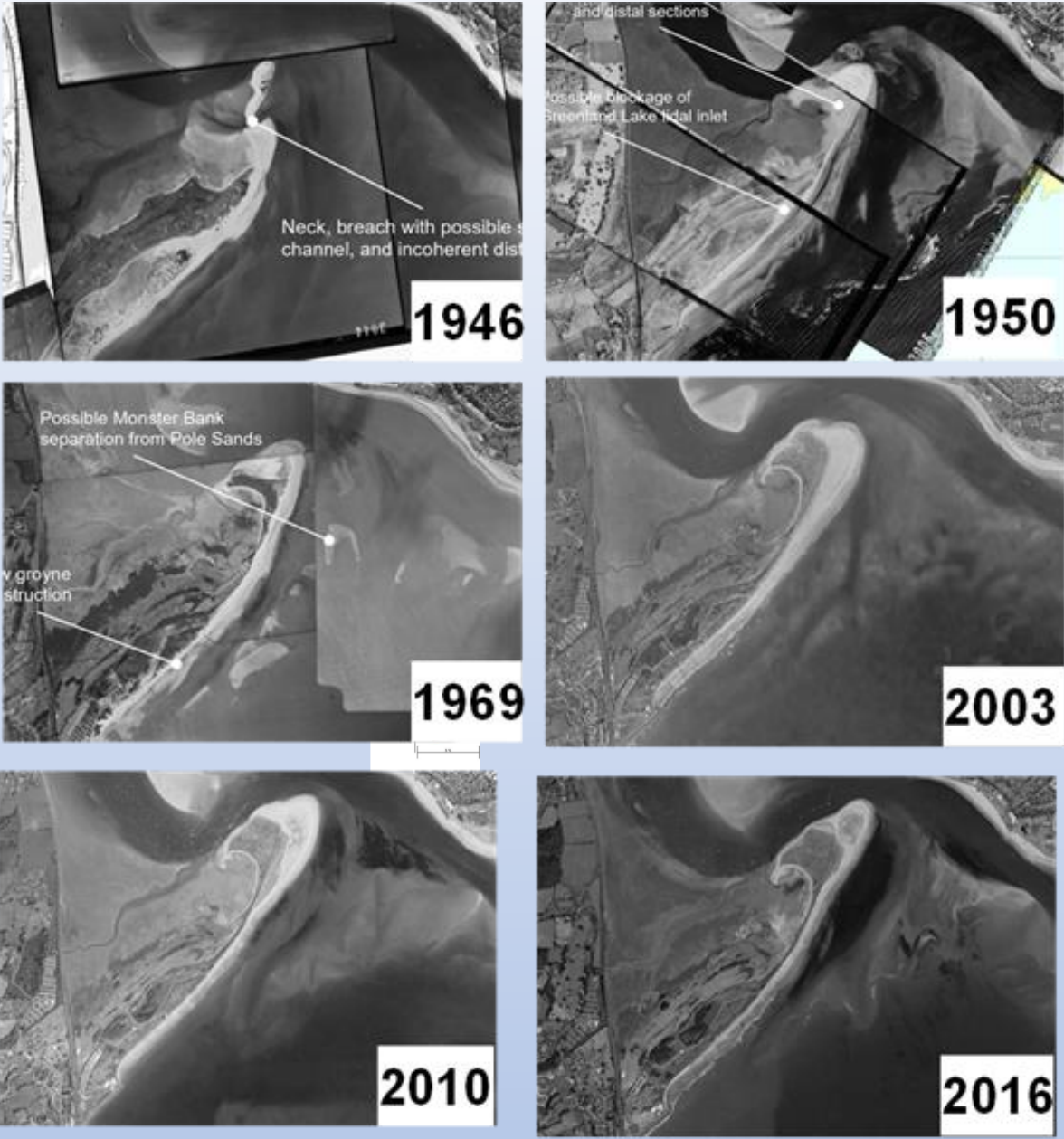
- Lower Clyst Valley – not acceptable. LORP
- Kenn Valley – not preferred
- Dawlish Warren spit – 2017 scheme; adaptation ongoing



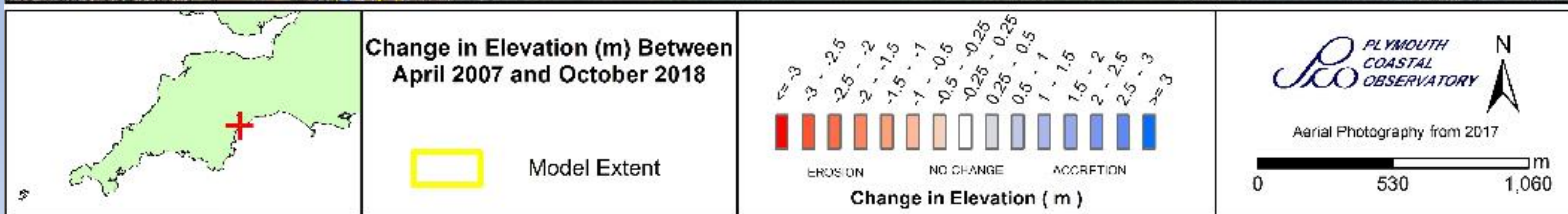
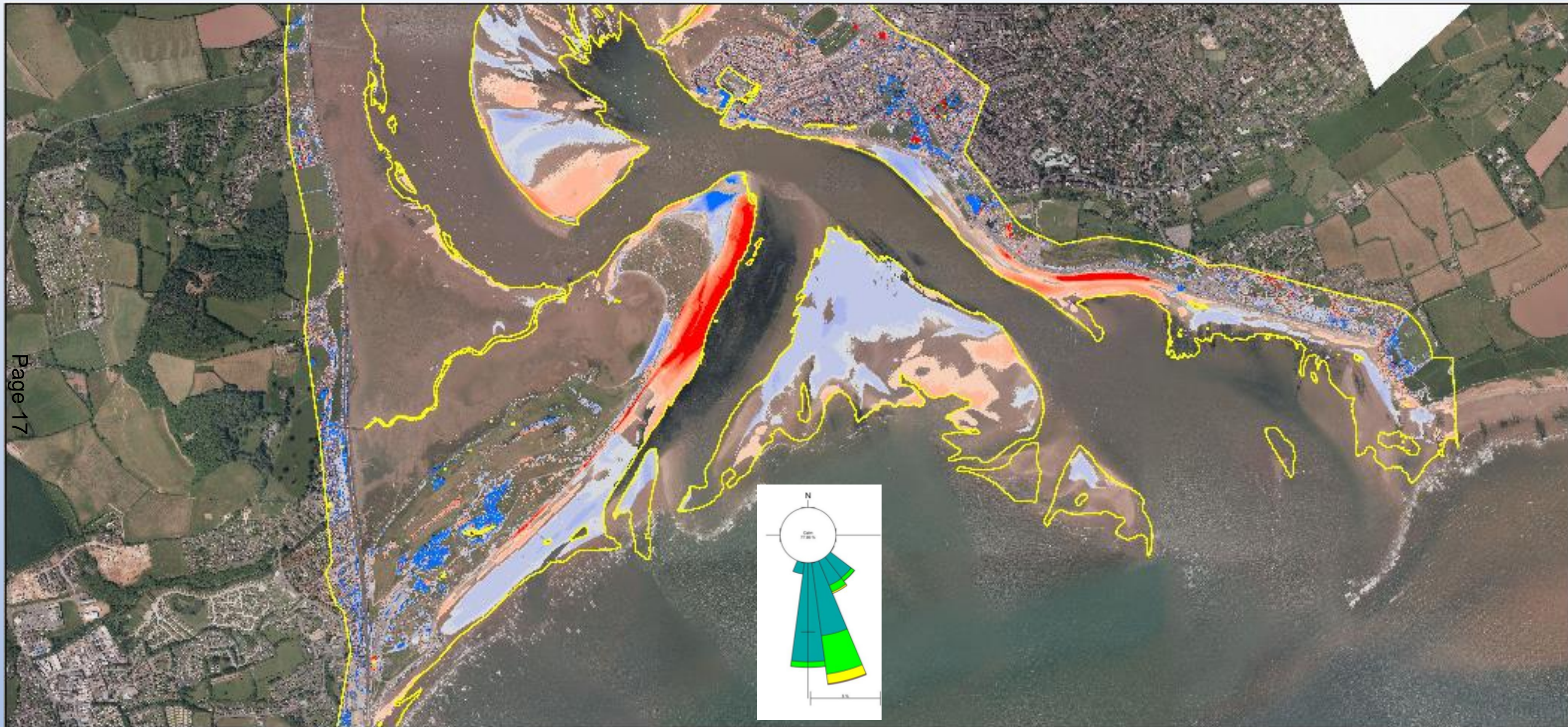
Historic change – awareness of long term, larger scale trend that will continue term
estuary-wide trend



Erosion and loss of land at Dawlish Warren sand spit, mouth of the Exe Estuary, East Devon.
Modified after Simz (1988), after Kidson. Ian West & Tonya West, 2007.



..that is ongoing and will continue



Not just Dawlish Warren



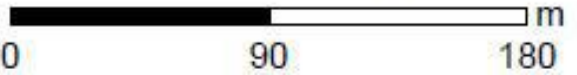
Change in Elevation (m) Between
May 1998 and March 2016



Model Extent



Aerial Photography from 2012



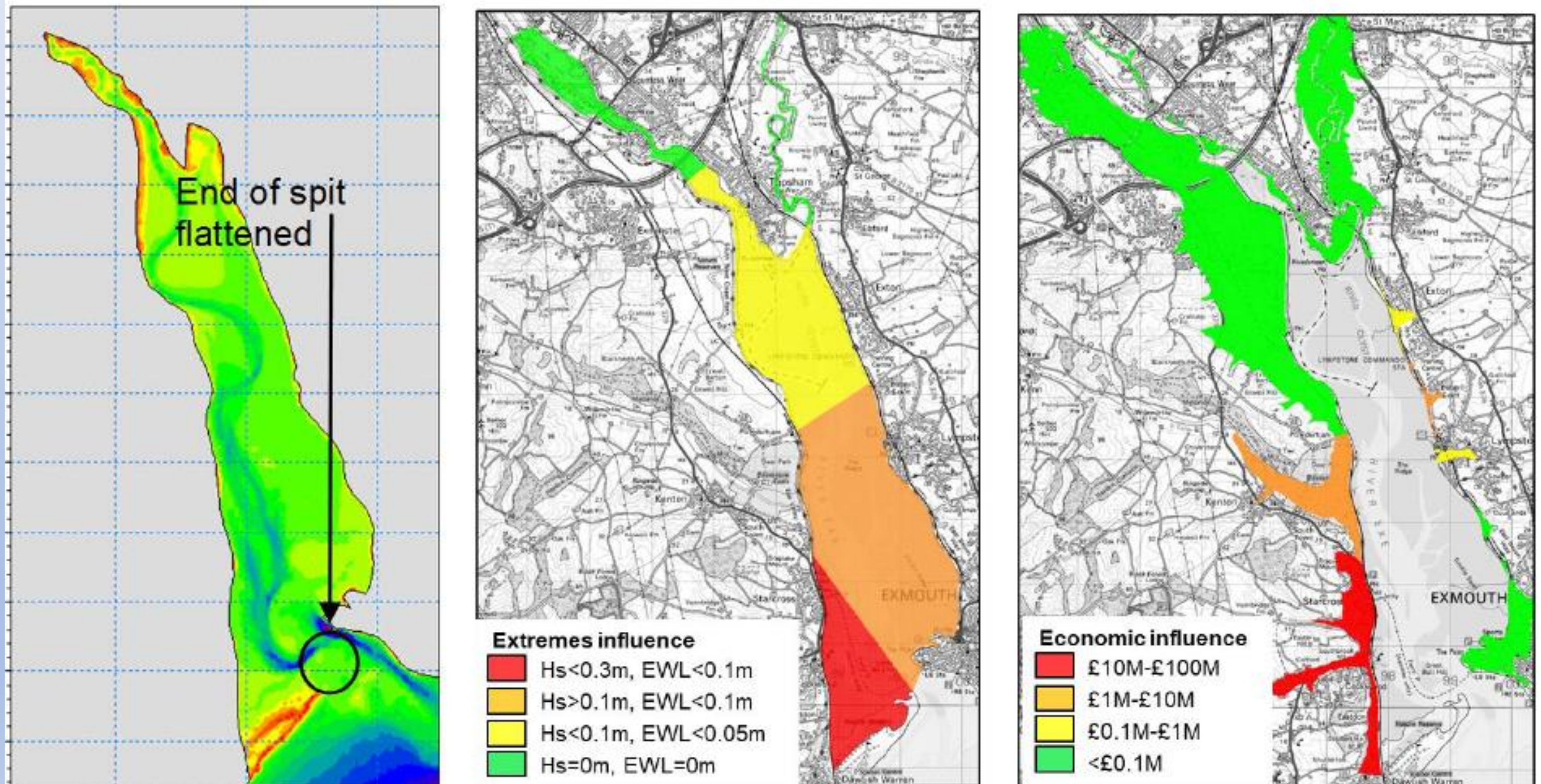
Local impact of change



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Estuary-wide impact of distal end flattening - waves, water level and economics



Dawlish Warren post-scheme Review

2017 Scheme



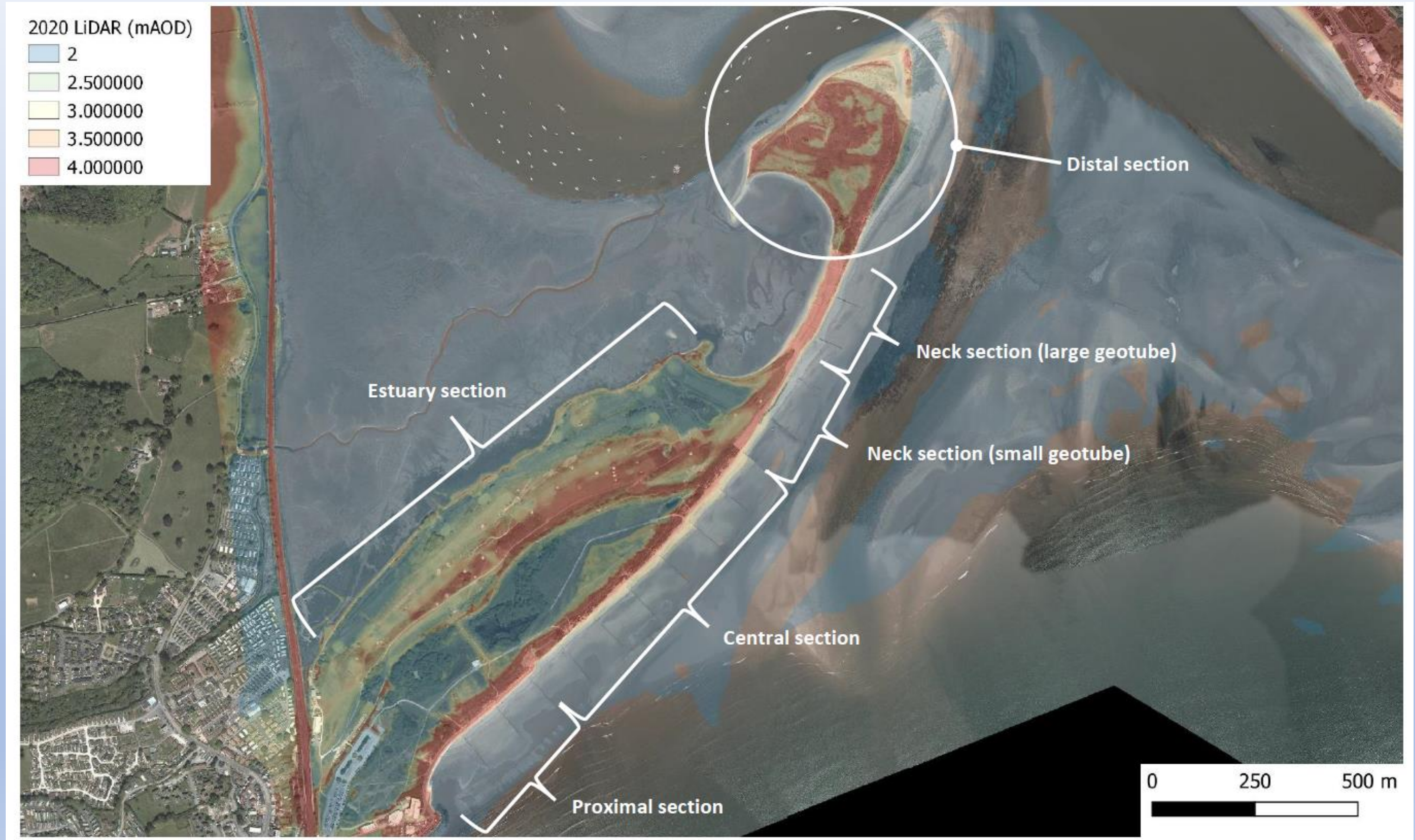
- Post-scheme beach level change happened at a rate earlier than predicted
- Investigation in-light of change
- Identify changes and propose any update to site management going forward
- Follows stakeholder engagement meetings during 2021 and 2022
- Proposals will be the 'baseline' to take forward into Exe Estuary FCERM Strategy update
- Future management to be confirmed by 2027/28

Scheme objectives and planning conditions

Primary Objectives – FCERM and Environmental drivers

No.	Dawlish Warren BMS objectives	Status – achieved / not met / partially met
1	Reduce risk of erosion and flooding to people, property, infrastructure and commercial assets and activities, locally at Dawlish Warren village.	Achieved through the new flood defence at the Visitor Centre
2	Continue estuary-wide storm sheltering function through to 2040s for people, property, infrastructure and commercial assets and activities.	Currently achieved. <u>Geotubes</u> at the Neck are key to meeting this objective. There is a question mark over the relative importance of the small and large <u>geotubes</u> in meeting this objective; if they function separately or together to achieve this; and if the large <u>geotube</u> alone would still achieve this objective.
3	Achieve SSSI favourable condition by 2030.	Not being met. NE advice is that this will not be met with exposed <u>geotube</u> in place.
4	Achieve SAC condition favourable/unfavourable recovering by 2030 to comply with Habitat Regulations.	Not being met. NE advice is that this will not be met with exposed <u>geotube</u> in place.
5	No adverse impact on the Exe Estuary SPA conservation objectives to comply with Habitat Regulations.	Achieved.
6	Delivery to meet the accelerated programme requirements.	Achieved – EA objective

Dawlish Warren Post Scheme Review - Sections



Neck section: geotubes

Small geotube

Geotube vandalism & damage



Proposed management going forward:

- Do Minimum 'patch repair' prior to removal by 2049
- Ongoing discussion re H&S and impact/management of wind-blown sand on to golf course

Feedback:

- Potential conflict – No improvement to Dawlish Warren SAC or SSSI

Large geotube



Proposed management going forward:

- Do Nothing - Large geotube ensures estuary-wide sheltering function is maintained until 2040s
- Emphasise need to upgrade in-estuary defences prior to removal

Feedback:

- Potential conflict – once exposed No improvement to Dawlish Warren SAC or SSSI unless removed

Relic gabion baskets & mattressing

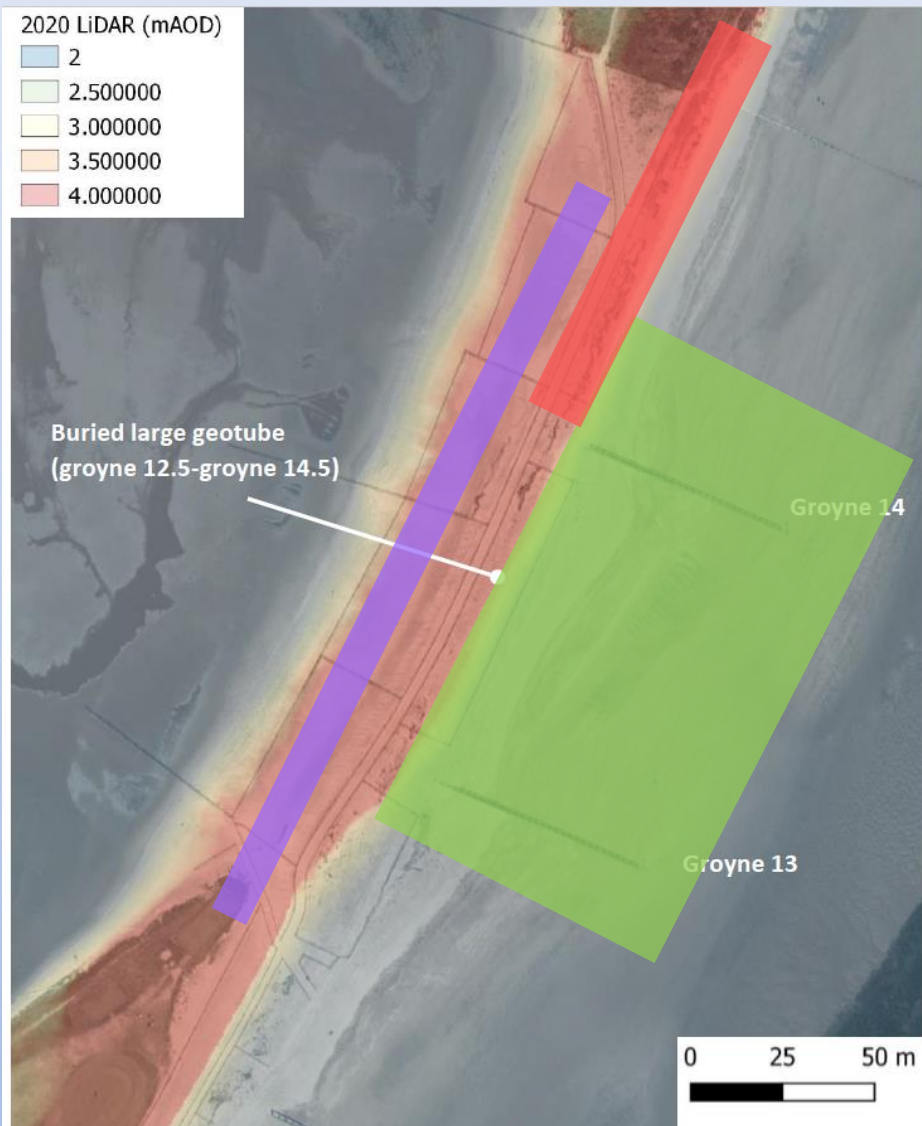


Proposed management going forward:

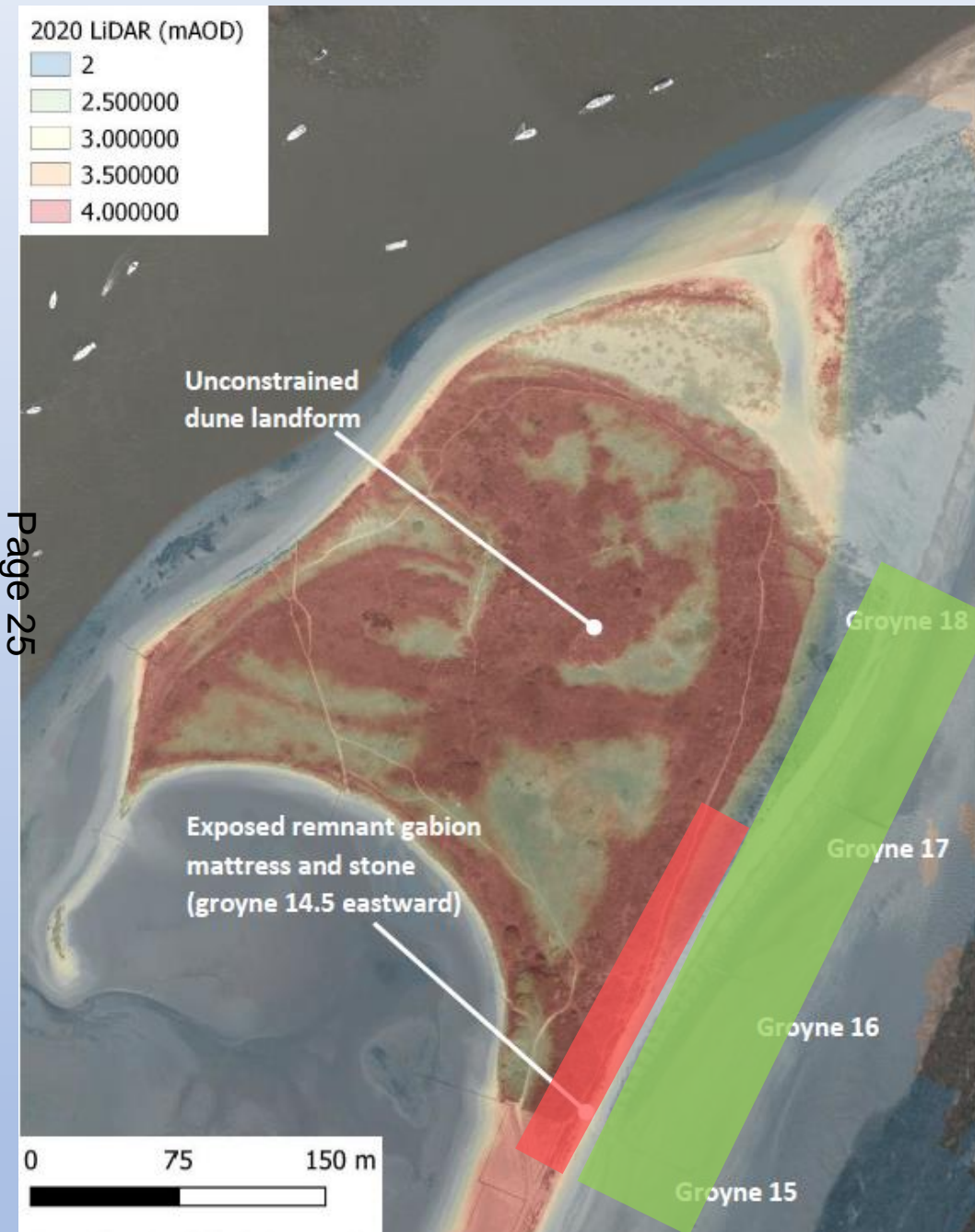
- Do Nothing - No proposal for maintenance or removal prior to 2049
- Monitoring and management of exposed and damaged gabions for H&S and pollution prevention only

Feedback:

- Potential conflict - no improvement to SAC or SSSI unless removed



Distal section



Relic groynes 16 - 18



Proposed management going forward:

- Removal of remnant groynes 16 to 18 by end 2023/24

Feedback:

- Authority consensus on removal of relic groynes

Relic gabion baskets & mattressing



Proposed management going forward:

- 'Do Nothing' - No proposal for maintenance or active removal but ongoing removal following failure
- Emphasise need to upgrade in-estuary defences as gabions degrade

Feedback:

- Potential conflict – Active removal of mattresses may impact a range of estuary interests including flood risk, navigation and fisheries and therefore not proposed
- Gabions continue to deteriorate but FCERM benefits to wider-estuary continues unless actively removed
- No improvement to Dawlish Warren SSSI or SAC unless actively removed

Feedback from Partnership engagement event

Groynes	remove	remove in phases	remove relic groynes only	retain	unsure
	0	10%	5%	60%	25%
Dune notch 'trials'	yes	no	Unsure		
	0	80%	20%		
Geotube removal	yes	yes - but build revetment instead	No	unsure	
	0	20%	50%	30%	
Relic gabion removal	yes	repair/ replace	No	unsure	
	15%	25%	50%	10%	

Potential further 'change' sites



Figure 3: Photo of typical flood bank condition

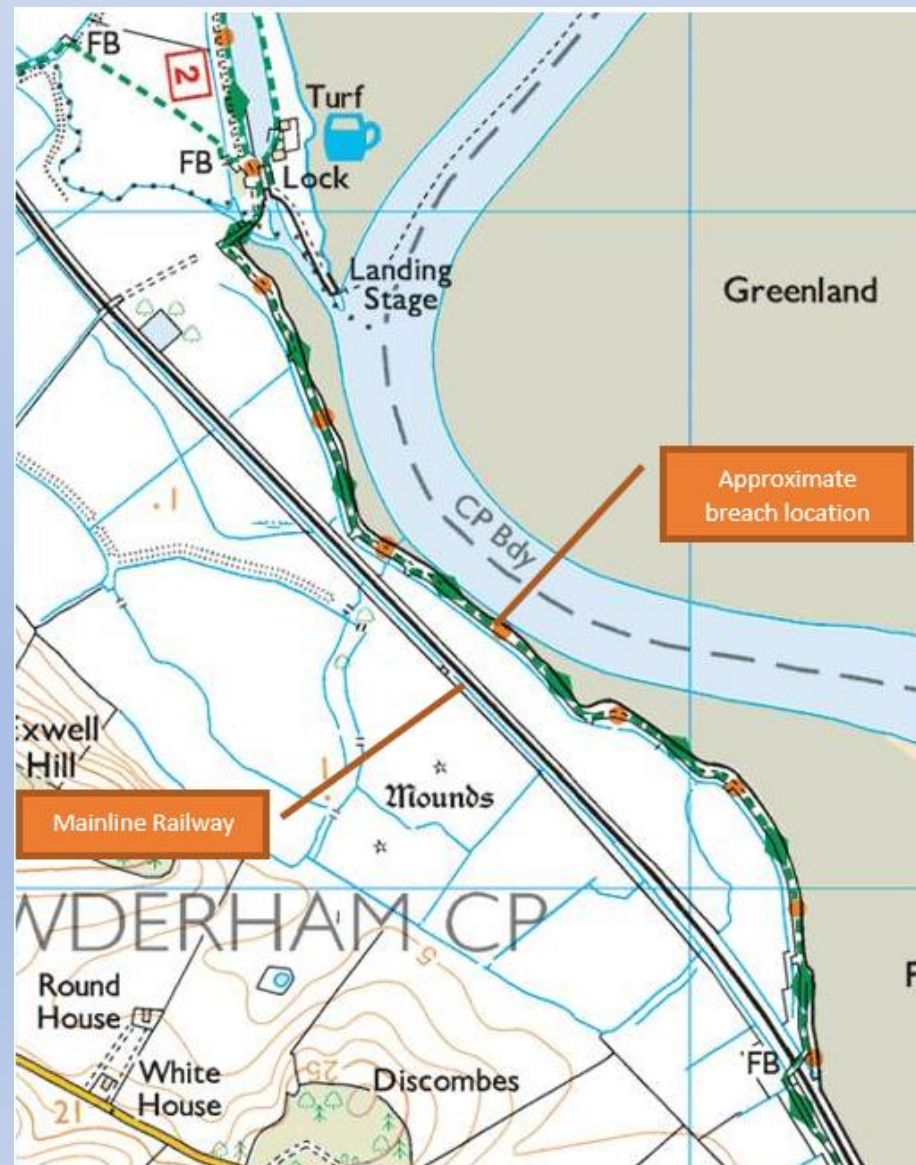


Figure 4: Photo of 2014 Breach of flood bank

Strategy update to confirm projects and future needs

Dawlish Warren

- Topsham
- Powderham Banks adaptation
- Bowling Green Marsh adaptation
- Shutterton Brook tide-lock
- ‘what if?’ breach scenarios Dawlish Warren, Powderham Banks, Exeter canal, Bowling Green Marsh
- Exminster Marshes WLMP?
- Habitat creation and BNG opportunities
- Flood Resilience
- LNRS ‘connectivity’ to coastal schemes
- Long-term change monitoring
- ?
- Engagement in 2026 for delivery by 2027/28

