

Heaths to Sea Landscape Recovery

Project Overview

March 2026

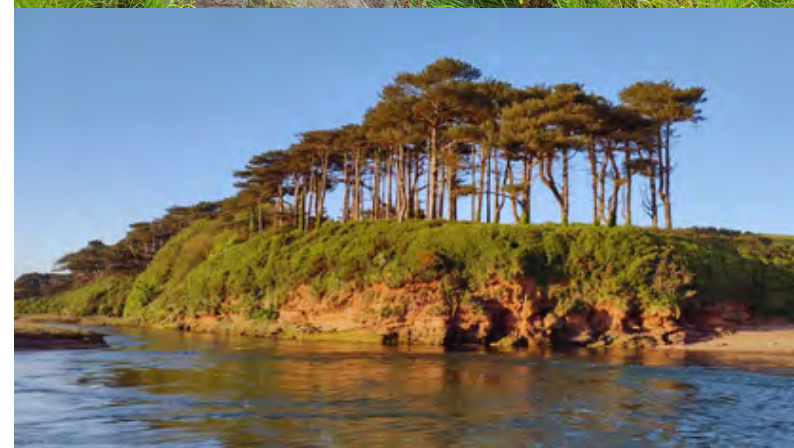


HEATHS TO SEA



Landscape Recovery





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Guidance note and thanks



The proposals summarised in this document have been submitted to the Department for Environment, Food and Rural Affairs (Defra) for consideration for funding through the UK Government's Landscape Recovery Scheme. If successful, funding will support the delivery and maintenance of Landscape Recovery in the lower Otter Valley over a 20+ year period.

Clinton Devon Estates and the Heaths to Sea team would like to recognise and thank all those who have been involved in the development of these Landscape Recovery plans. The two-year project development phase has involved extensive work, building on input received from project partners, a wide range of consultants, advisors, organisations, and the general public.

We look forward to working together to deliver our vision of a more connected, resilient, and ecologically healthy landscape for nature, which continues to support food & timber production, net zero ambitions, and public access.

What is laid out in our submission to Defra is our 'go-large', ambitious plan for nature recovery and sustainable land use. It is important to note that not all proposals submitted at this stage may be enacted. To reach a funding agreement with Defra, some of these proposals may be altered or removed from the final plan, and following confirmation of funding, many require additional permits, permissions, and/or consents.

We have worked closely with East Devon District Council, East Devon National Landscape, Devon County Council, Environment Agency, Natural England, Devon Wildlife Trust, Westcountry Rivers Trust, RSPB, and infrastructure stakeholders to pull together proposals that are in support of, or complementary to, existing strategic priorities. However, this does not guarantee approval in years to come.

Executive summary



The decisions we make around how we use the land impact every aspect of our lives. The State of Nature 2023 report outlined a stark crisis in nature across the UK: since 1970, average abundance of UK species has declined by 19% and 16% of species are threatened with extinction. The UK is considered one of the most nature-depleted countries in the world.

Protecting the natural environment is not only important for its intrinsic value but also for the benefits it brings to people and society. Land is multifunctional and there are many overlapping demands placed on it, including food, timber and energy production, the provision of housing and employment space, nature conservation, and public access. When managed well, these needs can be supported together, but achieving this balance requires a strong understanding of the needs of local society, trade-offs between different land uses as well as effective collaboration between landowners, farmers, environmentalists, communities, and policymakers.

At this critical tipping point in nature, exacerbated by the changes in climate, the UK Government has committed to the Environment Act 2021, outlining several legal commitments relating to reversing species declines. To help deliver on these commitments, Defra have launched the Landscape Recovery programme. This is designed to deliver ambitious, large-scale, long-term, and collaborative land management, following the Lawton principles of making habitats "more, bigger, better, and joined". Considered collectively, landscape recovery projects will restore critical habitats, create new habitats, and recover fundamental ecosystem services across the nation.

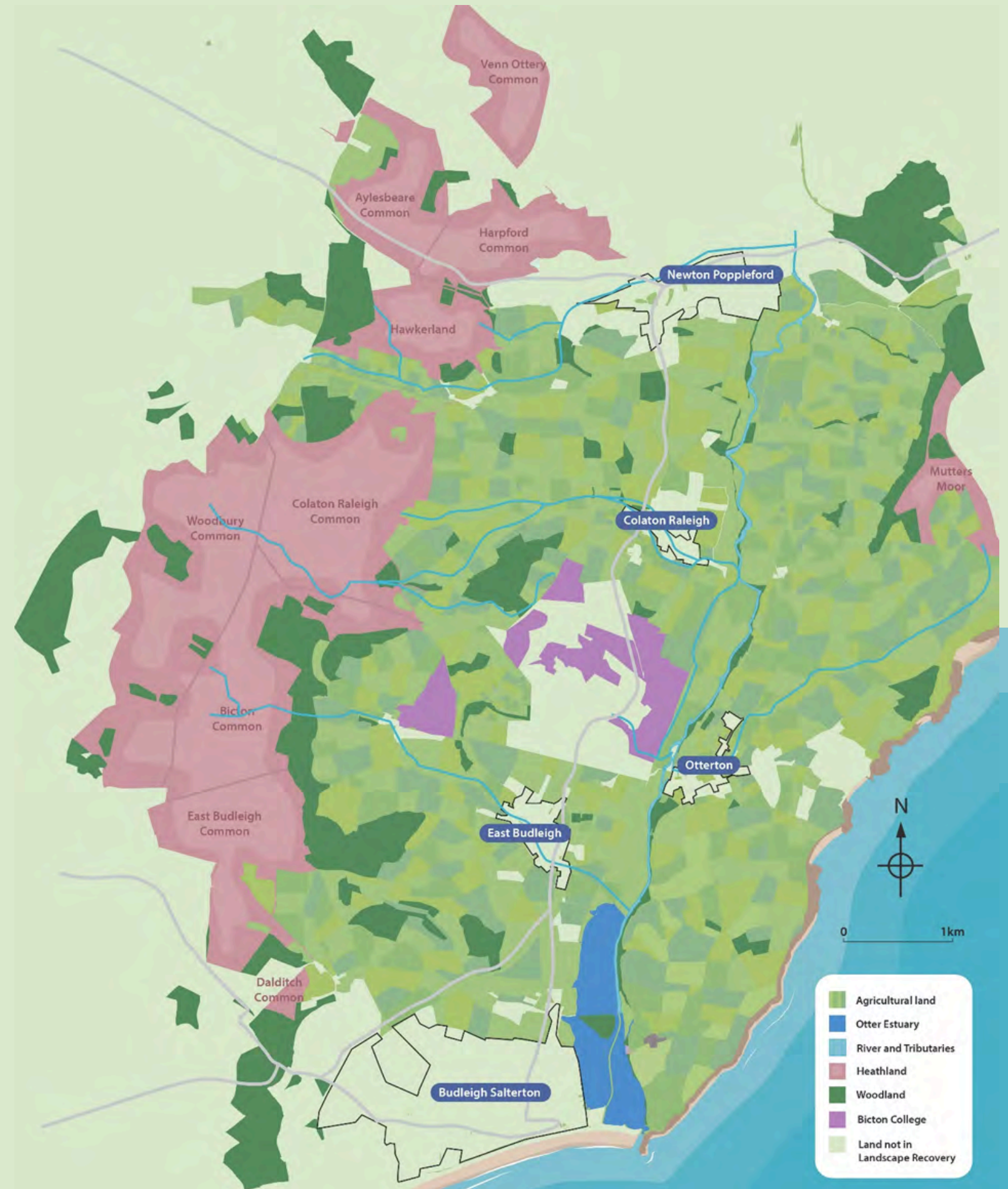
Heaths to Sea is a pilot Landscape Recovery project, with nature ambitions of national significance, and will support commitments to the natural environment, people, and land productivity.

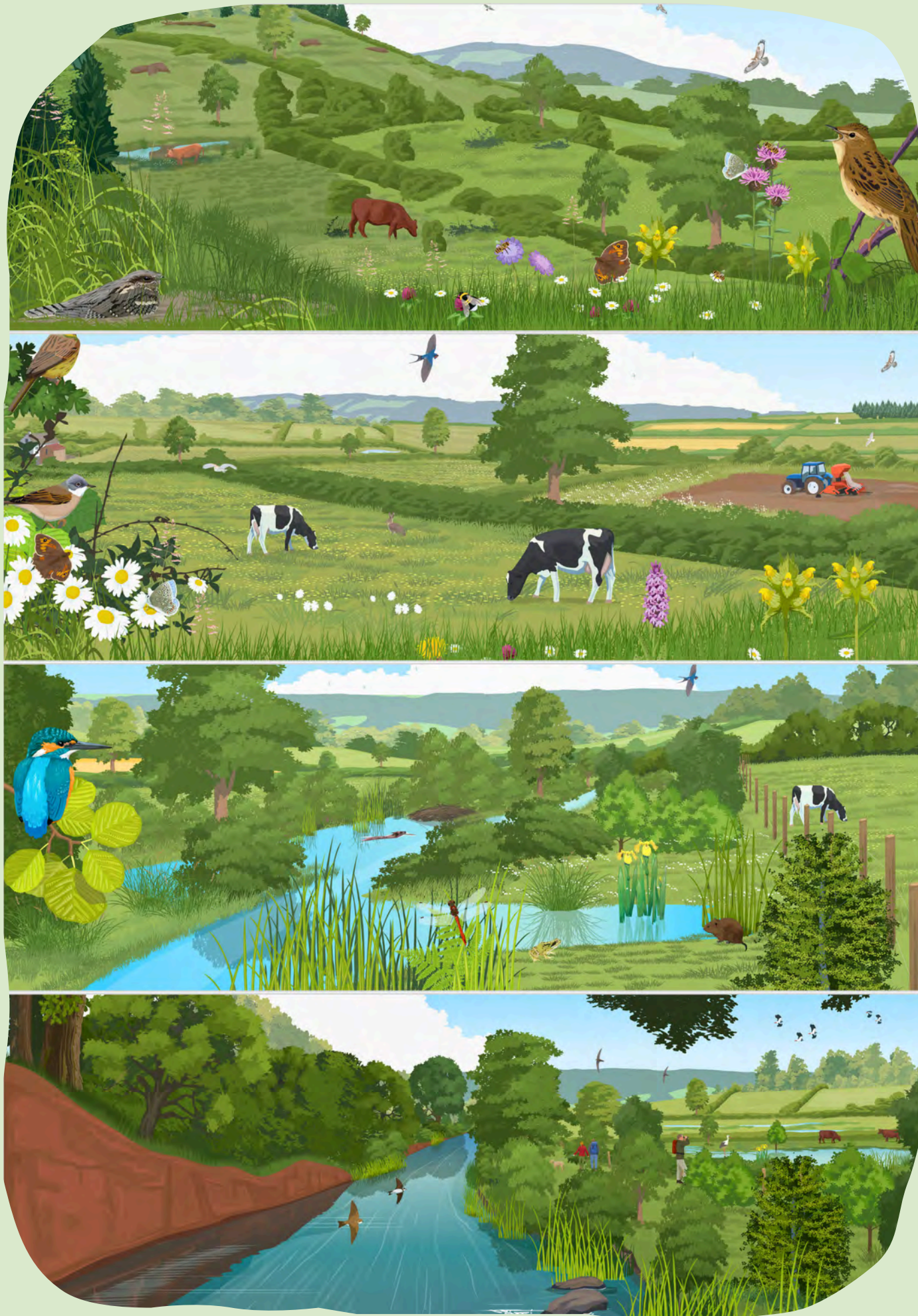
About the project

Led by Clinton Devon Estates, the Heaths to Sea Landscape Recovery Project aims to transform 3,945 hectares (15 square miles) of the lower Otter Valley catchment in East Devon into a more connected, resilient, and ecologically healthy landscape for nature, while continuing to support food & timber production, net zero ambitions, and public access.

The Heaths to Sea Landscape Recovery Project takes a landscape scale approach to restoring the lower Otter Valley by creating 485 ha of new wildlife-rich habitat and reconnecting the existing diverse habitats – from the lowland heath of the Pebblebed Heaths to the tidal wetlands of the River Otter estuary, through meadows, farmland, woodland, streams, and river. Wildlife can move and thrive across the continuous, resilient nature network. We seek to create a "super NNR" by enhancing the nature value and resilience of core reserves and by restoring natural processes from source to sea, across the agricultural hinterlands between the three separate sections of the Pebblebed Heaths NNR.

The plan prioritises habitats of international and national importance while balancing them with sustainable food and timber production. Working with farmers, the project aims to balance food production with nature recovery through wildlife friendly practices such as hedgerow restoration, buffer strips, low intensity grazing, and creating new meadows and orchards. This will be guided by tailored farm plans that improve soil health, water quality, and habitat connectivity. By releasing agricultural pressure immediately adjacent to watercourses, the project aims to benefit biodiversity across the entire catchment whilst de-risking agricultural activity. Alongside ecological benefits, these actions will reduce flood risk, enhance the area's natural beauty, and support inclusive access and sustainable tourism, with community voices playing a central role in shaping the future of the valley.





Vision

By 2046, the Heaths to Sea initiative will be nationally and internationally recognised as a leading example of how world-class nature recovery can be achieved within a thriving, productive, and populated lowland English landscape.

The Pebblebed Heaths National Nature Reserve (NNR) and its surrounding agricultural hinterlands will form a fully connected, climate-resilient ecological network; priority habitats will be restored to favourable condition and will support thriving populations of priority terrestrial, wetland, and riparian species. A new, landscape-scale wildlife reserve of international renown will provide habitat connectivity, excellent public access, and nature-rich experiences, acting as a model for conservation, sustainable land use and rural regeneration. The value of cultural heritage related to the landscape will be appreciated by all with heritage sites at risk protected.

The landscape will be ecologically functional and deliver a full range of ecosystem services, including clean water, carbon storage, soil health, pollination, and natural flood management (NFM). Degraded ecological processes will be restored, and environmental risks associated with land use will be significantly reduced through regenerative, nature-friendly farming systems.

A strong evidence-based monitoring programme, co-developed with local communities and underpinned by science, will demonstrate the ecological, economic, and social benefits of nature recovery. Land managers, communities, and policymakers will share a renewed social contract rooted in trust, collaboration, and transparency—where land use decisions, trade-offs, and benefits are clearly understood by all.

Optimism will replace past pessimism around biodiversity loss, with vibrant opportunities for people to connect with, care for, and benefit from the natural environment. The restored landscape will contribute to reversing climate change through carbon sequestration and will underpin sustainable green growth, improved health and wellbeing, and regional economic prosperity.

Setting the scene

People and place

- **Three civil parishes within the project area:** Colaton Raleigh, Otterton, East Budleigh with Bicton
- **Three civil parishes border the project area:** Newton Poppleford and Harpford, Woodbury, Budleigh Salterton
- **Population of 10,000** – 39% over 65; 48% economically active; 98% White British
- Within 15 min drive: Exmouth and Sidmouth (35,500 and 13,600 population respectively)
- Accessible Green Infrastructure District Criteria (access to at least 100 ha of accessible green space within 5km from home) is met across the area, and the majority meets the Wider Neighbourhood Criteria (access to at least 20 ha within 2km from home)



Current land management

- **3,945 hectares (15 sq. miles)**
- **Six landowners and 14 farm tenancies**
- **49% is farmed land:** majority dairy production, with other agriculture including mixed production, arable, vegetable, orchards, and pig farming
- **18% is woodland** managed for production
- **33% Pebblebed Heaths NNR** including the Pebblebed Heaths, Mutters Moor and Otter Estuary
- **Multiple conservation designations** apply across the area: Sites of Special Scientific Interest, Special Area of Conservation, Special Protection Area, and County Wildlife Sites



Access and recreation

- **1,149 ha Registered Common** (Open access) with >60 km tracks and fire breaks
- **6 ha designated Green Space**
- **128km of specific access routes** comprising
 - 54km Public Footpath and 28km Public Bridleway
 - 29km Green lanes / Other Routes with Public Access,
 - 8km permissive footpaths
 - 9km National Cycle Network Route 2
- Included within that is:
 - 5km accessible paths
 - 8km South West Coast Path
 - 12km East Devon Way
 - 2km National Cycle Network Route 248



Landscape and heritage

- **East Devon National Landscape (EDNL)**: 99% of the project area is within the EDNL, and the project area represents 25% of the total EDNL area
- **Devon Redlands National Character Area**: underlying red sandstone, soils associated with mixed farming, strong hedgerow network, floodplain, rolling hills with flat bottomed valleys and combes
- **Two Landscape Character Areas**: Pebblebed Heaths and Farmland (wooded skyline and heathland ridge) and Sidmouth and Lyme Bay Coastal Plateau (steep wooded combes and the Otter Estuary)
- **Jurassic Coast World Heritage Site**
- **Rich Historic Environment Record** with evidence of human activity in the valley from pre-historic times, including definitive evidence of an Iron Age settlement at Woodbury and evidence of medieval strip fields on Otterton Hill



Proposals at a glance

Land use for nature

- On the floodplain, up to 290 ha of wetland habitats will be created through strategic interventions of the River Otter, including ditch blocking and the reactivation of old paleo-channels by partially diverting the Colaton Brook from its canalised position back into the floodplain. Strategically placed chutes and backwaters will be excavated to better connect the main River Otter, creating a mosaic of wet woodland, grazing marsh, wet meadow, reeds and fen. These habitats will be managed through low-intensity grazing.
- Along the tributaries (Back Brook, Colaton Brook and Budleigh Brook) and the banks of the River Otter approximately 30 ha of wet woodland will be established through the creation of 20m riparian corridors.
- Heaths to Sea will transform Otterton Hill into a 170 hectare mosaic of wood pasture, scrub and species-rich grassland, with nature recovery driven through naturalistic low-intensity grazing by traditional breeds of cattle, ponies and pigs, mimicking the actions of ancient herbivores.
- On the Pebblebed Heaths and Mutters Moor, traditional conservation grazing will increase from 589 ha (48%) to over 1,188 hectares (around 90% of the NNR), reducing the need for mechanical intervention to prevent the heathland habitat transitioning into woodland and promoting the development and subsequent management of the full suite of heathland habitats with a greater diversity of species, sward age and height.
- Heaths to Sea interventions also aim to:
 - bring at least 80% of the SSSI into favourable condition.
 - minimise the impact of access and recreation on the sensitive habitat through engaging visitors and providing educational resources to raise awareness and support conservation.
 - deliver positive benefits for 30 Devon Special Species identified by the Local Nature Recovery Strategy.

Land use for productivity

- Across the area, 90 hectares of new productive woodland for timber production will be created comprising a diverse mix of climate-resilient conifer and broadleaf species. Mixed productive woodland will be buffered by broadleaf woodland containing rides and will be managed to enhance biodiversity, open space and access.
- Approximately 700 ha of existing woodland will transition from a clear-felling regime to a 'continuous cover' or irregular selection silviculture approach, keeping mature trees and thinning selectively, improving biodiversity and climate resilience.
- Heaths to Sea is committed to maintaining local food production. Tailored farm plans have been developed with each land manager, supporting biodiversity, improving water quality, reducing runoff and enhancing soil health while maintaining each farm's operational needs. Two farms will take a land sparing approach, with significant restructuring of their farming operations.
- Restoring the landscape is projected to significantly increase carbon sinks with an additional estimated 110,000+ tonnes of carbon stored through enhancing existing natural habitats and creating new natural habitats in the floodplain, riparian corridors and on Otterton Hill. The creation of new woodland and transition of existing woodland to more sustainable management will also sequester significant carbon over 20 years, and beyond.
- Heaths to Sea will incorporate strategic use of Natural Flood Management (NFM) techniques along the tributaries delivering recommendations from the existing Climate Resilient Otter Catchment (CROC) project (led by EA and Westcountry Rivers Trust). This will store over 40,000m³ of water across the three tributaries (Colaton Raleigh, Budleigh, and Back Brooks) by leaky woody dams and beaver dams and help reduce flood risk to local communities.

Land use for people and heritage

- Plans will deliver on opening 5 km of the disused railway line between Newton Poppleford and Otterton as a multi-access trail (dependant on alterations to farming operations and diversification revenue) with hugely significant benefits to local access to nature-rich areas and health and wellbeing.
- Permissive access will be increased by developing a circular access route around Otterton Hill, through the installation of a new permissive bridleway from Kitts Lane to Sidmouth Bridleway 19. Anchoring Hill pastures and the proposed new traditional orchard will be dedicated as permissive open access. Tracks across Dalditch Plantation will be formalised as permissive bridleways, and a new permissive path from the South West Coast Path to South Farm Court facilities will be created.
- The popular riverside footpath (Otterton Footpath 1) will have increased protection from erosion by planting a wide woodland riparian corridor with “roll back” permissive access. Other legal footpaths impacted by floodplain restoration works will be protected by installing a raised boardwalk (at Otterton Footpath 6) and bund (Bicton Footpath 3).
- Access infrastructure will be enhanced to meet accessibility needs and requirements, following the “least restrictive access” principle. This includes replacing stiles and kissing gates with 1.5m wide accessible gates and the provision of additional benches and rest-points.
- To protect cultural heritage, work will be undertaken to remove Woodbury Castle from the Heritage Register’s “at risk” category, medieval strip fields on Otterton Hill will be protected by keeping those fields as wildflower meadows, minimising disruption of the soil, and further investigations will take place for the potential Bronze Age barrow sites and Roman buildings at Otterton Point. This with a view to furthering their protection and interpretation.
- A varied programme of communication and engagement with stakeholders and local audiences will be delivered, sharing the vision and aims of Heaths to Sea through a consistent programme of communication including online and offline channels. Opportunities will be provided for public involvement and feedback through consultation, themed walks and community-based events reaching over 1,500 people per year
- A detailed and wide-ranging education programme will be delivered, including curriculum-linked opportunities reaching 1,000+ students per year (KS 1-3), post-16 career explorations, Land Use team game, public talks, and educational access trails.
- People will be connected with nature through an expansive volunteering programme, building long-term citizen science monitoring networks of species and habitats, and delivering opportunities for creative nature-based activities.



Heaths to Sea in support of local and regional strategic priorities

East Devon Local Plan 2020 – 2042

Objective 2: Tackle the climate emergency by moving towards net-zero carbon emissions by 2040

Objective 8: Commit to safeguarding and enhancing biodiversity across the district
Strategy 5 (Environment) outlines the Council’s approach to conserving the natural and built environment. This strategy includes the themes: biodiversity and green networks; natural assets and carbon storage; flooding and surface water; green infrastructure and ecosystem services

East Devon National Landscape (EDNL) Management Plan 2025 – 2030

EDNL’s vision for “A wilder, greener landscape where healthy ecosystems provide multiple benefits to society” will be met through targets outlined in their Management Plan 2025. These include:

- **Nature:** Restore 2,691 ha of new habitat outside of protected sites; bring 80% of SSSIs into favourable condition; increase tree canopy cover by 807 ha by 2050; increase diversity and abundance of wildlife; improve the water quality of all catchments
- **Climate:** reduce net GHG emissions within EDNL to net zero by 2050; provision of sustainable and reliable green infrastructure; natural processes to be restored
- **People:** EDNL is inclusive and accessible to all; people of all backgrounds can connect with nature; support and grow a thriving economy that balances sustainable land management with food production; a diverse and inclusive group of volunteers taking action to promote and conserve natural beauty
- **Place:** EDNL’s historic environment is celebrated and valued.

Devon Local Nature Recovery Strategy (LNRS) - in development

This LNRS sets out priorities and actions to help nature recover, including a list of Devon Special Species for priority recovery and proposed areas for habitat creation, restoration or expansion.

Heaths to Sea directly supports both objectives through its habitat restoration and creation plans.

Heaths to Sea directly supports Strategy 5 through the creation or restoration of ecological corridors, soil and woodland management for maximum carbon storage, habitat management for effective climate mitigation and increased resilience to extreme weather events and connected green infrastructure through proposed access enhancements.

The delivery of Heaths to Sea will provide a strong foundation for delivering the EDNL 2025 Vision and targets through the large-scale habitat restoration, expansion of conservation grazing on the Pebblebed Heaths, creation of 100 ha of new woodland, and inclusion of buffer zones around all water courses. Carbon sequestration will be delivered through improving soil health, and woodland planting. Development of new access trails and infrastructure, provision of mapping and interpretation at historic sites, and a large engagement offer will all support delivery of the EDNL vision.

There is a high degree of coincidence between the LNRS recommended areas for habitat development and Heaths to Sea aspirations for habitat creation. Heaths to Sea proposals will create a network of connected habitats and wildlife corridors which will support the LNRS focus for key priority species.

Heaths to Sea in support of national strategic priorities

Global Biodiversity Framework: To protect 30% of land and sea for nature by 2030.

Environment Act 2021: To halt the decline in species populations by 2030, and increase populations by at least 10% to exceed current levels by 2042

EIP 2025 Interim Target: By December 2030, double the number of farms providing sufficient year-round resources for farm wildlife, compared with 2025.

Environment Act 2021: To create or restore 500,000 hectares of wildlife-rich habitat by 2042.

EIP 2025 Interim Target: Restore or create a total of 250,000 hectares of wildlife-rich habitats outside of protected sites by 2030.

EIP 2025 Commitment: Support farmers and land managers to create or restore 48,000km of hedgerows by 2037 and 72,500km of hedgerows by 2050.

Environment Act 2021: To deliver UK net zero ambitions and boost nature recovery by increasing tree and woodland cover to 16.5% of total land area in England by 2050.

EIP 2025 Interim Target: Increase England's tree canopy and woodland cover by 0.33% of land area by December 2030 from the 2022 baseline of 14.9%. Equivalent to a net increase of 43,000 hectares.

Environment Act 2021: Restore precious water bodies to their natural state by cracking down on harmful pollution from sewers and abandoned mines and improving water usage in households.

EIP 2025 Interim Target: Reduce total nitrogen, phosphorus and sediment pollution from agriculture to the water environment: a) By at least 12% by December 2030, compared to 2018 levels; b) By at least 18% in catchments containing protected sites in unfavourable condition due to nutrient pollution by December 2030.

UK Net Zero Strategy 2021: The UK is to meet net-zero greenhouse gas emissions by 2050.

Within the Heaths to Sea project area, 33% will be managed for nature by 2042.

For each farm within the Heaths to Sea project area, bespoke farm plans ensure long-term nature-friendly farming practices.

485 ha of wildlife-rich habitat will be created within the project area by 2042.

See above.

Tree cover across the project area will increase from 21% to 24% by 2042, through planting of an additional 90 ha to productive conifer and broadleaf woodland.

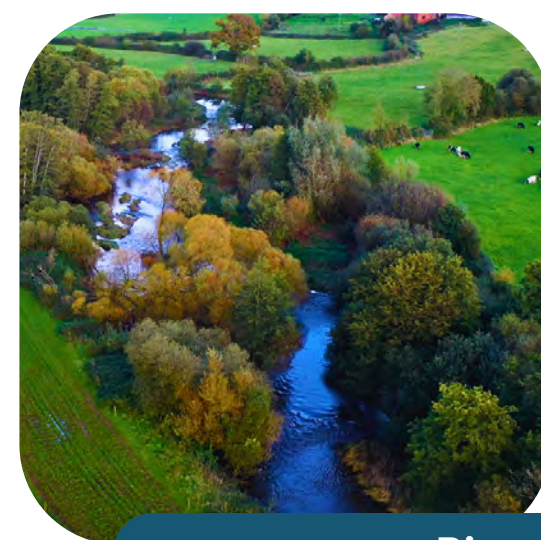
Through creation of 20m wide (average) riparian buffer zones on all watercourses.

Heaths to Sea will support the key targets to increase afforestation and reforestation efforts to enhance carbon sinks and will adopt sustainable land management practices to boost biodiversity and carbon storage.

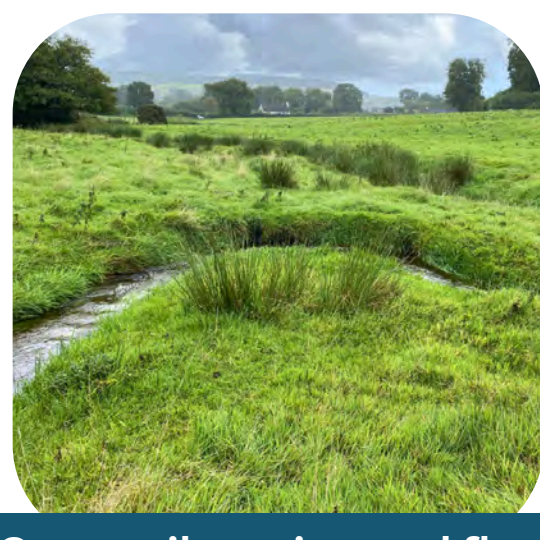
Land Management Plan: Balancing nature and productivity

The Land Management Plan details the current state of nature, types of land use within the lower Otter Catchment and the full scope of work to be delivered by the Heaths to Sea Landscape Recovery initiative. The actions proposed to improve nature whilst maintaining productivity and improving socio-economic benefits will focus on the following areas.

A full map of proposed land management and interventions can be downloaded at www.heathstosea.com/submitted-proposals. Please note the areas of land management or land use change may alter during discussions with Defra and many are dependent on approval through permitting or licensing processes.



River Otter, tributaries, and floodplain



Otterton Hill



Woodland



Pebblebed Heaths & Mutters Moor



Keystone Species



Sustainable Farming

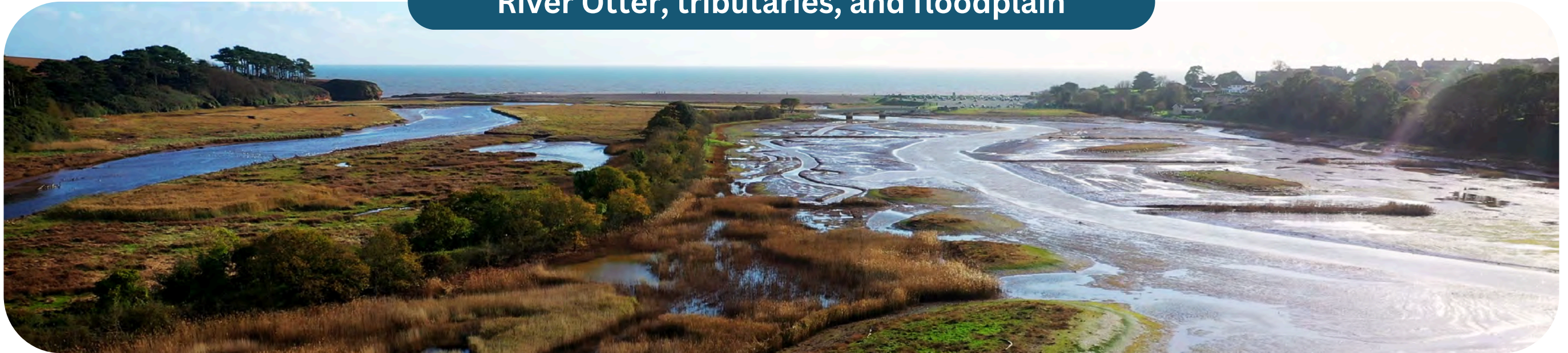


Resilience to Climate Change



Protecting our heritage

River Otter, tributaries, and floodplain



The primary focus of Landscape Recovery is the restoration of 7 km of the main River Otter and a further 8km of its tributaries, through reconnecting the river with its floodplain and creating new wetland habitat. Through historical actions to dredge and realign the river channel, the River Otter has been restricted from its natural flow. Drainage of the floodplain for agriculture has reduced water storage, worsening flood and drought risks with the majority of the original natural habitats lost. Climate change brings the increased risk of drought in the summer and wetter conditions with more intense rainfall in winter, making reconnecting the river to its floodplain vital.

Up to 290 ha of wetland habitats will be created through strategic interventions including ditch blocking and the reactivation of old paleo-channels by partially diverting the Colaton Brook into a paleo-channel in the main floodplain. These actions will result in the creation of a dynamic mosaic of wet woodland, grazing marsh, wet meadow, reeds and fen benefitting a wide range of species. The project will restore a natural transition from the inter-tidal saltmarsh estuary to freshwater habitats upstream.

Strategically placed **chutes and backwaters will be excavated to better connect the river with the floodplain**, creating a greater extent of permanent and seasonal wetland. In the longer term, where it poses no increased flood risk to local communities or critical infrastructure, the River Otter will also be allowed to meander naturally. These actions will improve biodiversity, carbon storage, and water quality, while improving water storage and resilience to climate change.

Up to 30 ha of wet woodland will be established along the tributaries (Back Brook, Colaton Brook and Budleigh Brook) and along the banks of the River Otter. This will provide a buffer zone, reducing agricultural impact on the watercourses and providing vital wildlife corridors. The benefits will include habitat creation, improved water quality, reduced runoff, and increased shade reducing water temperature.

Natural flood management measures will be delivered on the Budleigh, Colaton, Back and Otterton Brooks to slow flows and store water with the aim of reducing flood risk to communities.

Otterton Hill



Otterton Hill is a large area of low grade agricultural land situated on a western-facing scarp stretching along the edge of Mutters Moor and Otterton Hill / Bulverton Plantations. Currently used for marginal grazing of dairy youngstock, Heaths to Sea will **transform this area into a 170 hectare dynamic mosaic of wood pasture, scrub and species-rich grassland**, with the percentage of tree/scrub to grassland increasing from approximately 10% to 30%.

The area will be managed through naturalistic low-intensity grazing by traditional breeds of cattle, ponies and pigs, mimicking the actions of ancient herbivores. Realignment of existing fencing will allow animals to move more freely across the wider area encouraging the development of an ever-changing mosaic of habitats driving a radical uplift in biodiversity. For example, grassland will develop a varied, diverse sward structures that benefit small mammals. These in turn will support large predators such as owls.

Woodland



Clinton Devon Estates currently manages 840 hectares of woodland within the Heaths to Sea project area, the majority (690 ha) is managed for timber production, with benefits for wildlife and public amenity; 285 ha of these woodlands have permissive access. A further 150 ha of woodland are managed on the Pebblebed Heaths.

Through Landscape Recovery, **90 hectares of new productive woodland will be created, a diverse mix of climate-resilient conifer and broadleaf species.** The initial 43 ha will be planted adjacent to existing conifer blocks. **Mixed productive woodland will be buffered by broadleaf woodland and will be managed to enhance biodiversity, open space and access.**

Sustainable management of the existing productive woodland will be delivered through 'continuous cover' or irregular selection silviculture approach, keeping mature trees and thinning selectively. This avoids clear-felling, promotes woodland structural diversity and encourages more natural woodland regeneration, increasing woodland resilience to pests and climate change. This will provide UK-grown timber, helping to reduce the nation's reliance on imports (currently 80%) and support the local economy, whilst creating a more natural woodland with enhanced biodiversity. A programme to monitor and manage invasive animal and plant species will protect young trees from damage caused by deer and grey squirrels.

Pebblebed Heaths and Mutters Moor

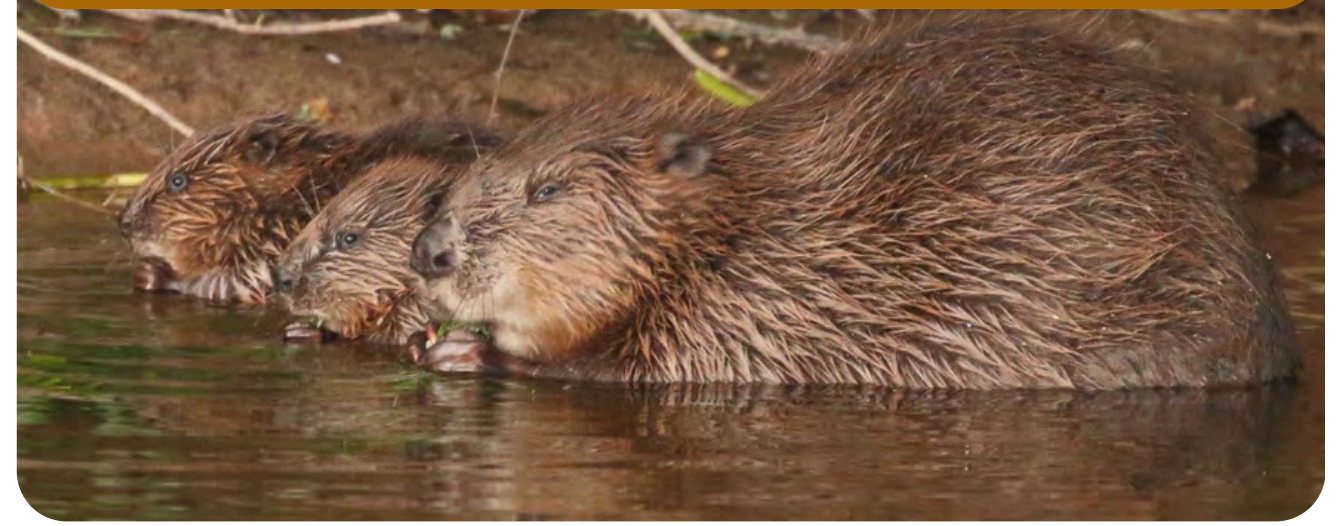


The Pebblebed Heaths and Mutters Moor are home to many rare wildlife species which are dependent on specific habitat conditions, including nightjars, Dartford warblers, southern damselfly, and the silver-studded blue butterfly. As lowland heath habitat becomes increasingly scarce across Europe, ongoing management is vital to prevent reversion to scrub and woodland.

Heaths to Sea will **increase traditional conservation grazing on the heaths to cover 1,188 hectares** (around 90% of the NNR, compared to 48% currently), reducing the need for mechanical intervention to prevent the heathland habitat transitioning into woodland. Conservation grazing outcomes will be supported by the use of ‘No fence’ collars to target grazing focus where it is most needed, and through additional perimeter fencing.

Overall, the goal is **to bring at least 80% of the SSSI into favourable condition**. This will be achieved by optimising the condition of the full range of heathland habitats, diversifying the age structure of dry heath, tackling scrub invasion, maintaining mires open and creating the bare ground required by species like the silver-studded blue butterfly.

Keystone Species

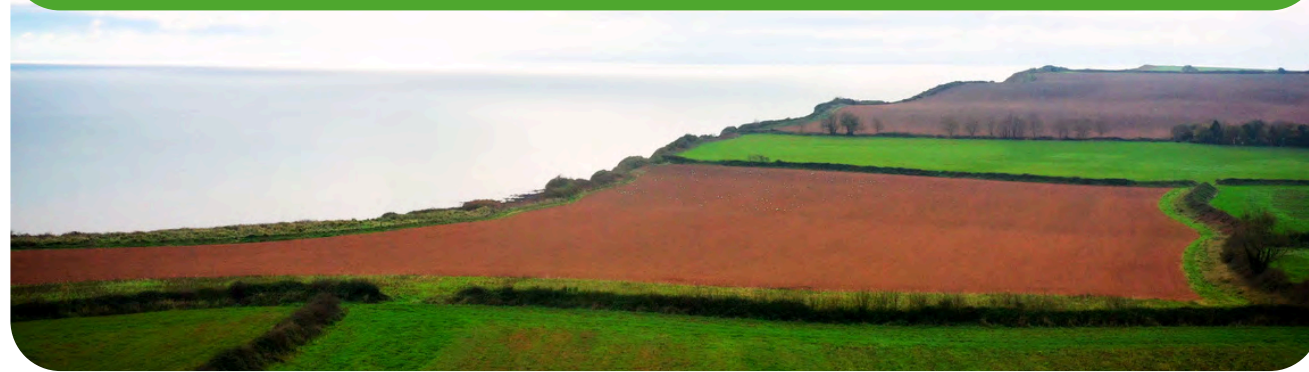


Heaths to Sea actions will **deliver positive benefits for 30 Devon Special Species identified by the Local Nature Recovery Strategy**. Habitat creation, including the creation of corridors and stepping stones to link existing habitats will support greater and lesser horseshoe bats (which forage on invertebrates from cattle dung), cirl buntings, and the rare southern damselfly found on the heaths.

The scheme will also **accelerate the expansion of the wild-living beaver population**, which has been present in the Otter since at least 2008. Currently occupying eight territories, these "ecosystem engineers" are critical to the wetland component of Landscape Recovery success. By damming streams and creating complex braided wetlands, beavers transform dry, species-poor systems into biodiverse habitats that naturally store water and attenuate flood peaks.

Recolonisation of the tributaries by water vole, another “ecosystem engineer” species previously thought absent, will be encouraged. Their actions at micro-scale help to buffer streams and create suitable wetland habitat, following the discovery of their presence during the project development phase.

Sustainable Farming



With increasing pressures on global food production, **Heaths to Sea is committed to maintaining local food production.** The scheme aims to balance sustainable farming with nature recovery through both land sharing and land sparing approaches.

Land sharing integrates wildlife-friendly practices into farmland, through for example, enhanced soil management, hedgerow restoration, enhanced hedgerow management, agroforestry, the use of pollinator margins, the creation of wild bird food crops, buffer strips alongside fields and waterways, and the creation or management of meadows and orchards. **Tailored individual farm plans that complement one another have been created in collaboration with each land manager, supporting biodiversity and improving water quality** while maintaining each farm's operational needs. Across the valley, these bespoke interventions will contribute to a wider, joined-up approach to farming that is both economically viable and environmentally responsible.

Land sparing focuses farming on productive areas, allowing other less-productive land to be actively managed for nature restoration, or through low-intensity grazing. **Two farms will take a land sparing approach, with significant restructuring of their farming operations** with a less intensive grazing approach, allowing fields to transform into floodplain grazing marsh and wetland or wood pasture and scrub, whilst others will use regenerative techniques like herbal leys and minimal tillage to improve soil health and carbon sequestration.

Resilience to climate change

The project proactively addresses climate projections that predict winters will be on average 5% wetter, with more intensive rainfall, and summers 10% drier by 2050. By moving away from defending fixed lines –such as riverbanks and paths–the management model focuses on adaptive resilience. This includes addressing "coastal squeeze" by creating inland transitions for habitats and using the King Charles III English Coast Path roll-back provisions to protect access rights as the coastline shifts.

Restoring the landscape is projected **to significantly increase carbon sinks with an additional 110,000+ tonnes of carbon stored** through enhancing existing natural habitats (Pebblebed Heaths) and creating new natural habitats in the floodplain, riparian corridors and on Otterton Hill. The creation of new woodland and transition of existing woodland to more sustainable management will also sequester significant carbon. Predicted estimates are an additional 63,000+ tonnes of carbon sequestered in the Estates existing and newly created woodland above the Business As Usual scenario over 20 years.

Heaths to Sea will **incorporate strategic use of Natural Flood Management techniques along the tributaries**, delivering and maintaining activities recommended through the Climate Resilient Otter Catchment (CROC) project (led by EA and Westcountry Rivers Trust). This seeks to reduce flood risk across the Otter catchment through nature-based and soil improvement focused interventions. By storing over 40,000m³ of water across the Colaton Raleigh, Budleigh, and Back Brooks, the initiative provides critical protection for flood-prone communities like Newton Poppleford, which suffered £1.1 million in clean-up costs after a single event in 2023. These NFM measures rely on both beaver-led damming and human-engineered interventions like leaky woody dams.

Protecting our heritage



Archaeological evidence shows human occupation in the lower Otter Valley dating back to the Neolithic era. Heritage assessments were undertaken to ensure any potential land use change would not negatively impact significant heritage sites. Aerial photography and LiDAR were used to reveal heritage features, some new to the Historic Environment Record.

Across the Heaths to Sea area, we have 194 Listed Buildings, 12 Scheduled Monuments including Woodbury Castle, an Iron Age Hill Fort, and a Grade I Registered Park (Bicton). Evidence was found for medieval strip field systems on Otterton Hill, additional Bronze Age barrow sites, and Roman buildings at Otterton Point.

Through Heaths to Sea, **work will be undertaken to remove Woodbury Castle from the Heritage Register's "at risk" category. The medieval strip fields, evidence of which is now rare in Devon, will be protected by keeping those fields as wildflower meadows, minimising disruption of the soil. Further investigations will take place for the potential Bronze Age barrow sites and Roman buildings at Otterton Point.** We also will develop resources and access trails to promote public awareness and experience of these heritage features.



Site Access Plan: Making nature accessible

The Site Access Plan outlines Heaths to Sea's commitment to support UK Government targets for inclusive and accessible green infrastructure and encourage long-term sustainable and responsible interaction between people and nature when land is used for recreation and travel purposes.

There is already a good density of access, both public and permissive, within the project area, but this is challenged by increasing visitor numbers. The Pebblebed Heaths NNR receives over a million visitors each year, a 113% increase since 2015. Planned housing developments across East Devon will drive a further increase in footfall over the next 20 years, creating a damaging level of pressure on these sensitive habitats.

With the Pebblebed Heaths Conservation Trust, Heaths to Sea endeavours to minimise the impact of access and recreation on the sensitive habitats by engaging visitors, promoting positive behaviours and providing educational resources and opportunities to raise awareness and encourage support for the site, including through volunteering.



Heaths to Sea proposes to enhance access by:



- Developing a new 5 km multi-access route from Newton Poppleford to Otterton along a disused railway line, overlooking the proposed wetland habitat, with appropriately placed rest, view and interpretation points.
- Establishing 1km of new permissive bridleway to create a circular access route around Otterton Hill, connecting users with the concept of wood pasture and scrub habitats and conservation grazing management activities.
- Creating or formalising up to 26km of permissive access routes (including the railway and Otterton Hill routes), and 52 ha of permissive open access areas and safeguard existing permissive access for a further 20 years.
- Safe-guarding 3.5km of the existing riverside footpath from closure due to riverbank erosion through creation of a riparian corridor with 5m-wide permissive access to allow continued pedestrian movement as the river moves.
- Installing a raised stone pathway to protect an existing public right of way, which will be impacted by floodplain reconnection and wetland creation.
- Enhancing access infrastructure where it doesn't follow the 'least-restrictive principle' and provide additional benches and rest-points.
- Supporting local parish councils in providing information on accessible routes.
- Improving signage on public highways in the project area to raise awareness of non-motorised users of country lanes, including supporting the British Horse Society's 'Dead Slow' campaign.
- Developing and promoting educational access trails to educate on local heritage and history, and local nature conservation.

Engagement Aim

Objectives / Targets



Communicate

Raise awareness of the challenges and opportunities for nature and its recovery, the importance of protecting sensitive species and habitats and the need for widespread Landscape Recovery.

- Maintain a consistent programme of communication via online and offline channels, through regular social media posts and six blog / newsletter articles per year, to reach and engage with all identified stakeholder audiences, sharing the vision and aims of Heaths to Sea Landscape Recovery.
- Manage visitor pressure on, and build responsible use of, the NNR by embedding key messages into all access or engagement related to newly created or enhanced nature-rich areas, with a demonstrable increase in public understanding levels (5-year visitor surveys).
- Develop an interactive virtual tour of the project area, providing alternative options for accessing nature, by Year 3.
- Over the first 10 years, install up to 20 informative and engaging interpretive panels at over ten locations around the project area.
- Co-develop up to three educational, accessible trails on local heritage and history and local nature conservation by Year 3.



Educate

Equip people in theoretical and practical land and nature stewardship.

- Develop a Land Use team game exploring decision-making and priorities of land use and management by Year 3, for use at a minimum of one school or community event per year.
- By Year 3, have assessed the feasibility, and potentially developed an annual Land Based Learning Day, focused on different habitat types and land use across the project area, to engage up to 200 students.
- Develop a nature-based educational curriculum and schedule in collaboration with local educational professionals by Year 2.
- Engage a minimum of 1,050 students per year from across Key Stages 1-4, through a mixture of curriculum-linked educational site visits, tenant-led farm visits, land-based learning days, and multi-organisation events aimed at school children.
- Each year, offer post-16 education opportunities to explore land-based careers, including project-based work experience days and a project-based apprenticeship.
- Deliver a minimum of 12 themed talks for local organisations and offer four sessions for uniformed or youth groups per year.



Involve

Build a resilient society through developing relationships between land-users, land managers and policy makers.

- In Year 1-3, deliver a successful consultation to engage public support and feedback in relation to Planning Inspectorate applications (related to the expansion of conservation grazing on common land) to deliver the project's proposed Land Management Plan actions.
- Engage an additional minimum of 1,500 people per year through a wide range of engagement activities to raise awareness and inspire positive action for nature. This will include an annual presence at local community events, an annual project-run large-scale event, and project-led delivery of fora, exhibitions, festivals and Citizen Science days.



Connect

Connect people with place through individual and communal action, overcoming social, cultural and physical barriers preventing inclusion and/or access to nature.

- Deliver a minimum of 12 guided walks per year.
- Deliver up to five story benches and associated engagement by Year 5, bringing together locals to share their stories of the landscape.
- Deliver five creative events, targeted at an identified under-represented group, throughout the 20-year project lifetime.



Invest

Support ecosystem restoration and uplift, through prevention, monitoring and contribution to future knowledge sharing.

- Deliver 3000 volunteering hours per year to monitor and maintain river health, terrestrial habitat health, and heritage sites.
- Run 12 Take Action for Nature and 12 Youth Ranger events per year.
- Co-develop and publish a What-you-can-see Nature Recovery guide with volunteers by Year 6.
- Maintain a project scrapbook and reflective diary of engagement activities throughout the project lifetime. This to be kept by engagement delivery staff to support a lessons learnt log and provide context to engagement feedback from the public.

Monitoring and Evaluation Plan: Evidencing successful nature recovery

The Monitoring and Evaluation Plan provides the structured framework required to evidence delivery of Heaths to Sea's agreed outcomes and impacts. It follows DEFRA Landscape Recovery guidelines to ensure interventions are effective, efficient, and provide evidence of value-for-money. A substantial environmental and socio-economic baseline, comprising professional surveys with a structured citizen science programme, is in place to support the robust monitoring, evaluation and reporting of this initiative.

The project has a dedicated Theory of Change (ToC) which explains the causal pathway showing how Heaths to Sea inputs and activities will lead to the desired outcomes and ultimate impacts, and identifies assumptions and project risks.

Desired outcomes and impacts:

- A functional, ecologically healthy floodplain that supports improved water management and water quality.
- A well-connected landscape that supports diverse species and habitats, and leads to benefits for nature and society.
- Healthy and productive soils, leading to improved carbon sequestration and a landscape resilient to climate change.
- Reduced risk to critical infrastructure and local communities.
- Sustainable, nature-friendly, and economically viable farms that create a stable and resilient farming community.
- Opportunities for the local community and visitors to access and experience nature, promoting improved community well-being and connection to nature.
- Strong, resilient, and green local economy, with long-term sustainable green finance.



Through a series of project-specific evaluation questions, indicators, and metrics, Heaths to Sea actions are assessed for progress against the desired outcomes. The evaluation focuses on eight areas:

1. **Habitats:** To what extent have land management changes increased area cover, quality and connectivity of priority habitats and woodland?
2. **Species:** To what extent have our interventions impacted biodiversity in the Lower Otter Valley?
3. **Water Management:** To what extent has activity to restore the river and floodplain been successful and either had a positive or negative impact on natural flood management?
4. **Heritage:** To what extent have interventions impacted heritage features and historic landscapes?
5. **Climate Resilience - Adaptation and Mitigation:** To what extent has our project made the landscape more resilient to the impacts of climate change and how has the project impacted the balance of emissions and sequestration in the project area?
6. **Resilient Farming Community:** To what extent have our interventions impacted the resilience of farming operations?
7. **Local Community and Visitors:** To what extent has the project resulted in increased local community engagement in nature and social benefits (recreational access, health and wellbeing)?
8. **Green Finance:** To what extent has the project developed sustainable flows for nature recovery?



Each evaluation question has additional sub-questions; an example of this would be under ‘Habitats and Woodland’, where one of the more focused questions is “To what extent have woodland habitats been created or enhanced under the project?”. Each of these sub-questions has been assigned corresponding indicators and metrics, which estimate the baseline condition of the project area prior to Heaths to Sea and forecast the expected outcomes and impacts as a result of Heaths to Sea.

Core indicators and metrics are those supplied by the Government, linking directly into the Environmental Improvement Plan 2025. Examples of Defra’s core metrics include the Biodiversity Net Gain condition score and Woodland Condition Assessment for habitats. Bespoke indicators and metrics are those tailored specifically for our project and include water quality, species monitoring and carbon storage in soils and habitats.

A comprehensive monitoring plan delivered through Heaths to Sea will provide the necessary data to be evaluated against the indicators and metrics. A strong evidence-based monitoring programme, co-developed with local communities and underpinned by science, will demonstrate the ecological, economic, and social benefits of nature recovery. A proportion of project monitoring and evaluation is related primarily to ecological monitoring. The fortunes of birds, butterflies, dormice and water quality (including Riverfly) will be tracked through a programme of citizen science. This would supplement professional monitoring work (for example, using UKHab methodology) delivered by staff or commissioned from consultants.

There are many benefits to a citizen science model: it facilitates collaboration between farmers and local wildlife experts and builds understanding between farmers and the local community; the farmer can tailor the protocol to their specific needs associated to the Heaths to Sea initiative and contribute their own wildlife observations and insights to the process; the citizen scientists will develop a detailed knowledge of the farm and its habitats. Support with training, advice and coordination from specialists at Clinton Devon Estates, including the proposed Data and Monitoring Officer, will ensure that the volunteers can provide consistently reliable, high-quality data over extended periods of time.



Project Management and Governance Plan: Ensuring successful landscape recovery



This Project Management and Governance Plan sets out the framework for delivering the project over a 20-year implementation period. It defines the project scope, deliverables, and assumptions, and describes activities, outputs, schedules, team roles, procurement strategies, risk management, and benefits realisation.

Structure: A Special Purpose Vehicle (SPV) will be created to act as the Single Legal Entity (SLE) for the purposes of delivering this project, to ensure we retain independence and flexibility to manage our project over its lifetime. The SPV will be set up as a company limited by shares (CLS). The SPV will have separate agreements with other legal entities, including with suppliers, landowners and tenants. It will be the single legal entity responsible for signing and managing the implementation agreement with Natural England.

Roles: All project coordination roles exist largely within the existing structure of the Estate, whether they are existing roles or will be newly created specifically for the delivery of the project. The roles will be organised and managed under existing Estate teams: Reserves, main Estate (management), Farm and Forestry.

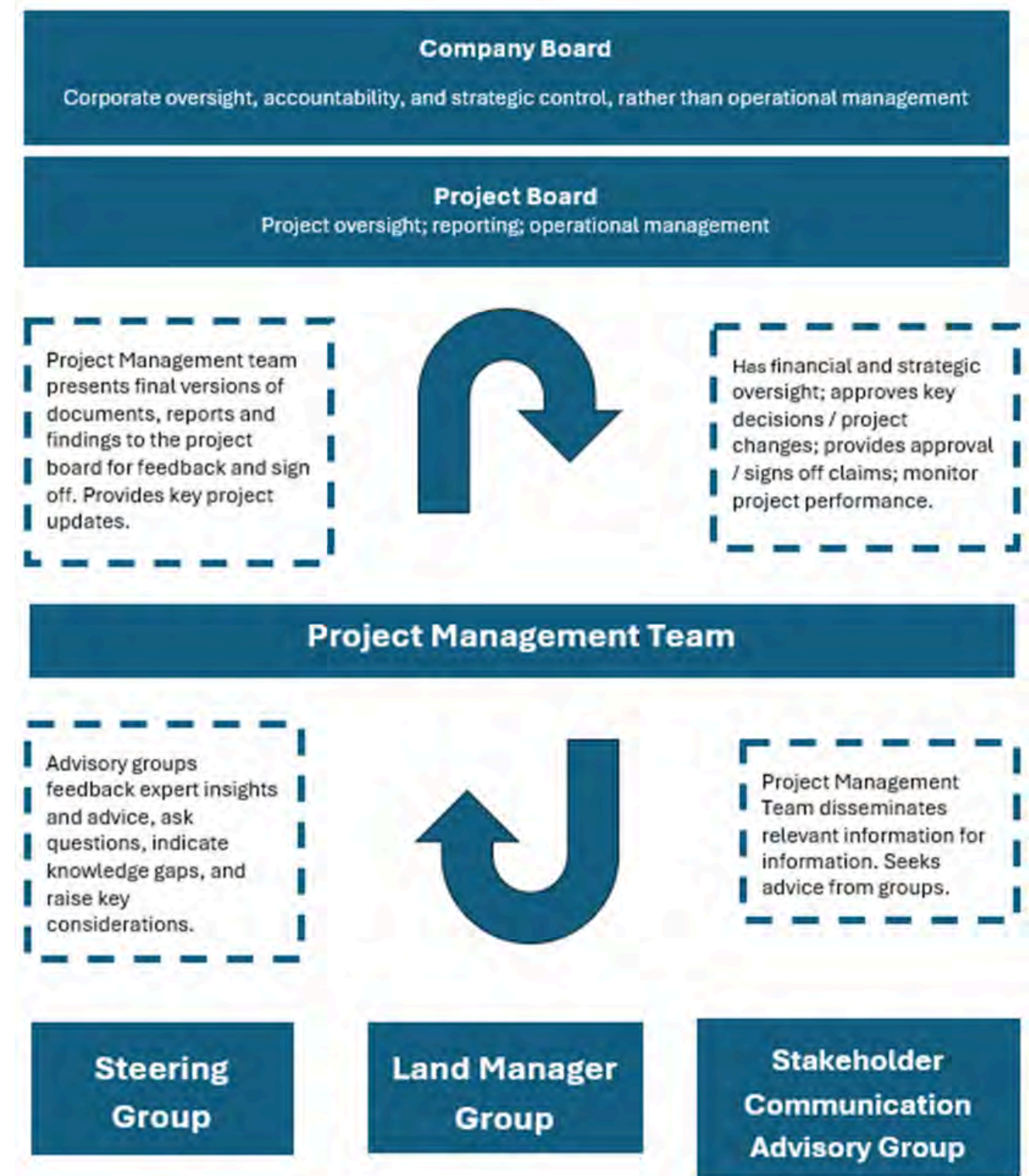
Roles directly funded by Landscape Recovery include:

- Heaths to Sea Project Manager
- Heaths to Sea Project Support Officer
- Data and Monitoring Officer
- Ecologist
- Engagement and Volunteer Ranger
- Heaths to Sea Wildlife Ranger
- Heaths to Sea Apprentice

Heaths to Sea will also be supported by existing Clinton Devon Estate staff, as well as staff and teams within partners and landowners involved in the project.

Heaths to Sea Management and Governance Structure

- **SLE Company Board** - Membership will include landowners and managers, but will be optional. The Company Board will be responsible for the overall governance of the company, not the daily running of the project.
- **Project Board** - Will have financial and strategic oversight of the project, and will make/authorise any major project decisions, and will work within the terms of reference of delegated responsibilities from the Company Board.
- **Project Management Team** - Will be responsible for the day-to-day coordination and delivery of the project and will report into the Project Board as well as the other groups.
- **Steering Group** - Will provide technical expert guidance and advice / problem-solving to achieve the project deliverables and maintain performance. Core members will be drawn from project partners and members of the Technical Advisory Group, Green Finance Advisory Group, and the Land Manager Group which existed during the 2-year project development phase.
- **Land Manager Group** - Will be made up of Estate farming tenants and the other land managers in the project: Bicton College, RSPB, Devon Wildlife Trust, and Canterbury Barton.
- **Stakeholder Communication Advisory Group** - We will retain a Stakeholder Communication Group, similar to that used through the Project Delivery Phase.



Blended Finance Plan: Valuing our landscape



The Blended Finance Plan sets out the strategic, economic, commercial, financial, and management case for a 20-year programme of landscape-scale nature recovery that will deliver measurable environmental, social, and economic outcomes. It identifies potential finance and revenue streams to deliver the project, in addition to Defra funding. The plan also details the value and uplift of benefits in terms of ecosystem services, from biodiversity and carbon storage to social and physical welfare, natural flood management, and air quality improvements.

Heaths to Sea would deliver an estimated £201.7M uplift in ecosystem service value over the project duration. This includes biodiversity value calculated through BNG metrics, estimated value of carbon storage, potential flood risk reduction, and welfare values of recreation, health, and education. This highlights the vital role the landscape plays in local health, wellbeing, and the rural economy.

To deliver Heaths to Sea, the majority of funding will be sought from Defra. Alternative green financing routes are being investigated, including carbon credits and BNG, as well as potential agreements with local infrastructure networks and local authorities. The funding will cover all project costs, including land management, infrastructure, access, engagement, education, monitoring and evaluation, and project management. Land management payments will go to farmers, partners, and the Estate to deliver these environmental benefits.

The funds requested to finance Heaths to Sea are on par with those that have been spent on the landscape over the last 20 years through other agri-environment schemes. However, Landscape Recovery provides a higher degree of certainty to deliver bigger and better wildlife outcomes, more joined-up thinking across land management boundaries, and a greater transparency in monitoring, evaluation, and reporting.

Timeline and process



The proposed Landscape Recovery project will span over 20 years, with a prospective start date of January 2027.



