



Dynamic Dunescapes DuneLIFE Deliverable F2 AfterLIFE plan



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1 Introduction

The following report is provided to fulfil the requirement for LIFE Deliverable F2' 'AfterLIFE' report under the Dune LIFE project LIFE 17 NAT/UK/000570.

2 AfterLIFE management plan objectives

The key management objectives of the Dune LIFE AfterLIFE plan are as follows:

- Achieving and securing sustainable management of sand dune habitats across the component project sites that make up SAC sites. (C – Conservation Actions).
- Facilitate the continuation of the project's post-intervention monitoring (D - Monitoring Actions).
- Continue to actively engage with communities, landowners, and other stakeholders in the UK and wider EU audiences (E - Awareness & Dissemination Actions).
- Continue to disseminate information about the special value of sand dunes to the wider community (E - Actions).

3 Summary of the Project

Dynamic Dunescapes is a partnership project restoring sand dunes across England and Wales for the benefit of wildlife, people and communities. It has delivered nature conservation work at scale across England and has undertaken engagement work that has both supported the restoration of these unique habitats and made a wider contribution to local communities.

Sand dunes were listed as the habitat most at risk in Europe (Article 17 Habitats Directive Report, 2013¹) with the lowest proportion of assessments marked as 'Favourable'. In the UK, Since the 1900s these special habitats have sadly declined by a third, with only around 18,000 hectares remaining in England. Previous conservation action focused on stabilisation of the dunes, but this has prevented natural 'dynamic' processes, which reduces their capacity to support a diversity of wildlife including many rare and threatened species.

New evidence has dramatically enhanced understanding and it is now recognised that sand dunes need to be dynamic rather than static to flourish. While 'succession' from bare sand to full vegetation cover is itself a natural ecological process, it has been accelerated over the past 80 years in England, because of overprotective management, a lack of traditional disturbance and increased atmospheric Nitrogen deposition. New pioneer and early succession dune habitats are naturally created as dunes 'accrete' (build) but this does not currently keep pace with the rate of vegetation growth and succession: The project work has restored and replicated the processes that create and maintain sand dune formation, and the full range of habitats that wildlife needs, and people can enjoy.

¹ All EU Member States are required to report on the implementation of the [EU Habitats Directive](#) (under Article 17) every six years. The report provides information on the conservation status of habitats and species listed in Annexes I, II, IV and V of the Directive.

3.1 Key Objectives of DuneLIFE

- **Conservation and Restoration:** Deliver direct evidence-based management on project sites that will make a demonstrable and sustainable improvement of the conditions and natural processes needed to support dune habitats and species.
- **Communication:** Build an understanding and appreciation of sand dunes as a naturally dynamic habitat requiring conservation work to support natural processes.
- **Engagement:** To ensure that a greater number and a wider range of people become learn about, enjoy and value sand dunes.
- **Skills Development:** Develop the skills of individuals and organisations to better manage dunes, now and in the future.
- **Collaboration:** Establish strong networks so that lessons learnt from the project (both conservation and public engagement) are shared and disseminated, building a lasting legacy for sand dunes.

Six core partners, Natural England, Plantlife, National Trust, Cornwall Wildlife Trust, Lincolnshire Wildlife Trust and Cumbria Wildlife Trust, worked in collaboration with local delivery partners. The project budget of £10 million includes funding contributions from two major funders, the National Lottery Heritage Fund and the EU LIFE Programme, alongside partner and in-kind contributions.

The English Dynamic Dunescapes “DuneLIFE” is the sister project of the Welsh EU-funded “[Sands of Life/Twyni Byw](#)” project that ran from September 2018, until June 2024.

3.2 Core Sites:



Key:

1. **Lincolnshire: Saltfleetby to Theddlethorpe and Gibraltar point SACs**
2. **Dorset: Studland SAC**
3. **Cornwall: Penhale SAC**
4. **Devon: Braunton Burrows SAC**
5. **Lancashire: Sefton Coast SAC**
6. **Cumbria: Solway Firth, Drigg Coast, Morecambe Bay SACs**

3.3 Highlights of Conservation actions at the six core areas of DuneLIFE:

3.3.1 Lincolnshire

Natural England and Lincolnshire Wildlife Trust worked closely together to deliver immediate improvements to the condition of 156ha of dune habitats at Saltfleetby -Theddlethorpe SAC and Cleethorpes, secure long term management to 535ha at Gibraltar Point and Saltfleetby as a result of the new volunteer accommodation, and enabled the dune systems to respond to future change by ensuring their long-term resilience through the restoration and creation of dune/grassland transitional habitat along a further 2.4km stretch of the SAC boundary. This was achieved through dune slack rejuvenation activity, re-creating 12.6ha transitional dune and wetland habitats, reducing the cover of scrub, controlling problem plant species, providing sustainable grazing by installing infrastructure to support an extended, intensified and improved grazing regime, and securing year-round, on-site, continuity of volunteers.

Project activities:

- Bare sand creation
- Grazing infrastructure
- Grazing using Nofence technology
- Grey seal colony protection fencing
- Invasive species removal and control (Clematis)
- Mowing with Softrak
- New area under cattle grazing
- Slack creation/restoration
- Native scrub removal and control (sea buckthorn, willow)
- Turf stripping/scrapes
- Washland creation, removal of ditch/banks and transitional dune habitat creation (adjacent to SAC)
- Provision of volunteer accommodation
- Installation of dipwells to enable future monitoring and study of the sites hydrology

Key highlights included:

Washland creation project

Over the last 23 years, Lincolnshire Wildlife Trust have created transitional wetland habitat along the 2.4km boundary of Saltfleetby-Theddlethorpe Dunes known as the Washlands. One of the key project aims was to build resilience and help the dunes adapt to future challenges i.e. sea-level rise by giving them space to roll-back, while continuing to provide protection as a flood defence. Over time parts of the washland have developed a dune-slack type community. Building upon these successes, the Dynamic Dunescapes project removed a further 700m of riverbank creating 11.6ha more floodplain habitat. The project involved re-modelling the river's flood banks, creating interconnected pools and scrapes to allow flood water to extend over a narrow breach point across the remnants of the flood bank, connecting the riverplain to the adjacent dunes. The base of the field was also reengineered, to form a series of saucer-shaped pools to favour natterjack toads (a European protected species). These pools (of varying depth) were interconnected by wide, meandering shallow scrapes. The work was completed in October 2021, the first flood event happened in February 2022 and the natterjacks had already found the site by April 2022. The pools are also attracting wading birds.

Re-creation of dune habitat

The turves and bank soil from this Washland Creation Project were used to create a new dune ridge, to recreate lost dune topography in a field owned by Lincolnshire Wildlife Trust, immediately adjacent to Saltfleetby-Theddlethorpe Dunes NNR. The field was once an integral part of the wider sand dune complex, likely having been levelled for agricultural benefit, probably during the Second World War. A very large trench was dug in the field, the clean sand banked to one side. The flood bank material was deposited in the bottom of the trench and back-covered from the sand store bank. The new dune ridge provided bare sand open habitat a scarce habitat on site due to the stable character of east-coast dune systems. The ridge will be managed for secondary sand colonising plants such as sand sedge (*Carex arenaria*) and wildlife of bare sand e.g. mining bees and ground beetles. The orientation of the new ridge provides both hot, dry conditions on the west-facing slope suitable for drought-loving plants and invertebrates of open ground, with cooler, moister conditions suitable for moss-dominated swards on the east face.

Removal of Invasive Alien Species

At Saltfleetby-Theddlethorpe NNR, the scrambler Traveller's-joy (*Clematis vitalba*) has smothered the dune grassland and scrub, including dead sea buckthorn (*Hippophae rhamnoides*), creating an impenetrable tangle of stems. While Traveller's-joy is a native species it can have invasive attributes where it becomes overly dominant leading to the complete loss of other native dune flora.

Work focused on removing Traveller's-joy and dead sea buckthorn by cutting and burning to allow the re-establishment of the dune grassland over an area of 7.3ha. During the works the footprint of the work area was modified as the clearance works enabled better visibility of the ground conditions. Several unexpected dune slack pools were exposed, so the machinery on site was also used to excavate these further – widening shallow slopes to open up an additional habitat for wildlife in the works area. The main challenge was preventing regrowth of the Traveller's-joy and two main herbicide treatments have been trialled. Further treatment will be required to manage and reduce regrowth in the future.

Grazing facilitation

Grazing on the site to enable improved management of Dune vegetation communities has been made possible by installation of a significant length of new and replacement fencing (over 7km) and cattle handling facilities.

3.3.2 Dorset

National Trust led the works to restore natural dynamic processes across the dunes and dune slacks at Studland, with direct beneficial impacts on the site's unique suite of habitats and species. The aim was to set back the clock of ecological succession in key areas, restoring pioneer and early successional habitats in both wet and dry areas; instigate a new grazing regime through the reintroduction of grazing cattle onto the dune system, which will slow down future succession and enable the ongoing low level disturbance of the dunes that provides the necessary ecological niches for many dune specialist species; and remove the non-native carp that have been introduced into the Little Sea lake, to enable the restoration of the aquatic ecosystem of the dune slack wetlands.

Project activities:

- Bare sand creation
- Carp removal from duneslack shallow lake
- Grazing infrastructure

- Grazing using Nofence technology
- Native scrub removal and control (gorse, heather, willow carr)
- New area under cattle grazing
- Slack creation/restoration
- Reedbed restoration
- Turf stripping/scrapes
- UXO surveys

Key highlights include:

First trial of GPS Nofence technology

Studland Dunes is one of many sites where there is a clear ecological need for grazing, but where the creation of conventional fenced paddocks has been undesirable or impractical. Here due to the large numbers of visitors and the high landscape value of the open dunes where the use of fences and gates would be intrusive and disruptive. The trial of the use of virtual fencing system was a ground-breaking initiative which was seen by the National Trust as a potential game changer for conservation grazing.

In 2020, ten 2–3-year-old, Red Devon cattle from the NT Purbeck herd were trained over 7 days in wearing the collars. The trial had a number of aims including 1) to contain the cattle on extensive open heathland with public access; 2) To target graze specific areas and vegetation communities; 3) To move the boundaries and use the system to herd the animals; and 4) To exclude cattle from a heavily visited areas in the centre of the grazing unit. The virtual fence worked well with the pressures of walkers and dogs, runners and mountain bikers and there were no reported incidents regarding the cattle during the various trials. The technology has since been used extensively for conservation grazing.

Restoration activity on Little Sea lake

Little Sea at Studland is Britain's largest lowland oligotrophic lake, which means it is low in nutrients and can support rare species. The illegal introduction of common carp (*Cyprinus carpio*) into Little Sea around 2005 caused rapid ecological deterioration with increased turbidity, dramatic loss of aquatic flora and overwintering birds, and indications of increased nutrient status. Little Sea was in an Unfavourable declining condition: there had been a dramatic loss of specialist and priority plants, birds and invertebrates. Some carp removal had taken place since 2013, when first detected in the lake, and there were early signs of reduced numbers and some recovery of plants, but turbidity remained high and conditions were still unfavourable. Since 2019, Dynamic Dunescape enabled the carp removal work to be scaled up and additional techniques to be deployed, as well as more detailed monitoring and surveillance activities to be undertaken to inform longer-term management aimed at recovering the lake's ecology.

The present management policy of regular capture and removal of carp from Little Sea has the potential to reduce the overall population enough to allow for the regeneration of submerged vegetation, with the caveat that all external sources of nutrients, particularly phosphorus are adequately controlled. However, if this management ceases, then there is a strong likelihood that the population will simply expand to pre-removal levels, until populations can be reduced to a level where fish recruitment is limited. Evidence indicates incidences of illegal stocking of the lake and this presents another challenge.

National Trust are committed to and are post-project monitoring of carp, water quality and biological indicators of lake condition and are working in partnership with Bournemouth university, Natural England and Environment Agency to deliver this. In addition to continuing with the current

methodology and monitoring, this work includes fish mark and re-capture work, further water quality investigations, and feasibility studies into the use of different Carp population control options.

3.3.3 Cornwall

Cornwall Wildlife Trust worked closely with local landowners and stakeholders to rejuvenate over-stabilised dunes. At Penhale, this was done through increasing the area of bare sand by notching and turf striping in carefully selected areas, dune slack scraping, reducing scrub cover and removing invasive plants.

Project activities:

- Bare sand creation
- Foredune rejuvenation - incl. notches
- Grazing infrastructure
- Invasive species removal and control (Japanese rose, sea buckthorn, Cotoneaster, Montbretia)
- New area under cattle grazing
- Slack creation/restoration
- Native scrub removal and control
- Turf stripping/scrapes

Key highlights include:

Dune notches

During summer of 2023, Cornwall Wildlife Trust excavated five V-shaped notches in the frontal dunes to help restore natural dynamic processes and support site wildlife. Penhale Dunes is one of the largest dune systems in Cornwall covering around 625ha. Like many sites, the sand dunes have become too stable and overgrown with vegetation. Recent habitat surveys showed that only 1.5% of the site was bare sand, with a target of around 20% needed for the site to be in favourable condition. It is estimated that around 50% of the site comprised bare sand habitats in the 1940s. Therefore, the aim of the work was to rejuvenate the mobile dunes creating areas of bare sand to support plant species such as Sea Holly (*Eryngium maritimum*) and Sea Rocket (*Cakile maritima*) that can colonise bare sand and create warm sandy niches beneficial for various insects that burrow into the sand such as the tiny Silver Leaf-cutter Bee, and Minotaur Dung Beetle.

Vegetation in the surrounding area of the notches was also turf stripped to create more bare sand habitat and to increase wind speeds over the surface. Dune notching works by funnelling wind-blown sand from the beach into the dune system behind. It was important to fully engage with the local community and stakeholders around the proposed works as these works could appear to be destructive, to explain that they were being done for the purposes of habitat restoration.

Monitoring of the bare sand and notches will continue, and remedial works will be undertaken to reactivate any areas should they become too stable in future years. The works have significantly increased bare sand habitat at Penhale Dunes, and while further work will be needed, it is hoped that reactivating the dunes and allowing sand movement will start a process of natural dune dynamics.

New grazing activity

In addition, grazing has been expanded on the site with the use of native ponies to control scrub for benefit of the rare Annex II grassland and lichen species on the site. Goats have also been introduced on the site as a trial to control difficult to manage scrub, and based on initial success there are plans to expand this approach.

Continued management for the very rare Shore dock (*Rumex rupestris*) has also continued with careful management of grazing and the wetter features on the site.

Invasive Alien species

The main population of sea buckthorn (*Hippophae rhamnoides*) at Penhale has been significantly reduced by mechanical removal with machinery but also through 'tree popping' by volunteers and corporate groups. This has reduced the sea buckthorn population to a much more manageable size. Cotoneaster has been treated across the dunes with herbicide and in some areas mechanically removed, by Cornwall Wildlife Trust and working with the MoD to create further bare areas.

3.3.4 Devon

Plantlife led the works at Branton Burrows, working closely with Devon Christie Estates and Natural England while National Trust led works at Woolacombe.

At Branton Burrows, the project aimed to restore a more open and dynamic nature to the coastal sand dunes, securing both their distinctive landscape and characteristic animals and plants for the benefit of people and communities into the long term. This was done through creating deep 'notches' particularly within the foredunes (combined with foredune de-vegetation) to encourage the natural processes of long-term dune mobility alongside a wider scatter of 'scrapes', typically within wet dune slacks and adjacent dry dune, to provide new open habitat with abundant bare sand, in order to allow the natural spread and colonisation of early successional vegetation types along with their rare and threatened specialist plants and animals. There was also a focus on certain non-native invasive species: notably sea buckthorn and Japanese rose (*Rosa rugosa*) to effectively eliminate these species from the site in their entirety.

Project activities:

- Bare sand creation
- Boardwalk removal
- Invasive species removal and control (Japanese rose, sea buckthorn)
- Fence removal/repair
- Foredune rejuvenation - incl. notches & inland notches
- Grazing infrastructure
- Grazing using 'Nofence' technology
- Litter pick & beach clean
- Slack creation/restoration
- Pond creation/restoration
- Native scrub removal and control (gorse)
- Turf stripping/scrapes
- UXO surveys

Key highlights include:

UXO clearance

Major dune restoration works at Braunton Burrows planned to 'wind back the ecological clock' and revitalise the landscape. Much of the planned work involved 'scraping' of the dunes known as turf-stripping. This is a process where large diggers remove overgrown vegetation to expose the underlying sand, creating bare ground which can then be colonised by threatened dune specialist species.

The initial unexploded ordnance (UXO) desk-top research survey was carried out by a private contractor and the projected cost of making work areas safe was so high that it would have cut into the project budget and significantly reduced the hectareage of scrapes, scrub clearance and number of notches that could have been undertaken. However, existing positive relationships with on-site Defence Infrastructure Organisation (DIO) staff meant that they were willing to search for UXO across the site to support the project. The MOD have cleared over 100ha finding more than 1,100 ordnance items, and leaving a legacy of safe areas that can be managed in the future.

Dune notches and large-scale scrapes

Dune habitat at Braunton Burrows covers around 950ha (this represents around 10% of all UK dune habitat in Natura 2000 sites). As well as being exceptional for biodiversity it holds historical significance as a key site for wartime training before D-Day. Historically, the dunes here experienced natural and human caused sand mobility with up to 60-70% of the site remaining unvegetated. Over time, the abundance of bare sand at Braunton Burrows significantly declined and by 2018, it was estimated that only about 5% of the site remained open.

Grazing has been reintroduced to over 90% of the dunes, which has helped control the spread of vegetation but has not been effective in maintaining open bare sand for specialized species.

The aim for the project was to significantly increase areas of early successional habitat with an abundance of bare sand. A combined approach of mechanical sand creation through notches, turf-stripping, scrapes and scrub removal along with controlled grazing was enacted to restore and maintain open conditions for the site's unique biodiversity in the future.

Six notches were excavated along the south-western end of the foredune. Three notches were also excavated inland on the eastern dune ridge. Maintenance activity has been needed to ensure their continued function and it is expected that management will need to continue for the foreseeable future.

3.3.5 Sefton Coast

Natural England led works across the Sefton Coast, working closely with National Trust who led the works at Formby. The project aimed to restore natural dynamic processes through the creation of V-shaped notches at Formby and at selected low points in the artificially high frontal dune ridge at Ainsdale NNR to help restore the connection between the beach and the inner dune system; provide enhancement and restoration of overgrown dune slacks behind the frontal dune ridge to restore the hydrological processes and provide suitable breeding pools for natterjack toads; oversee the removal and control of invasive non-native Japanese rose (*Rosa rugosa*) across the Sefton Coast, which will also help to create large areas of bare sand, helping the dune system to potentially re-mobilise and provide sandy habitat for dune specialist species. Turf stripping and mowing of dune grassland at Ainsdale NNR and Cabin Hill NNR removed rank vegetation and the nutrient-rich upper soil layer from fixed dune grassland and dune slacks to encourage sand mobilisation, growth of positive indicator species, restore hydrological processes and improve overall condition of dune grassland and dune

slack habitats; and, at the Triangle Dune Heath, tree felling and scrub clearance to encourage natural regeneration of dune heath, a particularly rare habitat.

Project activities:

- Bare sand creation
- Dune heath restoration
- Foredune rejuvenation - incl. notches
- Invasive species removal and control (Japanese rose, sea buckthorn)
- Mowing
- Slack creation/restoration
- Native scrub removal and control
- Turf stripping/scrapes
- Woodland management

Key highlights include:

- **Restoration of dune heath**

A particularly rare habitat which often forms along the landward edge of the sand dunes, dune heath has largely been lost to plantations and development, leaving only small, isolated fragments. Only 14ha of heather-dominated dune heath is found on the Sefton Coast. Approximately 4.3 ha of Scrub and trees, were removed from the working in partnership with Lancashire Wildlife Trust, and Dune heath is now regenerating. Follow-up work will be necessary to keep the areas clear of scrub regeneration. Grazing has now been established and a volunteer group is helping to keep the inevitable scrub and tree seedling regrowth under control.

- **Removal of IAS - *Rosa rugosa***

In 2014, a survey of the area of Japanese rose (*Rosa rugosa*) was undertaken across the Sefton Coast, at that time it covered 5.7ha. Over time the amount of Japanese rose had grown, and Japanese knotweed (*Reynoutria japonica*) were also known from the site, often growing within the Japanese rose. Both species were tackled as part of the project which aimed to manage them at the landscape scale. Specialist contractors were brought in for both herbicide treatment and mechanical removal and burial. Aside creation of areas of bare sand this has also benefited protected species such as sand lizard, natterjack toad and the rare northern dune tiger beetle. The measures developed to eradicate Japanese rose across the Sefton Coast will inform management of invasive species on these sand dune systems and help to provide long term security of the conservation interest.

- **Car park removal at Formby, Sefton Coast**

Formby is one of the UK's fastest-moving coastlines. Its naturally shifting sand dunes are a haven for wildlife – including a population of rare natterjack toads and sand lizards.

However, rubble from the old Harington Barracks that formed the foundation of the Victoria Road car park was preventing the coastline from shifting as it should – disconnecting wildlife habitats and limiting beach access for visitors. The National Trust led a major conservation project to remove the huge amounts of rubble from the sand dunes and beach at Victoria Road to restore these rare sand dune habitats. The rubble was sorted and most of it was crushed to create an aggregate material which was re-used to help create a replacement car park further inland. The foredunes were reprofiled, some vegetation restored, and over time wind and coastal processes will re-establish a natural profile.

Restoration of the frontal sand dunes will re-connect and bring new wildlife to an extensive area of dune habitat, as well as also acting as a natural sea defence.

3.3.6 Cumbria

Natural England and Cumbria Wildlife Trust formed a collaborative local team working closely with many landowners and local stakeholders across multiple sites. The project aimed to rejuvenate over-stabilised dunes through scrub control, slack restoration and turf stripping, invasive species control, new grazing technology, rabbit population enhancement measures, pond creation and restoration, foredune litter collection and data analysis and feasibility work regarding large scale remobilisation.

Project activities:

- Bare sand creation
- Grazing infrastructure
- Grazing using No-fence technology
- Invasive species removal and control (Japanese rose, sea buckthorn)
- Native scrub removal and control (gorse, willow, bracken, nettle)
- New area under cattle grazing
- Slack creation/restoration
- Pond creation and restoration
- Turf stripping/scrapes
- UXO surveys
- Installation of dipwells

Key highlights include:

- **Dune turf-stripping**

Significant areas of turf stripping were carried out at various sites across Cumbria. For example, at Sandscale Haws over 3.5 Ha of removed to recreate bare sand in the duneslacks to enable early successional species and maintain damp and wet conditions, also with a view to restoring and extending the available habitat for populations of Natterjack toads.

During the mechanical turf stripping at several sites, spoil made up of stripped turf and surface sand was generated. Instead of incurring the expense of removing it from the site, much of the spoil was used nearby, either by landscaping it into hollows or adding it to adjacent dune shoulders.

- **Action on rabbit grazing**

Historically, European rabbit (*Oryctolagus cuniculus*) populations were abundant in dune systems before the 1950s, profoundly influencing vegetation, biodiversity, and the creation of bare sand in dune systems. However, there has been a rapid decline in rabbit numbers since then. Efforts to enhance rabbit populations include creating artificial burrows and shelter using brush piles. Turf was removed from steep dune faces to expose bare sand, making it suitable for rabbit burrowing, with rabbits favouring south-facing areas for burrowing because they are warmer.

Additionally, incorporating livestock grazing, which maintains shorter, species-rich vegetation, has proven to be beneficial for rabbit populations.

Grazing was extended and had improved targeting through the use of the 'no fence' technology at North Walney NNR.

- **Dune Notching**

Smaller scale dune notching was also trialled at South Walney, where the foredunes are lower in height than many of the other sites outside Cumbria, but the issue of sand mobilisation through the site still needed addressing. A trial notch was created and maintained, and evidence of sand transport inland can be seen.

3.4 Engagement and communication

In addition to the habitat and species restoration actions delivered through Dune LIFE funding, communication around the project activities and engagement with communities, stakeholders and the media was an key aspect of the project. A full separate report is available around this aspect of the work (deliverable D5), and the Sand Dune Managers Handbook provides extensive advice for future projects on this, but in summary:

Communication:

Communications across the project between partners, but especially with stakeholders and the wider community, and with media about the work of the DuneLIFE was a key feature of the project. A national communications team was formed as part of the central project management function bringing additional skills and expertise to the project. The Communications Officers oversaw the brand and national communications, alongside support for the local teams with their communication and engagement work.

The website provided a focal point for the project, with over 168000 views from people visiting it to understand sand dune conservation and management, access events and resources.

There was extensive reach with over twenty major media showcases including national TV, radio and newspapers.

Engagement

The engagement team worked across the different sites, and connected diverse audiences to nature through a variety of tools and techniques. This included taking the learning about dunes and their management out into communities and using the arts to engage different groups.

The team was also instrumental in supporting successful delivery of conservation works, by engaging with communities, particularly when new techniques such as large-scale Dune notching was being introduced.

Each project site had a different focus to their engagement work, but there were common approaches including

- Matching the activities to the season to maximise interest and engagement.
- Providing a central place for people to connect with the projects
- Adapting the delivery - creating opportunities for the understanding about dunes to come to people, rather than people having to physically visit the dunes.

Citizen science activity

Engagement Activity also included significant citizen science activity, to contribute to understanding of the sites, and to build expertise in communities. Staff and Volunteers led events at many sites, and the project developed a set of programme-wide resources, supported by a Citizen Science Manual, that includes an online training course and a series of PowerPoint presentations, YouTube videos and printable recording forms that covering a range of topics.

A mobile app was also developed for tracking: disturbance; dune profiles; dune zonation; fixed point photography; quadrat (indicator species); and quadrat (plant groups and height). However, the use of the app requires specific training and close liaison with the site manager to set up the transects and is therefore more of a data collection tool than general citizen science tool.

3.5 Summary assessment of the situation at the end of the project

DuneLIFE has achieved very significant progress toward returning nationally and internationally important coastal dune habitat and species features toward Favourable Conservation Status. In addition, it has engaged site managers, stakeholders and communities including the wider public in the management and understanding of the importance of returning dynamism to dune sites.

The project was originally intended to run for 5 years from 2018 to 2023. However, with the global Covid pandemic, two prolongations meant that the time-period became 7 years in total to September 2025. Whilst activities were limited during the project because of this, it has also enabled a longer time frame to start to understand how the ecosystems are starting to respond to some of the interventions that could be made at the start of the project and enable very significant projects such as that at National Trust Formby to be completed.

It is inevitable that ecosystems that have been perturbed over decades, with the continued pressures of nutrient enrichment, and changes in use, will not recover in such a relatively short period. It is also understood that maintenance of the interventions will likely be required to ensure they remain effective. Thus, monitoring into the future is essential to understand their effectiveness and maintain them as appropriate. So, the AfterLIFE actions identified in the following text and appendices include not only conservation action but also monitoring activity undertaken to date, and going forward.

4 The AfterLIFE plan – development, implementation, resources and funding.

4.1 Method for development of the AfterLIFE plan

The AfterLIFE plan is built up from the individual component plans that identify future activity that were developed in collaboration between Dynamic Dunes (DuneLIFE) partners during the project.

The majority of the AfterLIFE actions relate to direct practical conservation work; either management and maintenance of DuneLIFE interventions or proposed further restoration work. However, the plan also includes to actions relating to management planning, and survey and monitoring.

In addition, there are some overarching themes around monitoring and funding that are relevant to all the sites, and these are detailed below.

4.2 Governance of the After-LIFE plan

The completed DuneLIFE After-LIFE Plan has been approved by the DuneLIFE Project Governance Board; and the AfterLIFE steering group comprising representatives from all the project partner organisations and additional scientific expertise. (see below for membership).

The group will meet twice a year to monitoring progress on the existing projects, influence the delivery of the AfterLIFE Plan, and help to identify potential future opportunities for coastal dune restoration. The first meeting is scheduled to take place in September 2026.

The group's role will be to annually monitor and influence the delivery of the AfterLIFE Plan

As well as overseeing the delivery of the After-LIFE plan, the Steering Group will also continue to support networking amongst sand dune practitioners and act as a forum to discuss management techniques, news and developments relating to sand dunes. The group will continue to maintain links with the UK Sand Dune and Shingle Network.

The AfterLIFE plan will be made available to all relevant partners, and the respective site managers from each beneficiary organisation.

4.3 Implementation of the After-LIFE plan

The following sections describe how DuneLIFE outcomes will be progressed and sustainably managed and how the longer-term management of the sites habitats and species will be assured.

It covers the transition from implementing major capital works delivery through the DuneLIFE project, to management and maintenance activities, whilst continuing to find opportunities to build on the work of the project.

4.4 Management of the sites

Natural England hosts a protected sites management database (CMSi), (publicly accessible through <https://designatedsites.naturalengland.org.uk/> which is used for operational planning and monitoring for all nationally designated wildlife and geological Sites of Special Scientific Interest (SSSIs) across England. The CMSi database records conservation condition status of the SSSIs management units/features, that underpin the wider SACs, as well as pressures on sites - and any actions being taken, or that need to be taken to address the pressures. Thus, the actions required to maintain and improve the condition of the DuneLIFE project sites during the AfterLIFE phase will be formally recorded via this database.

In addition, the beneficiary organisations will operate their own organisational detailed site management plans (e.g. National Nature Reserve management plans) which can be referenced by the CMSi database and hold the operational detail of planned maintenance, restoration activity and monitoring.

4.5 AfterLIFE Project Actions and estimated costs:

Ongoing and future anticipated site level actions (according to SAC/regional areas) are shown in [Appendices 1-7](#), along with identification of priorities, cost estimates/needs, and known and potential funding sources.

Project partners have assigned actions a priority rating of 1, 2 or 3, and if available likely actual costs,

or indicative costs based on broad cost bands as shown below. All values are estimates, and action can only be implemented if resources allow.

Budget needed:	Cost Range
N/A	no inherent cost other than staff time
€	up to 5,000 Euros
€€	between 5,000 and 10,000 Euros
€€€	between 10,000 and 50,000 Euros
€€€€	between 50,000 and 100,000 Euros
€€€€€	over 100,000 Euros
Priority:	Description
***	The action is crucial and necessary for the objective
**	It would be good for the objective to implement this action
*	This action should be implemented if there are free resources

Table 1: Indicative Budget and priority ranges in the appendices.

Based on the actual and estimated costs identified by the partners (see the Appendices), the annual cost of maintenance and other actions is of the order of £180,000 (c.205,000 euros) per annum. This is based on 'best estimates' at this time, also allowing for some notional inflation in costs. There will be additional significant investment in terms of staff (see table 2) and volunteer time from the respective organisations, and from other sources such 'grant-in -aid' budgets for Natural England's National Nature Reserves, and Countryside Stewardship agri-environmental agreements on other sites.

Known and potential National or multiple site funding sources, are summarised in Section 4.6 below.

Future national approaches and action on monitoring are outlined in Section 4.7.

4.6 Organisational and staffing resources

Natural England, as the project beneficiary, and the project partners responsible for site management are committed to ensuring that the positive outcomes from the DuneLIFE project are maintained and continued into the future.

The majority of the Coastal Dune ecosystems in the main SAC DuneLIFE project sites where works have taken place, are under sustainable management led by well-established organisations. These generally have oversight or responsibility for the site and in most cases some permanent staff resource available to maintain the site, as shown in Table 1.

English County, and Main SAC Dune LIFE project site	Organisation/s Responsible for component sites	Staff resource
Cumbria Solway Firth, Drigg coast, Morcombe Bay.	Cumbria Wildlife Trust South Walney NNR Eskmeals (CWT Tennant on part of it - MoD Owned) Drigg Dunes (Private Estate)	Full Time Ranger x 1

English County, and Main SAC Dune LIFE project site	Organisation/s Responsible for component sites	Staff resource
	Natural England : North Walney NNR	Full time NNR Manager (+ Area Team resource working across Sites in Cumbria, inc. Dune SSSIs)
	National Trust : Sandscale Haws, Roanhead	Full Time Area Ranger (+ site ranger 2.5 days/week, anticipate full time again soon).
Lancashire Sefton Coast	Natural England Ainsdale NNR	Senior Reserve Manager; 2x Reserve Manager, Reserve Ranger team + SSSI Higher Officer covering across Sefton coastal Sites
	National Trust Formby	Full Time Area Ranger + additional staff
Devon Braunton Burrows	Privately owned	Private Estate – Land Managed under England Agri-environment Scheme
Woolacombe (NT)	National Trust	Ranger
Cornwall Penhale	Cornwall Wildlife Trust	Site manager
Lincolnshire Saltfleetby & Theddlethorpe Gibraltar Point;	Natural England Saltfleetby & Theddlethorpe NNR	Senior Reserve Manager; + Reserve Manager
	Lincolnshire Wildlife Trust Saltfleetby & Theddlethorpe and Gibraltar Point NNR	Reserves Officer + Coastal Officer for Lincs Coast
Dorset Dorset Heaths (Purbeck and Wareham) and Studland Dunes;	National Trust Studland	Property Manager

Table 2: Current Staffing at the Core SAC DuneLIFE sites.

In addition, Natural England as the lead beneficiary will also be providing additional national staff resource and expertise going forward throughout the AfterLIFE project. This includes:

- Coastal Senior Habitat Specialist time to:
 - help Co-ordinate ongoing monitoring across NE sites (NNRs) and through our project partners' sites. And assistance with vegetation monitoring (quadrat sampling) of all main core intervention areas based on Coastal Senior Habitat Specialist assisting local Area Team/ NE Field Unit.
 - Assist with annual data analysis and reporting.
 - Support AfterLIFE group as needed
- Support advice by NE Coastal Senior Geomorphological Specialist regarding the notches and any future dune reprofiling.
- Continued oversight of the project in its 'AfterLIFE' phase by a Senior Responsible Officer
- Support from Natural England's 'External Funding' team for delivery of any AfterLIFE activity for Natural England.

4.7 National Financial resources / Potential funding mechanisms

Future funding options and availability will vary from site-to-site, however, the main potential National funding resources and mechanisms are shown below. Specific funding sources for each site are identified in the Appendices. The [Sand Dune Managers Handbook](#) also provides details on funding opportunities locally, nationally and wider to support any additional future work (annex 2) .

Natural England Grant in Aid (GIA): GIA is Natural England's own core funding from Defra which is allocated annually. Budgets are available for National Nature Reserves to undertake site management and maintenance. However, these budgets are relatively small and generally only cover ongoing maintenance and management rather than major further restoration capital works.

The Conservation Enhancement Scheme is an additional fund administered by Natural England, and targeted at SSSIs, working with partners, to undertake appropriate capital works on SSSIs, usually where Countryside stewardship actions are not appropriate or specialist actions are required.

Agri-environment funding: There are Funding Options through the English Government's Department of Food and Agriculture (DEFRA) ' [Environmental Land management Scheme](#)'

This funding is at three levels;

- **[Sustainable Farming Incentive \(SFI\)](#):** Accessible to most farmers and land managers (Subject to budget limits from government), covering actions like soil health, moorland, and hedgerows, which may also be relevant to the land holdings in which Dune systems are located.
- **[Countryside Stewardship \(CS\)](#):** Focuses on targeted, location-specific actions for habitat, biodiversity, and water protection. Non-Governmental managed sites are able to apply for this funding; -several of the Dunescape partners/landowners managing sites have access to this funding. There are Capital and Management 'actions' (measures) tailored specifically to Sand dunes and coastal restoration, and protected Areas. See [CCT8: Manage and restore coastal sand dunes - GOV.UK](#), which currently pays a rate of £620/ha over a 5 year agreement period for appropriate management and restore coastal sand dunes. There are also a number of associated capital work items and planning that can be used to support maintenance and restoration activities including:
 - CCT6 Coastal vegetation management (£123 / ha)
 - CSP1 Difficult site supplement (£93 / ha)

- CSP13 -CSP15 Invasive plant species control and management supplement (£140-£ 380/ha)
 - PA1: Implementation plan (£1,200 per plan)
 - PA2: Feasibility study (Up to 100% of actual costs)
 - FM2: Customised capital works (Up to 100% of actual costs)
- **Landscape Recovery:** Supports long-term, large landscape-scale projects, such as habitat restoration, peatland rewetting, and woodland creation. Dune systems can be incorporated into these as part of wider projects.

Funding through other Government Agencies. Funding for habitat mitigation, associated with flood risk management activity, through initiatives such as England's Environment Agency 'Region Habitat Creation programme'; or Funds associated with supporting Nature Based Solutions for Flood Risk Management may also provide sources of funding for managing Coastal Dune Systems, at a site, or coastal cell scale e.g. facilitating / mobilising sand supply for a stretch of coast. (Note the new 2025 FCERM funding policy - lists [Sand Dune Management as a Standalone NFM project intervention](#) eligible for FCERM funding).

Non – Governmental Grant funding: Other sources of grant funding are also available for sand dune restoration subject to successful applications, for example, the National Lottery Heritage Fund, or local authority community funds.

'Green / Nature Finance' – there may be opportunities for investment for restoration of Dunes through 'green finance, e.g. if restoration is linked to investment around ecosystem services such as flood resilience.

In addition there is potential for funding from 'The Crown Estate' through a 'Memorandum of Agreement' for monitoring of some DuneLIFE site features (habitats and species). The in-principal agreement is for approximately £50,000 (approx. 57,500 euros) over the next nine years to 2035, most of which would be across Dunescapes Coastal sites on species survey and other coastal monitoring (e.g. topographic change). for 2025/2026, £47,500 was agreed.

There is potential for further collaboration with the **Ministry of Defence (MoD)** to support maintenance and restoration work may be possible, especially on those sites such as Saltfleetby Theddlethorpe, and Braunton Burrows SAC where there is historical and current use of the land by the MoD for training. MoD were involved in both UXO removal and scrub clearance at Dunescapes sites.

Other Miscellaneous potential income streams:

Income from timber: Where mature timber is felled from sand dunes to restore habitat this can be sold into the market (determined by current value) along with associated chipwood in some cases. Depending on the circumstances of the site, this income can cover or at least partially offset costs of extraction. (NB this was the case at Haverigg, Cumbria with gorse scrub chip, covering removal cost).

Income from livestock: Some income can be gained by farmers from grazing livestock, however, this may not cover the full costs.

Income from visitor facilities: Car parking charges and concession fees for mobile food and drink facilities can bring in income for the landowner/site manager in some sites that can be reinvested in site / organisational management

5 Monitoring

Ongoing monitoring will ensure that the project's actions are assured and the site features progress towards meeting their contribution to Favourable Conservation Status within the expected time frame. Data will contribute to Natural England's Habitats (Directive) Regulation 9a reporting obligation.

Statutory monitoring will be recorded on Natural England's sites management database (CMSi), (publicly accessible through <https://designatedsites.naturalengland.org.uk/>) that records condition status and associated monitoring protocols for the SSSIs that underpin the wider SACs; as well as the SAC European Site Conservation Objectives.

Condition surveys are carried out either by members of Natural England staff, or by specialist contractors. In addition, partners will carry out their own informal or formalised monitoring of sites they manage either through their own staff or working alongside volunteers and citizen scientists.

The Monitoring activity will include:

5.1 Vegetation monitoring

Vegetation monitoring will be taken at key intervention sites until 2030. In key areas where notches and larger scrapes were created, we hope to continue vegetation monitoring beyond five years after intervention – i.e. repeating surveys in years 6, 8 and 10 after intervention, depending on resources. We would expect this will be done through Natural England NNR, Area, or National team staff.

Note Petalwort (*Petalophyllum ralfsii*) and Scrambled egg lichen (*Gyalolechia fulgens*) surveys are already scheduled to take place in Spring 2026.

5.2 CASI and LiDAR habitat mapping.

The national CASI and LiDAR habitat mapping is undertaken through a Natural England and Environment Agency collaborative project. The data set provides a national picture on coastal habitats and change, including DuneLIFE sites. (This equates to approx. 80,000 euros per year invested, noting this is not solely for Dynamic Dunescape sites).

5.3 Natural England Earth Observation project Analysis

Natural England's Evidence Earth Observation team, have carried out analysis of scrub cover across the sites as well as mapping of changes in area of bare sand, before and after Dune LIFE interventions. This analysis is in progress and will be reported on subsequently. Findings will be shared with partners to assist with understanding and planning future maintenance and management of notches, scrapes etc.

5.4 Topographical survey of Dune notches and Formby dunes restoration

At Penhale Dunes, Braunton Burrows, Ainsdale NNR & Formby, topographical surveys will be continued every 2-3 years around the different sites with monitoring programmed to coincide with the next airborne photography and LIDAR surveys commissioned as part of the Northwest Coastal Regional Monitoring Programme. This will capture data on changes around the notch locations and will help determine whether any further interventions are needed to sustain sand movement. Both Formby and Ainsdale NNR notches were surveyed in January 2026 (and reports for analysis will be available from April 26).

5.5 Annex II species surveys,

Focusing on the intervention areas, post-intervention surveys will be undertaken for relevant species (e.g. Petalwort (*Petalophyllum ralfsii*)). As well as informing the Dynamic Dunescape monitoring programme the surveys will feed into the SAC feature Condition Assessment.

5.6 Hydrological monitoring

As part of the DuneLIFE capital works new dataloggers and dipwells were installed at North Walney NNR (13 dipwells and dataloggers were installed in 2023); and 13 new dipwells and dataloggers in Saltfleetby to Theddlethorpe, and Gibraltar Point NNRs in 2025. This data will add to our understanding of the response of the Dune systems to management interventions at these sites along with changing climatic and groundwater conditions over at least ten years. At Braunton Burrows, data was collected prior to the project activity (between 2015-2020) but was stopped due to funding / resource issues, we anticipate analysing this data and hopefully restarting hydrological monitoring in the future.

5.7 Air Quality

To expand on the data sets already collected at Sefton Coast SAC, we anticipate continuing annual air quality monitoring into 2026/27 – at a cost of Approx £25,000 (approx. 28,700 euros). Costs are for monthly analysis of 7 passive atmospheric ammonia samplers by UKCEH, with samplers changed over each month by local NE staff at Sefton Coast.

This data contributes to informing the Air Quality “Site Nitrogen Action Plans ” (SNAPs) for the site. At Sefton, and at Braunton Burrows (where another SNAP air quality monitoring trial was undertaken through Dune LIFE), Natural England will continue to work through the Catchment Sensitive Farming project, and Protected Site Strategies that cannot be resolved easily at the site level using proactive, wider-area solutions. ([Protected Site Strategies](#) are a new power in the [Environment Act](#) for Natural England to improve conservation and management, mitigating offsite pressures such as nutrient pollution and air quality)

5.8 Natural England’s ‘Long term Monitoring Network’

In addition several of the Dunescapes sites (Braunton Burrows; North Walney; Saltfleetby-Theddlethorpe; Ainsdale NNR) are part of Natural England’s [‘Long Term Monitoring Network’](#) (LTMN).

The LTMN collects data to track long-term biodiversity change, and understand the causes of change, across a range of habitats important for their nature conservation value. Co-located vegetation, soils (physio-chemical and biological measures), butterflies, air quality, and land management data is collected at 37 sites across England. Data collection began in 2009, with protocols based on those of the [Environmental Change Network](#) (see also the [Environmental Change Biodiversity Network](#) (ECBN)).

Contextual data from the surveys will contribute to inform future management across these sites.

6 Future opportunities for replication of best practice

6.1 Website & communications

The project website (<https://dynamicdunescape.co.uk>) has proved a valuable tool to raise awareness and act as a central hub for project activity. The final external facing reports will be uploaded, once approved, and then we will maintain the website in a ‘static’ state for at least 5 years after the end of the project. The website links to the partners sites, which each have their own communication channels for up-to-date information.

Communication around activity that follows from the Dune LIFE projects will continue through the individual project partners and enable further dissemination of information in addition to what has

already been done (including the end of project conference, Handbook and website) after the project ends.

6.2 Sand Dune Managers Handbook

[The Sand Dune Managers Handbook](#) is the main technical output from the project and holds a plethora of technical information and case studies aimed at sharing learning from the project, so other restoration projects and site managers can replicate or build on the work from DuneLIFE. It remains available online and can be updated in future through the UK Sand dune and shingle network.

6.3 Case Studies & Reports

Many case studies on a wide range of topics, were produced by partners through the project, which will provide transferable and replicable information for future projects. For example topics include a range of different habitat management techniques; Invasive Species control; Dune Notching; Scrub clearance; and Unexploded Ordnance removal. These have been and will remain available via the website [Case Studies - Dynamic DunesCAPes](#).

In addition, there are five more detailed reports, based on findings from the different component projects, aimed toward site managers and practitioners. These include for example GPS virtual Fencing Trials, and impacts of dog flea treatments on Dune Slack ponds. See [Site managers - Dynamic DunesCAPes](#).

6.4 Citizen Science

There was a strong focus on Citizen Science in the project with production of a monitoring manual, and e-learning around sand dune species, processes and management interventions. These products are available at [Citizen Science - Dynamic DunesCAPes](#) and would be of benefit and use to other projects in the existing locations and beyond.

6.5 Partner networks and future opportunities for knowledge exchange, continuation and replication

DuneLIFE partners each brought and will continue to bring different but complementary opportunities for improving the replicability and transferability of DuneLIFE actions. Each partner will draw on its wider networks to contribute to the replication and transfer of project learning. This will multiply the impacts of the projects' solutions and mobilise a wider uptake. This approach will ensure that solutions developed or applied in the project are put into practice elsewhere, in the UK and more widely

Approaches have and are continuing to be replicated by partners and authorities linked to the project in the UK. For example, on the Lincolnshire Coast, scrub control techniques developed on the DunesCAPes SAC sites, are now being expanded along the whole of the Lincolnshire coast National Nature Reserve, by partners including the Ministry of Defence, and Cleethorpes and East Lindsey District Council.

At Woolacombe, Devon a dune site adjacent to Braunton Burrows SAC managed by The National Trust, work has recently begun (November 2026) on creating notches in the foredunes, with learning carried across from projects at Penhale, NT Formby and elsewhere.

Knowledge exchange has happened more widely throughout the project with other LIFE projects – especially the Welsh 'Sands of LIFE' project; and other European partners to share learning on Coastal Dune Restoration and this continues. E.g. recently, contact has been made with the proposed Danish

'LIFE Duneamics' bid (via the project lead Maria Michelsen, Nature manager) initially through the Sand Dune & Shingle Network (See below), and then subsequently through an initial knowledge exchange session to share approaches as part of LIFE Duneamics project planning.

6.6 UK Sand Dune and Shingle Network

Natural England and National Trust staff are and will remain key members of the core (steering) group of the [UK Sand Dune and Shingle Network](#). (see Appendix 8). Many of the objectives of the network will pick up from the work of the project and maintain it into the future. As well as the core project partners, the network also brings in other statutory conservation and environmental bodies from Scotland and Northern Ireland, as well as experts in the field. This will help the project's learnings to be spread widely which in turn will aid replication.

7 AfterLIFE Steering group – Membership and Purpose

The **AfterLIFE Project Steering Group (ALSG)** is in place to manage Natural England commitment to the post project objectives as specified in the grant agreement. (Action F5)

As the project is 100% funded by EU LIFE and National Heritage Lottery Funds, with Natural England as the lead legally named beneficiary of their funding, NE is bound under the terms of the funding agreements to maintain overall control of the project and maintains the responsibility for meeting its primary objectives.

The ALSG will be a multi-partner group reporting to, the Project's Senior Responsible Officer (SRO) for Natural England.

The ALSG will provide governance over the project's legacy work from September 2025 to September 2027 as a minimum, and for ideally 5 years.

The AfterLIFE Steering group will consist of the following members:

- Natural England – Helen Dixon (Senior Responsible Officer)
- National Trust – Ben McCarthy
- Plantlife – Nicola Hutchinson
- Lincolnshire Wildlife Trust – Paul Learoyd
- Cornwall Wildlife Trust – Callum Deveney
- Cumbria Wildlife Trust – Hazel Jones
- Natural Resources Wales - Nick Thomas

The Steering group's purpose includes:

- To provide direction and guidance, make decisions as necessary²
- Support the project's legacy and drive further action on the ground.
- Supporting further engagement and communication with practitioners, stakeholders and communities.
- Ensure learning from actions and interventions across the project sites is communicated.
- Support monitoring activity and share results.
- Work to seek future funding to continue to maintain and expand on the achievements from Dynamic Dunescape.
- Meetings will be coordinated and chaired by the Project SRO.

The ALSG will meet to oversee this plan and AfterLIFE activity every 6 months.

END Main report.

² Whilst not its primary purpose, this group may need to make decisions on e.g. seeking future funding bids.

8 Appendices: Proposed/Predicted activity across the six core DuneLIFE project areas

Key for tables: where no precise £GBP or Euro cost figure identified, this is indicated as a range according to the table below.

Budget needed:

N/A no inherent cost other than staff time

€ up to 5,000 Euros [$<£4,500$]

€€ between 5,000 and 10,000 Euros [$£8,600$ and $£13,000$]

€€€ between 10,000 and 50,000 Euros [$£13,000$ and $£43,500$]

€€€€ between 50,000 and 100,000 Euros [$£43,500$ and $£86,000$]

€€€€€ over 100,000 Euros [$>£86,000$]

Priority:

***** The action is crucial and necessary for the objective**

**** It would be good for the objective to implement this action**

*** This action should be implemented if there are free resources**

Based on the actual and estimated costs identified by the partners (in the following appendices), the annual cost of maintenance and other actions is of the order of £180,000 (c.205,000 euros) per annum

Note precise Figures have been redacted for this public version.



Appendix 1: Cornwall

Location	Ownership	Project Action	Management and maintenance activity	When, how often	Who		Source of finance	Priority
Penhale	MOD, Bourne Leisure, Perranporth Golf Course, Perranzabuloe Parish Council	Non-native invasive control	Removal of sea buckthorn	Summer 2026,27,28,29,30	Cornwall Wildlife Trust with Volunteers		n/a	***
Penhale	MOD, Bourne Leisure, Perranporth Golf Course, Perranzabuloe Parish Council	Non-native invasive control	crocosmia and cotoneaster removal	Summer 2026,27,28,29,30	Cornwall Wildlife Trust with Volunteers + Contractor		CWT	***

Location	Ownership	Project Action	Management and maintenance activity	When, how often	Who		Source of finance	Priority
Penhale	MOD, Bourne Leisure, Perranporth Golf Course, Perranzabuloe Parish Council	Dune rejuvenation	scrub control	Autumn / Winter 2026,27,28,29,30	Cornwall Wildlife Trust with Volunteers + Contractor		Cornwall Wildlife Trust	***

Location	Ownership	Project Action	Management and maintenance activity	When, how often	Who		Source of finance	Priority
Penhale	MOD, Bourne Leisure, Perranporth Golf Course, Perranzabuloe Parish Council	Dune rejuvenation	slack clearance	Summer 2026,27,28,29,30	Cornwall Wildlife Trust plus contractor		unknown	**
Penhale	MOD, Bourne Leisure, Perranporth Golf Course, Perranzabuloe Parish Council	Dune rejuvenation	dune mobilisation	Summer 2026,27,28,29,30	Cornwall Wildlife Trust plus contractor		unknown	**

Location	Ownership	Project Action	Management and maintenance activity	When, how often	Who		Source of finance	Priority
Penhale	MOD, Bourne Leisure, Perranporth Golf Course, Perranzabuloe Parish Council	Dune rejuvenation	grazing	2026,27,28,29,30	Cornwall Wildlife Trust plus contractor		Cornwall Wildlife Trust	***

8.1 Appendix 2: Cumbria

Location	Ownership	Project Action	Management and maintenance activity	When, how often	Who		Source of finance	Priority
Eskmeals	MOD	Non-native invasive control	Continued treatment of regrowth of sea buckthorn	winter 2026, winter 2027, winter 2027, winter 2028, winter 2029	Cumbria Wildlife Trust		Maintenance from CS Revenue if needed	***
Eskmeals	MOD	Creation and maintenance of ponds	Ensure ponds hold water	summer 2026, summer 2027, summer 2028, summer 2029 summer2030	Cumbria Wildlife Trust		Maintenance from CS Revenue if needed	***
S Walney	Holker Estate	Invasive species control	Continued management of invasive bracken either spraying or rolling. Continued control of nettles.	summer 2026, summer 2027, summer 2028, summer 2029 summer2030	Cumbria Wildlife Trust		If we get required equipment through the project extension we will have no costs other than staff time	**

Location	Ownership	Project Action	Management and maintenance activity	When, how often	Who		Source of finance	Priority
S Walney	Holker Estate	Bare sand creation	Monitor for regrowth, possibly harrow in subsequent years	summer 2026, summer 2027, summer 2028, summer 2029	Cumbria Wildlife Trust		TBC	**
S Walney	Holker Estate	Pond creation	Monitor dune slack to hold water into the spring	summer 2026, summer 2027, summer 2028, summer 2029 summer 2030	Cumbria Wildlife Trust		N/A	*
S Walney	Holker Estate	Rabbit enhancement	Continue to control foxes	winter 2026, winter 2027, winter 2027, winter 2028, winter 2029	Cumbria Wildlife Trust		No funding available	***
S Walney	CWT	Citizen Science	Monitor sand dunes and dune plant communities	summer 2026, summer 2027, summer 2028, summer 2029 summer 2030	CWT volunteers		N/A	

Location	Ownership	Project Action	Management and maintenance activity	When, how often	Who		Source of finance	Priority
Sandscale Haws	National Trust	Citizen Science	Monitor sand dunes and dune plant communities. Citizen science project came to an end due to little volunteer interest; However, the monitoring has been continued by NT staff, with the aim of getting it re-established with volunteers in the future. The turf stripped areas have been maintained by NT staff and NT volunteers (hand removal of Marram grass) and	summer 2026, summer 2027, summer 2028, summer 2029 summer 2030 The monitoring of the dunes & dune plants is done yearly. The monitoring of the water levels is done each Spring. The maintenance of the turf stripped areas is done several times a year where necessary.	National Trust volunteers National Trust Staff and volunteers		N/A Internal NT funding from Countryside stewardship scheme.	***

Location	Ownership	Project Action	Management and maintenance activity	When, how often	Who		Source of finance	Priority
			monitoring of water levels, to assess whether further deepening of areas required.					
Mawbray Banks	Solway Coast AONB	Citizen Science	Monitor sand dunes and dune plant communities	summer 2026, summer 2027, summer 2028, summer 2029 summer 2030	Solway Coast AONB volunteers			

8.2 Appendix 3: Dorset

Location	Ownership	Project Action	Management and maintenance activity	When, how often	Who	Budget needed	Source of finance	Priority
Studland	National Trust	Bare sand creation in dry dunes	Monitoring of plant and animal colonisation. Removal of bracken and gorse regrowth where necessary to maintain feature interest	Monitoring as part of sand dune priority habitat monitoring schedule, every 4 years. Vegetation work: Autumn 2027 Autumn 2030	NT volunteers	N/A	NT	**

Location	Ownership	Project Action	Management and maintenance activity	When, how often	Who	Budget needed	Source of finance	Priority
Studland	National Trust	Wet slack creation	Monitoring of plant and animal colonisation. Cattle grazing and beaver introduction should maintain open - no further mgmt proposed.	Monitoring as part of lowland fen priority habitat monitoring schedule, every 4 years. Summer cattle grazing. Beaver released 2025	NT ecology staff and volunteers		N/A	**
Studland	National Trust	Reedbed restoration	Monitoring of plant and animal colonisation. Cattle grazing and beaver introduction should maintain open - no further mgmt proposed.	Monitoring of reedbed habitat part of NT Priority Habitat assessments - every 4 years. Summer cattle grazing. Beaver released 2025	NT ecology staff and volunteers		N/A	**
Studland	National Trust	Sallow carr clearance	Monitoring of plant and animal colonisation. Cattle grazing and beaver introduction should maintain open - no further mgmt proposed.	Monitoring of fen/carr part of NT Priority Habitat assessments - every 4 years. Summer cattle grazing. Beaver released 2025	NT ecology staff and volunteers		N/A	**
Studland	National Trust	New area under cattle grazing	Infrastructure maintenance of fences, gates, cattle handling pen, bowser	Spring - ongoing annually	NT		N/A	***

Location	Ownership	Project Action	Management and maintenance activity	When, how often	Who	Budget needed	Source of finance	Priority
Studland	National Trust	New area under cattle grazing	Grazing contractor - livestock management	Summer - ongoing annually	NT	████	NT	***
Studland	National Trust	New area under cattle grazing	Nofence technology - use and maintenance of collars	Autumn/Spring - ongoing annually	NT	██	NT	***
Studland	National Trust	New area under cattle grazing	Collar subscription	Spring - ongoing annually	NT	████	NT	***
Studland	National Trust	New area under cattle grazing	Replacement of collars if required (warranty ends 2024)	2027 expected	NT	██████████	NT	***
Studland	National Trust	Area of oligotrophic lake under restoration from carp - survey and monitoring	1-Ongoing water quality monitoring using multiparameter sondes 2-Annual plant transect monitoring 3-Wetland Bird surveys 4-Aquatic invertebrate surveys	1-Permanent ongoing (no end date) 2-Biannual (no end date) 3-Quarterly (no end date) 4-Dragonfly transects 3 times/year in summer every 3 years (no end date set);	1-NT + EA 2-NT staff and volunteers 3-BTO volunteers 4- NT staff and volunteers + contractors	██████████	NT/NE	**
Studland	National Trust	Area of oligotrophic lake under restoration from carp	Ongoing electrofishing and removal of carp - contract	Ongoing 4-5 fish removals per year; + mark/recapture work to assess population	NT-led contract	██	NT/NE	***

Location	Ownership	Project Action	Management and maintenance activity	When, how often	Who	Budget needed	Source of finance	Priority
Studland	National Trust	Area of oligotrophic lake under restoration from carp	Maintenance of structures - cormorant roosting posts, exclusion zones	Maintain as necessary	NT rangers	■	NT	*

8.3 Appendix 4 : Lincolnshire – Natural England

Location	Ownership	Project Action	Management and maintenance activity	When, how often	Who	Budget needed	Source of finance	Priority
Lincolnshire	NE	Lincolnshire - Infilling of ditches adjacent to Saltfleetby SAC to reduce lowering of watertable in the dune system (250 metres@£10/m.	Infill of spoil arising from surface stripping in the dune slacks, addressing the problem of disposal of arisings. Material will be quite porous and will need to be compacted during in-fill. Stopping up with clay/plastic sheet pile dams will be especially important. If silty-clay - ditches stopped out the outfall end by using clay plugs or plastic sheet piles.	The work on the turf stripping of Fresh water Marsh was achieved in 2021. And a new fencing installed in the same year. The whole area receives grazing yearly, via an early grazing Apr-May and an autumn grazing Oct-Dec. In 2026, we started with the Highland ponies in Dec 25, and we are intending to retain them there all year, depending on vegetation growth. On-going grazing agreement will be in place until a balance has been	NE Staff, grazing and Volunteers	n/a		***

Location	Ownership	Project Action	Management and maintenance activity	When, how often	Who	Budget needed	Source of finance	Priority
			Scrub to be cleared in some areas. Source and obtain quotes for surface stripping and infill inc. plastic sheets, plugs. A managed transition habitat by suitable grazing and monitoring water levels with Dipwells and monitoring/surveying the ditches annually.	reestablished. We are also actively looking at sourcing some goat to add to the work the ponies are doing. Goats will focus more on the brash, and scrub aspect. The new grazing is how this site will be managed. Autumn grazing alone was not sufficient to maintain the sward. Alternatively, and when the site is dry enough, we will cut using the Softrak to keep vegetation opened. The ditches were found to be ecologically rich and worth keeping for				

Location	Ownership	Project Action	Management and maintenance activity	When, how often	Who	Budget needed	Source of finance	Priority
				nature conservation, these have been slubbed in Winter 25. We do not expect to revisit until c.2030 Dipwells were installed in 2025 Data as started to be downloaded				
Lincolnshire	NE	Lincolnshire - Clearance of new fenceline route through scrub at Saltfleetby.	All fencing planned as part of the project have been put in place; grazing enclosure have been extended, and grazing is taking place on all the enclosure	some enclosure will have spring/summer grazing whilst some enclosure will have winter. this is due to the level of the sward, and weather condition. All enclosures will receive some management and depending on the location it may be just once per year.	NE Staff/ Contractor	n/a		***

Location	Ownership	Project Action	Management and maintenance activity	When, how often	Who	Budget needed	Source of finance	Priority
Lincolnshire	NE	Lincolnshire - Seaview - Fencing for grazing of created transitional habitat (materials and installation) adjacent to Saltfleetby dunes (800 metres@CS rate £7/m).	Installation of a new fence line from top of dune to bottom	This is incorporating the dense scrub previously not grazed, into the new enclosure. Grazing has been difficult; the cows are not really tackling the thick bramble. From 2024, Volunteer parties have created channels to ease access. This work will carry on until the foreseeable future	NE Staff/Contractor	n/a		***
Lincolnshire	NE	Lincolnshire - Disposal of existing fencing from for redesigned of grazing enclosure on			NE Staff/Contractor	n/a		***

Location	Ownership	Project Action	Management and maintenance activity	When, how often	Who	Budget needed	Source of finance	Priority
		grey dunes at Saltfleetby (1,362 metres: 1051m removal of 307m old fence line, disposal of wire etc @£5/m).						
Lincolnshire	NE	Lincolnshire - Seaview? - Rymac (167)- Fencing for re-design and extension of grazing enclosures on fixed dunes at Saltfleetby (2,800 2063 metres: materials and erection @CS rates £7/m 14/m).			NE Staff/Contractor	n/a		***

Location	Ownership	Project Action	Management and maintenance activity	When, how often	Who	Budget needed	Source of finance	Priority
Lincolnshire	NE	Saltfleetby-Seaview to Rimal (inc. fence removal of 301m) Rimal North back of Burts farm - Re-design and extension of grazing enclosures. Approx 810 945 metres: materials and erection @ 7/m 14/m). C.3	Source and obtain quotes for removal and installation.	some enclosure will have spring/summer grazing whilst some enclosure will have winter. this is due to the level of the sward, and weather condition. All enclosures will receive some management and depending on the location it may be just once per year.	NE Staff/Contractor	n/a		***
Lincolnshire	NE	Saltfleetby-Rimal see 89- Re-design and extension of grazing enclosures around dune slack. Approx 1600lm-materials and erection		some enclosure will have spring/summer grazing whilst some enclosure will have winter. this is due to the level of the sward, and weather condition. All enclosures will receive some	NE Staff/Contractor	n/a		***

Location	Ownership	Project Action	Management and maintenance activity	When, how often	Who	Budget needed	Source of finance	Priority
		@£8.4 /m) C.3		management and depending on the location it may be just once per year.				
Lincolnshire	NE	Saltfleetby- 2 Nos livestock gates for redesigned 29.25ha grazing enclosure round dune slack. C.3	Source livestock gates and resources required to install. Prepare area to install the livestock gates. Maintain by checking on a rotational system. Log any maintenance of H&S App.	The new gates are to support our grazing enclosures. some enclosures will have spring/summer grazing whilst some enclosure will have winter. this is due to the level of the sward, and weather condition. All enclosures will receive some management and depending on the location it may be just once per year.	NE Staff/Contractor	n/a		***

Location	Ownership	Project Action	Management and maintenance activity	When, how often	Who	Budget needed	Source of finance	Priority
Lincolnshire	NE	Saltfleetby-Crookbank Clematis suppression	Maintenance: To spray annually until reduction of growth can clearly be seen. Grazing of established scrub will suppress growth. Surveys of after effects of re-spraying or any regrowth.	In-house spraying in 2025, very limited suitable period available due to too hot, too windy or raining. This in-house treatment will carry on until clematis is reduced to ad-hoc				
Lincolnshire	NE	Saltfleetby-IAS control (Mahonia, Duke of Argyll's tea plant) by spot-spraying of herbicide (10 man days @ £150/day). Direct benefit to H2130* plus H2120	Spot spraying of Mahonia and Duke of Argyll's tea plant	activity will carry on until we have complete control over Mahonia and Duke of Argyll; this is likely to be in practice until well after the end of the project c.2030 The team purchased some tree stump puller and our volunteering team were	Contractor			***

Location	Ownership	Project Action	Management and maintenance activity	When, how often	Who	Budget needed	Source of finance	Priority
				introduced to this new task from Sept 24..				
Lincolnshire	NE	Saltfleetby- Removal of willow/scrub from dune slack	Contractor to cut and dispose of large coops of willow, especially when working near ditches. as well as mechanical cutting, volunteer work parties, coppicing (on rotation), uprooting mature willow with an excavator equipped with a rake attachment allowing the soil to be shaken off the	This activity will carry on well after the project has finished The team purchased some tree poppers, and our volunteering team will carry out this task. It is well liked by our Vols	NE Staff/Volunteer Work Parties/Contractor			***

Location	Ownership	Project Action	Management and maintenance activity	When, how often	Who	Budget needed	Source of finance	Priority
			root system and leaving minimum disturbance to the ground. Stump treatment. Mowing, bailing and livestock grazing are also options for good management techniques to restore open dunes habitats.					
Lincolnshire	NE	Saltfleetby Cleethorpes- IAS sea buckthorn removal (@5760 €/ha). Direct benefit to restoration of H2130*, H2110, H2190 and H2120 across 206ha unit/	Mosaic created at Cleethorpes and continued management via a contractor with cutting.	North East Lincolnshire County Council is securing funding to support this management. This operation occurs by using the Softrak and the council hiring an operator and paying for the	contractor	n/a	NELCC	

Location	Ownership	Project Action	Management and maintenance activity	When, how often	Who	Budget needed	Source of finance	Priority
		HLF Lincolnshire - Sea buckthorn management at Cleethorpes - diversify age structure through coppicing and removal (3 hectares@£4,800/ha).		transport of the equipment.				
Lincolnshire	NE	Reserve Manager (Saltfleetby)	New Reserve Manager in post 21 Nov 22 starts	Permanent post; this post is no longer supported due to a NE recruitment freeze.		n/a		
Lincolnshire	NE	Lincolnshire - Invertebrate and plant survey of dune slack following interventions at Saltfleetby to assess benefits to	baseline secured in 2020; post work survey	Yearly recording, information passed on to the Greater Lincolnshire Partnership and Lincolnshire Naturalist Union for record.	Contractor Volunteers NGOs		LIFE	**

Location	Ownership	Project Action	Management and maintenance activity	When, how often	Who	Budget needed	Source of finance	Priority
		marsh pea, greater water parsnip and crucifix beetle.		All survey undertaken for biodiversity the data is recorded on IRecords and sent to Lincolnshire Environmental Records Centre Butterfly Conservation etc..				
Lincolnshire	NE	Crookbank clematis clearance	Visit area. Allocate areas on a map and work out total area or areas. 1-3 years - Herbicide treatment. 2-5 years - Aftermath grazing. Autumn grazing. Target spraying - trained NE Staff. Boom spraying using contractors. Cut back vines to ground level	From 2025 the work is be done in-house with the use of the Softrak and our tractor using a cut and collect inside the enclosures.	Contractors, NE Staff, Volunteer Work Parties			***

Location	Ownership	Project Action	Management and maintenance activity	When, how often	Who	Budget needed	Source of finance	Priority
			and apply herbicide. Volunteer work parties to cut back clematis prior to spraying or contractor to cut back on large scale.					

8.4 Appendix 5: Lincolnshire (Lincolnshire Wildlife Trust)

Location	Ownership	Project Action	Management and maintenance activity	When, how often	Who	Budget needed	Source of finance	Priority
Gibraltar Point	LWT/LCC/ELDC	Sward management by grazing	Fenceline management and maintenance	Monthly/Annual	LWT staff with volunteers	£	LWT	***
Gibraltar Point	LWT/LCC/ELDC	Sward management by mowing	Expand dune grassland areas by use of the Softrak	Autumn/winter 2026, 2027, 2028, 2029, and 2030	Contractor and LWT staff	£	LWT	***
Gibraltar Point	LWT/LCC/ELDC	Residential trainee scheme	Find quality trainees for the new accommodation units	Ongoing from Sept 2025	LWT staff	N/A	LWT	***
Gibraltar Point	LWT/LCC/ELDC	Residential trainee scheme	Ensure trainees get a well rounded work experience placement	Ongoing from Sept 2025	LWT staff	N/A	LWT	***
Saltfleetby	LWT	Sward management by grazing	Fenceline management and maintenance	Monthly/Annual	LWT staff with volunteers	£	LWT	***
Saltfleetby	LWT	Sward management by mowing	Weed control on the new dune restoration and washland areas by use of the Softrak	Spring, autumn/winter 2026, 2027, 2028, 2029, and 2030	Contractor and LWT staff	£	LWT	***
Saltfleetby	LWT/NE	Sward management by mowing	Assist NE colleagues with Softrak deployment/maintenance	As required by NE	LWT staff	N/A	N/A	**
Saltfleetby	LWT	Residential trainee scheme	Find quality trainees for the new accommodation units	Ongoing from Sept 2025	LWT staff	N/A	LWT	***

Location	Ownership	Project Action	Management and maintenance activity	When, how often	Who	Budget needed	Source of finance	Priority
Saltfleetby	LWT	Residential trainee scheme	Ensure trainees get a well rounded work experience placement	Ongoing from Sept 2025	LWT staff	N/A	LWT	***
Donna Nook	LWT/MoD	Sward management by mowing	Sea Buckthorn control on the yellow dunes and dune slack mowing with the Softrak	Autumn/winter 2026, 2027, 2028, 2029, and 2030	Contractor and LWT staff	£	LWT/MoD	**

8.5 Appendix 6a: North Devon (Woolacombe)

Note : Braunton Burrows SAC is privately owned and does not have an NGO or statutory body managing it. Instead it is managed through a Countryside Stewardship agri-environment agreement.

Location	Ownership	Project Action	Management and maintenance activity	When, how often	Who	Budget needed	Source of finance	Priority
Woolacombe	National Trust	Dune notches	Creation of 5 notches leading into bare sand areas. Ongoing maintenance to retain profile and visitor safety.	Capital works 2025-2027. Ongoing annual maintenance expected for near future.	Contractor	██████████ ██████████ ██████████ ██████████	National Landscapes 30by30 funding National Trust internal project	**
Woolacombe	National Trust	Turf stripping	Mechanical stripping of turf in 6 discrete areas across the dunes. Ongoing monitoring and hand weeding expected. 2 areas re-scraped winter 2025/26, potential this may be replicated.	Capital works 2024-2027. Ongoing annual maintenance expected for near future.	Contractor and NT staff	██████████ ██████████ ██████████ ██████████ ██████████ ██████████ ██████████	National Trust internal project NT operational budget (ongoing NT staff time)	***
Woolacombe	National Trust	Wet slack scrub clearance and profiling	Brambles cut back and shallowly scraped, to include future reprofiling and creation of deeper pools at the edges of the slack.	One-off capital works 2025-2027. Ongoing annual maintenance.	Contractor and NT staff	██████████ ██████████ ██████████	National Trust internal project	**

Location	Ownership	Project Action	Management and maintenance activity	When, how often	Who	Budget needed	Source of finance	Priority
			Ongoing manual scrub clearance annually.					
Woolacombe	National Trust	Roll-back creation	Turf stripping and excavations to create artificial sloping roll-back profile in dune front.	Monitor to measure success, hand-weed if necessary.	Contractor	██████ ██████ ██████ ██████	National Landscapes 30by30 funding National Trust internal project	*
Woolacombe	National Trust	Sea buckthorn excavation and burning	Excavation and manual clearance of stem and root of sea buckthorn at Northern end of dunes. Burning of arisings. Ongoing monitoring, removal, and chemical control of regrowth.	Excavations 2025-2028 Additional hand clearance expected.	Contractor	██████ ██████ ██████ ██████	National Landscapes 30by30 National Trust internal project	***
Woolacombe	National Trust	Sea buckthorn chemical control	Stump injection of mature sea buckthorn on slopes above the beach and buildings. Follow-up spraying and stump treatment of regrowth in cleared areas.	Chemical control ongoing until at least 2028.	Contractor	██████ ██████ ██████ ██████	National Trust internal project	**

Location	Ownership	Project Action	Management and maintenance activity	When, how often	Who	Budget needed	Source of finance	Priority
Woolacombe	National Trust	Sea buckthorn manual cutting and smothering of stumps	Trial of manual removal of smaller sea buckthorn with cut stumps to be covered with thick black plastic to smother regrowth.	Trial in Winter 2025/26. Continuation if successful.	NT staff and volunteers Potential public engagement with schools	██████ ██████ ████	NT operational budget (ongoing NT staff time)	*
Woolacombe	National Trust	Scrub clearance around dune grassland	Annually ongoing clearance of bracken, bramble, privet, and other scrubby plants to increase cover of dune grassland habitat. Purchase of roboflail, bracken roller, and additional brushcutters to achieve clearance objectives.	Annually ongoing.	NT staff	██████ ██ ██████ ██████ ██████ ██	National Landscapes 30by30 funding Countryside Stewardship (National Trust staff time)	***
Woolacombe	National Trust	Access improvement works	Annual clearance of vegetation along paths. Periodic excavation and reprofiling of main access routes. Installation of new disabled access (tramper) route.	Capital works 2026 Maintenance annually ongoing.	Contractor and NT staff	██████ ██████ ██████ ██████ ██	NT operational budget (ongoing NT staff time)	***
Woolacombe	National Trust	Grazing using NoFence collars	Winter grazing of 35Ha of the dune system with 6-10 Red Devon cattle.	Annually ongoing.	NT staff and tenant grazier	██████ ██ ██████ ██████	Countryside Stewardship	***

Location	Ownership	Project Action	Management and maintenance activity	When, how often	Who	Budget needed	Source of finance	Priority
						██████████ ██████████	NT operational budget	
Woolacombe	National Trust	Bumblebee surveys	Annual surveys to monitor spread of brown-banded carder bee through the dunes	Annually ongoing.	NT staff and volunteers	██████████ ██████████ ██████	NT operational budget	***
Woolacombe	National Trust	Species reintroduction/translocation projects	Feasibility studies, monitoring, permissions, and works associated with potential introductions of viable populations of glow worms, sand lizards, and water germander.	Feasibility works starting 2026	Contracted ecologist NT staff NE advisors	██████████	NT operational budget seed funding, further funding to be sourced	*

8.6 Appendix 6b: North Devon (Braunton Burrows)

Note that Braunton Burrows is not managed by one of the existing Dunescape Partners -It is owned entirely by a private estate (with some use for active Military training).

However, the site is managed under an England specific agri-environment 'Higher Tier' countryside stewardship Agreement. At time of writing the agreement (which began in 2018), has been extended through to 31st Dec 2027, at which point any management options will be reviewed considering the funding available at that time. Options in the agreement will assure maintenance, and in addition a specific scrub management plan is being developed for the site, as the main mechanism to manage and further manage and reduce scrub encroachment and IAS across the site.

8.7 Appendix 7: Sefton Coast

Location	Ownership	Project Action	Management and maintenance activity	When, how often	Who	Budget needed	Source of finance	Priority
Ainsdale NNR	NE NNR staff	Dune notches	Monitoring (annual) of dune notches	Annually 2026-2030	NE NNR staff	£	Natural England	**
Cabin Hill NNR	NE NNR staff	Mowing at Cabin Hill NNR	Maintain areas with cattle & sheep grazing	Annually each autumn/winter 2026-2030	NE NNR staff	££	Natural England	***
Ainsdale NNR	NE NNR staff	Dune slack rejuvenation	Grazing, mowing of slacks & scrub control	Annually each autumn/winter 2026-2030	NE NNR staff	££	Natural England	***
Ainsdale NNR	NE NNR staff	Blow outs	May need occasional re-profiling with digger, potentially digging and removing vegetation from the surface	As needed based on blowout condition - autumn/winter 2026-2030	NE NNR staff	£	Natural England	*
Sefton Council	Sefton Council	Invasive non-native species control	Spraying regrowth of Rosa rugosa and Japanese knotweed	Two visits in late spring/summer per year for Japanese rose. Two visits in autumn per year for Japanese knotweed - 2026-2030	Sefton Council	£££	Sefton Council - agri-environment t CS-HT scheme	***
National Trust	National Trust	Invasive non-native species control	Spraying regrowth of Rosa rugosa and Japanese knotweed	summer/early autumn 2026-2030	National Trust	££	National Trust	***

Location	Ownership	Project Action	Management and maintenance activity	When, how often	Who	Budget needed	Source of finance	Priority
Ainsdale NNR	NE NNR staff	Stakeholder Woodland Participation Event	Should have a woodland Management Plan in place by end of 2026 and implementation started on a ten-year plan	Management would take place over autumn/winter each year - 2026-2030	NE NNR staff	££££	Natural England	***
The Triangle	NE NNR staff	Dune heath restoration	Ongoing heathland scrub management and species monitoring currently with Ainsdale NNR Ranger and volunteers. Long term plan to incorporate site into Ainsdale NNR and manage via a nature reserve agreement.	Management takes place all year round. Currently monthly visits by volunteer group led by Ainsdale NNR staff - 2026-2030	NE NNR staff	£	Natural England	***
Formby	NT	Non-native invasive control	Monitoring - NVC carried out annually to ensure unfavourable or invasive species can be identified and successional vegetation changes on the site can be measured and assessed and used to inform management decisions appropriate to the	NVC to be carried out on a 5-yearly basis due to funding. In house monitoring of invasives done by rangers. Treat invasives annually if needed	Ecologist to do NVC survey. NT staff Spraying/stump treatment, and contractors.	££	NT	***

Location	Ownership	Project Action	Management and maintenance activity	When, how often	Who	Budget needed	Source of finance	Priority
			maintenance. Monitoring - were possible treating regrowth of sea buckthorn and poplar spp with appropriate herbicide. Manually removing regrowth with hand tools with all arisings burnt using the air burner.					
Formby	NT	Dune rejuvenation/slack creation	Monitoring - NVC carried out on 5-year cycle to ensure unfavourable or invasive species can be identified and successional vegetation changes on the site can be measured and assessed and used to inform management decisions appropriate to the maintenance. Maintain slacks - this may require reprofiling and/or removing unfavourable scrub.	Winter as required	NT Staff and NT volunteers	N/A	N/A	

Location	Ownership	Project Action	Management and maintenance activity	When, how often	Who	Budget needed	Source of finance	Priority
Formby	NT	Notches	Aerial/Drone survey to be carried out to assess sand movement. Topographical surveys to be undertaken annually for 3 years. Maintenance - maintenance to be carried out on the advice of Geomorphologist specialist. Regrading Notches proposed for 2027	Notch Topographic survey January 2026; 2029; 2032	Contractors and NT Staff			
Formby	NT	Heavy thinning/Dune corridors	A ten-year woodland management plan has been created and approved by Forestry commission. Sand movement/ dune rollback through the dune corridors to be monitored through drone/aerial surveys. Monitoring understory/ground flora and analysing any changes in NVC habitat categories.	November each year until 2033 then on going	Contractors and NT Staff		NT	

8.8 Appendix 8: Sand Dune & Shingle Network objectives:

- To establish, maintain and promote a Sand Dune and Shingle Network as a forum for all those interested in dune, machair and shingle habitats, facilitating active discussion and sharing of experience, knowledge and ideas.
- To advocate for the management of sand dune, machair and shingle habitats for nature, recognising the importance of this natural resource and the need to seek suitable sustainable solutions to conservation issues particularly in response to a changing climate.
- To drive improvements in site condition, sustaining a coherent site network and delivering national commitments and targets (SSSIs (and ASSIs), SAC, Ramsar, 30x30, nature networks, climate change resilience etc).
- To promote the exchange of best practice, raising awareness of latest guidance and research as well as highlighting practical examples of management implementation.
- To encourage diversity of thought, collaboration and partnership working through connecting individuals and organisations across a broad spectrum of sectors and disciplines, both in the UK and internationally.
- To provide opportunities for individual and organisations to come together to debate and discuss management of these habitats, e.g. through study tours, workshops and conferences.
- To develop and build capacity in the next generation of sand dune, machair and shingle managers and scientists, through actively involving young people in the network.
- To explore and share opportunities for future funding and partnership opportunities that support the objectives of the network.
- To identify future research needs that support the objectives of the network.

END

Glen Cooper FINAL v1.0 March 2026