

## Water Environment Improvements Project Evidence Form

### Scope & Purpose

This form is to be used by the external Water Environment Governance Group (WEGG), to review, validate and formally approve the length of bluespaces improved for the Water Environment Improvements ODI. The form will be completed by the Water Environment Team with support from project partners and presented to the WEGG. After formal approval, the km of water environment improved will be recorded against the ODI and projects will be marked as completed on the Water Environment Scorecard and illustrated as delivered in the Bluespaces Mapping Portals.

### Project Name

'Water and Wellbeing Warden' - Teesmouth & Castle Eden Dene National Nature Reserves

### Project Lead

Company/ Organisation	Named Lead	Position
Durham County Council	Alex Kaars Sijpesteijn	Principal Heritage Coast Officer

### Bluespaces Improved

Year	Claimed	Proposed	Reason For Any Change
Year 5	17.5 km	17.5 km	N/A

### Water Environment Assurance

This project has been reviewed internally to ensure it has delivered benefits above and beyond our baseline and regulatory obligations to improve the water environment accessible to customers across at least two out of three aspects. Following our assurance process, the project was approved by both our internal and external groups for review before delivery. This form presents evidence of project completion and the outputs achieved, to request project sign off.

Level	Project Acceptance Date	Project Approval Date	Completed Project Sign Off Date
Project Team	October 2022	N/A	N/A
Water Environment Steering Group (Internal)	November 2022	November 2022	N/A
Water Environment Governance Group (External)	November 2022	November 2022	June 2025

### Project Timescales

Candidate Project Approved	Project Initiated	Project Completed
November 2022	May 2024	March 2025

## Project Summary and Highlights

### Summary

The Heritage Coast Partnership, Durham County Council, Natural England and NWG have delivered water environment improvements to 17.5 km of bluespaces through the Water and Wellbeing Warden project. This two-year (Spring 2024-2026) project, to which Bluespaces has contributed towards staff and capital costs, supports a Water and Wellbeing Warden to work across both Castle Eden Dene & Teesmouth National Nature Reserves (NNRs). Both sites have many areas of bluespaces, in the form of coastal streams, ponds, mudflats, rivers, estuary and the sea.

The warden post, hosted by the Heritage Coast Partnership (in turn hosted by Durham County Council), is working as part of the wider Natural England site management team, complementing and building on existing partnership working. The warden post ensures that the local environment, site facilities and engagement events offer a safe and positive welcome for visitors, whilst encouraging responsible use of these two important nature sites on the North East coast for people and wildlife. The Warden is delivering a wealth of visitor engagement activities, promoting visitor learning, discovery and safety, as well as carrying out surveys & wildlife monitoring, and undertaking practical habitat and nature conservation management tasks. These activities are far beyond Natural England's existing organisational capacity to deliver at these sites, and have provided a great visitor experience for NWG customers and other visitors accessing these bluespaces on the North East coast.

This two-year project was scheduled to start in spring 2023 but was delayed by a year so delivery will continue until March 2026. However, just in the first year of delivery, a huge number of the planned activities have already been achieved, engaging with a diverse range of visitors, volunteers and organisations. The warden will build on these relationships to deliver more activities during the second year of the project.

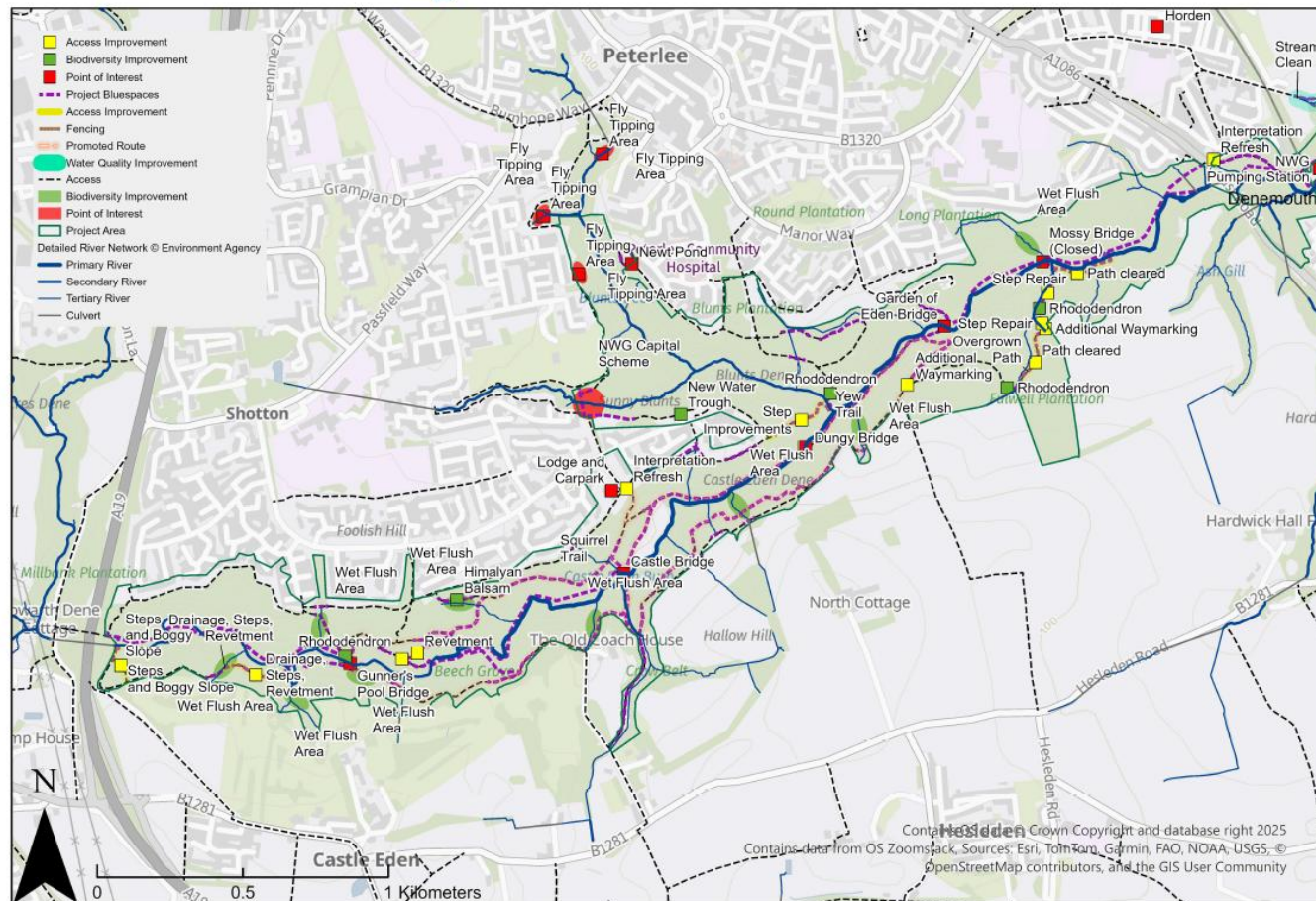
### Highlights

- 30 events hosted or delivered, engaging with 210 schoolchildren and almost 1000 members of the public
- Three-fold increase in volunteering effort and opportunities, now also catering for complex needs and reduced mobility
- Significant physical improvements to access, interpretation and signage
- INNS distribution mapped throughout reserves and significant areas of Rhododendron, Himalayan Balsam and Sea Buckthorn controlled
- A brilliant example of partnership working that has raised the profile of both reserves amongst the local community and attracted new visitors to the sites.



## Maps

## Water and Wellbeing Warden: Castle Eden Dene

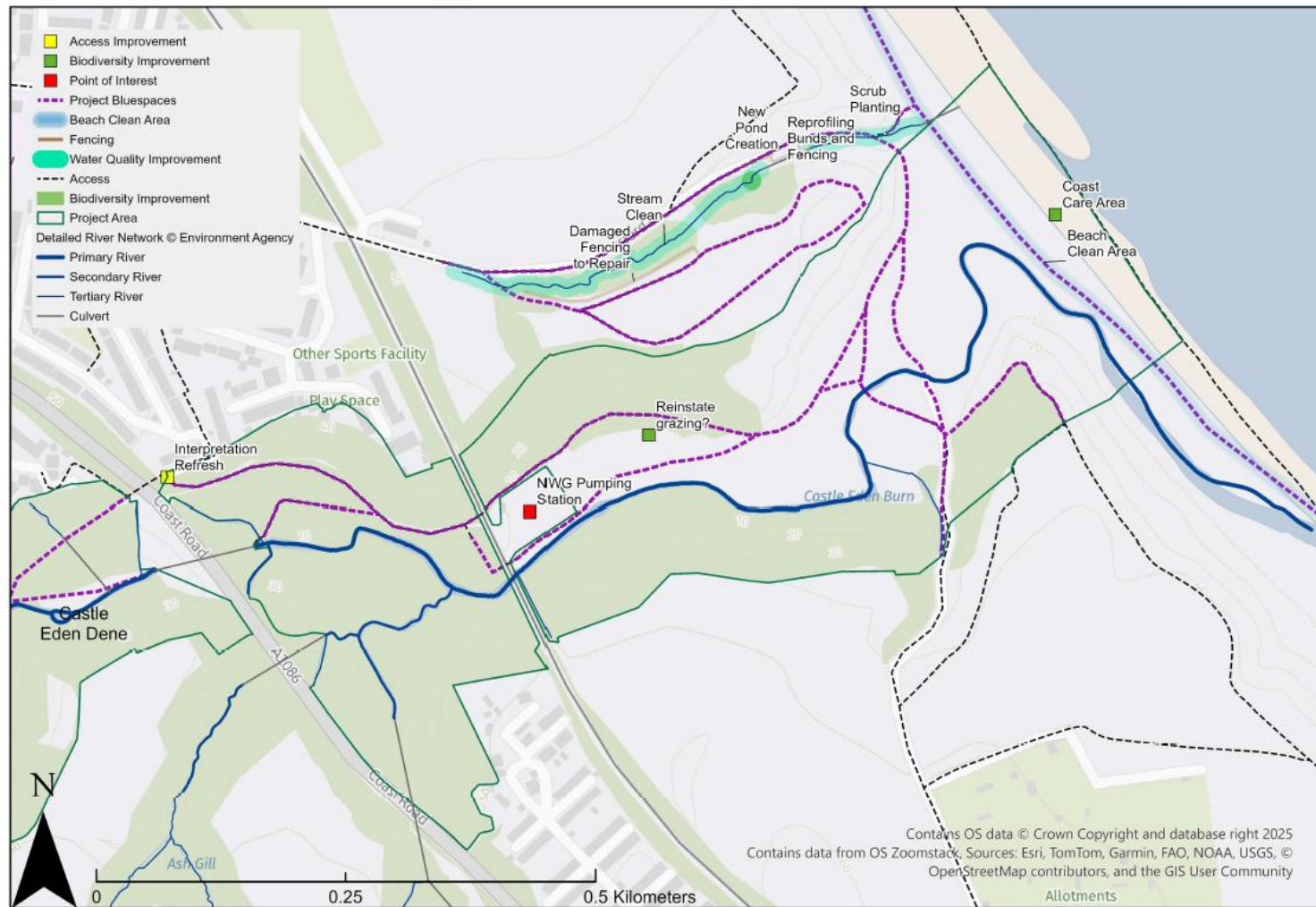


**Total length of Bluespaces: 12.7 km**

Figure 1: Overview of water environment improved at Castle Eden Dene



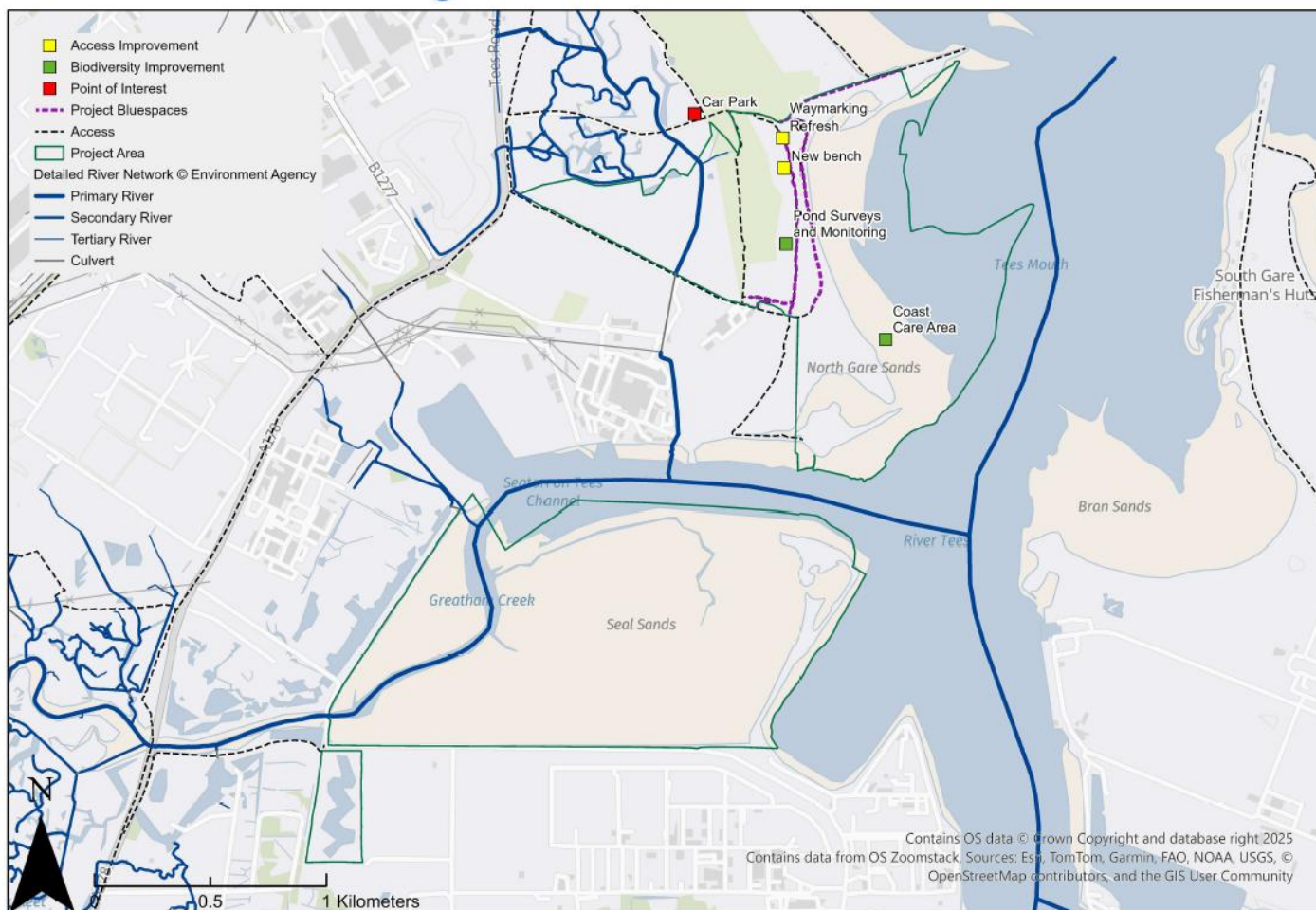
## Water and Wellbeing Warden: Denemouth



**Total length of Bluespaces: 2.2 km**

Figure 2: Overview of Bluespaces improved at Denemouth

## Water and Wellbeing Warden: Teesmouth



**Total length of Bluespaces: 2.6 km**

Figure 3: Overview of Bluespaces improved at Teesmouth

## Project Outputs, Benefits & Evidence Against Criteria

Access, Facilities & Recreation	
Expected Project Outcomes	Benefits
<ol style="list-style-type: none"> <li>Physical improvements and maintenance to access furniture and infrastructure such as steps, paths and boardwalks for improved visitor access at Caste Eden Dene &amp; Teesmouth, and new suitable seating provisions for public enjoyment</li> <li>Improved welcome and interpretative material for visitor engagement and interaction through waymarked trails, including new signage at Denemouth, Newt Pond &amp; the Wildlife Garden</li> <li>Face to face daily public engagement through the Warden, encouraging safe, responsible use of the coastal stream and beachfront for leisure activities</li> <li>Engagement activities and public events, such as guided walks and talks, offered at both sites – Warden will lead weekly guided 'health &amp; wellbeing walks' along with holding ten annual events</li> <li>Work with partners on a new 'Coast Care' initiative with Partners (PD Ports, Cleveland, Police Hartlepool Borough Council) to promote responsible dog walking policies and reduce the impact of anti-social behaviour activities including kite-buggy and kite-surfing on the coast</li> <li>The partnership will help develop local community ownership for protecting these areas of Bluespaces, engaging communities in the local environment through awareness and volunteering</li> </ol>	<ul style="list-style-type: none"> <li>➤ A1: Increases access to, engagement with and enjoyment of the water environment</li> <li>➤ A2: Benefits health and wellbeing through:</li> <li>➤ A3: Influences positive environmental behaviors</li> </ul>
Outputs	
<ol style="list-style-type: none"> <li>Significant improvements have been delivered on both NNRs. These include a new bird hide and creation of disabled access at a second hide at Teesmouth NNR, 3 new kissing gates and 2 new benches, 2 benches replaced and 1 restored, footpath improvements (resurfacing, revetments replaced and drainage installed), fencing replaced or repaired, and 3 footbridges cleaned and maintained.</li> <li>Five new 'You are here' panels were installed at Teesmouth, and two new chalk boards have been made for installation at Castle Eden Dene. 1 new panel for the newt pond at the north of the site and 8 new small boards for the wildlife garden have been designed. Existing waymarking signs have been cleared of vegetation.</li> <li>Regular staff presence on site has ensured daily public engagement, informing site visitors about the importance of the site and responsible use of it. In addition, the reserves have hosted a Dogs Trust event, an Information Day, and had a stand at a Michaelmas fair, each event providing further opportunities to engage with members of the public about the NNRs and the pressures they face. Further information about these outputs is in the Other Supporting Evidence section.</li> <li>Over 30 events have been hosted or delivered, engaging 210 school children, and almost 1000 members of the public.</li> <li>Due to the retirement of a key individual this new initiative has not yet been progressed, but may be tied into the Seascapes legacy project. The Heritage Coast Partnership has recently secured the continuation of a Beach Care Officer role for 3 years and joint events can be held with this officer, as well as linking into the Species Survival Fund scheme going forwards.</li> <li>Volunteering opportunities have been created and enhanced through local advertising, and collaboration with other organisations, including Durham Works, Houghall College, the on-site forest school, Run Peterlee, Teeside and Durham Universities, and local business. Autistic volunteers and those with other complex needs have been supported in new volunteer roles, and 'low impact' opportunities have also been created. This has resulted in a 20% increase in the number of volunteers, and the average weekly volunteer hours increasing from 25 to 85 hours.</li> </ol> <p>A detailed breakdown of activity led by the warden is provided in the Other Supporting Evidence section.</p>	



## Evidence



Volunteers replacing revetments (left), new ramp and rail at Teesmouth NNR (centre) and new gabion basket (right)



Fence repairs at Castle Eden Dene before (centre) and after (right)



Churchill bridge cleaning and maintenance before (left) and after (right)



Sign installed at Denemouth, and new seating in the Castle Eden Dene wildlife garden and at Teesmouth NNR





Seaton Carew information day (left) Dogs Trust event at Castle Eden Dene (centre), and Natural England stalls at Dene Academy (right)



Biodiversity day pond dipping (left), bug hunting (centre), den-building event (right)



Weekly Wellbeing Walking group (left), tracks and signs event making a deer footprint cast (centre) and Run Peterlee tree-planting event (right)



Bat crafts (left), geology walk (centre) and moth night at the Dene (right)



## Wildlife & Biodiversity

Expected Project Outcomes	Benefits
<ol style="list-style-type: none"> <li>1. Practical community engagement activities (volunteer tasks) undertaken in line with site management plans to significantly reduce invasive non-native species (INNS) (Balsam, Snowberry, Japanese Rose etc.) and restore the functionality of habitats.</li> <li>2. Reinstating grazing at Denemouth and installing water troughs and fencing, to allow for conservation grazing and move grasslands into favourable condition</li> <li>3. SSSI (Sites of Special Scientific Interest) unit improvements at both sites - during this project several SSSI units at both sites are expected to move from 'unfavourable' condition to 'favourable'</li> <li>4. Surveys undertaken for 'Wet Flush' locations and 'Seepage Area' to identify protection needed – these are rare and important habitats and often contain 'red data book' and 'nationally scarce' species</li> </ol>	<ul style="list-style-type: none"> <li>➤ B1: Improves the quantity, quality and connectivity of habitats</li> <li>➤ B2: Improves the conservation status and or abundance or distribution of species</li> <li>➤ B3: Reduces risk or impact of invasive non-native species (INNS)</li> </ul>

## Outputs

<ol style="list-style-type: none"> <li>1. The warden mapped the distribution of INNS (including Himalayan Balsam, Snowberry, Rhododendron, Sea Buckthorn and Japanese Rose) throughout the project area, and then drew up a programme of control. Significant areas of Himalayan Balsam, Sea Buckthorn and Rhododendron have now been cleared, with further control planned for subsequent years. In addition, Sycamore and other woody species have been cleared from meadow areas, and further Sycamore has been removed from parts of the woodland, which were then replanted with native species.</li> <li>2. Water troughs were installed on site in summer 2024 and are now awaiting connection of the water supply. However, fencing plans have been disrupted by anti-social behaviour, with one fence section being repeatedly destroyed. No-fence collars were considered as an alternative means of stock management, but the proximity to transport links means that fencing will have to be used. Whether grazing goes ahead depends on whether the fencing continues to be damaged.</li> <li>3. The SSSI condition assessments have not happened in their entirety due to staff and funding commitments. However, the conservation improvement works that have been completed, and removal of INNS, means that the SSSI compartments at Castle Eden Dene should be moved to 'favourable' or 'favourable recovering' status.</li> <li>4. An initial survey of some seepage sites is being added to by the warden, who commenced a full survey of seepage / wet flush sites in winter 2024/25. This will be completed in winter 2025/26 and a record kept of all sites.</li> </ol>
--

## Evidence



Removal of sea buckthorn (left), sycamore (centre) and other woody species (right)



Balsam bashing (left) and native tree planting (right)



SSSI condition assessments at Teesmouth (left) and reserve managers removing ash trees affected by dieback (right)



Map showing seepage and wet flush locations – rare and important habitats that often contain 'Red Book' and Nationally scarce species.



## Water Quality

Expected Project Outcomes	Benefits
<ol style="list-style-type: none"> <li>1. Work to be undertaken to keep the Castle Eden Burn as a suitably functioning water course, monitoring protective structures, landslips and clearing problematic dams</li> <li>2. General litter removal from water environments across both sites and 'Coastal Litter Surveys' undertaken in partnership with SeaScapes and the Marine Conservation Society and organised groups and public events</li> <li>3. Monitoring of potential issues relating to NW infrastructure within Castle Eden Dene to prevent pollution, e.g. reporting dam build-up or pipe/manhole spills), supporting existing Water Ranger activity</li> </ol>	<p>➤ C3: Improves state and function of water, including naturalisation, visual appearance, litter and odour</p>

## Outputs

<ol style="list-style-type: none"> <li>1. Monitoring of the watercourse for any issues has been conducted throughout the project on an ad-hoc basis as part of the warden's site activities. Revetment improvements and reinforcement of banksides using gabion baskets has reduced erosion of sediment into the watercourse</li> <li>2. Four litter pick / beach clean events were arranged, details of which are in the Other Supporting Evidence section. In addition, the warden has removed significant quantities of debris from Teesmouth NNR.</li> <li>3. Monitoring for potential issues has been done routinely on an ad-hoc basis as part of the warden's regular site activities. No issues were identified until a pollution incident at the western end of Castle Eden Dene (NZ 40900 38800) during the Christmas 2024 break which was reported to EA and NWG. The Warden now liaises with the Water Rangers and their site visits.</li> </ol>
--

## Evidence



Litter pick with Seascales (left), litter removed from Teesmouth NNR (centre and right)



Using photos to monitor land-slip (left), monitoring dam build-up (centre), and gabion baskets for bankside protection (right)

## Additional & Secondary Benefits

Expected Project Outcomes	Benefits
<ol style="list-style-type: none"> <li>1. Surveys of the Castle Eden Burn and its tributaries through work with the Coastal Streams Partnership will help identify problematic areas and debris build-up, from which Highways England, the Environment Agency and DCC can plan actions to address erosion and flooding.</li> <li>2. Opportunities to link to other areas of NWG activity including Bin the Wipe campaign and misconceptions, and supporting the Great British Beach Clean, World Clean-up Day, Litter Heroes and Great British Spring Clean etc.</li> <li>3. Relationship built between Natural England and NWG and other project partners will help identification of other opportunities to work together, for example to address Nutrient Neutrality and contribute to Biodiversity Net Gain and Nature Recovery Network initiatives.</li> </ol>	<ul style="list-style-type: none"> <li>➤ D1: Provides resilience and adaptation to climate change and/or reduces the risk of flooding</li> <li>➤ D2: Provides benefits to local communities, the local economy or NWG</li> <li>➤ D3: Supports strategic project or investment into strategic partnership or landscape/regional activity</li> </ul>

## Outputs

<ol style="list-style-type: none"> <li>1. Although the Coastal Streams Partnership is no longer operating, the warden continues to monitor the condition of the waterways during regular on-site activity, reporting any issues as they arise.</li> <li>2. Links with NWG Just an Hour scheme have been established and, following the successes demonstrated in 2024, further public events are planned for 2025, including the Great British spring clean carried out in March.</li> <li>3. A series of collaborative events and activities were organised, details of which are in the Other Supporting Evidence section. All of these activities have fostered and maintained links with key partners, allowing identification of other opportunities for joint working.</li> </ol>
---

## Evidence



Natural England team day at Thrislington NNR (left) and Green Social Prescribing event at Castle Eden Dene in partnership with NE and County Durham Sport (right)



## Customer Testimonies & Media

### Feedback from events

*"Community feel of getting together early and learning new things on the way"*

*"It was a great walk, with a lovely and friendly atmosphere, and a knowledgeable leader"*

Feedback from Dawn Chorus event

*"we loved it! Thank you for keeping the magic alive for us"*

*"Excellent staff very interactive for all ages"*

Feedback from Forest Fairies event

*"Fantastic all round service, great way to let kids be creative"*

*"Fantastic free activities, perfect for getting the family out during holidays"*

Feedback from Bat Craft event

*"its great that you have this event, it's the first time they've got off their computers all week"*

Verbal feedback from Den Building event

*"Thank you for giving us the opportunity to get involved with our community"*

Verbal feedback from Wellbeing Walk

## Lead Partner Quotes & Testimonials

*'The funding has enabled a significant amount of public engagement to take place, introducing new audiences to our precious habitats and places. It has also enabled the practical works that have improved the sites and made them better spaces. In addition, the funding has strengthened the Heritage Coast Partnership, the work building on over 20 years of activity.'*

**Alex Kaars Sijpesteijn, Durham Heritage Coast Manager, Durham County Council**

*'The partnership is proving to be a real success. It has brought the partners closer together and through the funding of Bluespaces, we have seen a real increase in both community participation and environmental improvements across the NNRs. There has been some excellent initiatives being developed such as the wellbeing walk, events program and the expansion of our volunteer offer to include marginalised groups who help with things like invasive species, bridges and ponds works.'*

**Joe Davies, Senior Reserves Manager for Castle Eden Dene, Teesmouth, Thrislington & Cassop National Nature Reserves, Natural England**

**Access, Facilities and Recreation detailed outputs – provided by lead partner to NWG**

1. July 2024 milestones:

- A new hide, including seating overlooking Bluespaces, installed and painted at Teesmouth NNR
- Revetment replaced at Castle Eden Dene (west end path) reinforcing the footpath and preventing erosion
- Drain cleared and new drainage installed to protect paths from flooding (lodge bank, along the coast path and red slide alternate track)
- A new ramp and rail installed at hide 2 at Teesmouth NNR for improved accessibility
- A new kissing gate installed at the old A19 entrance for Castle Eden Dene
- Fence repairs at A19
- Gabion baskets installed to protect footpath from erosion near Craggy Bank
- Bridge cleaning and maintenance completed
- Vegetation around existing way markers cleared to maintain visibility

October 2024 milestones:

- New kissing gates installed at Dene mouth and Gleason court
- Fence repairs completed at Bellister
- Ongoing drainage works across site to ensure drains remain clear, drainage is adequate and preventing erosion of footpaths
- Bridge cleaning and maintenance (A19 footbridge and Churchill bridge)

November 2024 milestones:

- Gunners Pool bridge cleaned and vegetation removed
- Worked with volunteers to maintain garden path accessibility by clearing vegetation

January 2025 milestones:

- Warden has mapped the existing locations of seating around the dene, and discussed with volunteers and site users where extra seating may be useful. Once locations have been agreed, new natural seating will be installed in conjunction with winter felling works, to maintain the natural aesthetic and wild look of the dene/ These locations will be added to the Castle Eden Dene Visitor app.
- 2 existing log seats along easy access path identified as needing replaced.
- Warden maintained regular monitoring of footpath condition, particularly after heavy rains and storms.
- Warden worked with Reserve managers to clear windblown trees from paths to maintain access.

March 2025 milestones:

- Fencing work carried out at Denemouth
- Painting and maintenance of wildlife garden bench completed and new seat installed in wildlife garden overlooking pond
- Footpath monitoring continued on an ad hoc basis.

April 2025 milestones:

- New seat installed at Teesmouth NNR to celebrate 30 years as NNR

2. July 2024 milestones:

- Four signs installed at reserve entrances and kept clear of vegetation.
- Warden discussed potential signage locations with wildlife garden volunteers about signage locations and drafted the signs

October 2024 milestones:

- Worked with volunteers to design new signage for wildlife garden and newt ponds

November 2024 milestones:

- Discussed with Senior reserve manager plans for revamped nature trail at Teesmouth (to be completed 2025).
- Existing chalkboards signage at Castle Eden Dene dismantled ready for redesign and revamp

January 2025 milestones:

- First draft of new signage for both newt pond and wildlife garden completed
- New interpretive panels for Teesmouth delivered

March 2025 milestones:

- Signage for newt pond and wildlife garden finalised ready for production
- Chalkboards revamped



3. July 2024 milestones:

- Regular staff presence on site ensured daily public engagement, informing site visitors about the importance of the sites and responsible use
- Dogs Trust event hosted, providing an opportunity to engage with dog owners on responsible use of sites
- Seaton Carew Information Day – engaged with members of the public about Teesmouth NNR, the importance of the site and the pressures it faces

October 2024 milestones:

- Warden's frequent presence on site, conducting tasks, continued to provide opportunities for engagement with members of the public, educating them on what they were doing and why, and responsible usage of the site.
- Ran a stand at the Michaelmas fair in Bishop Midlands, providing further opportunity for public engagement

November 2024 milestones:

- Continued to engage with members of the public while on site, answering questions and informing about work being conducted.
- Posted education articles on social media pages

January 2025 milestones:

- Continued to engage with members of the public while on site, answering questions and informing about work being conducted.

March 2025 milestones:

- Warden expanded social media resource, adding information about works being conducted across the sites.
- Warden contacted local councils and groups to identify more community event opportunities.

4. July 2024 update – total of 16 events have been delivered, with a further 15 planned up to Christmas 2024.

Weekly health and wellbeing walks are likely to start in August in partnership with a local suicide awareness and mental health charity.

- Coxhoe school visit, self-led – 30 school children
- Educational activities with Teesmouth field centre, Rivers – 30 school children
- Educational activities with Teesmouth field centre, Habitats – 30 school children
- Facilitated Shotton Hall Academy to use site for studying rivers with their KS3 pupils – 30 school children
- Oases School visit with Halden Primary (hike, orienteering, den building) – 90 school children
- EDF Biodiversity Team guided walk at Teesmouth NNR – 12 attendees
- Scrub management with BT Corporate volunteers at Castle Eden Dene (11<sup>th</sup> June) – 7 volunteers
- Reach out session with Harbour women's refuge (12<sup>th</sup> June) – 12 people
- Dawn Chorus at CED (5<sup>th</sup> May) - 14 people
- NNR week family discovery day (25<sup>th</sup> May) at CED – 60 people
- Dogs Trust Information Day (14<sup>th</sup> June) at Castle Eden Dene – (wet day) 14 people
- Seaton Carew information event (22<sup>nd</sup> June) at Teesmouth – 88 people engaged
- Dene Academy Community Day (22<sup>nd</sup> June) – 46 people engaged

October 2024 milestones:

- Grassland management team day with NE national team (24<sup>th</sup> October) - 8 people
- The Barn at Easington visit to Castle Eden Dene – 30 kids
- Summer holiday events – Every Thursday 25<sup>th</sup> July – 29<sup>th</sup> August
  - Forest Fairies - 48 people
  - Bugs and Butterflies - 16 people
  - Pond explorers - 101 people
  - Tracks and signs - 12 people
  - Bat Crafts - 41 people
  - Den building - 62 people
- Moth Night (24<sup>th</sup> July) at Castle Eden Dene -17 people
- DHC England Coastal Path Event at Easington Local Nature Reserve (August 10th) – ~100 people engaged
- Bat night (August 22<sup>nd</sup>) – 26 people
- Geology Rocks (21<sup>st</sup> September) -10 people
- Warden ran a Green Social Prescribing Event in partnership between NE and County Durham Sport with link workers and other active community members investigating ways of working together

November 2024 milestones:

- Warden worked with Natural England Higher Officer for Health and Environment to offer a program of green social prescribing events including practical conservation sessions, nature walks.
- Fungi Foray (20<sup>th</sup> October) – cancelled due to yellow weather warning
- Dene in the Dark (25<sup>th</sup> October) – 12 people attended
- Warden attended networking event at East Durham Trust, meeting community organisations

December 2024 milestones:

- Christmas event (7<sup>th</sup> December) held with crafts, Santa, tombola, teas, coffee and preloved toys for sale (those not sold donated to Alice House Hospice), raising over £500 for local children's cancer charity 'The Bradley Lowery Foundation' in Blackhall – over 150 people (despite storm Darragh)
- Facilitated use of classroom and dene by Walk Durham and the infant feeding team for pushchair-friendly festive walk and crafts – 8 people

January 2025 milestones:

- Tree-planting event (24<sup>th</sup> November) with Run Peterlee at Northumbrian Water Meadow, Castle Eden Dene
- Hosted Northumbria area team meeting and team-building session at Castle Eden Dene (3rd December)

March 2025 milestones:

- Supported stargazing event at Teesmouth NNR – 25 people
- Valentines event at Castle Eden Dene (15<sup>th</sup> February) – 28 people attended
- Castle Eden Dene spring events leaflet finalised and ready to go to print
- Spring Clean event – 10 people attended, removing 13 bags of rubbish

5. Due to the retirement of a key individual this new initiative has not yet been progressed, but may be tied into the Seascapes legacy project. The Heritage Coast Partnership has recently secured the continuation of a Beach Care Officer role for 3 years and joint events can be held with this officer, as well as linking into the Species Survival Fund scheme going forward

6. October 2024 milestones:

- Volunteering opportunities created and enhanced with role descriptions advertised locally at Castle Eden Dene – 15 new volunteers inducted
- Autistic volunteers and those with other complex needs have been supported in new volunteer roles, and 'low impact' volunteering opportunities created
- Support provided to individual from Durham Works, helping them gain skills and confidence to make decisions about training and employment opportunities

November 2024 milestones:

- Worked with Playology (onsite forest school) to update classroom displays.
- Recruited new volunteers looking to gain experience for employability through Durham Works and Houghall College
- Invited 11 local businesses and organizations to Castle Eden Dene for team-building days, conducting practical conservation tasks.
- Tree-planting event with Run Peterlee at Castle Eden Dene to plant trees on Northumbrian Water Meadow - 24<sup>th</sup> November

January 2025 milestones:

- Worked with NE health and nature lead to develop green social prescribing activities, including tree planting, to offer to local groups.
- Established collaborative working links with Teesside and Durham Universities
- Recruited another new volunteer from Houghall college.

March 2025 milestones:

- Tree-planting event at Castle Eden Dene for Heritage Coast Team
- Initial conversations with Durham University's conservation society have been promising with interest being shown in potential visits to CED to be arranged for the academic year.
- Volunteer numbers have significantly increased from 48 to 68 to date, of which those regularly active increasing from 30 to 58. Average weekly logged volunteering hours increased from 25 to 85 hours per week.

**Wildlife and Biodiversity detailed outputs:**

1. January 2024 milestones:

- The new warden was trained in the identification of invasive species, including Himalayan Balsam, Snowberry, Rhododendron, Sea Buckthorn and Japanese Rose, and undertook mapping across the project area, using previous INNS assessments / maps as a reference guide.
- A programme for control was drawn up and Balsam removal commenced near Castle Bridge

October 2024 milestones:

- The warden led on Balsam removal during the summer, and mapped key areas for control in subsequent years. Significant areas have now been cleared through the whole dene, including Dene mouth

November 2024 milestones:

- Sea Buckthorn removed at Teesmouth



January 2025 milestones:

- Tree planting began in November
- Volunteers helped to remove Sycamore saplings and plant native species in their place.
- Sycamore, and other woody species, was also removed from meadow areas to prevent succession.

March 2025 milestones:

- Rhododendron removal has been undertaken with regular volunteer groups, including a group from Refugee Futures. So far, a significant area of Rhododendron at the blunts has been cleared.

3. July 2024 milestones:

- SSSI condition assessments were planned at North Gare to monitor the condition of the sand dunes.
- Ash dieback monitoring was conducted across Castle Eden Dene.

October 2024 milestones:

- The warden worked with NE staff to conduct SSSI surveys at Teesmouth, sand dunes and saltmarsh.
- Seed collection of locally sourced target species was undertaken for propagation in the site's tree nursery for future planting.
- Non-native Sycamore saplings were removed from woodland areas within the dene

November 2024 milestones:

- Seed collection of locally sourced target species continued
- Mapping of invasive species continued
- More Sea Buckthorn removed from sand dunes at Teesmouth

January 2024 milestones:

- Native tree species planting continued
- Ash trees affected by die-back were felled

March 2025 milestones:

- All tree planting was completed, with 200 new trees planted in winter 2024/25, promoting native species
- Further Rhododendron control has been conducted, with the blunts identified as the main target area

4. July 2024 milestones:

- Some seepage sites were surveyed and mapped by Andy Godfrey and the warden was trained in the identification of these sites

March 2025 milestones:

- The warden commenced a full survey of seepage / wet flush sites in winter 2024/25, which will be completed in winter 2025/26

### Water Quality detailed outputs:

1. Monitoring of the watercourse for any issues has been conducted throughout the project on an ad-hoc basis as part of the warden's site activities. Revetment improvements and reinforcement of banksides using gabion baskets has reduced erosion of sediment into the watercourse

2. July 2024 milestones:

- Litter surveys were completed in partnership with Seascapes and Marine Conservation Society in May and a litter pick was completed in Teesmouth

October 2024 milestones:

- Assisted Seascapes with beach cleans at Seaton Carew (2<sup>nd</sup> August) and Crimdon beach (15<sup>th</sup> September)

March 2025 milestones:

- Warden has removed several loads of litter and marine debris from Teesmouth NNR Snook and North Gare beach.
- A community litter picking event at Castle Eden Dene was held in late March, linking with the Great British spring clean

January 2025 milestones:

- Monitoring for potential issues has been done routinely on an ad-hoc basis as part of the warden's regular site activities. No issues were identified until a pollution incident during the Christmas break which was reported to EA and NW.

March 2025 milestones:

- Contact has been made with NW to arrange Just an Hour NW volunteering opportunities, and for the warden to liaise with Water Ranger site visits.

**Additional and Secondary Benefits detailed outputs:**

1. Although the Coastal Streams Partnership is no longer operating, the warden continues to monitor the condition of the waterways during regular on-site activity, reporting any issues as they arise.
2. July 2024 milestones:
  - Guided walk with EDF Biodiversity team
  - Joined Teesmouth Field Centre for educational activities with school groups
  - Took part in Seascapes beach cleans
 October 2024 milestones:
  - Worked with partners at County Durham Sport, and NE, to develop Green Social Prescribing opportunities at Castle Eden Dene
  - Attended DHC England Coast Path event at Easington (10<sup>th</sup> August)
 November 2024 milestones:
  - Team grassland management day with NE (24<sup>th</sup> August)
  - Discussed with Springboard plans to run three blocks of six-weekly sessions with their service users to trial a program for groups looking to gain environmental experience. Springboard dropped out, but project has now developed the framework and hope to trial the program with other groups.
 March 2025 milestones:
  - Warden has continued to explore opportunities for volunteering / team building days with partners including NE, NW (Just an Hour), Durham University and Refugee Futures



Image showing the watercourse at Castle Eden Dene (NZ 40900 38800), during December 2024 pollution incident which was reported to EA and NW