

Water Environment Improvements Project Evidence Form

Scope & Purpose

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

Project Name

Carlton Marshes

Project Lead

Company/ Organisation	Named Lead	Contact Details
Suffolk Wildlife Trust	Christine Luxton	Chief Executive

Water Environment Improved

Year	Claimed	Proposed	Reason For Any Change
Year 1	16km	16km	N/A

Project 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 2020	November 2020	N/A
Water Environment Steering Group (Internal)	October 2020	November 2020	N/A
Water Environment Governance Group (External)	October 2020	December 2020	January 2021

Water Environment Project Timescales

Candidate Project Approved	Project Initiated	Project Completed
December 2020*	April 2020	November 2020

*Note approval was retrospective for this project due to the feasibility project taking place late in Year 1

Project Summary and Highlights

Summary

This project has contributed to the creation of a new wetland site located on the outskirts of Lowestoft. The Carlton Marshes wetland is accessible to the public via 16km of footpaths and boardwalks, supports and improves wildlife and biodiversity, and provides extensive visitor and recreational facilities.

The reserve is managed by the Suffolk Wildlife Trust, and comprises grazing marsh, fens, peat pools, short fen meadow, tall fen, dykes, pools and scrub. It is situated in the Waveney Valley at the southern tip of the Norfolk Broads, is designated a Site of Special Scientific Interest (SSSI) and Ramsar Site, and forms part of the Broads Special Area of Conservation (SAC) and Special Protection Area (SPA).

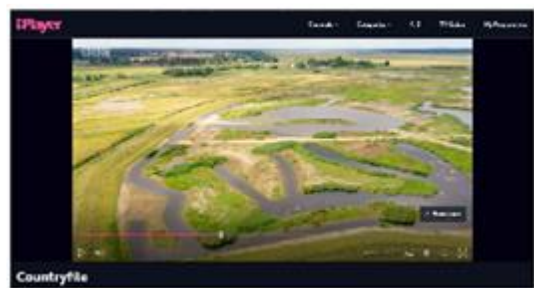
The Carlton Marshes project exemplifies the Lawton principles of 'better, bigger, more and joined', and has reconnected core areas of internationally important habitat. It has created a publicly accessible 1,000 acre (405ha) wetland with all-access tracks, a new visitor centre, a 4ha Wild Playscape to encourage families to explore and play in nature, and viewing hides. It has already had record numbers of breeding waders in the recently created scrapes including Avocets, Marsh Harrier, Lapwing, Redshank and territories of Bittern and Grasshopper Warbler.

The project has been supported by NWG since its inception, due to the benefits it brings to wildlife and biodiversity and visitor access for customers.

The new wetland and visitor centre, and the extensive network of footpaths and boardwalks with associated visitor facilities was opened in November 2020 and is anticipated to attract 120,000+ visitors per year.

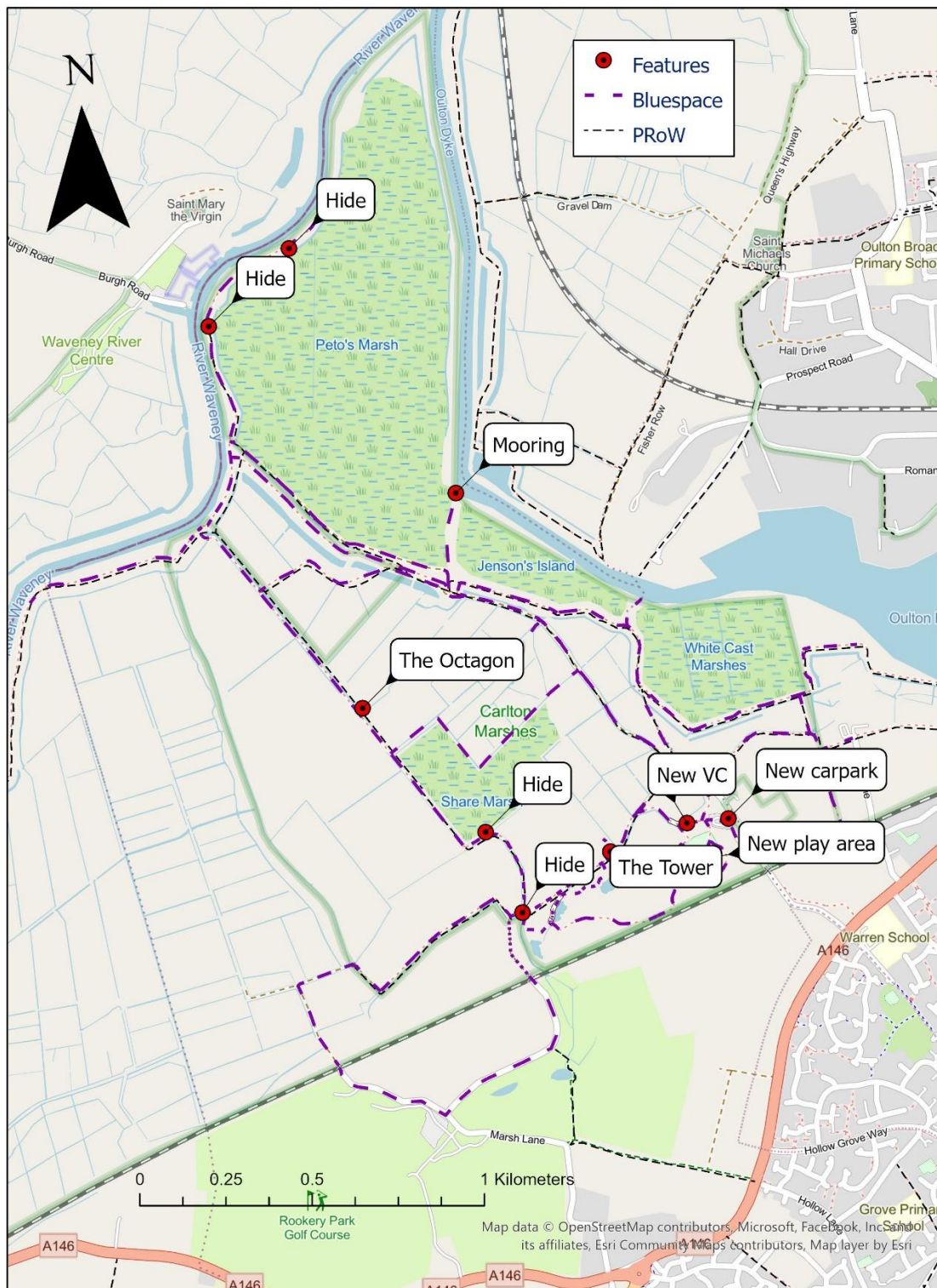
Highlights

- The visitor centre and reserve provide vital outdoor space for local people and visitors. It has been designed with people in mind, to offer the visitor infrastructure and close-up wildlife experiences needed to connect people to the natural world and inspire them to play their part in its future.
- Year-round (Covid-19 permitting) nature activities for families, a comprehensive learning programme and a suite of interpretation to help visitors to understand and value water and wetlands.
- The 2020 calendar year, during and after the creation of the wetland scrapes and open water, has been Carlton Marshes most successful year for breeding waders, and this is one of the huge successes of the project. Notable species include:
 - 25 pairs of Avocet
 - 20 pairs of Lapwing
 - 14 pairs of Redshank
 - Nesting Little Ringed Plover
 - 3 pairs of Marsh Harrier
 - 2 booming Bittern
 - 10 territories of Grasshopper warbler
 - Visiting Spoonbill and cranes
- For the second year running Carlton Marshes was runner up in the Countryfile magazine awards which are nominated by readers



Carlton Marshes featured on BBC Countryfile which reaches 6-7 million people each week, and on Anglia TV News – part of a regional feature on nature in lockdown and the important role of places like Carlton Marshes

Carlton Marshes



Total Length of Accessible Water Environment: 16km

Figure 1: Map of accessible water Environment at Carlton Marshes



Figure 2: Creation of new wetland habitat at Carlton Marshes



Figure 3: Overview of works at Carlton Marshes

Project Outputs, Benefits & Evidence Against Criteria

Access, Facilities & Recreation	
Outputs	Benefits
<ul style="list-style-type: none"> Natural, all weather and disabled access paths Viewing hides constructed with locally sourced and milled oak frames and larch cladding Network of viewpoint structures and interpretation New visitor centre opened in November 2020 Wild 'playscape' Extensive educational programme: to date, 3951 school children involved in learning activities on the reserve 214 events or activities held and 2000 volunteer days dedicated to the project so far 	<ul style="list-style-type: none"> ➤ A1: Increased access to, engagement with and enjoyment of the water environment through: <ul style="list-style-type: none"> ○ Free and accessible facility for all members of the public ○ Enhanced visitor experience at the site ○ Enjoyment and appreciation of the natural environment through enhanced biodiversity and wildlife ➤ A2: Benefits health and wellbeing through: <ul style="list-style-type: none"> ○ Engagement with nature provided at the site ○ A focal point to socialise in nature, with facilities including refreshments ➤ A3: Influences positive environmental behaviours through: <ul style="list-style-type: none"> ○ Environmental education and awareness, including the opportunity for NWG to engage with customers around water use and management

Expected Project Outcomes
<ul style="list-style-type: none"> Carlton Marshes is becoming one of the UK's premier nature destinations with free access and wildlife enjoyment attracting an anticipated 120,000 visitors per year Year-round nature experiences and educational programme around wildlife and water for adults and children

Evidence



Carlton Marshes Visitor Centre



Carlton Marshes viewing hides and structures



Network of paths and signs at Carlton Marshes

Summary of engagement - cumulative reach to August 2020

Activity	Description of activity	No. sessions	Total no. participants	
D1	Marsh on the move	Community outreach programme	113	15,346
Activities at Carlton Marshes				
D2	Weekend pop-up cafe			1814
D7	Wild Poems	Wild Writing workshop for children	1	9
		Wild Poems workshops with schools	6	39
D9	Discovery Days	Themed pre-book sessions for community groups	10	174
E4	Wild Walks	Lunchtime wellbeing walks, health walks, themed wildlife walks, walks for community groups	35	424
L1	Drop-in activity sessions for adults & children	Local families (adults & children together)	7	494
L2	Wild kids – booked activities (6-11s)	Themed holiday, weekend & evening sessions for 6-11s or families	35	364
L3	Wild kids – regular clubs	Weekend or afterschool clubs for 5-11s	16	95
L4	Weekly weekday preschool sessions	Wild Babies group for parents & under 2s	83	696
		Wild Tots group for parents & under 5s		
L5	Wild skills for teens (11-16s)	Booked, small group courses & activities for teens	5	63
L6	Adult courses	Themed courses for adults	14	226
L7	Teacher training	Training sessions for education professionals	2	50
L8	Wild schools	School visits	96	3951
L9	Really wild schools	Activity programme to develop local 'twinned' schools	-	-
Volunteering				
V1 & V4	Wild Guides & Walking wardens	Volunteer time dedicated to visitor engagement	591.5 days	
		Volunteer time dedicated to learning activities	286.5 days	
V2	Reserve volunteers	Volunteer time dedicated to habitat work	452.5 days	
V4	Survey Team	Volunteer time dedicated to ecological monitoring	263.5 days	
V5	Team Wild	Volunteer opportunities for teens	16	67



Wildlife & Biodiversity

Outputs	Benefits
<ul style="list-style-type: none"> • Extensive wetland creation supporting breeding wildfowl • Swift boxes and bat roosting opportunities built into the visitor centre • Nest cameras installed on bird nesting boxes and at a feeding station • 21ha fen meadow created, 37.5ha of reedbeds and 58.5ha of wet grazing marsh 	<ul style="list-style-type: none"> ➤ B1: Improves the quantity, quality and connectivity of habitats through: <ul style="list-style-type: none"> ○ Habitat creation ○ Enhanced nesting and roosting opportunities for Swifts and bats ○ Restoration and management of existing dyke systems ➤ B2: Improves the conservation status and or abundance or distribution of species through: <ul style="list-style-type: none"> ○ Supporting breeding wetland birds such as Avocet, Marsh Harrier and Lapwing ○ Supporting SAC designated invertebrates

Expected Project Outcomes

- A regionally significant wetland habitat
- Range extension and species populations boosted

Evidence



Extensive areas of wetland scrapes, pools, dykes and marsh created at Carlton Marshes



Nesting boxes with cameras installed throughout the reserve (taken from SWT annual report for Branch Out)



Swift boxes, before & after the larch cladding

Swift boxes created into the cladding of the visitor centre (taken from SWT annual report for Branch Out)

Water Quality

Outputs

- Foot drains and turf pond creation
- Purchase of an additional 13.1ha land for grazing marsh and dyke adjacent to Share Marsh resulting in improved land and water management

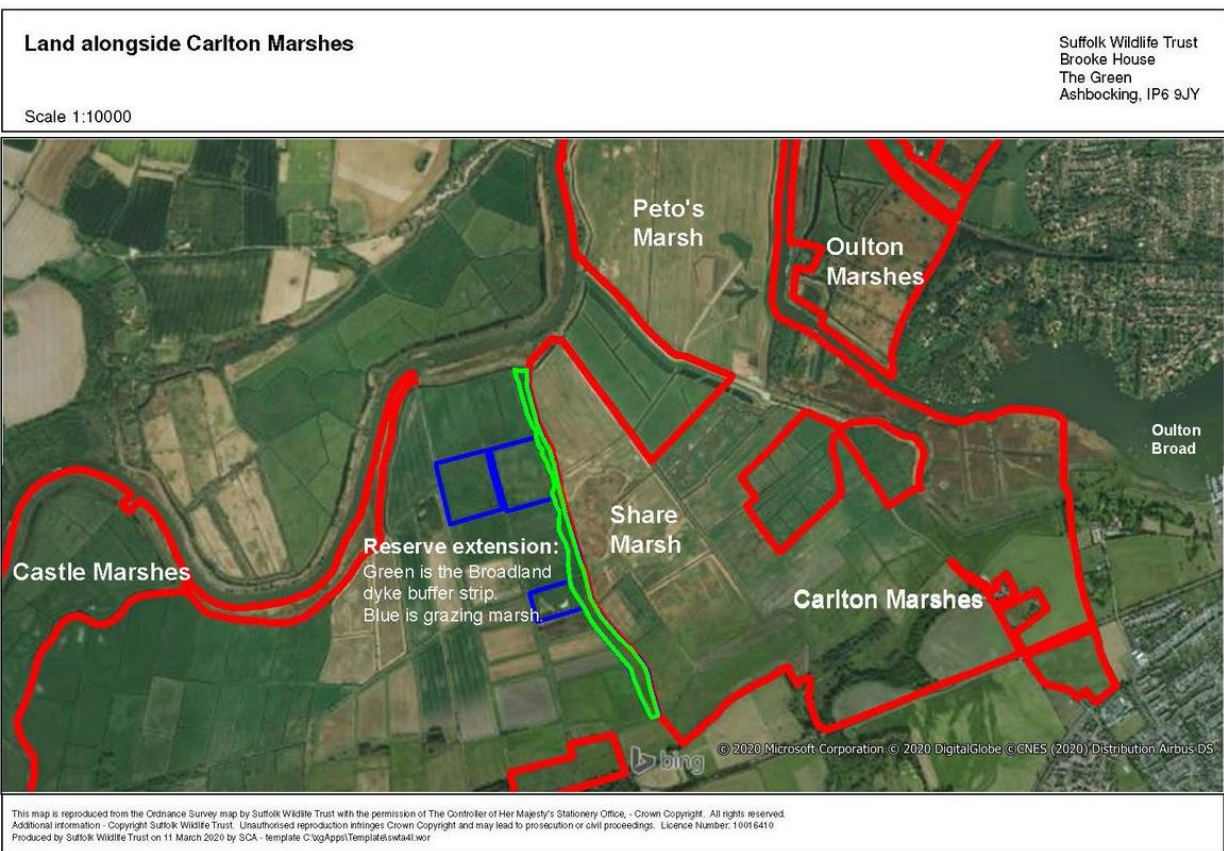
Benefits

- C1: Reduces pollutants entering waters from point or diffuse sources through:
 - Drains and ponds reducing flow of pollutants into the wetland
 - Improved land and water management influence the quality and quantity of water flowing into the site

Expected Project Outcomes

- Improved water quality within the site delivering benefits to people and wildlife

Evidence



Land (in blue), adjacent to Share Marsh acquired by SWT following match funding provided by NWG in 2020

Additional & Secondary Benefits	
Outputs	Benefits
<ul style="list-style-type: none"> • River embankment works for flood alleviation • Carbon capture and sequestration in wetland habitat • Additional boat mooring facilities 	<ul style="list-style-type: none"> ➤ D1: Provides resilience and adaptation to climate change and reduces the risk of flooding through: <ul style="list-style-type: none"> ○ Flood protection benefits through river embankments and planned overtopping of the river walls during tidal surges ○ Adaptation and mitigation for climate change through carbon capture ➤ D3: Provides benefits to the community, the local economy or NWG employees through: <ul style="list-style-type: none"> ○ All access reserve located close to Lowestoft and NWG offices
Expected Project Outcomes	
<ul style="list-style-type: none"> ▪ Contribution towards national climate change targets ▪ Wetland enjoyed by local communities 	
Evidence	
<p><u>25 June</u></p> <p><i>Out of 20 conversations in the morning, three were with residents from Carlton Colville who had lived there all their lives and who had never visited the Marshes. One of them was an ex-local postman</i></p> <p style="padding-left: 40px;"><i>'I'd been told about the marshes by another postman but in all my 32 years on the job I had never ventured down burnt hill lane. Today is my first visit'</i></p> <p><i>Four conversations were with residents from Oulton Broad who had discovered the reserve since lockdown and had made it their daily walk along the river wall and footpaths. One single woman had returned with a camera determined to find and photograph Chinese water deer.</i></p> <p><i>One young couple from Carlton Colville said</i></p> <p style="padding-left: 40px;"><i>'We found out about what was happening down here through the murals in town. I absolutely love them and they give people in the town some uplifting and colourful to see each day. Are there going to be any more please?'</i></p> <p><i>One couple had moved to the area in the last 6 months specifically to be closer to wildlife and nature reserves.</i></p> <p><i>One elderly couple who lived in Worlingham had contributed to the land purchase appeal and were on their first visit to see what it was like.</i></p> <p><i>One couple from Lowestoft had been visiting the reserve every day since lock down.</i></p> <p><i>Mr Phillippo joined the Trust stating</i></p> <p style="padding-left: 40px;"><i>'I've been using the reserve each day to walk 'dodger'.</i></p> <p style="padding-left: 40px;"><i>We get a lot of enjoyment from what you are doing here so we want to join.'</i></p>	

30 June 2020

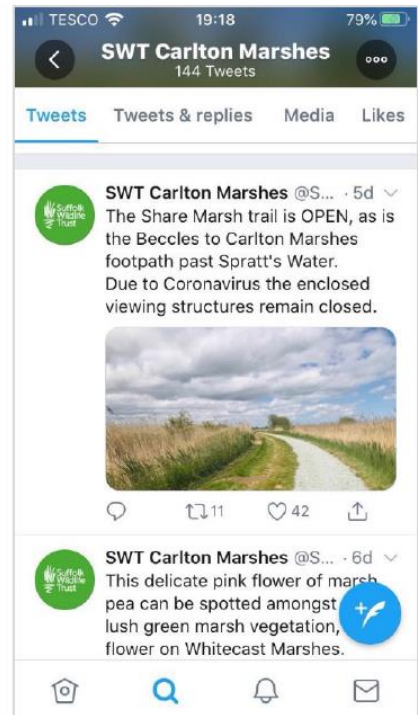
'I've been walking down here most days since lockdown and have been meaning to join.'

We've come up from London to visit my mum. I googled 'the Broads' but it seemed too far away. That's when I noticed Carlton Marshes and remembered I came here on a school trip from Halesworth 30 years ago. We'll be back!

'I love the peace and quiet after a hard day at work. The grandkids love it. We taught our granddaughter to tally and count slugs. I think once she counted over 120 on the river wall!'

Residents discovering and enjoying Carlton Marshes

Customer Testimonies & Media



Lead Partner Quotes & Testimonials

Christine Luxton, Chief Executive (January 2021):

NGW/ Essex and Suffolk Water are a natural partner to share our ambition for Carlton Marshes to become one of the region's most important wetlands. Transforming bean fields into a water-filled landscape of pools, dykes, grazing marsh and reedbed has demonstrated what strong partnerships for nature can achieve. As water flowed back into the landscape, so too did wildlife, bringing the sheer abundance and spectacle of nature that is missing from so much of our countryside – and from our daily lives. During 2020, Carlton Marshes has offered an escape into nature for the communities on our doorstep, showing just how important places like Carlton Marshes are for people and for nature – and what can be achieved when we work together.

Ben McFarland, Head of Conservation (January 2021):

Since we created the new wetlands at Carlton, we've had an incredible response from wildlife. Breeding waders took a liking to the new reserve very quickly, with lots of nesting lapwing and avocet. We've had hundreds of ducks and geese using the site this winter and we've also been very lucky to have a number of rarer birds visit, such as the beautiful and exotic looking glossy ibis. Carlton is now also one of the very best nature reserves for dragonfly in the whole of the UK, with 28 different species. Support and funding from NGW/ Essex and Suffolk Water has played a vital role in achieving this.

Other Supporting Evidence

A few words from volunteers about what the marshes meant to them during C-19

Sarah:

"We exercised on the marshes every day during lockdown as a family, and continue to do so as restrictions ease. We've found real calm out there and been aware of noticing more details of the wildlife and the changing seasons this year (Despite the increasing numbers of visitors and the minority causing problems!!) Surveying wildlife has been a respite from the NHS situation for me. I could sit on Share Marsh and forget anything has changed in the world for a while. The spiders Saturday was a revelation-having your teenager teach you to recognise and survey spiders-passing on what he learnt from Ellen was quite amazing! "

Kevin:

"A beautiful, safe place to sit and lose yourself and all your worries while the rest of the world goes mad. Without it and all the super wildlife I know I would be in a very dark place.

Rob:

"Being able to go to the Reserve during lock down has been crucial to me as it highlights the importance of being a great benefit to my mental well-being and health.

Chris:

"Once lockdown was eased so I could venture out I headed straight to Carlton Marsh , it has made so much difference since to be able to visit. It felt as if life once again had more purpose, I felt the calming effect of the birds singing and by the end I felt more happy and far more relaxed."