

# Staffordshire Wildlife Trust Reserve Management Plan

2015 to 2025



## Croxall Lakes

A former quarry restored to now act as an important site for breeding and wintering birds, situated in the heart of the Central Rivers Living Landscape.



Photo credit: C Hayes

Date written	12/03/2015
Date last reviewed	23/10/2015



Working for a Living Landscape

# Contents

Reserve description	3
Location and conservation status	4
Reserve information	
Map: Reserve location	
Statutory designations	
Non-statutory designations	
Map: Reserve boundary and designated sites	
Aims of the management plan	6
A place for wildlife: key species and habitats	7
A place for wildlife: objectives	8
Map: Area actions	
Map: Targeted actions	
A place for people: key messages	11
Key messages	
Target audiences	
A place for people: objectives	12
A place for people to learn	
A place for people to discover	
Map: A place for people: objectives	
Planning for climate change	15
Demonstrating success	16
A place for wildlife	
A place for people	
A place for wildlife: work plan	19
A place for people: work plan	21



# Reserve description

Croxall Lakes is a former sand and gravel quarry, acquired by the Trust in 2006. The reserve is located one and a half miles east of Alrewas and four miles south of Barton-under-Needwood. The reserve neighbours the National Memorial Arboretum (NMA) and is at the confluence of the River Tame, River Meese and River Trent.

The mainline cross country railway splits the reserve in to two distinct areas to the west and east of the line. The west side is dominated by a 32 acre steep sided basin lake originally intended for recreational use. Overall, the post-extraction restoration of the site left a relatively poor diversity of wetland habitats for wildlife.

Since acquiring the reserve, the Trust's main aim has been to create a site for wintering wildfowl and breeding waders. The reserve now attracts good numbers of wintering waterfowl including pochard, tufted duck and goldeneye, whilst breeding waders include oystercatcher, lapwing and redshank. The reserve also holds up to nine breeding species of warbler and occasionally pairs of common tern, black-headed gull and little-ringed plover.



The reserve lies within the Central Rivers Initiative, one of the Trust's Living Landscapes partnership projects working to shape and guide the progressive restoration and revitalisation of the river valley for the benefit of wildlife and people along its course between Burton, Lichfield and Tamworth.

In 2009, the Trust worked with Environment Agency, Natural England, Lafarge Aggregates and others to undertake an ambitious project to restore a 540 metre section of the river corridor through a process known as re-braiding. The images below show the north section of the reserve before in 2003 (left) and several years after in 2013 (right).



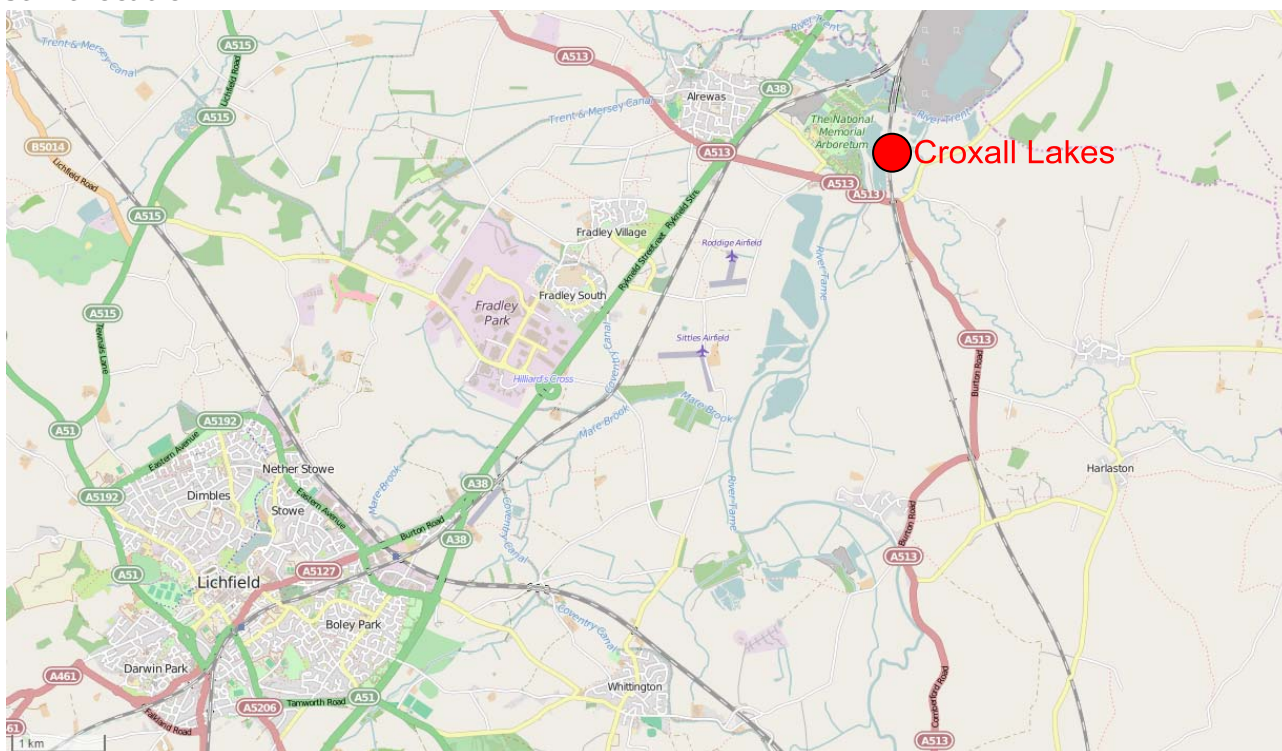
Due to the wildlife experiences it offers, and the good levels of access via main roads from large population centres, including Lichfield, Burton-upon-Trent and Tamworth, the reserve is one of Staffordshire Wildlife Trust's flagship reserves. The reserve is well visited by birdwatchers and dog walkers but currently offers limited interest to families.

# Location and conservation status

## Reserve information

Reserve size	101 acres / 41 hectares
Entrance grid reference	SK 189 138
Nearest post code	WS13 8QX (Mytholme Cottage)
Local authority / Parish	Lichfield District Council / Edingale CP

## Reserve location



Reserve status	Flagship (Tier 1) <sup>△</sup>
Living Landscape	Central Rivers Initiative <sup>△</sup>
National Character Area <sup>△</sup>	Trent Valley Washlands

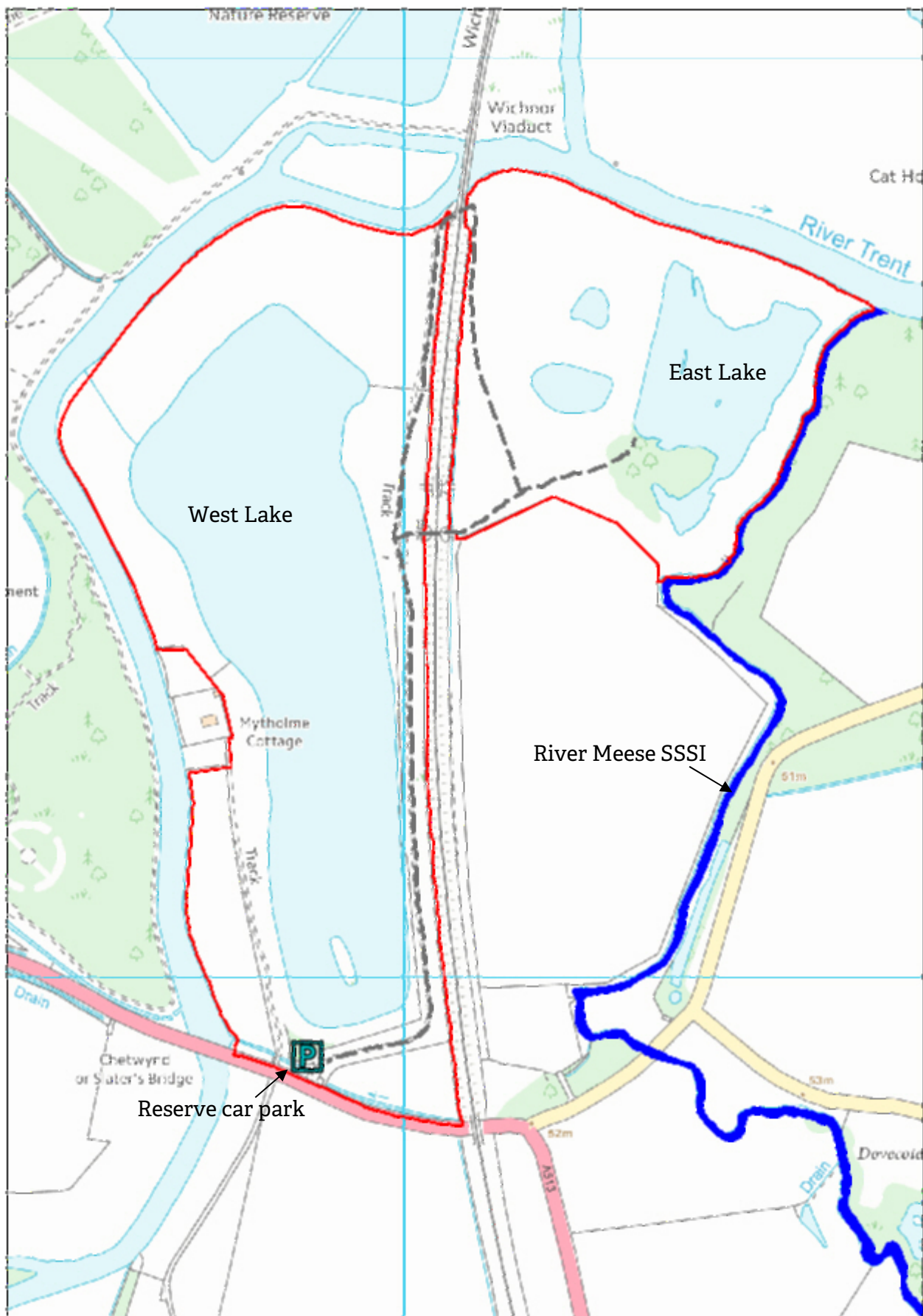
## Statutory designations

The reserve has no statutory designations but does border the River Meese SSSI (unit 1). See the accompanying map for details.

## Non- statutory designations

The reserve has no non-statutory designations.

## Reserve boundary and designated sites



□ Reserve boundary

■ Sites of Special Scientific Interest (SSSI)

--- Permissive paths

# Aims of the management plan

This plan aims to set out our vision and priorities for the nature reserve over the next 10 years. Some of the planned works are essential for wildlife, people or statutory reasons, whilst other works may be aspirational and will be delivered as the Trust's priorities and resources allow.

The objectives outlined in each section of this management plan have been allocated a number between 1 and 3, based on the criteria outlined below:

- ❶ These objectives are key planned work the Trust undertakes for wildlife, people or statutory reasons. They are the Trust's main priorities for the reserve and, where ever possible, should be achieved.
- ❷ These objectives are a priority to be completed, but will require additional funding or consent from other organisations to undertake. If funding can't be sourced, some of these objectives may not be achieved.
- ❸ These objectives aren't essential to manage the reserve for wildlife, people or statutory reasons but would complement key planned work. They will be completed as resources allow

# A place for wildlife: **key species and habitats**

The Trust's reserves should act as a first class example of their habitat(s) and be places where wildlife can flourish. Each reserve has its own range of key species and habitats which are the main features of the reserve as a place for wildlife. The habitats and species listed below are not exhaustive, but should be the priority for resources and management.



## **Breeding waders**

## **Primary interest**

The reserve's areas of wet grassland, islands and reprofiled river offer opportunities for breeding waders, especially lapwing and redshank. Management of these areas will focus on creating and maintaining the conditions required to attract breeding waders.

Several other wader species also occur on migration.



## **Wintering wetland birds**

## **Primary interest**

The restored quarries along the Tame and Trent river valleys are an important wintering area for wetland birds, particularly ducks and geese. In winter, the reserve holds large numbers of tufted duck, pochard and teal.

The surrounding farmland is often used by a large herd of swans, which occasionally include whooper swan and bewick's swan.



## **Breeding warblers**

## **Secondary interest**

Parts of the reserve are dominated by areas dense scrub, particularly along the railway embankment and southern end of the West Lake.

These areas are not suitable for breeding waders or wintering wetland birds, but instead do support a high numbers of breeding warblers, with up to nine species regularly recorded.

# A place for wildlife: objectives

Croxall Lakes is an important area for wetland birds, and part of a larger network of potential wildlife habitat comprising farmland and restored quarries. The aim is to maintain the reserve in a favourable condition for the reserve's bird life; breeding waders and wintering wetland birds.

## Objective 1 Maintain wet grassland in favourable condition for breeding waders

- ❶ Manage wet grassland by grazing with cattle to maintain sward<sup>△</sup> between 5cm – 15cm suitable for breeding waders covering at least 80% of the area
- ❶ Control rushes in sward by mowing outside the bird breeding season to maintain cover of up to 20% of the area
- ❶ Control in-field scrub and remove scrub around waterbodies as necessary
- ❶ Control invasive and non-native flora species

## Objective 2 Improve the lakes and islands for birds

- ❶ Clear islands of scrub to encourage breeding waders
- ❶ Coppice, on rotation, scrub and trees around east and south shoreline of the West Lake to keep them low to reduce corvid vantage points and improve structure for breeding warblers
- ❷ Where suitable, create small pockets of reedbed along shoreline
- ❷ Install and then maintain floating tern nesting rafts on the West Lake

## Objective 3 Manage semi-improved species rich / rough grassland for wintering birds

- ❶ Manage grassland by grazing with cattle to improve botanical interest of the sward<sup>△</sup>
- ❶ Manage wet grassland by grazing with cattle to maintain sward<sup>△</sup> suitable for breeding waders and wintering birds, with the sward being between 5cm – 15cm in April and May,
- ❸ Control in-field scrub and remove scrub from around waterbodies as necessary
- ❸ Control invasive and non-native flora species

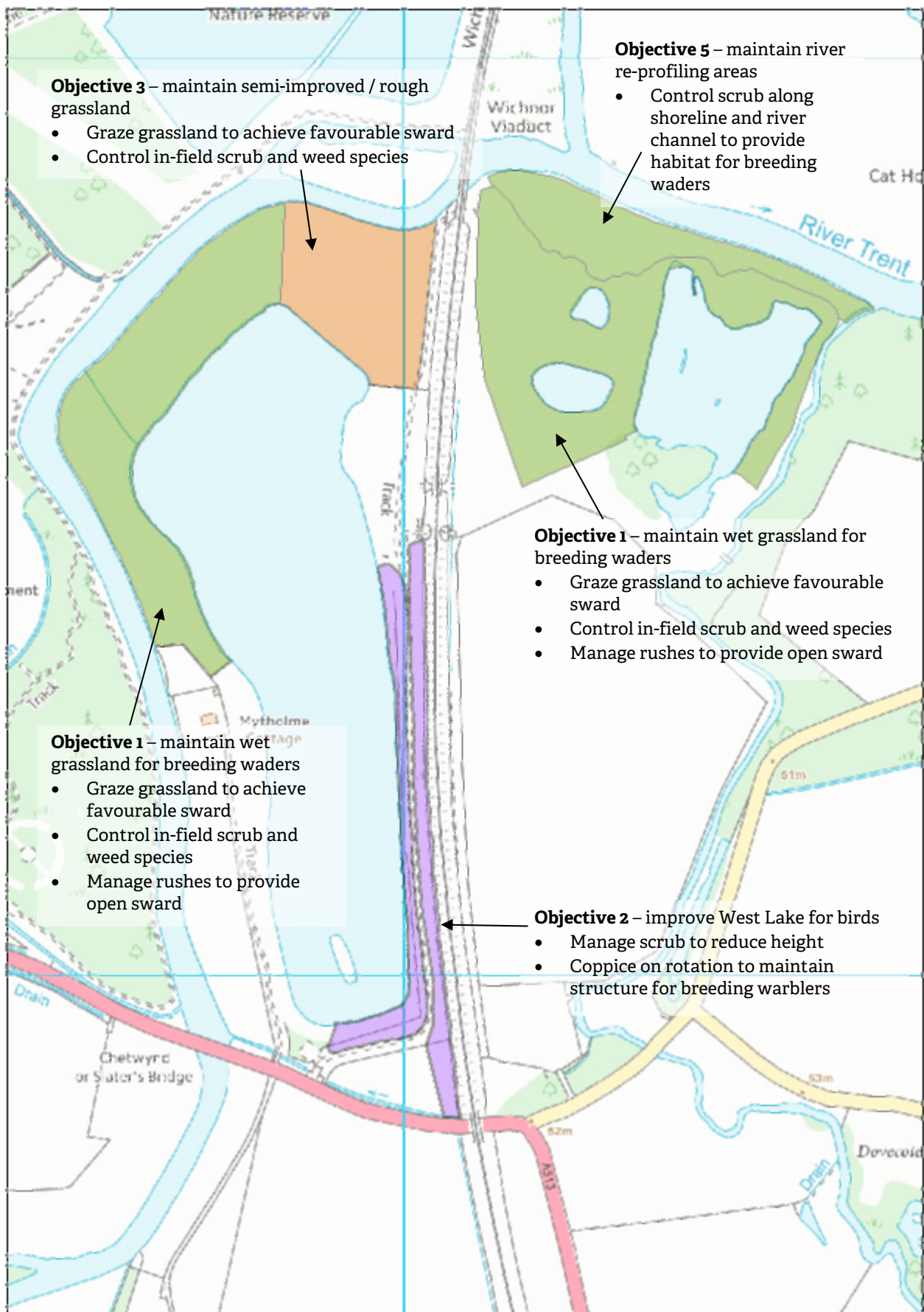
## Objective 4 Restore area near car park to create new visitor focused wetland exploration area

- ❷ Restore pools near car park to create wetland exploration area
- ❸ Manage and maintain areas of scrub for breeding birds
- ❸ Maintain grassland to improve botanical interest

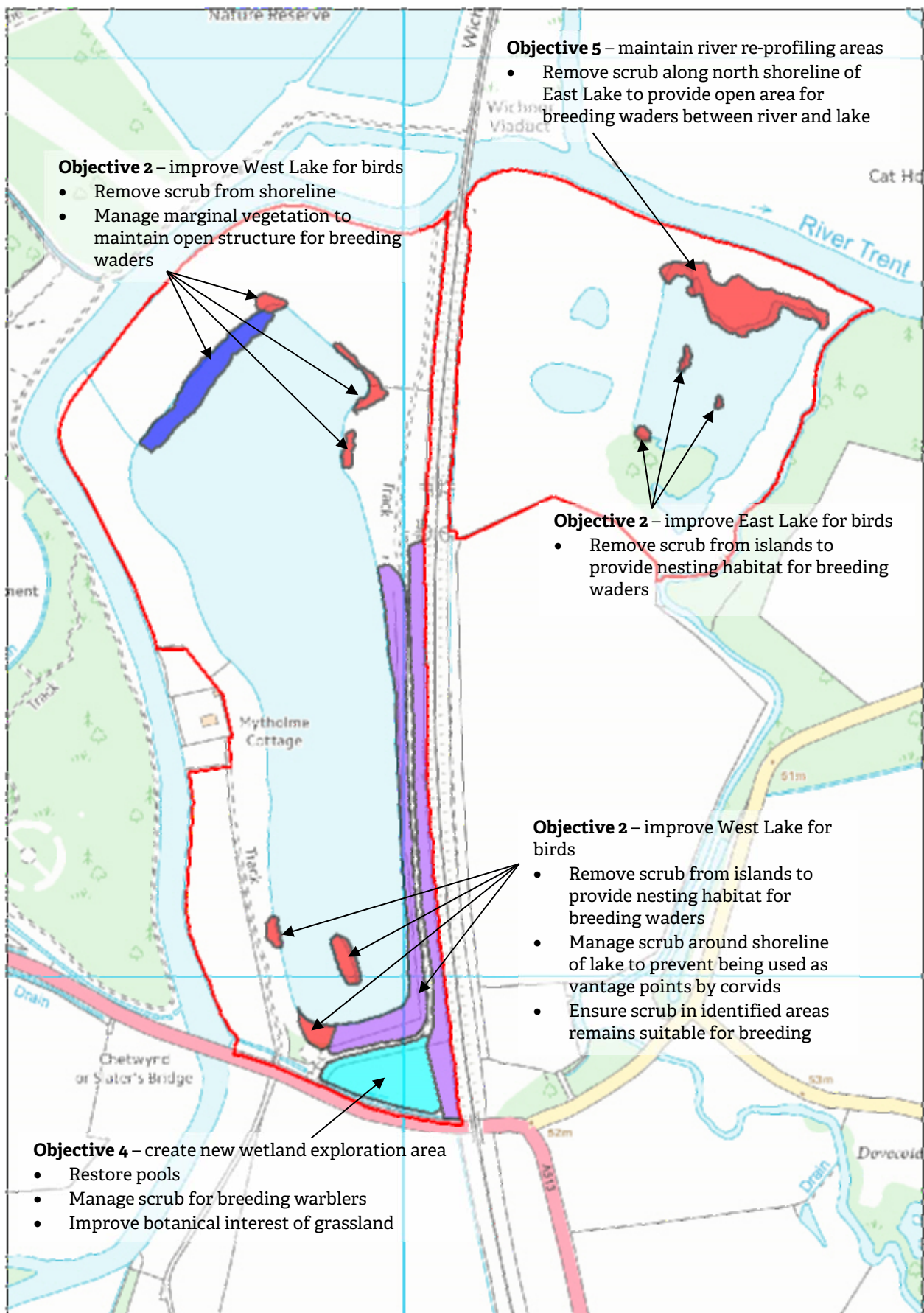
## Objective 5 Maintain the river re-profiling areas for waders

- ❶ Keep north shoreline of East Lake and link channel between West Lake and river channel clear of scrub to keep open habitat for waders





- Reserve boundary
  Habitat for breeding waders
  Habitat for breeding warblers
- Semi-improved species-rich / rough grassland



- Reserve boundary
- Scrub control
- Scrub management
- Wetland exploration area

# A place for people: **key messages**

Every Trust reserve has the potential to inspire people to value wildlife and habitats, and support the work of the Trust. In order to achieve this, each reserve has key messages that should form the focus of all of our work with people at the reserve.



**The reserve is primarily managed for wetland birds, especially breeding waders such as lapwing, redshank and snipe.**

All three of these main wader species have suffered a long term decline in their population over the last 40 years. The reserve is one of several sites along the river valley that are being managed for breeding waders either by the Trust or other land owners.



**At the end of their working life, quarries in the Tame and Trent river valleys offer great potential for wildlife and people.**

If correctly restored, quarries can become fantastic habitat for wildlife to thrive. The quarries in the Tame and Trent river valleys are most likely to be restored to wetland habitat including lakes, reedbeds and wet grassland.

The restored sites also have great potential to become great places for people to experience wildlife and enjoy it.



**The Trust is the leading wildlife conservation organisation in the county, helping to restore the Tame and Trent river valleys as a Living Landscape.**

Croxall Lakes is just one of a number of sites that the Trust is working to restore the river valleys as places for wildlife and people.

The Trust is the leading partner in the Central Rivers Initiative, a Living Landscape aiming to create a sustainable network of wildlife habitats, public amenities and agricultural land along the river valleys.

## Target audiences

The Trust aims to promote responsible and appropriate levels of access to all its reserves, which can include either creating new access routes or restricting access completely. The following target audiences are those which the Trust would actively promote the reserve to, or make improvements for (ie. bird hides for birdwatchers, all-ability paths for wheelchair users etc.)

The Trust acknowledges that many other users groups use the reserve.

Primary	<ul style="list-style-type: none"> <li>• Birdwatchers (adults)</li> </ul>
Secondary	<ul style="list-style-type: none"> <li>• Families, confident in the outdoors and interest in wildlife, with children aged 7+</li> <li>• National Memorial Arboretum (staff, volunteers and visitors)</li> </ul>
Other users	<ul style="list-style-type: none"> <li>• Dog walkers</li> </ul>

# A place for people to discover: objectives

This section covers objectives aimed at improving the quality of self-led, everyday visits.

Croxall Lakes is already a popular and well known site for birdwatchers, and is well used by dog walkers. The aim is to increase the Trust's engagement with the target audiences and extend the appeal of the reserve to family visitors.

Objective 1 Improve the quality of the visit for the primary target audiences	
<b>Families</b>	<ul style="list-style-type: none"><li>② Soil and seed most of the road track to create a meandering path that goes to the features</li><li>③ Break up concrete pads by West Hide and install picnic benches</li><li>② Replace West Hide with larger, more open hide on the water's edge near the millennium sculpture</li><li>③ Replace gate through tunnel onto field with a wooden gate positioned further to the left</li><li>② Replace all wooden kissing gates with larger metal kissing gates</li><li>③ Increase directional signage</li><li>② Replace path under railway bridge with boardwalk</li><li>② Install a self-guided family wildlife discovery trail</li><li>② Create visitor focused wetland exploration area, including boardwalk, pools, picnic tables</li></ul>
<b>Birdwatchers</b>	<ul style="list-style-type: none"><li>① Install viewing screen opposite island on West Lake</li><li>① Open further views onto the West Lake from the path</li><li>① Keep view from East Hide open but screen access to hide to prevent disturbance to birds</li><li>② Install raised viewing platform with seating overlooking the river re-profiling area</li><li>① Add interpretation of the wildlife to hides and viewing areas</li></ul>

Objective 2 Raise awareness, appreciation and support for the Trust and its work	
	<ul style="list-style-type: none"><li>① Install new welcome interpretation board with wildlife information and dog access information</li><li>② Replace millennium sculpture interpretation board with a wildlife interpretation board in vicinity that mentions the sculpture</li><li>① Include a membership request in at least one piece of interpretation</li></ul>

Objective 3 Increase visibility from the road	
	<ul style="list-style-type: none"><li>① Manage scrub and trees between car park and road to create window of view</li><li>② Install new reserve welcome signs at entrance to car park from main road</li></ul>

Objective 4 Increase the Trust's presence to visitors to the National Memorial Arboretum (NMA)	
	<ul style="list-style-type: none"><li>② Create a reserve leaflet and ensure it is stocked in the NMA visitor centre</li><li>③ Run biannual guided walk for NMA staff and volunteers</li></ul>

# A place for people to learn: objectives

This section covers objectives aimed at improving the experience offered through events and activities led by Trust staff and volunteers.

Croxall Lakes is already a popular and well known site for birdwatchers, and is well used by dog walkers. The aim is to increase the Trust's engagement with the target audiences and extend the appeal of the reserve to family visitors.

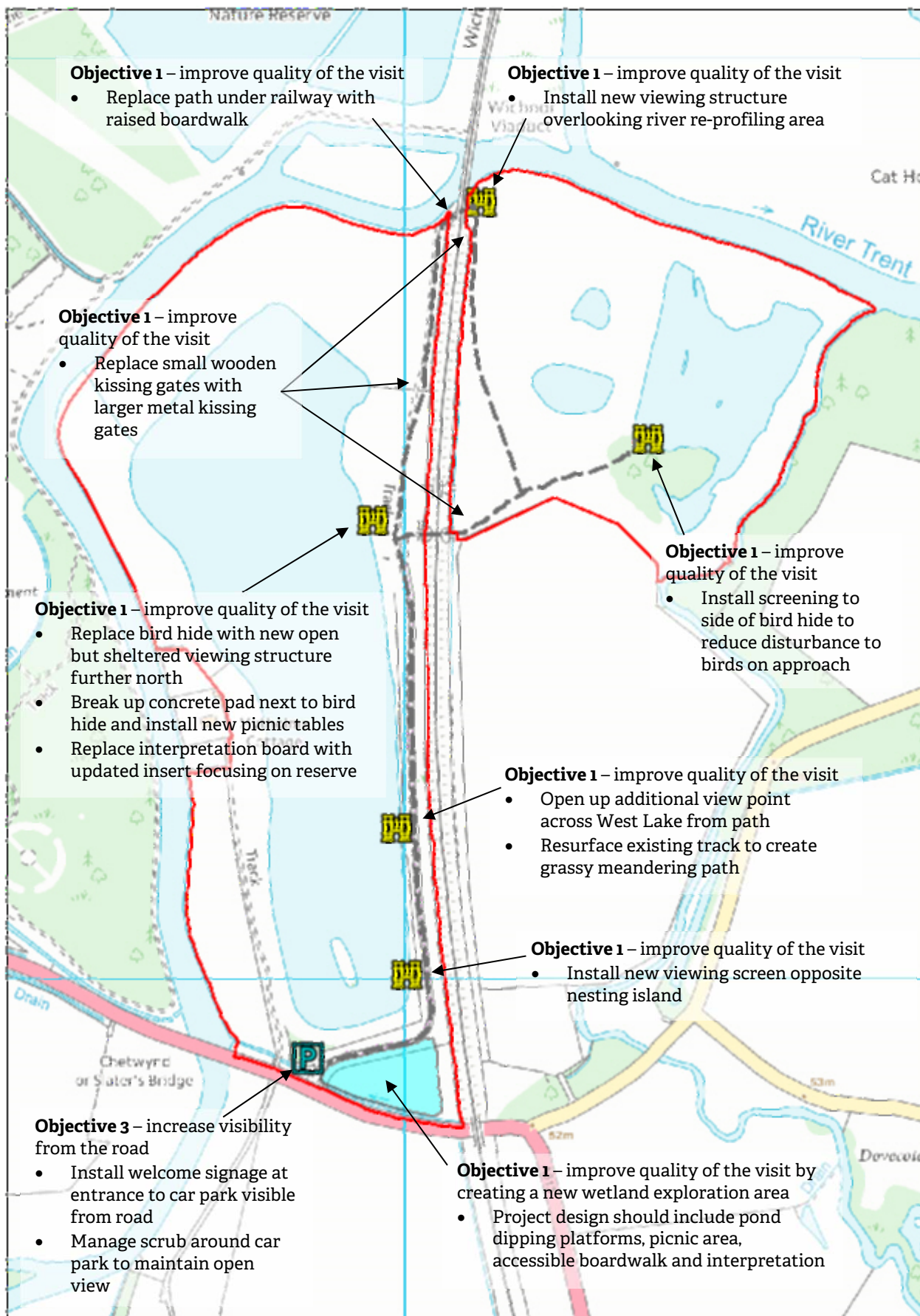
**Objective 5** Provide led opportunities for people to experience the wildlife of the reserve

- ❶ Hold at least three guided wildlife events annually
- ❷ Recruit wildlife guide volunteers to man the hides at weekends

## **Formal education visits** <sup>△</sup>

Croxall Lakes is a popular and well known site for general visitors, but has limited potential for the Trust to offer more structured formal education visits to schools and colleges as part of the Trust's formal education programme.

No additional improvements will be made to the reserve to accommodate formal education visits, nor will the reserve be actively advertised as part of the Trust's formal education programme. Should a school, college or other education provider seek to book a formal education visit to this reserve, the Trust will always attempt to accommodate the request when possible.



- Reserve boundary
  Viewing structure
  Permissive paths
- Wetland exploration area

# Planning for climate change

The Trust acknowledges that climate change could impact our reserves in many ways, potentially affecting the species using them and the level of management required to maintain the habitats.

Natural England has produced a Climate Change Adaptation Manual for guidance on mitigating impacts of climate change on specific habitats. The habitats and potential impacts for this reserve are outlined below. The full document can be viewed as document number NE546 at <http://publications.naturalengland.org.uk/>

## **Coastal floodplain and grazing marsh** (sensitivity: medium)

- Warmer summers may encourage an earlier growing season leading to less favourable conditions for ground nesting birds, particularly waders which are a priority species group for the reserve. Drier summers may also reduce food availability for breeding waders
- Changes to flood inundation through wetter winters could affect the suitability of the reserve for wintering birds, whilst the associated ground conditions may create difficulties for grazing livestock to access the reserve. An increase in unseasonal flood events could also impact the productivity of breeding waders and warblers

## **Standing open water** (sensitivity: high)

- An increased frequency of storms may lead to an increase wave erosion damage along the shorelines of larger waterbodies
- Higher annual temperatures may lead to increased occurrence in blooms of 'blue-green algae' as well as altering the suitability of the waterbodies for phytoplankton and macrophytes. Higher temperatures and periods of drought may also lower dissolved oxygen levels and increase stress on marginal plants

The Trust's habitat management of the reserve will help address many of the key adaptation options noted for helping to limit the impacts of climate change on the habitat.

The Trust will annually review its grazing regime on the reserve to promote conditions for breeding waders. The creation of new areas of reedbed around the shoreline of the larger lakes will help to reduce the impact of wave erosion, as well as improving water quality and providing a vital habitat for breeding warblers and invertebrates.

Management work already completed to restore the river corridor along the edge of the reserve will help address issues of flooding by creating a more natural flood system.

# Demonstrating success

The objectives and resulting work detailed in this management plan are intended to make a positive impact on the reserve, whether they act as a place for wildlife, a place for people or both.

In order to evidence the impact of the management and ensure that the impact is positive, the Trust aims to undertake structured monitoring looking at the attributes for the objectives. The monitoring results will also help to review, and where necessary amend the current management plan period and provide evidence to inform future management of the reserve.

The main attributes and objectives are listed on the accompanying tables. From time to time, the Trust may occasionally undertake additional surveys and monitoring to help inform management.

## **A place for wildlife**

The targets listed are intended to provide a realistic and achievable measure of the impact of the reserve's management. Figures, timescales and methods are taken from the existing requirements, such as the Trust's environmental stewardship agreements or best practice guidelines such as JNCC's Common Standards of Monitoring Guidance documents. Where no such reference exists, the Trust consults with experts and partner organisations.

## **A place for people**

The targets listed are intended to provide a realistic and achievable measure of the impact of the Trust's work with people. As little guidance exists for the best practice of monitoring work with people, the Trust's aims to focus monitoring on collecting quantifiable data that can demonstrate an impact, such as number of visits, proportion of people visiting for specific reasons or whether they would recommend a visit to the reserve to others.

The Trust will continually review and update all aspects of its monitoring work to ensure that the data obtained is able to provide an evidence base.



Attributes	Targets	Monitoring methods Consult highlighted methodologies for more details	Monitoring frequency	Priority
<b>Objective 1: Maintain wet grassland in favourable condition for breeding waders</b>				
Breeding waders	<ol style="list-style-type: none"> <li>1. Key species present during breeding season and behavior indicating that they are breeding</li> <li>2. Establish baseline using CSM*</li> <li>3. Each reporting cycle shows an unchanged or recovering population</li> </ol>	<b>Method B3 – breeding waders and wetland birds</b> Three visits between April and June to record presence and activity of key indicator species	Annually	High
Sward height and rush cover	Average sward height of between 5 – 15cm in April and May covering at least 80% of the area. Rush cover that requires management is less than 30% of the area.	Informal visual assessment as part of regular bird surveys	Annually	High
<b>Objective 2: Improve West Lake for birds</b>				
Breeding waders	<ol style="list-style-type: none"> <li>1. Key species present during breeding season and behavior indicating that they are breeding</li> <li>2. Establish baseline using CSM*</li> <li>3. Each reporting cycle shows an unchanged or recovering population</li> </ol>	<b>Method B3 – breeding waders and wetland birds</b> Three visits between April and June to record presence and activity of key indicator species	Annually	High
Wintering wetland birds	<ol style="list-style-type: none"> <li>1. Establish baseline using CSM*</li> <li>2. Each reporting cycle shows an unchanged or recovering population against baseline</li> </ol>	<b>Method B1 – wintering wetland birds</b> Monthly visits between September and February to record presence of wetland birds	Annually	High
<b>Objective 3: Manage semi-improved species rich / rough grassland for wintering birds</b>				
Species composition	<ol style="list-style-type: none"> <li>1. At least 2 high value indicator species frequent in abundance, and 2 occasional</li> <li>2. Invasive trees and scrub cover less than 5%</li> </ol>	<b>Method G1 – grasslands (botanical interest)</b> Samples taken every 30m along transects through grassland and required information recorded	Every 3 years from 2015	Medium
Wintering wetland birds	<ol style="list-style-type: none"> <li>1. Establish baseline using CSM*</li> <li>2. Each reporting cycle shows an unchanged or recovering population against baseline</li> </ol>	<b>Method B1 – wintering wetland birds</b> Monthly visits between September and February to record presence of wetland birds	Annually	High
<b>Objective 4: Restore area near car park to create wetland exploration area</b>				
Project complete	Project complete by end of management plan period	Task completion logged	Bi-annually	High
<b>Objective 5: Maintain the river re-profiling areas for waders</b>				
Breeding waders	<ol style="list-style-type: none"> <li>1. Key species present during breeding season and behavior indicating that they are breeding</li> <li>2. Establish baseline using CSM*</li> <li>3. Each reporting cycle shows an unchanged or recovering population</li> </ol>	<b>Method B3 – breeding waders and wetland birds</b> Three visits between April and June to record presence and activity of key indicator species	Annually	High

## A place for people

Attributes	Targets	Monitoring methods Consult highlighted methodologies for more details	Monitoring frequency	Priority
<b>Objective 1:</b> Improve the quality of the visit, especially for birdwatchers and families				
Frequency of visits made per person	Average number of visits per person increases over period of the management plan	Visitor survey with specific questions to gather data against monitored attributes	Every 3 years from 2015	High
Favourite feature(s) and reason for visiting	New wetland exploration area and overall wildlife experience become favourite features of visitors and reason for visiting.			
Proportion of visitors with children	Proportion of visits made with children increases over period of the management plan			
Likelihood of visitors recommending the reserve to others	Likelihood of visitors recommending the reserve to others increases over period of the management plan			
Quality of visit	Quality of visit increases over period of the management plan			
<b>Objective 2:</b> Raise awareness, appreciation and support for the Trust and its work				
Membership recruitment	Member's recruited from reserve leaflet or during events	Review data from Membership Officer for the join source and reason for joining	Annually	High
Support for work of the Trust	Likelihood of visitors becoming a member of the Trust increases over the period of the management plan	Visitor survey with specific questions to gather data against monitored attributes	Every 3 years from 2015	High
<b>Objective 4:</b> Increase the Trust's presence to visitors to the National Memorial Arboretum (NMA)				
Number of walks offered to NMA	At least one walk every 2 years	End of year review of data on database	Bi-annually	Medium
<b>Objective 5:</b> Provide led opportunities for people to experience the wildlife of the reserve				
Number of events run at reserve	At least 3 events run on reserve and recorded on database	End of year review of data on database	Annually	High
Number of days a wildlife guide is present	At least 1 day in every bank holiday weekend is covered by a volunteer wildlife guide	Data recorded on volunteer log on database	Annually	Low

# A place for wildlife: work plan

◇ Lead staff member may undertake task directly or delegate to other staff or volunteers: Land Management Team (LMT), Monitoring Officer (MO), Visitor Experience Team (VET), Fundraising Manager (FM)  
 ☆ For this plan, year one is taken as 2015      ◊ Code refers to project entry on CMSi to allow work recording      ⊗ Task not timetabled as work only required once funding secured

Objective 1 Maintain wet grassland in favourable condition for breeding waders						
Management / Task	Projects	Priority	Timing	Lead ◇	Years ☆	CMSi ◊
Ensure sward is between 5cm - 15cm by November	Issue annual grazing license for reserve (also supports Objective 3)	High	Feb	MO	All	MG++/01
	Manage grazing to ensure target sward length	High	Mar to Oct	LMT	All	-
	Control rushes in target area	High	Sept to Feb	LMT	All	MH12/01
	Control scrub encroachment	High	Sept to Feb	LMT	All	MH07/01
	Control weeds species (ie. ragwort, dock, bramble etc.)	High	Mar to July	LMT	All	MH2+/01
Maintain feeding areas for waders	Control and reduce scrub along shorelines of waterbodies	High	Oct to Feb	LMT	1-5	MH07/02
	Coppice tallest trees on northern shore of East Lake	High	Sept to Feb	LMT	1-2	MH07/04

Objective 2 Improve West Lake for birds						
Management / Task	Projects	Priority	Timing	Lead ◇	Years ☆	CMSi ◊
Create more feeding and nesting areas for target birdlife	Remove trees from island nearest car park	High	Sept to Feb	LMT	1	MH07/03
	Maintain open view point lake side of car park	High	Sept to Feb	LMT	All	MH07/02
	Remove scrub from north west shoreline of lake	High	Sept to Feb	LMT	All	MH07/02
	Install and then maintain floating nesting raft(s)	Medium	Apr	LMT	1 / All	MS40/01
	Create more areas of reedbed	Medium	Oct to Mar	LMT	All	MH51/01
Reduce corvid vantage points	Coppice tallest trees on west shore of West Lake	High	Sept to Feb	LMT	All	MH07/04
	Manage scrub along eastern shore by rotational coppicing of tallest areas	High	Sept to Feb	LMT	All	MH00/01

Objective 3 Manage semi-improved species rich / rough grassland for wintering birds						
Management / Task	Projects	Priority	Timing	Lead ◇	Years ☆	CMSi ◊
Diversify and maintain sward	Graze area to maintain grassland in target condition	High	Mar to Oct	LMT	All	
	Control scrub in field	High	Oct to Feb	LMT	All	MH07/01
	Remove scrub from the shoreline of waterbodies	High	Oct to Feb	LMT	1	MH07/02

Objective 4 Restore area near car park to create wetland exploration area						
Management / Task	Projects	Priority	Timing	Lead <sup>◇</sup>	Years <sup>☆</sup>	CMSi <sup>○</sup>
Create a managed wildlife area close to car park	Plan and cost funded projects, including design of new wetland exploration area	High	Any	VET FM	1-2	
	Secure funding to deliver projects	High	Any	VET FM	1-2	
	Restore and maintain pools	High	Jan to Mar	LMT	⊗	
	Mow path around area for visitor access	High	Jul	LMT	⊗	
	Manage scrub	Medium	Oct to Feb	LMT	⊗	MH07/01

Objective 5 Maintain the river re-profiling areas for waders						
Management / Task	Projects	Priority	Timing	Lead <sup>◇</sup>	Years <sup>☆</sup>	CMSi <sup>○</sup>
Maintain open areas of shingle	Control scrub	Medium	Oct to Feb	LMT	All	MH07/02

# A place for people: work plan

◇ Lead staff member may undertake task directly or delegate to other staff or volunteers: Land Management Team (LMT), Monitoring Officer (MO), Visitor Experience Team (VET), Fundraising Manager (FM)  
 ☆ For this plan, year one is taken as 2015      ◦ Code refers to project entry on CMSi to allow work recording      ⊗ Task not timetabled as work only required once funding secured

Objective 1 Improve the quality of the visit, especially for birdwatchers and families						
Management / Task	Projects	Priority	Timing	Lead ◇	Years ☆	CMSi
Deliver improvements to access and facilities on the reserve for visitors through external funding	Plan and cost funded projects, including design of new wetland exploration area	High	Any	VET FM	1-2	
	Secure funding to deliver projects	High	Any	VET FM	1-2	
	Install visitor facilities including boardwalk and picnic tables in new wetland exploration area	High	Sept to Feb	VET	⊗	
	Resurface existing track to create new meandering grass dominated path	Medium	Aug to Oct	LMT	⊗	
	Replace wooden kissing gates with larger metal gates accessible for wheelchairs and pushchairs	High	Any	LMT	⊗	
	Replace path under railway river bridge with boardwalk	High	Any	LMT	⊗	
	Install new directional signage	Medium	Any	LMT	⊗	
	Install self-guided family wildlife discovery trail	High	Any	VET	⊗	
	Break up concrete pad by West Lake hide and install new picnic tables	Medium	Sept to Mar	VET	⊗	
	Replace West Lake hide with new structure	High	Aug to Mar	VET	⊗	
	Install new raised viewing platform overlooking river restoration area	High	Aug to Mar	VET	⊗	
Complete additional low resource improvements to the quality of the visit	Reposition field gates and replace with wooden gates	Low	Any	LMT	Any	
	Open up additional view points from main track across West Lake	Medium	Sept to Feb	LMT	1-2	
	Install viewing screen opposite West Lake island	Medium	Any	LMT	1-2	
	Keep view from East Lake hide across lake open	High	Sept to Feb	LMT	All	
	Install screening to side of East Lake hide to prevent disturbance to birds	High	Any	LMT	1-2	
	Install new wildlife interpretation panels to hides and viewing areas	Medium	Any	VET	1-2	

Objective 2 Raise awareness, appreciation and support for the Trust and its work						
Management / Task	Projects	Priority	Timing	Lead ◇	Years ☆	CMSi ◦
Use on site signage to help achieve objective	Install new welcome interpretation board at entrance	High	Any	VET	1-2	
	Replace existing interpretation board next to millennium sculpture	Medium	Any	VET	Any	

Objective 3 Increase visibility from the road						
Management / Task	Projects	Priority	Timing	Lead <sup>◇</sup>	Years <sup>☆</sup>	CMSi <sup>○</sup>
Ensure the reserve entrance and car park are easy to find	Manage scrub and trees between car park and road	High	Sept to Feb	LMT	All	

Objective 4 Increase the Trust's presence to visitors to the National Memorial Arboretum (NMA)						
Management / Task	Projects	Priority	Timing	Lead <sup>◇</sup>	Years <sup>☆</sup>	CMSi <sup>○</sup>
Ensure visitors to NMA have opportunities to find out about the reserve	Design and cost new reserve leaflet	High	Any	VET	Any	
	Regularly provide copies of reserve leaflet to NMA visitor centre	High	Any	VET	Any	
	Lead bi-annual guided walk for NMA staff and volunteers	Medium	May to Sept	VET	From 2	

Objective 5 Provide led opportunities for people to experience the wildlife of the reserve						
Management / Task	Projects	Priority	Timing	Lead <sup>◇</sup>	Years <sup>☆</sup>	CMSi <sup>○</sup>
Provide opportunities for visitors to explore the reserve with help from staff or volunteers	Plan and deliver 3 guided wildlife events each year	High	Any	VET	All	
	Recruit wildlife guide volunteers to man hides at weekends	Low	Any	VET	All	