BLACK SLUICE
INTERNAL DRAINAGE BOARD

Environment Committee Meeting

Tuesday, 1st March 2022 at 2pm

Station Road, Swineshead, Lincolnshire PE20 3PW

Black Sluice
Internal Drainage Board

Station Road
Swineshead
Boston
Lincolnshire
PE20 3PW

01205 821440

www.blacksluiceidb.gov.uk

mailbox@blacksluiceidb.gov.uk

Our Ref: DW/JB/B10 Your Ref: Date: 22nd February 2022

To all Members of the Environment Committee and Invited Guests

Notice is hereby given that a Meeting of the Environment Committee will be held at the offices of the Board on Tuesday, 1st March 2022 at 2:00pm at which your attendance is requested.

Ian Warsap
Chief Executive

AGENDA

1. Recording the meeting.

2. To welcome guests and receive apologies for absence.

3. Declarations of interest.

4. To receive and, if correct, sign the Minutes of the last meeting of the Committee held on 3rd March 2021 **(pages 1 - 7)**

5. Matters arising.

6. To review the Biodiversity Action Plan 2021 – 2026 **(under separate cover)**

7. To receive a report on Environmental Work completed in 2021/22 and recommendations for proposed works for 2022/23 **(pages 8 - 16)**

   (a) Environment Agency ChERP Project Final Newsletter **(pages 17 & 18)**

8. To receive the 2021 Black Sluice IDB Barn Owl Box Reports **(pages 19 & 20)**

9. To receive a report on the 2021 butterfly records from Windmill Lodge Butterfly Conservation and Wildlife Area, Amber Hill **(pages 21 & 22)**

10. To receive a report on the Limits of Acceptable Change Study around The Wash and North Norfolk coast **(pages 23 - 27)**

11. To receive a report from Tammy Smalley on Lincolnshire Wildlife Trust (LWT) and Greater Lincolnshire Nature Partnership (GLNP) updates **(verbal)**

12. To receive the Minutes from the ADA Lincolnshire Branch Environment Committee held on:

    (a) 16th December 2020 **(pages 28 - 33)**
    (b) 16th December 2021 **(pages 34 - 36)**

13. The Wash & North Norfolk Marine Partnership Project update **(pages 37 & 38)**

14. Any Other Business.

BLACK SLUICE INTERNAL DRAINAGE BOARD

MINUTES

of the proceedings of a meeting of the Environment Committee

held remotely on
3rd March 2021 at 2pm

Members

Chairman - * Mr P Holmes

*	Mr W Ash	*	Mr J Atkinson
*	Mr V Barker	*	Mr K C Casswell
	Mr R Leggott		Mr P Robinson
*	Mr R Welberry	*	Mr J R Wray

* Member Present

In attendance: Mr I Warsap (Chief Executive)
Mr P Nicholson (Operations Manager)
Amanda Jenkins (Lincolnshire Wildlife Trust)
Cllr P Skinner (Board Member)

Due to COVID-19, this meeting will be held remotely in accordance with The Local Authorities and Police and Crime Panels (Coronavirus) (Flexibility of Local Authority and Police and Crime Panel Meetings) (England and Wales) Regulations 2020.

The Chairman noted the cancellation of the 2019 Environment Committee Meeting due to COVID-19, reassuring the committee that environmental matters were addressed at the Executive Committee meeting.

1736 RECORDING THE MEETING - Agenda Item 1

Board Members were informed that the meeting would be recorded.

1737 APOLOGIES FOR ABSENCE - Agenda Item 2

Apologies were received from Mr P Robinson.

The Chairman welcomed and introduced Amanda Jenkins, the Lincolnshire Wildlife Trust Conservation Officer, covering the Fens area; mainly Boston Borough and South Holland.

The Chief Executive referred to Minute 1447 of the minutes of the Environment Committee meeting held on 15th May 2019, highlighting that it was suggested that Cllr P Skinner be invited onto the Environment Committee due to his position as ADA Lincolnshire Branch Environment Committee Chairman, but that it was not actually agreed by the committee at that meeting. The Chief Executive informed the committee that he had invited Cllr P Skinner to this meeting, with a view to him joining the committee. Proposed by Mr K Casswell, seconded by the Chairman, all AGREED that Cllr P Skinner should be a member of the Environment Committee. The Chairman welcomed Cllr P Skinner to the committee.

1738 DECLARATIONS OF INTEREST - Agenda Item 3

There were no declarations of interest.

1739 MINUTES OF THE ENVIRONMENT COMMITTEE MEETING - Agenda Item 4

The Minutes of the last meeting of the Environment Committee held on the 15th May 2019, copies of which had been circulated, were considered. It was AGREED that they should be signed as a true record with the following amendment:

- Minute 1436 – the date of the previous meeting minutes '27th June 2019' should be '27th June *2018*'.
- Minute 1447 – spelling mistake of 'Environment' in the title

1740 MATTERS ARISING - Agenda Item 5

There were no matters arising.

1741 TO REVIEW THE ENVIRONMENT COMMITTEE TERMS OF REFERENCE - Agenda Item 6

The Chairman presented the Environment Committee Terms of Reference, with the only one amendment, inviting opinions of the committee.

All AGREED that the Environment Committee Terms of Reference be recommended to the Board for approval.

1742 TO REVIEW THE 'NEW' DRAFT BIODIVERSITY ACTION PLAN (POLICY No. 11) - Agenda Item 7

The Chief Executive emphasised the importance of the Biodiversity Action Plan (BAP), noting that at one point there were discussions with the Greater Lincolnshire Nature Partnership (GLNP) about the possibility of moving towards a Green Recovery Plan. However, Defra have since confirmed that IDBs should hold a BAP.

The Chief Executive referenced the draft BAP circulated with the agenda, noting that an extensive amount of work has been completed on it since and so there is now an updated draft BAP. The Chief Executive Officer invited questions and opinions of the BAP circulated but suggested that the updated version be circulated following the meeting for committee members to review at their leisure. The Chief Executive gave the suggested following timeline;

- The updated BAP to be circulated to the Environment Committee and Amanda Jenkins, via email, by the end of the week (5th March)
- Members to review and share comments / questions via email or telephone before 2nd April
- Officers can then amend the plan according to the feedback received to be presented to the Board on 30th June for approval.

The updated BAP was presented on screen, with new additions highlighted in red, to demonstrate to the committee how much work has been completed on it. The Chief Executive noted Appendix 4 the map showing Non Statutory Local Sites, noting his pleasant surprise at the number of sites identified within the catchment. Amanda Jenkins added that there is also a map of the quality of some of the Local Wildlife Sites in terms of how many species they have, noting she can forward this on.

The Chairman questioned if the reason behind the quality of the site would be identified? Amanda Jenkins responded that there are citations for each site, which can be used to find out, noting that the GLNP could most likely provide the Board with the citations. The Chief Executive noted that this information has been shared and referenced within the BAP, adding that any information that could be useful to include or reference within the BAP would be appreciated.

The Chairman noted that the BAP is a fluid document, echoed by the Chief Executive.

All AGREED that the updated BAP be circulated to members by the end of the week via email, for members to review and share comments / questions via email or telephone before 2nd April. Officers can then amend the plan according to the feedback received to be presented to the Board on 30th June for approval.

The Chairman suggested that it may be beneficial for the Officers to share all email responses with all members of the committee to avoid getting duplicates of the same feedback and questions.

The Chief Executive also noted that this committee should perhaps consider receiving their agenda via email, noting that it may be something the Board has to seriously consider in the future.

1743 TO RECEIVE A REPORT ON ENVIRONMENTAL WORK COMPLETED IN 2020/21 AND RECOMMENDATIONS FOR PROPOSED WORKS FOR 2021/22 - Agenda Item 8

The Operations Manager presented this agenda item, inviting questions and opinions of the committee.

The committee AGREED the budgetary figures included within the agenda report.

1744 TO RECEIVE A REPORT ON BARN OWL NESTING BOXES FOR 2019 & 2020 - Agenda Item 9

The Chairman presented this agenda item, noting the written report from Alan Ball within the agenda which is not positive news for Barn Owls, noting his hope that they will be able to rectify themselves following a bad year.

Mr V Barker referenced Boxes 1371 and 1293 in the annual check report by Alan Ball, explaining that he believes they should be 'Dowsby Lode' as opposed to 'Dowsby Fen'. The Operations Manager confirmed that Mr Barker was correct. The Chief Executive noted that they will talk to Alan Ball and ask him to amend accordingly.

1745 TO RECEIVE A REPORT ON THE 2019 & 2020 BUTTERFLY RECORDS FROM WINDMILL LODGE BUTTERFLY CONSERVATION AND WILDLIFE AREA, AMBER HILL - Agenda Item 10

The Chairman presented this agenda item, noting his thanks, on behalf of the committee, to Phil and Ros Bowler for their work and for keeping the Board and Committee informed also.

The Chief Executive requested that Amanda Jenkins pass this information to the Greater Lincolnshire Nature Partnership (GNLP), noting he feels they may be interested in reviewing it. Amanda Jenkins confirmed she would.

1746 TO RECEIVE A VERBAL PRESENTATION FROM THE GREATER LINCOLNSHIRE NATURE PARTNERHSIP (GLNP), LINCOLNSHIRE WILDLIFE TRUST (LWT) & THE SOUTH LINCS FENLANDS PARTNERSHIP (SLFP) - Agenda Item 11

Amanda Jenkins commenced by noting the positive working relationship between Lincolnshire Wildlife Trust and the BSIDB, thanking the Board for their help and support, adding how easy it is to work with the Board and their gratefulness for all help in contacting landowners and time and effort on various nature related projects.

Amanda Jenkins informed the committee of various projects as follows;

- *ADA Pollinator Project* – The Government have set out a 25 year plan that recognises the negative impact modern society and its ways of life have had on the environment. The plan recognises that nature needs to recover and sets out a nature strategy, it being noted that the nature strategy could eventually take over the Biodiversity Action Plan (BAP). It also refers to National and Local Planning Policies, stating that there must be no net loss to biodiversity but must be net gain on certain projects above a certain size.

  Amanda Jenkins noted that IDBs are doing well in relation to this; management of Fenland watercourses, helping to preserve biodiversity and working on many projects together. One particular project that would be beneficial is a pollinator project. The Environment Agency have been researching how to improve their watercourses and assets for pollinators. If Black Sluice and other IDBs were able to replicate this work across their banks and pumping stations, they would help to create a nature recovery network for pollinators across the county. The basic aim of the ADA pollinator project is to improve flower-richness of IDB banks and assets with a specific emphasis on improving habitat for pollinators. This would be done with guidance from an ecologist to ensure a consistent approach and avoid any damage to banks. In brief the project would consist of an ecological consultant working with IDBs to achieve the following:
    - Ecological assessment and surveys of selected banks to assess baseline condition – some of this is already done through fenland flora surveys. Need to avoid areas that are already species rich.
    - Prioritise sites for improvement / management
    - Collect wildflower cuttings
    - Grow on plants with local growers – has to be in set conditions
    - Plant out
    - Monitor for plant diversity and pollinators

  Amanda Jenkins noted that she will send the precis following the meeting.

- *Green Recovery Fund* – Bourne North Fen was not successful however other funding streams are continuing to be applied for. There is some ring fenced match funding from Anglian Water and Affinity Water through the South Lincs Water Partnership (SLWP).

- *Boston Alternative Energy Facility* – The Chief Executive noted that the Board has been involved with this throughout the pre-planning process.

Amanda Jenkins noted the Lincolnshire Wildlife Trust (LWT) have been commenting and advising on the ecological assessment alongside Natural England and the RSPB.

- *Community Naturehoods* – This idea is just starting to be developed in Baston & Boston. Setting up a naturehood includes ecological surveys of selected public access areas – parks, gardens, school, verges, water courses etc, writing management plans to improve these areas and then holding demonstration events to show people how to make a difference for wildlife in their gardens.

  Amanda Jenkins added that she noted the Board's work at the Risegate Eau, with the Chief Executive noting that the site was not particularly successful and would be interested in seeking guidance around how to develop it. Mr V Barker noted that last year some wildflower did come through the bank, it may have taken two years for them to grow from seed, noting that further work may be able to be done with Lesley's son. The Chairman added that the ground was perhaps too fertile and therefore the wildflowers could not compete.

  Amanda Jenkins noted that the Risegate Eau school have been working on a wildlife project, questioning if the Board do any community work? The Chairman responded that he has previously tried to engage with another local primary school about farming and IDB work but unfortunately, due to their strict and tight curriculum, it has not been of interest to them. Amanda Jenkins added that the Risegate Eau School contacted Amanda about having a nature area at school, suggesting whether there may be a potential link between the school and Black Sluice IDB.

  Mr V Barker noted that he would be willing to help, adding that he has seen some of the children going for walks on both sides of the drain previously.

  The Chief Executive added that the Board would be willing partners to offer assistance and support within and around the catchment.

  It was confirmed that Amanda Jenkins will follow up the possible connection with the school and that Mr V Barker's details will be forwarded to her.

- *ESIF Bid* – The Chief Executive explained that the Lincolnshire County Council, as a lead partner of the SLWP, applied for a monetary bid to implement smart water catchment monitoring within the Board's catchment. This includes rainfall, gravity flows, water quality, content, it being in relation to Anglian Water and Affinity Water who have formed the first water authority partnership to transfer water from a part of the country that does have water to a part that doesn't. The tendering process was conducted and put out for bid, only one company returned a tender bid and the Lincolnshire County Council's procurement team did not believe the quality of the bid was good enough to be able to award the contract, therefore the process is now running again. As long as readings have started to be collected by the end of September 2021, the funding remains available. Amanda Jenkins added that the LWT have been involved to help collect the baseline environmental data for this project.

The Chairman thanked Amanda Jenkins for the update.

1747 TO RECEIVE THE ADA TECHNICAL NOTE ENVIRONMENTAL BILL - Agenda Item 12

The Chairman presented the Environment Bill, noting that it has not yet been signed off.

1748 TO RECEIVE THE MINUTES FROM THE ADA LINCOLNSHIRE BRANCH ENVIRONMENT COMMITTEE: - Agenda Item 13

The Chairman presented the minutes form the ADA Lincolnshire Branch Environment Committee Meeting held on 20th November 2019.

Cllr P Skinner, as Chairman of the ADA Lincolnshire Branch Environment Committee, noting some interesting points, as follows. He firstly noted the work Amanda Jenkins discussed regarding the pollinators, emphasising the importance of getting some pollinator corridors through the area.

Cllr P Skinner next referred to invasive species, in particular, referencing Mink. Cllr P Skinner noted that some people are volunteering to monitor traps but are not doing it properly, and animals shouldn't be suffering because of this, they need to be dispatched as quickly as possible.

The Operations Manager noted that there are alarms available now which can be monitored on a mobile phone app noting that the Board no longer place mink traps due to the requirement for them to be checked on a daily basis.

Amanda Jenkins noted there is due to be some research conducted on the remote mink traps on the Waithe Beck and the Great Eau, noting that she can keep the Board updated on this once it has commenced. Amanda Jenkins noted that she is not aware of the cost of the traps, as they aren't purchased, but noted that it is the Chalk Streams Project doing the work. Mr R Welberry noted that he has seen mink in the Simon Weir drain and into the Hammond Beck.

The Chief Executive noted that the Operations Manager is looking into the new remote traps which send a notification to a connected phone when the trap has gone off. It therefore will save money and time in reducing the need to travel to site to check, as the site will only need to be attended once notified by phone. Amanda Jenkins noted that the trials in Norfolk have shown that they are 100% accurate.

Cllr P Skinner noted that there is another meeting scheduled for April, him being keen to ensure the work is being completed. He further noted that all of the Lincolnshire IDBs and landowners take this work very seriously and can see the benefits of this work.

1749 ANY OTHER BUSINESS - Agenda Item 14

(a) CONTROL OF BADGERS

Mr V Barker referred to badgers, noting that he recently attended a virtual meeting about them and the idea of birth control. He further referenced Genetic Editing, in relation to grey squirrels being injected so that the female produced male offspring only so that eventually the population dies out. Mr V Barker noted that other ways should be investigated to control these mammals so that it is in sympathy of the general public.

(b) DEFRA NATURAL ENVIRONMENT INVESTMENT READINESS FUND

The Chief Executive informed the committee that there is a new Defra Natural Environment Investment Readiness Fund available. There are individual grants of up to £100,000 available for local environmental groups, which includes IDBs.

The Chief Executive noted that there is one particular aspect of work that he felt could be focused upon; developing berms in banks to introduce wildlife. This may also mean that the banks could be graded back at a lesser angle, meaning they would be less susceptible to slips. The Chief Executive noted that they will progress it and keep the committee updated.

Mr R Welberry suggested that the grant could be used to purchase some remote mink traps. The Chief Executive noted he has already thought this.

The Chairman raised his concern about the potential theft of a remote trap. Amanda Jenkins noted that in the Norfolk trials they were placed depending on how many people would see them, but that they are easy to hide, also noting that they are not always baited either.

(c) VIKING LINK

Mr R Wray referenced the ongoing Viking Link project at Donington Northorpe. He noted that the environmental impact of this has been discussed, with Viking Link being open to help in any way they can in relation to this. Mr R Wray noted that the site is surrounded by Black Sluice drains and so the Board may want to consider talking to them about various possibilities. The Operations Manager noted he will speak with Mr R Wray following the meeting.

(d) PAST BOARD MEMBER - EDGAR BETTISON

Mr R Welberry informed the committee that Edgar Bettison, a previous Board Member, is unfortunately in hospital after falling and breaking his hip.

(e) WATER VOLES

Mr R Welberry noted the number of active Water Voles that can be seen at Westwood Lakes. The Chairman added that he has also seen them on the farm.

There being no further business the meeting closed at 15:06.

BLACK SLUICE INTERNAL DRAINAGE BOARD

ENVIRONMENT COMMITTEE MEETING - 1st MARCH 2022

AGENDA ITEM 07

REPORT ON ENVIRONMENTAL WORKS

Completed Works in 2021/22

1. **Owl Boxes**

Repairs were completed where required and all boxes fixed to pumping station buildings were internally cleared, cleaned and suitably 're-dressed'.

The completed 2021 Barn Owl Box Reports are included in Agenda Item 7. It should be noted that Jackdaws were present in fifteen (60%) of the twenty five boxes checked in early summer 2021.

2. **Early Flailing Works**

Early season bank flailing on our high profile watercourses (approximately 67km) was completed along with the early health and safety bank top cuts on the main river highland carriers for the Environment Agency (EA) through our Public Sector Co-Operation Agreement (PSCA). Our pumping station grounds maintenance cuts commence in March each year until the end of the growing season..

3. **Control of Mink**

The Board have continued to liaise with agricultural landowners with regards to the correct setting up and inspection frequencies of the Boards traps and the dispatching of mink throughout the year.

4. **Environmental Surveys of Larger Hedge Rows in our Bushing Programme**

Surveys were carried out by the Boards officers on any significant hedgerows that were felt could offer a form of environmental enhancement prior to any bushing works. No environmental enhancements or protected species were identified during the 2021/22 surveys or works.

5. **RSPB Water Abstraction for Frampton Marsh**

Permission has again been granted by the EA and the Board for the RSPB to abstract 500,000m^3 of water per annum from the Wyberton Marsh pump drain to assist with water management levels in the nearby Frampton Marsh Nature Reserve.

6. **Big Boston Clean Up**

The 2021 Big Boston Clean Up was cancelled due to Covid.

7. Operation Fly Swat

The Board remains a partner within the Operation Fly Swat team and contributes towards its running costs, which in turn offers financial benefits to the Board in relation to the amount the Board previously spent on fly tipping clearance, collection and disposal.

8. Invasive Species

Invasive species identification guides produced by the Greater Lincolnshire Nature Partnership (GLNP) for Himalayan Balsam, Japanese Knotweed, Giant Hogweed, New Zealand Pigmyweed and Floating Pennywort are handed out to the operational workforce at each year's pre-cutting brief.

The continuous spread of Wild Yellow Flowering Brassica Rapa, a non-native species growing on Board maintained and Riparian banks has been brought to our attention and addressed at Board level. Continuous flailing trials over a 3 year period on selected areas have been undertaken, 2021 was the final year of the trial.

Originally it was thought that yellow flower growing on watercourse banks was contamination caused due to adjacent fields sown with Oil Seed Rape. However studies have shown that the yellow flower growing on the banks of watercourses is not always a result of self-set plants from adjacent cropped fields but from the Brassica family that Oil Seed Rape comes from.

At the 2019 Environment Committee Meeting three control sites were identified. The control method was to involve one cut annually in May for three years and monitor what benefits or affects this has. Dependent on the results of the trial areas will depend on the method taken going forward.

It was agreed by the Board, the 3 year control started in May 2019, the total length identified and to be completed across the 3 sites is 5.6km.

Site 1 Old Hammond Beck Frampton Bank 3.5km
Site 2 Dunsby Fen Pump Drain 1.1km
Site 3 North Forty Foot 1.0km

An average of 5 flail width cuts are required per km the total linear length is 28km. At an average output of 2km/hr + maintenance/travel to the sites this was completed in 2 days (18 hours).

The current rate per hour for the Twiga SPV2 including fuel is £96.50, therefore, to cut the 3 sites identified once costs £1,737.00. To complete one cut in May also requires a ground nesting bird survey on the day the works are planned, by the workforce at an additional estimated cost of £350.00, per day per machine.

Results

The 3-year controls completed show a reduction in the yellow flower growth. A dedicated survey has not been completed to establish the extent of yellow flower growth on watercourse banks within the Boards catchment.

The Board maintain c800km of watercourse, which is 1600km of banks, a reserved estimate could be that yellow flower covers 50% of watercourse banks maintained by the Board. At 14 linear km/hr, 800km of watercourse bank would equate to c4000km linear length, therefore take c286days/2574 hours.

2574 hours x £96.50 = £248,391.00 per year and £745,173.00 for 3 years.

If an estimated 3 week (15 days) timescale was established as the best for cutting in May, the Boards 3 Twiga flailmowing machines would possibly be able to complete 630km in 45 days @ £868.5 per day = £39,082.50

In order to complete the cutting of the total 800km within the proposed potential 3 week timescale in May would require 19 flailmowing machines.

Conclusion

Estimated machine cost to the Board to complete 3 x cuts c**£750,000**
Not included.

- estimated cost of ground nesting bird surveys c£100,000 x 3 = c**£300,000**
- estimated cost of compensation c£100,000 x 3 = c**£300,000** (50% of 800km @0.25p/m)

As May is the optimal time for cutting the yellow flower prior to seeding, this would still be c11 weeks before the commencement of the cutting season in the 1st week of August. It would therefore be expected that all of these sections would require flailmowing again prior to mechanical roding of the watercourses.

9. Bat Boxes and Surveys

Bat boxes erected on all pumping stations are being carefully monitored for occupancy, to date we have no confirmed sightings of occupancy.

10. Environmental Schemes

Eel Passability at the Boards 'Category A' Pumping Stations

As previously reported the eleven pumping stations in the initial EA Category A classification (Chain Bridge, Black Hole Drove, Cooks Lock, Donington Wykes, Donington North Ings, Gosberton, Great Hale, Holland Fen, South Kyme, Swineshead and Wyberton Marsh) have all been assessed by the EA consultants resulting in detailed Eel passage mitigation and proposals being produced. These have all been evaluated with costs ranging from Donington Wykes £300k to Black Hole Drove £3.4m.

The original 5 year exemption period expired in February 2021 and Eel screen exemption notices have now been received and these are issued in line with EA National eel screening advice to ensure consistency during the development period of the new approach to regulation, and are therefore all dated to expire on 22 February 2022.

The Eels Regulations (both for screening and passes) still apply, the EA conclude a project last year, to make some changes to their regulatory process, called Changes to the Eels Regulations Process (ChERP). They are currently developing new internal guidance to reflect the agreed changes and are due to share the key documents with their sector contacts very soon with more information. Full implementation of the new process is planned for later this year. Meanwhile they are proceeding with regulations as normal under the Eels Regulations, taking account of forthcoming changes where possible.

With regard to exemption notices, these will need to be reviewed by their Area Fisheries Team in advance of the expiry date to consider the best course of action to maintain legal compliance for the Operator. James Hooker will be the EA contact regarding this and we will be making contact with him regarding the exemption renewals.

The EA 'Changes to the Eels Regulations Process (ChERP) project : Final Newsletter is attached to this report.

11. Grass Snake Nesting Sites

The nesting/hibernation sites have been redressed with reeds and weed.

12. Wild Flower Meadow

The established area alongside the North Forty Foot Drain north of Cooks Lock Pumping Station totalling approximately 2,000m2 is being managed as a Wildflower Meadow.

13. Bug Hotel

The Bug Hotels at our Swineshead office/depot have been maintained throughout the year.

14. Badger Setts

From a conveyancing point of view Badger setts within banks continue to be a problem, especially so in raised main river banks where high fluvial flows could wash through the setts resulting in bank failures and breaches.

We continue to follow Natural England guidelines when working adjacent to Badger setts with all our site based employees maintaining Natural England licenses to work within the proximity of Badgers.

Exemption notices were required whilst works were completed on the Swaton Catchment Natural Flood Management (NFM) schemes this year.

15. Pollution Incidents

The Board have attended site(s) where potential pollution incidents could have a detrimental effect on water quality and/or the general environment in order to reduce any potential pollution/contamination issues.

We involve the Environment Agency and seek recovery of costs for all resources employed on such sites.

Whilst working on the NFM Upper Catchment works for the EA on Crown Estate land we were instructed to obtain cover for Impairment Liability Insurance at a cost of £14,000pa for £5,000,000 of cover, these costs were recovered from the EA.

16. Eel Passage Research

The Board contributed £500 towards the research currently being undertaken by the Environment Agency, Hull International Fisheries Institute (HIFI) and Zoological Society of London (ZSL) to minimise any impact of pumping stations on fish and eel populations and find cost effective solutions for compliance with eel legislation.

Our (and others) contributions helped in demonstrating our support for this research, and has enabled them to obtain additional funding from the Environment Agency and a grant from the European Marine Fisheries Fund to continue the research this year.

The status of the eel is critical. The aim is to reduce the impact of pumping stations in ways that are affordable and resources are targeted where they have the most benefit. The aim of this research is to assess the current impact of pumping stations, make recommendations for operational changes, develop and assess solutions for eel protection as pumping stations are refurbished or replaced. This will inform guidance for FCRM and IDB engineers currently in preparation.

17. Greater Lincolnshire Nature Partnership (GLNP)

As in previous years the Board (as do all Lincolnshire IDB's) continued with our Service Level Agreement (SLA) with the GLNP.

The Lincolnshire Environment Records Centre (LERC) data is included within our SLA, this enables us to check the ecological data from within and around our catchment. The complete LERC data collection holds over 5 million sightings.

18. ADA Biometrics Questionnaire 2021.

Officers completed the ADA questionnaire accordingly and await the national results for future updates, at the same time we are now working towards some of the targets we have set ourselves in line with our BAP.

19. Climate Change Strategy For South and East Lincolnshire

The Chief Executive attended a Climate Change Strategy workshop hosted by SHDC, ELDC & BBC.

A variety of organisations attended (two events in two locations) which produced some constructive discussions and debate. As the Strategy is developed we will be involved in order to help deliver climate change actions as a partnership.

A link can be found here https://www.e-lindsey.gov.uk/climatechangeconsultation

Proposed Works and Environmental Involvement in 2022/23

1. Water Vole Surveys

Committee approval is requested to continue to employ Inspired Ecology to undertake further surveys for water vole evidence at the monitoring sites and on relevant sites prior to desilting and any significant capital works. In addition, post desilting surveys will be carried out following the works where water vole activity has been found to confirm whether or not our works have had any effect on these populations. Environmental mitigation works may be required should results give evidence of disturbance. Estimates at c£1,750.

2. Winter Bushing and Cleansing

Bushing works will commence in November along with the cleansing works, all bushes will be chipped onsite, all excavated silt will be deposited on adjacent fields, left to dry then spread and levelled across the adjacent land.

Where required water levels will be lowered by damming lengths of the water course and the water over-pumped, if fish are evident they will be carefully removed whilst the water is being lowered and transferred over the dams.

We have our own bushing budget outside of the Environment budget, fish relocation whilst cleansing is budgeted at £2,000.

3. Summer Cutting and Vegetation Clearance

Following review the Boards summer cutting programme will change this year. An alternate maintenance programme is being developed and flailmowing will commence early April, the banks being cut every 4 weeks. Early flailmowing is necessary to prevent ground nesting birds. As with the high priority sites these watercourses can then be maintained at an earlier stage than previously. Therefore the main summer cutting programme will not commence until 2nd August, the mechanical flails will go out a few days before the excavators using the weed cutting baskets. The workforce will be presented with a 'Summer Cutting Brief' which will cover channel management in relation to balancing the benefits of flood risk management, agriculture and the biodiversity values.

Where birds' nests are encountered a minimum 10m length of bank will be left un-cut (5m each side of the nest).

4. Owl Boxes

Approval is sought for a budget of £2,000.00 for repairing/replacing three existing boxes during 2022/23 and to clean out the existing nesting boxes.

The boxes are purchased at £245.00 each including delivery from the Wildlife Conversation Partnership

5. Recording by Machine Drivers

The eight machine drivers will continue to record sightings on the Tom-Tom units; environmental sightings such as badger or fox holes in banks, water vole, mink and other specialist environmental sighting will be recorded.

All sighting information is passed onto the GLNP and in turn to the Lincolnshire Environmental Records Centre (LERC).

Budget request of £1,500 for Tom-Tom repairs/updates.

6. High Profile Watercourse Banks

Early season flailing of Wyberton Marsh Drain, Washdyke Lane, NFF (Cooks Lock to Punchbowl Lane) and New Hammond Beck (Chain Bridge to Tesco) will continue to been carried out.

Other notable watercourses that have enhanced maintenance are Endeavour Park (12/4&5), Kirton Drainside North (5/30), Frampton Towns Drain from London Road to weir (5/1), Gosberton Risegate Eau (22/14), Bicker Eau through the village (4/67), and the Drain alongside the IDEA park at Donington (2/26).

Budget request for c£3,500 for environmental flailing.

A total of c67Km of high profile watercourse banks (generally our larger watercourses) have been identified that require additional late summer inspections to determine whether a second flail and/or cut is required.

7. Water Levels

Water levels will continue to be controlled via the Boards 34 pumping station and/or the gravity channels associated with them.

The South Forty Foot Drain (SFF) water levels were raised to their summer levels by the EA in late March and will be lowered back to winter levels in November, this obviously affects the gravity flows from the catchments into the SFF. Water levels within the catchments will be held back where requested, this will help to enhance the biodiversity associated with the watercourses.

8. Invasive Non- Native Species (INNS)

The identification and eradication of INNS is important for the protection of our native species. INNS are expanding their population and geographical area, often to the detriment of native species. Early identification of INNS is critical in the control of their spread, we will continue with help from the GLNP to implement identification training for our workforce to help achieve early identification and assist with removal.

INNS locations will be reported to the GLNP to help determine population trends and distribution.

We propose to undertaken a mink control project with the aim to enhance water vole conservation and also to use as a contribution towards the Board's BAP. This will compliment other efforts from surrounding IDB's.

The Waterlife Recovery East Project is currently active as a project proposed to eradicate mink from East Anglia in the first instance, with the future ambition aiming to eradicate mink from the whole of the UK over time. The use of a smart trap, the "Remoti', which was able to use 'smart' technology, proved to be a turning point and we propose to initially purchase four traps and associated equipment to implement immediately (budget costs to include a small freezer for carcass storeage before collection and inspection c£1,700)

For further information on the Waterlife Recovery East Project, please visit: https://waterliferecoveryeast.org.uk

9. Fens for the Future/South Lincolnshire Fenlands Partnership

The Fens for the Future Vision is to see sustainable wetlands restored, re-created and reconnected across the Fens for the benefit of people, our natural and historic heritage and the rural economy.

Sustainable wetlands will help reduce storm effects, make available clean water and retain peat land soils so helping mitigate the effects of climate change, while at the same time offering a haven for wildlife, protecting our historic heritage and providing exciting areas for people to visit. Recreational access and tourism increases with more people taking exercise in the countryside. The diversity of the local economy widens and opportunities for employment in local communities are created.

The Fens remain nationally important for modern productive farming. The provision for wildlife in the farmed landscape increases significantly with the uptake of environmentally friendly farming practices and sensitive ditch and drain management, thus creating a network of wildlife habitats extending throughout Fenland. The variety and abundance of farmland wildlife increases and iconic Fenland species thrive.

We will continue to undertake sensitive watercourse maintenance by cutting alternative banks on an annual basis wherever this is the most practicable practice.

10. Operation Fly Swat Partner

Approval is sought to continue being a partner with this scheme into 2022/23, costs are to increase by 1.03%, using monies from the Environment budget .

The £3,454.78 partner contribution far outweights the collection, removal and tipping fees the Board would incur if we carried out all this work ourselves.

11. Big Boston Clean-Up

Approval is sought to offer manual/vehicular assistance with the annual Big Boston Clean-Up organised by Boston Borough Council c2,750.00 (i.e. 4 men 2 days + vehicle).

12. Grass Snake Nesting Sites

Redressing of the Grass Snake nesting/hibernation sites, create heaps of vegetation from the weed from the watercourse, reeds, leaves, grass etc. (budget £250).

13. Wildflower Meadow

To continue to maintain and develop the wildflower meadow area at Cooks Lock Pumping Station and also investigate other suitable areas around pumping stations. (budget £250).

14. Pollinator Project

We are involved with the Pollinator Project which is being organized by Lincolnshire Wildlife trust. There are 4 IDB's involved, each has two sites that have been identified by the trust to introduce pollinator species. The two BSIDB sites are Gosberton Risegate and Kirton Marsh Pump drain. This project is still in its early stages, and we have other meeting/workshop at the end of March. (budget £250)

15. Water Framework Directive (WFD)

Discussions take place with the WFD Officers to regularly review the following: -

- What actions do we undertake within our maintenance regime that can affect the water quality within our catchments?
- What levels of water quality information do the EA hold?
- What longer term plans can we start to jointly investigate to further enhance our catchments working within the WFD guidelines?
- What records do the WFD hold on the EA main rivers?

- What funding is there available to assist with future enhancements works?

16. The Wash and North Norfolk Marine Partnership (WNNMP)

Being a partner (£398 per annum) we have a statutory duty under the UK Habitats Regulations to report on progress against the management actions on an annual basis, and the information is presented in the Action Plan.

We report on subjects such as land drainage, shoreline management (if applicable), coastal oil spills, water framework directives, chemical weed control, non-native invasive species and water abstraction.

17. GLNP

Our annual payment as a Partners is £265.23 and this has been accepted.

18. Biodivesity Action Plan (BAP).

The Board adopted our BAP as one of its policies on the 3rd March 2021 and is committed to its implementation, we continue to periodically review and update it as appropriate.

Please review our BAP on our web site at www.blacksluiceidb.gov.uk and bring any suggestions back to this committee.

ADA have published an Environmental Good Governance Guide for IDB Board members to help those who sit on the Boards to have greater confidence in their role towards the environment. ADA are also developing a set of National IDB Biometrics that will help ADA to better explain the collective contribution to biodiversity made by IDB's to decision makers and the wider public.

19. Total budget allocation:-

Water Vole Surveys	£1,750.00
Winter Bushing & Cleansing	£2,000.00
Barn Owl Box Replacements	£2,000.00
Tom Tom Repairs/Updates	£1,500.00
High Profile Watercourse Banks	£3,500.00
Mink Control	£1,700.00
Operation Fly swat partner	£3,454.78
Big Boston Clean Up	£2,750.00
Grass Snake Sites	£250.00
Wild Meadow Maintenance	£250.00
Polinator Project	£250.00
WNNMP	£398.00
GLNP	£265.23
Total	**£20,068.01**

(2022/23 Environmental Budget being £20,000)

Changes to the Eels Regulations Process (ChERP) project: Final Newsletter

This newsletter is to keep all our stakeholders up to date on how we are progressing with our work to make changes to the Eels Regulations process.

Project Update, January 2021

In our last ChERP newsletter we told you that our aim was to complete the remaining work on the project and seek final sign-off of our new regulatory approach, from Executive Directors, during the third quarter of this year. I'm pleased to report that, just before the Christmas break, Directors made a decision to accept the new regulatory process developed during the project. This is good news and it means that we can now move on to implement the new process.

A summary of the changes

In response to sector concerns we have made changes to our regulatory approach to make compliance with eel passage and screening requirements more practicable. Here is a summary of the changes:

1. We have expanded our application of cost benefit analysis to all structures

2. We have developed a live package of technical solutions, which we refer to as the Best Achievable Eel Protection, or BAEP. These will continue to be updated as new technologies are approved for use.

3. We have introduced a new "Exceptions" component to the process and will apply it, by exception, where the requisite cost beneficial eel measure is unachievable due to insurmountable site-specific legal, technical or economic reasons.

4. For these exceptional cases, we have developed a new site specific eel risk assessment (SiERA) tool as a method to determine whether an alternative eel measure would offer an acceptably low risk to eel.

It has been a challenging project and, though it was not our aim to create bespoke processes for each sector, we have addressed a number of sector-specific issues and importantly we have a process that is consistent across operators as well as being based on the latest and best available evidence. The new process will mean that the decisions around suitable, pragmatic solutions are arrived at quicker. We expect eel measures will be the same or more economical than would be required under the current process.

What happens next?

We will soon commence implementation of the new process by recruiting an assignee to lead the delivery of the implementation plan. Once they are in post we expect the work to take around 12 months. This will include developing new guidance and training our staff before we can fully embed the new process and tools. During the latter stages of the ChERP project our sector representatives requested further engagement on the detailed guidance. We will share draft guidance with you as it is developed, to give you an opportunity to seek clarity or highlight any major issues.

Finally we would like to thank everyone who has been involved with and supported the ChERP project over the last two years.

Who can I contact for more information?

Our project manager, Fouzia, is no longer with us but if you have any questions you can e mail the project advisor at ayesha.taylor@environment-agency.gov.uk

Annual Check of Black Sluice IDB nest boxes –2021

Boxes checked by Alan Ball on dates shown

Wildlife Conservation Partnership

Box	IPMR	Grid Ref	Location	Type	Date		Con
3290		TF154188	Richardson's Borrow Pit, Twenty	Pole		n/c	
3291		TF173211	Gandy's Borrow Pit, Twenty	Pole		n/c	
3292		TF138195	Cook's Borrow Pit, Bourne N.Fen	Pole		n/c	
1366	RSI	TF167251	West Pinchbeck (Black Hole Dr)	Pump		n/c	
1367	RSI	TF166257	Haconby Fen Pump	Pump	24/05	Jackdaw – 4 eggs	
1368	RSI	TF166266	West Pinchbeck (Starlode Drove)	Pump	02/06	Jackdaw – small chicks	
1369	RSJ	TF165271	Dunsby Fen Pump	Pump	02/06	Jackdaw – three nests – 5 chicks EA13940 - 44	
1370	RSJ	TF164275	Rippingale Fen Pump	Pump	01/06	Jackdaw – two nests – 4 chicks EA13933 - 36	
1371	BFF	TF162284	Dowsby Lode Pump	Pump		n/c	
1293	BFF	TF162284	Dowsby Lode pole	Mk 7		n/c	
1372	DOF	TF167294	Gosberton Pump	Pump		n/c	
1373	RSQ	TF164318	Neslam Fen Pump	Pump	31/05	Jackdaw – 1 chick EA75494	
1374	RSV	TF168331	Quadring Fen Pump	Pump	01/06	empty	
1375	RSV	TF168333	Billingborough Fen Pump	Pump	31/05	Jackdaw – 1 chick EA74594	
1376	RSG	TF170346	Horbling Fen Pump	Pump	12/05	Jackdaw – 2 chicks EA13691 - 92	
1377	RST	TF174364	Swaton Fen Pump	Pump	12/05	Jackdaw – 3 chicks EA13693 – 95 (gravel added to top)	
1378	RST	TF176370	Donington Ing Pump	Pump	01/06	Jackdaw – 1 chick EA74622	
1379	RST	TF177375	Helpringham Fen Pump	Pump	19/06	Jackdaw – fledged, now Stock Dove – 1 egg	
1380	RSH	TF186397	Bicker Fen Pump	Pump	01/06	**BARN OWL** – 4 tiny chicks, adult male = GC14016 (06/07 3 Barn Owl chicks ringed GY44619-21)	
1381	RSU	TF206425	Great Hale Pump	Pump		No access	
1383	HKF	TF185466	Heckington Pump	Pump	07/06 19/08	**BARN OWL** – 5 eggs, male r/GY13270 1 chick GY44685	
1384	SKF	TF207469	South Kyme Pump	Pump	07/06 19/08	Jackdaw – fledged, KESTREL – in top 4 eggs (failed 07/07) **BARN OWL** – 8 small chicks (08/09 6 ringed GY44655-60)	
1385	EWW	TF159484	Ewerby Pump	Pump	07/06 29/06	**BARN OWL** – 3 eggs, female GY13346, male r./GR95401 **KESTREL** – in top – 2 tiny chicks + 2 eggs (3 Kestrel chicks ringed EA74789-91, Barn Owls failed)	
1386	SKG	TF194507	Damford Grounds Pump	Pump	07/06	**BARN OWL**: - 4 chicks GY13341 – 44	

						KESTREL – in top – 2 chicks EA13978 & 79	
2802	BSG	TF236477	Gill Bridge (Barry Hall)	Pole	13/06	**BARN OWL** – 1 chick + 3 eggs (2 chicks 18/07 GY44712/13	
2803	BSH	TF205529	Hart's Grounds (Andrew Means)	Pole	13/06 18/07	Jackdaw – fledged **BARN OWL** – 6 eggs (08/09 6 chicks GY44761-66) Bar added to top and filled with gravel	
2804	BSM	TF204484	Maryland (Pocklington Bros)	Pole	13/06	Box smashed on ground	
3169	KSK	TF341370	Kirton Skeldyke	Pole	06/06	Jackdaw – 2 chicks EA13966 & 67	
3165	BFK	TF340359	Kirton Bucklegate	Pole	06/06	Jackdaw – fledged. Jackdaw in top – 3 chicks EA13968 - 70	
3170	KME	TF281388	Kirton Meeres - Pick's Barn	Pole	19/05 19/08	**BARN OWL** – roosting pr Male r/GV23001, fem. GY13311 Grey Squirrel – 3 kits	
2969	BST	TF248464	Holland Fen (Two Hundred Fm)	Pole	13/06	**BARN OWL** – 2 chicks GY13396&97, female GY13395 **KESTREL** – 4 eggs (07/07 - 3 chicks EA74836-38 Bar added to top and filled with gravel	
2971		TF199521	Chapel House (ex Bridge House)	Pole		No access	
2973	PAH	TF192484	South Kyme (Pattingden House)	Pole	07/06 18/07	**BARN OWL** – 1 chick + 3 eggs, female GY13340 3 Barn Owl chicks ringed GY44714-16 Box cleaned out and bar added to top and filled with gravel	
1387	WYB	TF359400	Wyberton Marsh Pump	Pump	06/06	**BARN OWL** – 4 small chicks GY13336 – 39 **KESTREL** – in top – 4 eggs (failed 07/07)	
1388	KIR	TF343350	Kirton Marsh Pump	Pump	06/06	Jackdaw – 5 chicks EA13971 - 75	

BLACK SLUICE INTERNAL DRAINAGE BOARD

ENVIRONMENT COMMITTEE - 1ST MARCH 2022

AGENDA ITEM 09

AMBER HILL BUTTERFLY GARDEN REPORT 2021

Following on from our mid-season report we can now say with pride that this year has seen our best results ever with the butterfly garden, very much going against the national trend, it would seem. From all accounts it has been a rather disappointing season, very likely down to the cold and wet weather conditions of April and May, plus the dreary August. Butterfly Conservation are saying that their annual big butterfly count produced the worst numbers ever. Yet our garden has gone totally against the grain, with many species having their best year so far. Overall, it has without doubt been our most successful year to date.

The highlight has to be the unexpected discovery of Purple Hairstreak on site, which we now know for certain have bred, having recently found six overwintering eggs on oak buds, their stems being blown off the trees in the wind. We spent many an hour in August peering at the treetops through binoculars and we still have a strong inkling that amongst the Hairstreaks seen flying around the oak, ash, and elm tops, a few were the elm-feeding White-letter but he never confirmed it. Fingers crossed!

The Purple Hairstreak is the most exciting butterfly news. This elusive, largely treetop dwelling butterfly is not found in the area to our knowledge, being sparely distributed in the county, yet has appeared and set up the makings of a colony on our oaks. A wonderful, unexpected development!

Here is the full list of all the 2021 accolades:

SIX-SPOT BURNET

This day-flying moth had its third year in a row of best year to date, but this year was phenomenal, with an overall total just short of 200. They were so numerous that we had to transfer a good deal of them to a nearby large meadow, in case they ate all the foodplant, bird's-foot trefoil, needed for the caterpillars of the Common Blue butterfly.

ESSEX SKIPPER

Its third best year.

LARGE SKIPPER

At last, a much waited for return to 'normal' numbers. Its second best year.

BRIMSTONE

The highest count at any one time and its third best year.

SMALL COPPER

Its second best year to date.

BROWN ARGUS

Faring better than its stable-mate the Common Blue, it had its third best season.

PURPLE HAIRSTREAK

See comments above.

RED ADMIRAL

Best year to date.

SMALL TORTOISESHELL

With only being four short of the 2003 all-time best yearly total of 364, we are classing this year as its joint best year ever.

GATEKEEPER

Best year to date.

SMALL HEATH

Still low numbers but showing a dramatic return towards recolonisation. This is an important BAP priority species.

We also briefly encountered a one-off sighting of the Valezina form of the Silver-washed Fritillary, one of the few butterflies actually extending its range into Lincolnshire. The beautiful Valezina form occurs in females only, between 5 and 15% of the colony, so to have one passing through our garden was excellent news indeed.

As well as the butterflies, other wildlife thrived, especially birds and plant life in general. May we remind you here of the discovery we made of a reasonable colony of Willow Emerald damselflies, which as their name suggests are associated with willows, which we have growing away from the waterway within the garden. These have a magnificent story to tell, having taken the naturalist world by storm in recent years (see mid-season report). They are spreading their range in the UK and are as yet scarce in Lincolnshire, so we are very pleased to have what appears to be the making of a colony on site.

More so than in previous years, the dyke bank looked like and was seen to be acting as an extension to the meadow, especially during August /September as our meadow flowers faded. New growth of wild flowers on the bank resulting from your cutting back in June flourished and really helped, as well as looking very pretty. Many species of butterflies and moths have their main concentration of numbers on the meadow that runs along the top of the dyke bank.

Our IT son has updated and practically rebuilt our garden website, if you care to take a look.

www.homeforbutterflies.com

Phil and Ros Bowler

BLACK SLUICE INTERNAL DRAINAGE BOARD

ENVIRONMENT COMMITTEE - 1ST MARCH 2022

AGENDA ITEM 10

LIMITS OF ACCEPTABLE CHANGE STUDY – THE WASH AND NORTH NORFOLK COAST

The WNNMP and Norfolk Coast Partnership (NCP) will be conducting a Limits of Acceptable Change (LAC) study around The Wash and North Norfolk coast (up to Weybourne), with support from the PROWAD-LINK project. It is hoped that the study will establish acceptable levels of visitor presence at nature-based sites and provide recommendations, including management measures, for future sustainable development and tourism.

In terms of an update, the procurement process has now been completed, and **Footprint Ecology** have been appointed to conduct this work. Footprint Ecology have conducted much work in our area, and we are excited to see what this study can achieve.

The first steps in the study development will include a set of online workshops, to which you will receive invites, so please do keep an eye out for these. In the meantime, an excerpt from the Invitation to Quote (ITQ) is enclosed in order for you to see what we are aiming for.

Norfolk County Council

Interreg North Sea Region PROWAD LINK European Regional Development Fund

EUROPEAN UNION

Carry out a Limits of Acceptable Change study around The Wash and North Norfolk coast, from Gibraltar Point (Lincolnshire) to Weybourne (North Norfolk)

Contract commencement date:	17 January 2022
Period of Contract:	10 months

Background Information

Introduction

The Wash and North Norfolk coast are under increasing pressure from new housing developments and a growing tourism industry. These need to be carefully monitored and managed, to ensure that conservation features within The Wash and North Norfolk Marine Protected Area (MPA) network and Norfolk Coast Area of Outstanding Natural Beauty (AONB) are not negatively impacted.

To this end, The Wash & North Norfolk Marine Partnership (WNNMP), Norfolk Coast Partnership (NCP) and PROWAD LINK* project wish to conduct a collaborative Limits of Acceptable Change study around The Wash and North Norfolk coast. This will yield much-needed data on acceptable levels of visitor presence at local nature sites/attractions. It will enable the development of sector-specific, strategic and innovative recommendations that can be used to guide future planning/decision-making.

*PROWAD-LINK is an Interreg North Sea Region project funded by the European Regional Development Fund with local funding from Norfolk County Council. Notably, funding will not be affected by Brexit. Further information on the project can be found here.

'Protect and Prosper' forms the foundation for this project; the natural environment around The Wash and North Norfolk coast needs to be protected, whilst enabling local people and businesses to proper through economic opportunities. By considering the Nature Business Benefit Cycle (NBBC), this project will support both people and place, allowing them to exist together, in harmony.

Statement of Requirements

Objectives and Outcomes

The project aims to deliver a Limits of Acceptable Change study around The Wash and North Norfolk Coast. The study will establish acceptable levels of visitor presence at nature-based sites and provide recommendations for future sustainable development and tourism. The study will cover three geographically-distinct areas:

- South East Lincolnshire
- West Norfolk
- North Norfolk

Notably, to achieve its wider aims, a landscape-scale approach is needed, hence why this project covers a large geographical area.

The main outputs/outcomes will be as follows:

1. Establish acceptable levels of visitor presence for nature sites, green-spaces, and other nature-based attractions around The Wash & North Norfolk coast - this is much needed, as such information is currently lacking, yet is essential for the future planning and subsequent management of these places

2. Develop sector-specific recommendations (including mitigation measures) for relevant stakeholders - these will provide clear guidance on how best to protect local sites and to reduce pressure on nature 'hotspots' and/or support the promotion/creation of alternative sites

3. Support promotion of less pressurised sites (incl. inland/urban parks) – working in partnership/collaboration with relevant stakeholders

4. Support development (and subsequent promotion) of alternative access points – working in partnership/collaboration with relevant stakeholders

5. Develop a range of communication methods to assist points 3 & 4

We expect the outputs (points 1 & 2) of this study to influence management plans and mitigation measures of individual sites. Recommendations will be innovative and strategic, considering all demographics, and present solutions that integrate with new development. Stakeholders will have autonomy with regards how to utilise the outputs (points 1 & 2) and the wider outcomes (points 3 & 4) will be achieved through collaboration and coordination between stakeholders. These will be maintained beyond this project. Notably, as the outputs and outcomes of this study are realised, it is likely that it will set a precedent for future studies/work.

We will expect a draft recommendations document by 9 September 2022.

This draft document will be shared with the PROWAD LINK partnership for feedback and comments. Time needs to be allocated for this in the workplan and should have an allowance of at least two weeks.

Target Audiences

The study will be targeted at stakeholders with a vested interest in nature site management, ranging from local Council planning teams, to nature-site managers. Notably, an integrated, collaborative approach will need to be applied, if the outputs/outcomes are to be achieved.

As part of the methodology and work plan, we are looking to see how you would collect data and involve the relevant stakeholders. We are also looking to see how you would tailor the recommendations to different types of organisations depending on their areas of expertise.

Methodology

PROWAD LINK project partners have carried out a similar LAC study. The methodology and recommendations from this will be shared at the start of the work plan. However, new thinking and ideas are welcome; applicants are invited to put forward alternative methodologies to carry out this study.

Applications from outside the UK are welcome.

Draft Project Timeline

- Initial scoping meeting (week commencing 24 January 2022) with the project team, to review the work plan.
- Assistance with, and attendance at, collaborative workshops (mid-February 2022)
- Monthly meetings with projects team, to report on progress (these will be set up by Norfolk County Council).
- Interim reports to be provided every two months (mid-March, mid-May, Mid July 2022),

- The first draft report should be delivered for Norfolk County Council sign off on 9 July 2022 with the final draft report with recommendations delivered 9 September 2022.
- The final report should be made available for sign off on 17 November 2022 N.B. Time for feedback should be built-in, as input will be sought from external partners/funders
- It should be anticipated that there will be an expectation to update the partnership during a PROWAD-LINK steering group meeting. This is likely to occur in October 2022.
- Ongoing communications with the projects team, as and when required. This will be conducted by email, telephone and MS Teams.

Association of Drainage Authorities Lincolnshire Branch Environment Committee

Minutes of 'Virtual' Meeting held on Thursday, 16th December 2020 at 2:00pm

Present:

Paul Skinner (PSk)	**Committee Chairman** Black Sluice IDB and Witham 4th IDB *(Board Member)*
Chris Manning (CM)	**Committee Vice Chairman** Water Management Consortium *(Environmental Officer)*
Jane Picking (JP)	**Committee Secretary** Welland & Deepings IDB *(Secretary)*
Karen Daft (KD)	Welland & Deepings IDB *(Chief Executive)*
Nicholas Watts (NW)	Welland & Deepings IDB *(Board Member)*
Brian Tidswell (BT)	Welland & Deepings IDB *(Board Member)*
Karl Vines (KV)	South Holland IDB *(District Engineer)*
Caroline Laburn (CL)	Water Management Alliance *(Environmental Manager)*
Paul Sharman (PS)	North Level IDB *(Chief Executive)*
Peter Beckenham (PB)	Middle Level Commissioners *(Conservation Officer)*
Huw Sharman (HS)	Witham 4th IDB *(Technical Engineer)*
Fiona Scott (FS)	Witham & Humber IDBs *(Environment & GIS Technician)*
Will Bartle (WB)	Lincolnshire County Council *(Lincolnshire Chalk Streams Monitoring Officer – Community & Education)*
Nicola Craven (NC)	Lincolnshire Rivers Trust *(Project Manager)*
Suzanne Fysh (SF)	Lincolnshire Wildlife Trust *(Education & Community Officer)*
Margaret Haggerty (MH)	Greater Lincolnshire Nature Partnership *(Information Officer (Local Sites & Nature Strategy))*

1.	Apologies for absence	Alison Briggs, Shire Group of IDBs David Hutchinson, Environment Agency Tammy Smalley, Lincolnshire Wildlife Trust Daniel Withnall, Black Sluice IDB	
2.	Chairman's announcements and welcome	The Chairman welcomed attendees to the meeting and mentioned he was pleased to see so many familiar faces at our first 'virtual' meeting.	
3.	To approve the minutes of the last meeting held 20th November 2019	Minutes approved and signed by the Chairman as a true record.	

Association of Drainage Authorities Lincolnshire Branch Environment Committee

Minutes of 'Virtual' Meeting held on Thursday, 16th December 2020 at 2:00pm

			ACTION
4.	Matters arising and actions	NW advised he will revisit his paper on "Drain management with wildlife in mind" to bring it in line with the committee's 'Quick Wins' Biodiversity Action Plan. JP advised that the Water Vole Survey and Handling Training Course with Derek Gow, originally planned to take place in 2019 and then rearranged for 2020, was on the 'back burner' and that we would have to wait and see how the Covid-19 pandemic played out.	**NW** **JP**
5.	"Wolds Chalk Streams: Mink Rafts and Water Voles": a presentation by Will Bartle	WB explained that Lincolnshire's chalk streams are a characteristic feature that has helped shape the Lincolnshire Wolds landscape over the past 10,000 years. Much of the rolling hills of the Lincolnshire Wolds has underlaying chalk that has been designated as an AONB. Chalk streams have been identified as a UK Biodiversity Action Plan Priority Habitat. As a result of this, several organisations came together in 2003 to form the Lincolnshire Chalk Streams Project. Partners involved are Lincolnshire County Council, Lincolnshire Wolds Countryside Service, Environment Agency, Anglian Water, Lincolnshire Wildlife Trust, Wild Trout Trust and Natural England. WB then proceeded to give a presentation which gave further information on the background to the project and, in particular, the prevalence of mink and the decline of water voles in two rivers, the Waithe Beck and the Great Eau. A copy of WB's presentation is attached with these minutes. For further information on the project, please visit: https://www.lincswolds.org.uk/chalk-streams/lincolnshire-chalk-streams/the-lincolnshire-chalk-streams-project The Chairman thanked WB for his excellent presentation.	

			ACTION
6.	"South Holland IDB Mink Project": a presentation by Caroline Laburn	CL explained that the SHIDB had undertaken a mink project with the aim to enhance water vole conservation and also to use as a contribution towards the Board's IDB BAP. CL's presentation revealed that the methodology of using mink rafts and traps, using clay pads in the floating raft technique and a trapper to regularly check traps in 2018 had generated very little success, with no mink being caught or despatched during this period. As the project proved expensive this was terminated in August 2019. In early 2020, Professor Tony Martin invited the WMA to join the Waterlife Recovery East Project. Professor Martin's project proposed to eradicate mink from East Anglia in the first instance, with the future ambition aiming to eradicate mink from the whole of the UK over time. CL's presentation revealed that the use of a smart trap, the "Remoti', which was able to use 'smart' technology, proved to be a turning point. For example, a trap and a 'Remoti' were set at Ravensclough Bridge and the Little Holland Pump outfall on 6th July 2020 and the first mink was caught within a few hours on 7th July 2000. CL's presentation revealed very encouraging figures of mink capture since the first result. A copy of CL's presentation is attached with these minutes. For further information on the Waterlife Recovery East Project, please visit: https://waterliferecoveryeast.org.uk/ The Chairman thanked CL for her excellent presentation.	

7.	ADA IDB BAP Template	The Vice Chairman advised that the BAP template, together with an accompanying guidance are now available to download on ADA's website: www.ada.org.uk/environment. In 2021 ADA will also be publishing an Environmental Good Governance Guide for IDB Board members to help those who sit on the Boards to have greater confidence in their role towards the environment. ADA are also developing a set of National IDB Biometrics that will help ADA to better explain the collective contribution to biodiversity made by IDBs to decision makers and the wider public.	**ACTION**
8.	GLNP Update	NC advised that Sarah Baker has left the GLNP and has been replaced by Charlotte Palmer as Nature Partnership Manager. The GLNP's 'virtual' annual conference is to be held on the 23rd February 2021. This year's conference will focus on nature recovery in Greater Lincolnshire, highlighting projects both nationally and locally, and to look at how the GLNP partnership can support partners to put nature back into recovery. The GLNP's third edition BAP came to an end in March 2020 and will be replaced by a new Nature Strategy. The development of a Nature Strategy comes amidst a range of national policy changes with the Environment and Agricultural Bills currently making their way through parliament as Government sets out the legislative framework with which to deliver its 25 Year Environment Plan objectives. The new strategy will be unveiled during the annual conference in February 2021. The Chairman thanked NC for her report.	
9.	Witham Partnership Update	NC advised the WP is currently in the process of rewriting their BAP and is hopeful that this will be available in the new year.	

Association of Drainage Authorities Lincolnshire Branch Environment Committee

Minutes of 'Virtual' Meeting held on Thursday, 16th December 2020 at 2:00pm

			ACTION
9.	Witham Partnership Update (contd)	Floating pennywort is currently proving more problematic than usual.	
10.	EA Update	The Boston Barrier gate is now operational and is expected to be fully complete by 2022. The next stages of work will focus on tying-in the further parts of the scheme downstream, including: • installing a replacement flood gate at the Port of Boston's wet dock entrance; • work to tie the project into the Haven Banks Improvement Scheme, a separate EA project to raise and strengthen the existing flood banks running from the Barrier towards The Wash for a distance of 5km.	
11.	Update on Fish & Eel Regulations	The Vice Chairman advised the fish and eel regulations review is still ongoing.	
12.	IDB Updates on Environmental Issues	• Otters have been spotted in one of Witham 4th IDB's waterways. • Great white egrets have been seen in the Deeping Fen area. • NLIDB's wildflower meadow proved successful last year. • W&DIDB intends to seed further strips of Board's land this year. • Fly-tipping had increased exponentially since the Covid-19 pandemic. MH advised that one of the 'core zones' of the proposed Fens Biosphere runs along the boundary of NLIDB. Further details: https://www.smartsurvey.co.uk/s/5UINJA/ https://www.fensbiosphere.org.uk/the-fens-biosphere/biosphere-area/	
13.	Update on Remaining Groups	Fens for the Future – previously covered. ADA Technical & Environmental Committee – previously covered.	

Association of Drainage Authorities Lincolnshire Branch Environment Committee

Minutes of 'Virtual' Meeting held on Thursday, 16th December 2020 at 2:00pm

			ACTION
14.	Any Other Business	The issue of abandoned horses on Boards' land was discussed. KD mentioned that the fee of a horse bailiff was in the region of £1,000 per horse.	

There being no further business, the meeting concluded at 3:37 p.m.

Chairman

Association of Drainage Authorities Lincolnshire Branch Environment Committee

Minutes of 'Virtual' Meeting held on Thursday, 16th Dec 2021 at 2:00pm

Present:

Paul Skinner (PSk)	**Committee Chairman** Black Sluice IDB and Witham 4th IDB *(Board Member)*
Chris Manning (CM)	**Committee Vice Chairman** Water Management Consortium *(Environmental Officer)*
Fiona Scott (FS)	Lincolnshire Rivers Trust
Ian Warsap (IW)	Black Sluice IDB (Chief Executive)
Jackie Nicholson	Environment Agency
Karen Daft (KD)	Welland & Deepings IDB *(Chief Executive)*
Karl Vines (JV)	South Holland IDB (District Engineer)
Margaret Haggerty (MH)	Greater Lincolnshire Nature Partnership (Information Officer (Local Sites & Nature Strategy))
Sarah Swift (SS)	Environment Agency
Huw Sharman (HS)	Witham 4th IDB
Paul Sharman (PS)	North Level IDB (Chief Executive)

1	Apologies for absence	Amanda Jenkins, Lincolnshire Wildlife Trust Christopher Duku, Black Sluice IDB David Hutchinson, Environment Agency Jane Picking, Welland & Deepings IDB Jane Froggat, Witham 3rd IDB Peter Bateson, Witham 4th IDB Rachel Butler, Lincolnshire Rivers Trust Suzanne Fysh, Lincolnshire Wildlife Trust Tammy Smalley, Lincolnshire Wildlife Trust William Bartle, Lincolnshire Chalk Streams	
2	Chairman's announcements and welcome	The chair welcomed attendees.	
3	To approve the minutes of the last meeting held 22nd April 2021	Adopted.	
4	Election of Secretary	No volunteers.	
5	Lincolnshire Mink Control Strategy – update - EA trapping	Strategy in development, closer contact with Waterlife Recovery East, now 20% of England covered. WRE are now collecting carcases and using teeth for age assessment. Black Sluice & Witham 4th to begin control.	

		Wellend & Deeping IDB10 traps 24 trapped.	
6	Water Vole Awareness Course – feedback	Excellent course however several attendees got pinged. Difficulty getting license for IDBs - CJM to take up with ADA as the course didn't cover the handling element.	**CJM**
7	Pollinator Project	Pollinator project had an initial workshop at Tydd Gote Pumping Station back in September to look at methods of improving banks for pollinators. Practical workshop next spring, they need to find somewhere in the south of the county to demo this as willow tree fen won't be accessible due to breeding cranes. Mail shot on Butterfly etc to be circulated.	**PS**
8	GLNP Update Submitting records to NBN/irecord	Issue with uploading datasets with "recorders" consent required. LERC are prompting the use of irecord for individuals. LERC are still able to upload datasets or instruct IDB how to accomplish this. PS suggested an article on irecord for the councils.	**MH to provide briefing**
9	Lincolnshire Rivers Trust (~~Witham Partnership Update~~)	FS new Trust Manager (Rachel Butler) looking to have more IDB involvement. Not currently undertaking mink control, but looking at control of all invasive species.	
10	EA Update	Flood bank removed at Manthorpe near Grantham. Further projects upstream under investigation. Dunston/Nocton Wood work hoped to start in February River Lymn/Upper Steeping program in development upstream of Partney. River Waring NFW features are being installed at Belchford/West Ashby.	

		Soil health visits to landowners on the upper Witham are being undertaken by Philip Wright.	
11	Update on Fish & Eel Regulations	Changes to the Eels Regulations Process project is completed. Best Achievable Eel Protects for IDBs is FF pumps this avoid the costing of screening options. Non FF can still be exempted if they are not cost beneficial. A site specific eel risk assessment tool is available to asses other eel measures.	
12	IDB Updates on Environmental Issues	ADA Tech & Environment Committee - updated BAP guidance and metric published. IW reported requirement for Impairment liability insurance £14,000 pa for £5,000,000 NFM measures on Crown Land. Funding for 20,000 hectares via Local Choices, for 10 years. CM noted issue in Nottinghamshire with no longer term funding for their maintenance. More Barn owl nests but smaller broods reported.	
13	Update on Remaining Groups	None	
14	Any Other Business	CL net zero strategies, any IDB started these, PS producing a strategy at this time. Sarah Bbaker to be invited to next meeting. Invasives species, Pennywort in Witham from Foss dyke to near Boston and a patch in Welland & Deepings IDB with control initiated.	

There being no further business, the meeting concluded at 3:07 p.m.

Chairman

BLACK SLUICE INTERNAL DRAINAGE BOARD

ENVIRONMENT COMMITTEE - 1ST MARCH 2022

AGENDA ITEM 13

THE WASH & NORTH NORFOLK MARINE PARTNERSHIP PROJECT UPDATE

Black Sluice Environmental Centre

The Wash & North Norfolk Marine Partnership (WNNMP), in conjunction with Norfolk County Council's PROWAD-LINK project, has been working with Richard Austin in developing sustainable nature-based tourism plans/ideas for the Black Sluice Environmental Centre (name tbc). Excitingly, this project has enabled WNNMP to work more directly with Black Sluice Internal Drainage Board.

Marine Debris Removal Project

The East of England Plastics Coalition (EEPC) Marine Debris Working Group (chaired by Adele Powell, WNNMP) are undertaking a Marine Debris Removal Project around The Wash and North Norfolk coast. The Project aims to support the removal of debris from marine and coastal environments, to promote nature recovery, and to establish sustainable end-of-life pathways.

In Jan/Feb 2022, the Working Group delivered a series of online stakeholder-engagement workshops (funded by the Championing Coastal Coordination – 3Cs – fund), to share information and discuss ideas about types and quantities of marine debris (with a focus on fishing gear), and repair/reuse/recycle options.

In conjunction, a pilot project (funded by Natural England) was initiated, working in collaboration with Odyssey Innovation and ReWorked. This saw the installation of 1100 litre bins, placed at strategic sites around The Wash and North Norfolk coast, for the collection of marine debris. With support from local volunteers, including the Norfolk Beach Cleaners Collective (NBCC) and the Marine Conservation for Norfolk Action Group (MCNAG), the bins were filled and the collected material sorted.

Somewhat uniquely, accepted materials included lobster pots, and Styrofoam and polystyrene buoys, which were sent to ReWorked for processing. All other accepted materials, including angling line, were collected by Odyssey Innovation and taken to Plymouth University for laboratory analysis (undertaken by the Indigo Project). Whilst the results of this analysis are still pending, a better understanding of the polymer types will help inform recycling routes, and ultimately improve recycling outcomes, of marine debris moving forward.

Managing Visitors with Dogs Project

WNNMP and Norfolk Coast Partnership (NCP) are working together to deliver a Managing Visitors with Dogs Project, around The Wash and North Norfolk coast. Outputs to date, include:

Pre-visit website guidance – Information has been circulated to Site Managers on how to influence/amend websites that are most likely to appear from pre-visit searches. This is important in managing visitor expectations; the information resulting from web searches needs to accurately reflect on-site dog policy.

Branded dog leads – A limited number of dog leads have been produced (with HMM funding), which display the regional Coastal Code tagline "Enjoy, Respect, Protect". These have been distributed – free of charge – to nature sites, tourist information hubs, wildlife crime enforcers, and animal welfare and enforcement providers, to assist with dog-control around The Wash and North Norfolk coast.

Stakeholder engagement workshop – An online workshop was held in Feb 2022, which provided dog-related businesses an opportunity to learn more about our coastal landscapes and wildlife, the pressures they face, and how they (as a business) can support responsible dog walking.

Dog memorial advice – In response to the increasing appearance of dog memorial toy-boxes, which have a number of hazards associated with them, an article was written suggesting environmentally-friendly alternatives. This has been (and continues to be) shared across the region and has been published on the Barking Bugle website.

Black Sluice Internal Drainage Board

Biodiversity Action Plan

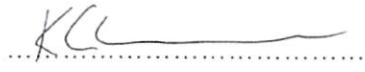
2021-2026

1. Statement

This Biodiversity Action Plan (BAP) has been prepared by the Black Sluice Internal Drainage Board in accordance with the commitment in the Implementation Plan of the Defra Internal Drainage Board Review of 2007 for internal drainage boards (IDBs) to produce their own Biodiversity Action Plans. It demonstrates the Board's commitment to fulfilling its duty as a public body to conserve and enhance biodiversity under various legislation and policy including, but not limited to, the Environment Bill (Act) 2020, the Natural Environment and Rural Communities Act 2006, the 25 Year Environment Plan and Water Framework Directive.

Importantly, it reflects the Board's aspiration to maximise the support it provides to biodiversity, particularly priority UK species and habitats, and the wider environment in general through its day-to-day activities, by setting clear objectives, actions and targets.

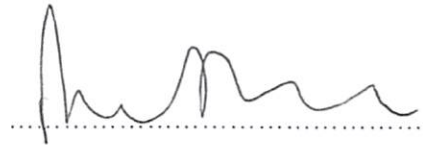
The Board has adopted this Biodiversity Action Plan as one of its policies and is committed to its implementation. It will review the plan periodically and update it as appropriate.



Keith Casswell

Chairman of the Board

30th June 2021



Paul Holmes

Environment Committee Chairman

30th June 2021

This Biodiversity Action Plan is a public statement by the Board of its biodiversity objectives and the methods by which it intends to achieve them.

We would welcome appropriate involvement in the delivery of the Plan from interested organisations, companies, and individuals.

You can contact us about this Biodiversity Action Plan by writing to the following address:

Black Sluice Internal Drainage Board

Station Road

Swineshead

Boston

Lincolnshire

PE20 3PW

Or via email: mailbox@blacksluiceidb.gov.uk

Further information is available on the Board's website: www.blacksluiceidb.gov.uk

Contents

2. Introduction

2.1 What is Biodiversity and why is it important?

Biodiversity can be defined simply as "the variety of life" and encompasses the whole spectrum of living organisms, including plants, birds, mammals and insects. It includes both common and rare species, as well as the genetic diversity within species. Biodiversity also refers to the habitats and ecosystems that support these species.

Biodiversity is part of our natural capital, a vital resource providing:

- Supply of ecosystem services including water, nutrients, climate change mitigation, flood mitigation, carbon storage and pollination;
- Life resources including food, medicine, energy and raw materials;
- Improved health and well-being;
- Landscape and cultural distinctiveness;
- Direct economic benefits from biodiversity resources and 'added value' through local economic activity and tourism;
- Educational, recreational and amenity resources.

This Biodiversity Action Plan is part of a much larger biodiversity framework that encompasses international, national and local levels of legislation and policy and which also include ecosystem services and climate change.

2.2 Legislative Background

When carrying out its functions, an IDB must pay particular regard to the effect on the environment. Some environmental legislation relates specifically to maintaining or restoring the condition of protected sites or protecting certain species, but there are also statutory duties for IDBs to conserve and enhance biodiversity in and alongside the watercourses they manage and the wider landscape.

The Natural Environment and Rural Communities Act 2006 places a duty on IDBs to conserve biodiversity. The Environment Bill (Act) 2020, when enacted, extends this duty on IDBs to also enhance biodiversity and report periodically on its actions. Therefore, as a public authority, every IDB must consider what action it can take, consistently with the proper exercise of its functions, to further the conservation and enhancement of biodiversity in England.

Below is a list of key environmental legislation (by no means an exhaustive list) relevant to the work of IDBs:

- The Environment Bill (Act) 2020
- Conservation of Habitats and Species Regulations 2017
- Eels (England and Wales) Regulations 2009
- Water Environment (Water Framework Directive) (England and Wales) Regulations 2003

- Natural Environment and Rural Communities Act 2006 (Section 40)
- The Environmental Impact Assessment (Land Drainage Improvement Works) (Amendment) Regulations 2017
- Land Drainage Act 1994
- Wildlife and Countryside Act 1981 (as amended)
- The Countryside and Rights of Way Act 2000
- The Protection of Badgers Act 1992
- Flood and Water Management Act 2010
- Salmon and Freshwater Fisheries Act 1975

2.3 Policy & Strategic Background

In 1992 at the United Nations Conference on the Environment and Development, commonly known as the Rio Earth Summit, the UK signed the Convention on Biological Diversity which pledged its commitment to contribute towards halting the worldwide loss of habitats and species and their genetic resources. At the 2010 biodiversity summit in Nagoya, Japan, the UK re-affirmed this commitment and the "Biodiversity 2020" white paper was developed setting out how those commitments would be put into action.

The 2010 report by Sir John Lawton "Making Space for Nature" set out that ecological networks were required in order to halt and reverse the declines seen in many threatened species and habitats. The report succinctly made clear that these ecological networks needed to be bigger, more frequent, better in quality, and more joined up in order to be successful in their ambitions.

The concept of Nature Recovery Networks featured in the Government's Biodiversity 2020 strategy (2011) and 25 Year Environment Plan (2018). The Environment Bill (Act) 2020 and the development of Local Nature Recovery Strategies (LNRS) expands this concept by also take into account the value of the ecological services provided by non-priority species and habitats such as the carbon sequestration of wetlands, the flood alleviation of tree-planting in the uplands and the wellbeing benefits brought about by green space. As such, this BAP presents the actions planned by the IDB to support both priority and non-priority species.

International reports such as by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) have found that climate change in particular is considered to be one of the biggest threats to our biodiversity now, and in the future. Supporting the continuity, connectivity and quality of habitat through management, restoration and expansion may help even the less mobile species to adapt more easily to climate change. This BAP presents the actions the IDB can take to support climate resilience for biodiversity.

2.4 Purpose

This BAP has been produced to demonstrate how the IDB fulfils its legal obligations to conserve and enhance biodiversity and sets out targets and actions that contribute to local, national and international strategies and policies.

While the IDB has a statutory duty to have regard for the environment whilst carrying out their functions, for example on or within drainage assets such as watercourses and their banks, the IDB has also to give consideration to how they can contribute to the enhancement of the wider environment.

It is not within the scope of this document to set out the IDBs' objectives and actions in relation to wider environmental topics, such as reducing carbon emissions or reducing waste. However, strategies to address such topics may be mentioned in connection to the enhancement of habitats and species, such as peatland restoration and carbon sequestration.

The opportunity to work together to support and enhance biodiversity in partnership with other organisations is sought wherever possible, as the IDB recognises the additional value working in such ways can bring to the overall objectives.

The intention is that biodiversity is fully integrated into the Board's activities, policies and procedures such as annual maintenance programmes, capital works projects, training and communications.

2.5 Vision

Black Sluice Internal Drainage Board's vision is:

To maintain a catchment where thriving wildlife is an integral part of delivering efficient and effective water-level management.

2.6 Aims

The aims of this BAP are:

- To ensure that opportunities for conservation and enhancement of biodiversity are fully considered throughout the IDB's operations;
- To enable more effective monitoring and reporting of progress and outcomes;
- To ensure that Priority species and habitats receive effective action within defined targets within the drainage district;
- To identify targets and appropriate actions for other habitats and species of local importance within the drainage district. This includes invasive non- native species (INNS);
- To contribute to local environmental partnerships such as the Greater Lincolnshire Nature Partnership (GLNP) to ensure that programmes and priorities for biodiversity conservation are aligned and maintained in the long term;
- To raise awareness within the IDB and locally of the need for biodiversity conservation, and to communicate with the local and wider community what actions the IDB are undertaking to support biodiversity.

3. The IDB BAP Process

3.1 The Biodiversity Audit

The Black Sluice IDB has conducted a biodiversity audit of its drainage district (Figure 1) and identified those habitats and species that would benefit from particular management or actions by the IDB.

This BAP focuses on nationally important priority habitats and species, that is to say those that have been deemed of 'principal importance' in England under the NERC Act 2006. However, those that are not priority species or habitats, but may be locally significant for a variety of reasons have also been considered. Invasive non-native species have also been included.

The information gathered, which is presented in later sections, has been used to develop this IDB's Biodiversity Action Plan.

3.2 Objectives, Targets and Actions

For each relevant habitat and species, conservation objectives have been identified. The action plan then details individual actions required to achieve the objectives, and associated monitoring and reporting of progress and impact.

In order for this BAP to be as effective as possible the targets and actions have been devised to be SMART (Specific, Measurable, Achievable, Relevant and Time-limited).

Procedural targets and actions have also been considered allowing the Board to measure the way in which it considers and incorporates biodiversity across the whole range of its operations. These may involve changes to administrative, management and operating procedures.

3.3 Monitoring and Reporting

Monitoring is the on-going process of regularly collecting and analysing relevant information to make sure the actions within the Plan are positively contributing towards the targets and to capture any additional benefit achieved. The Plan sets out how and when this monitoring will take place for example, to regularly review the progress of actions against the plan at Board meetings throughout the life of the plan.

The frequency and type of information reported is also defined by the Plan and includes the publication of progress reports in the public domain via the IDB's website and in accordance with the duty set out in the Environment (Bill) Act 2020.

The overall plan will be updated at least every 5 years but as this is a dynamic document it may change more frequently. For example, in the light of routine monitoring, changes may be necessary to ensure an objective can be met.

4. The Biodiversity Audit

4.1 The Black Sluice Internal Drainage District Overview

The drainage district covers an area of approximately 61,000 ha and contains 760km of IDB maintained watercourse along with 148 km of main river.

It is located in the Lincolnshire Fens generally south-west of Boston. The Board's area extends from Chapel Hill in the north, to Wilsford in the west, to Bourne then Spalding in the south back to Boston in the east. The Board's boundaries are defined by either main river, Witham and Kyme Eau to the north and Glen and Bourne Eau to the south. High contour line to the western boundary and differing catchments in adjacent Drainage Board areas to the east, the Board has 8km of boundary fronting the River Haven and Wash on the east coast below Boston. The South Forty Foot Drain, a major high consequence watercourse, effectively runs through the centre of the area, south from Guthram Gowt, north and then east into Boston and out into the River Haven and North Sea via the Wash.

The following outlines the key details of the District:

- Total area of the drainage district: 61,000 ha
- Upper Catchment area draining to the Lower Catchment: 20,000 ha
- Area of agricultural land: 43,887 ha
- Area of other (non-agricultural) land: 3,325 ha

Assets for which the Board has operational responsibility:

- Water level control structures: 6 No.
- Watercourses (maintained): 760 km
- Raised embankments: 148 km
- Sustainable drainage systems (SuDS): 33 No.
- Pumping Stations: 34 No. with 63 pumps
- Culverts/Bridges: 2,655 No.

4.2 Map of Audit Area (Drainage District)

The area covered by the drainage district of the IDB is shown below in Figure 1.

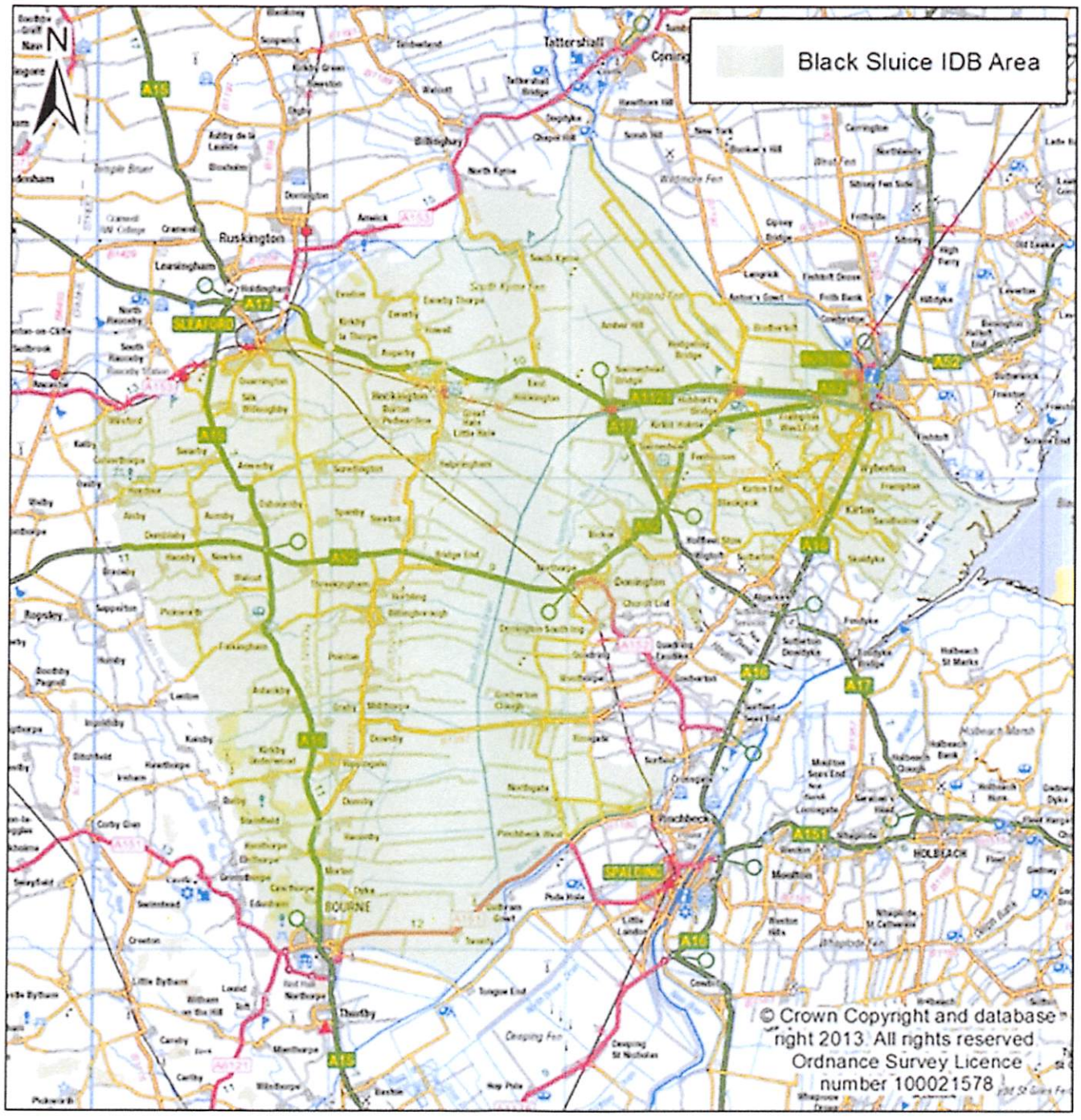


Figure 1. Black Sluice Internal Drainage District.

4.3 Geology

The majority of the Board's area has drift geology of fenland alluvium. In the west there are small areas of fen peat, gravel, clay and limestone.

4.4 Landscape Character

Natural England has divided the whole of England into a number of National Character Areas (NCA) based on characteristic landforms, wildlife and land use. For each NCA, there is a prepared profile that characterises the wildlife and natural features, identifies the influences that act upon those features and sets objectives for nature conservation.

The majority of the Board's area lies within The Fens NCA. The part which lies between Sleaford and Heckington then south to between Swaton and Osbournby lies within the Southern Lincolnshire Edge NCA, and the very small part which lies north of Bourne to roughly the east-west line of the A52 is within the Kesteven Uplands NCA.

4.5 Landscape Designations

There are no National Parks or Areas of Outstanding Natural Beaty (AONB) within the Board's catchment area.

4.6 Sites and Monuments

Scheduled Ancient Monuments (SAMs) are not directly related to Biodiversity matters. Information held by the Board and other sources has not therefore been collated. SAMs are only relevant where they occur adjacent to the Board's watercourses, and they would be referred to on a site by site basis as appropriate.

SAMs are listed by English Heritage, who together with Lincolnshire County Council's Historic Environment Record is consulted during Environmental Impact Assessment for all new schemes.

4.7 Tree Preservation Orders

Tree Preservation Orders (TPOs) are not directly related to Biodiversity matters since they are made on individual trees, groups or woods for landscape and visual amenity reasons. Information held by the Board and other sources has not therefore been collated. TPOs are only relevant where they occur adjacent to the Board's watercourses and they would be referred to on a site by site basis as appropriate.

TPOs are made under the Town and Country Planning Act 1990 and the Town and Country Planning (Trees) Regulations 1999. TPOs are administrated by Local Authorities. It is hoped to enter TPOs on the Board's Geographic Information System in the future; liaison on trees potentially protected by TPOs is undertaken during the EIA process.

4.8 Statutory Nature Conservation Sites

4.8.1 Internationally Designated Sites

The following internationally designated conservation sites, relevant to the water level management* and/or maintenance activities of the IDB, are found within or adjacent to the drainage district.

Table 1. Internationally designated sites within or adjacent to the IDB boundary

Site name	Designation	Features Relevant to IDB
The Wash	In two places to the south-east of Kirton and Frampton, the Board's area lies adjacent to The Wash, which is a Special Area of Conservation (SAC), Special Protection area (SPA) and Ramsar site.	The Wash is the largest estuarine system in Britain. It is fed by the rivers Witham, Welland, Nene and Great Ouse. There are extensive saltmarshes, intertidal banks of sand and mud, shallow waters and deep channels. It is the most important staging post and over-wintering site for migrant wildfowl and wading birds in eastern England. It supports a valuable commercial fishery for shellfish and also an important nursery area for flatfish. It holds one of the North Sea's largest breeding populations of common seal Phoca vitulina and some grey seals Halichoerus grypus. The sublittoral area supports a number of different marine communities including colonies of the reef-building polychaete worm Sabellaria spinulosa.

*Further information regarding Water Level Management Plans (WLMPs) are given later in the document.

Sources of information and map can be found in Annex 1.

4.8.2 Nationally Designated Sites

The following nationally-designated conservation sites, relevant to water level management and/or maintenance activities of the IDB, are found within the drainage district. Sources of information and a map can be found in Annex 2.

Table 2. Nationally designated sites within or adjacent to the drainage district

Site name	Designation	Component of an International Site	Associated WLMP?*	Features Relevant to IDB
The Wash TF 550400	SSSI, NNR	Yes	No	The whole area is of exceptional biological interest. The intertidal mudflats and saltmarshes represent one of Britain's most important winter-feeding areas for waders and wildfowl outside of the breeding season. Enormous numbers of migrant birds, of international significance, are dependent on the rich supply of invertebrate food. The saltmarsh and shingle communities are of considerable botanical interest and the mature saltmarsh is a valuable bird breeding zone. In addition, the Wash is also very important as a breeding ground for Common Seals.

Horbling Fen TF 154353	SSSI	No	Yes	This site contains sediments deposited between the end of the last Ice Age and the present day, and provides a record of the inundations of the sea during this period. The site has considerable potential for future research using stratigraphic and micropaleontological studies to assess one of the most recent marine transgressions in the region and to correlate the inferred sea-level changes with numerous local archaeological finds. The Board have a WLMP agreed with Natural England.

4.8.3 Local Nature Reserves

The following Local Nature Reserves are relevant to the activities of the IDB are found within the drainage district. Sources of information and a map are listed in Annex 3.

Table 3. Local Nature Reserves within the drainage district

Site name	Associated WLMP?*	Features Relevant to IDB
Mareham Pastures	No	On the Boards boundary with no relevance to the Board

4.8.4 Non-statutory Local Wildlife Sites

A number of sites have been identified locally as being important for wildlife. Whilst these designations do not have statutory status, the sites are important for their contribution to biodiversity and planning policy requires that they are given consideration by the LPA in forming any decision. The following relevant Local Wildlife Sites are to be found within or bordering the drainage district. Sources of data can be found in Annex 4.

Table 4. Non-Statutory sites within the drainage district

Site name	Designation	Features Relevant to IDB
Aswarby Thornes	Local Wildlife Site	Woodland
Beacon Hill Railway Cutting	Local Wildlife Site	Calcareous grassland
Botolphs Park Pond	Local Wildlife Site	Pond, Garden
Broadhurst Drain East	Local Wildlife Site	Coarse or rank grassland, Drain, Neutral grassland - semi-improved
Cobble's Lock Sedge and Reed Beds	Local Wildlife Site	Fen, Wet Woodland, Scrub, Standing Water
Cole's Lane Ponds	Local Wildlife Site	Scrub, Semi-improved neutral grassland, Pond, Marsh/fen, Reedbed
Drove Drain, Horbling Fen	Local Wildlife Site	Coarse or rank grassland, Drain, Neutral grassland - semi-improved
Dyke Fen Drains	Local Wildlife Site	Coarse or rank grassland, Drain
East Drains, Billingborough Fen	Local Wildlife Site	Coarse or rank grassland, Drain
Ewerby Pond	Local Wildlife Site	Pond, Scrub, Marsh, Field margin
Fen Road Drain	Local Wildlife Site	Coarse or rank grassland, Drain, Ruderal
Flower Pot Brick Pits	Local Wildlife Site	Semi-natural woodland, Wet woodland, dense scrub, standing water
Frampton Hall	Local Wildlife Site	Parkland, Semi-natural woodland, Scrub, Semi-

		improved neutral grassland, Semi-improved calcareous grassland, Improved grassland, Coarse or rank grassland, Ditch, Pond
Gravel Dike	Local Wildlife Site	Drain
Great Hale Eau	Local Wildlife Site	Drain
Guthram Gowt (River Glen)	Local Wildlife Site	Neutral grassland (semi-improved), Scrub (scattered and dense), Species-rich hedgerows, Ruderal, Pond, Floodplain
Hacconby Drove Drain	Local Wildlife Site	Coarse or rank grassland, Drain, Linear reedbed
Hall Weir	Local Wildlife Site	Wet woodland, Coarse or rank grassland, Dense scrub, Ditch, Pond, Reedbed
Hammond Beck	Local Wildlife Site	Coarse or rank grassland, Drain, Reedbed / Linear reedbed
Kirkby la Thorpe Pit	Local Wildlife Site	Standing water, Unimproved calcareous grassland, semi-improved neutral grassland, semi-natural & wet woodland, dense scrub, ruderal
Mackay's Pit	Local Wildlife Site	Pond
Mareham Pastures	Local Wildlife Site	Semi-improved neutral grassland, Woodland
Mill Drain	Local Wildlife Site	Coarse or rank grassland, Drain, Neutral grassland - semi-improved
Millthorpe Drove Drain	Local Wildlife Site	Coarse or rank grassland, Drain, Neutral grassland - semi-improved
Morton Drain	Local Wildlife Site	Coarse or rank grassland, Drain, Linear reedbed
New Dike West	Local Wildlife Site	Drain
North Drain, Billingborough Drove	Local Wildlife Site	Coarse or rank grassland, Drain
North Drain, Horbling Fen	Local Wildlife Site	Coarse or rank grassland, Drain
Old Forty Foot Drain	Local Wildlife Site	Coarse or rank grassland, Drain
Old Forty Foot to South Forty Foot Drain	Local Wildlife Site	Coarse or rank grassland, Drain
Risegate Eau	Local Wildlife Site	Coarse or rank grassland, Drain, Linear reedbed, Scrub
River Glen Corridor	Local Wildlife Site	River, Coarse or rank grassland, Semi-improved neutral grassland
Slippery Gowt Sea Bank	Local Wildlife Site	Coarse or rank grassland
South Drain, Billingborough Drove	Local Wildlife Site	Coarse or rank grassland, Drain
South Forty Foot Drain	Local Wildlife Site	Drain, Neutral grassland (semi-improved), Coarse or rank grassland
Threekingham Road Verges	Local Wildlife Site	Calcareous grassland
Twenty Foot Drain	Local Wildlife Site	Coarse or rank grassland, Drain
Tytton Lane West Pits, East	Local Wildlife Site	Pit, Dense scrub
Tytton Lane West Pits, West	Local Wildlife Site	Pit, Dense scrub
Westgate Wood and Meadow	Local Wildlife Site	Native plantation - new, Neutral grassland - semi-improved, Coarse or rank grassland, Ditch, Pond, Scrub - scattered / dense
Willow Farm Drain	Local Wildlife Site	Coarse or rank grassland, Drain

4.9 Habitat Audit Summary

This habitat audit summary lists the UK priority habitats that occur within the drainage district and are identified as likely to be influenced by the Board's activities. Also listed are habitats deemed to be of local importance and/or featured in local nature strategies that occur in the drainage district. Finally, brief notes are included on the potential for the IDB to maintain, restore or expand its important habitats. (A list of relevant Priority habitats can be found at https://jncc.gov.uk/our-work/uk-bap-priority-habitats/).

Table 5. Habitat Audit Summary

National Priority Habitat	National Status & Extent	Local Priority Habitat	Local Status and Extent	Habitat of Importance for IDB	Extent, status and Location of Habitat of Importance within drainage district	IDB Potential for Maintaining, Restoring or Expanding Habitat (high/medium/low)
Hedgerows	A hedgerow is defined as any boundary line of trees or shrubs over 20m long and less than 5m wide, and where any gaps between the trees or shrub species are less that 20m wide.	Ancient and/or species-rich hedgerows	70% loss between 1984 and 1990.	Hedgerows	Not known- dominant feature within the drainage district, with many watercourses bounded, at least on one side, by hedge lines. Most of these are species-poor and are either unmanaged or heavily managed.	High – planting and maintenance
Reedbeds	Reedbeds are wetlands dominated by stands of the common reed Phragmites australis, wherein the water table is at or above ground level for most of the year. They tend to incorporate areas of open water and ditches, and small areas of wet grassland and carr woodland may be associated with them.	Fens and wet reedbeds	Stable	Watercourses, ponds and wetlands	Isolated open water bodies with extensive reed margins on some watercourses, ponds and wetland fens.	High - Potential to expand reedbed habitat by extending existing margins along watercourses and Board owned ponds and wetlands

Wet Woodlands	Wet woodland occurs on poorly drained or seasonally wet soils, usually with alder, birch and willows as the predominant tree species, but sometimes including ash, oak, pine and beech on the drier riparian areas. It is found on floodplains, as successional habitat on fens, mires and bogs, along streams and hill-side flushes, and in peaty hollows.	Wet Woodlands	Stable	Wet Woodlands	Marginal to isolated open water bodies and some larger waterlogged areas	Medium – the Board owns three small wet woodland sites. No real potential to expand habitat by extending woodland areas.
Fens and Watercourses	Unknown	Watercourses	Stable	Watercourses	Vast majority of the Boards area is Fenland with Main River, Ordinary Watercourses and Riparian Ditches throughout.	High - Maintain vegetated fringes where risks allow, install vegetated ledges when re-profiling banks.

4.10 Species Audit Summary

This species audit summary will include priority and other species including INNS that occur within the drainage district and are identified as likely to be influenced by the Board's activities. Also listed are species deemed to be of local importance and/or identified by local nature strategies. Finally, brief notes are included on the potential for the IDB to improve the status of the species in the drainage district. (A list of relevant Priority species can be found at https://jncc.gov.uk/our-work/uk-bap-priority-species/).

Table 6. Species Audit Summary

Common & scientific name	National Status	Local Status	Location of Species of Importance within drainage district	IDB Potential for Maintaining or Increasing Species Population or Range
Bank and reed nesting birds such as:- Reed Bunting, Sedge Warbler, Reed Warbler, Bearded Tit, Cuckoo	Various protected species with fluctuating status	Fluctuating year on year, dependent on the breeding season	Throughout the remote fenland catchments	Manage banks so as to maintain and extend areas of adjacent rank grassland, alternate bank cuts where possible to leave established reed margins.
Bats	The latest trends indicate that populations of bat species that can be monitored are stable or recovering.	There are suggestions that current legislation and conservation actions to protect and conserve bats are having a positive impact, and it is vitally important that these continue.	Channels, Pumping Station buildings and Pumping Station suction bays	Bat boxes positioned on all Pumping Station buildings.
Water Vole	S41 species, Listed in WCA 1981 Long term decline	Difficult to determine, the view is the local status is stable.	Identified throughout the Board's area with the exception of smaller headwaters	Appropriate management of watercourses & predator control.

Kingfisher	Amber listed species in the 'Birds of Conservation Concern' Schedule 1 WCA 1981 Formerly declining along linear waterways until the mid-1980s, since recovered.	Increasing	Identified throughout the Board's area	Monitor & maintain current nest site and install artificial nest sites at suitable pumping station locations
Barn Owl	A Schedule 1 species, generally declining.	High than average population throughout the Board's area.	Likely to be breeding throughout the Board's area, using habitats not always associated with watercourses. Owl boxes at 30+ locations in the Board's area at present	Annually maintain existing Barn Owl boxes, continuous replacement plan.
Eel	S41 species, difficult to monitor but declining.	Believed to be in every watercourse throughout the catchment.	Probably throughout the Board's area	Maintain gravity flows at Pumping stations, remove all unnecessary obstructions from watercourses. Develop the Boards Eel management plans.
Otter	Priority species	Increasing	Increased sightings throughout the catchment.	Construct an Otter holt and maintain in good order in the hope an Otter marks a territory.
Grass Snake	Protected species	Widespread	Channels and their banks, including drying out weed rakings.	Maintenance of habitat and provision of refugia/egg laying piles/hibernating at suitable pumping station sites

4.11 Invasive Non-native Species Summary

The IDB has identified the following high risk aquatic and riparian invasive non-native species within the drainage district that are identified as likely to be influenced by, or impact upon the Board's activities.

Table 7: High risk aquatic and riparian invasive non-native species summary

Common & scientific name	Location within IDB if known	Year first recorded	Local status / Extent within drainage district	IDB potential for controlling species population or range
Floating Pennywort	Not yet identified within the catchment, be watchful			IDB management plan and control measures, and partnership working
Parrots Feather	Not yet identified within the catchment, be watchful			IDB management plan and control measures, and partnership working.
Water Fern	Widespread in 'bad' years, localised in normal years	2008	North Forty Foot, Claydyke, Hammond Beck	IDB management plan and control measures, and partnership working
Japanese Knotweed	Occasional around built-up areas	2013	Threekingham	IDB management plan and control measures, and partnership working
Giant Hogweed	Occasional	2013 2020	Wyberton South Forty Foot Drain Boston report from EA,	IDB management plan and control measures, and partnership working
Himalayan Balsam	Occasional		No known reports/records	IDB management plan and control measures, and partnership working
American Mink	Thinly but widely spread	2008	Sightings at Swineshead p/s, Frampton Towns Drain, North Forty Foot, Dowsby Fen p/s	Board purchased Mink traps used and monitored following positive sightings

Chinese Mitten Crab	Not yet identified within the catchment, be watchful			
Killer Shrimp	Not yet identified within the catchment, be watchful			
Signal Crayfish	Not yet identified within the catchment, be watchful			

4.12 Water Level Management Plans

Water Level Management Plans (WLMPs) provide a means by which the water level requirements for a range of activities in a particular area, including agriculture, flood defense and conservation, can be balanced and integrated. Guidance for the production of WLMPs by the operating authorities for sites of conservation interest was produced by MAFF/ Defra in 1992, 1999 and 2004. This guidance concentrated on SSSIs, especially those of international importance (SPA or SAC sites).

Where IDBs are the operating authority for sites, they may or may not actively manage the water levels.

The table below provides further details of the Water Level Management Plans for which the IDB has some involvement within their drainage district.

Table 8: Water Level management plans in operation within the drainage district

Site Name & Designation	Reason for WLMP (state main species or habitat)	WLMP lead and other key [partners	Favorable/ unfavorable condition (related to water level management)	Active Management by IDB	WLMP Last Updated
Horbling Fen	This site contains sediments deposited between the end of the last Ice Age and the present day and provides a record of the inundations of the sea during this period. The site has considerable potential for future research using stratigraphic and micropaleontological studies to assess one of the most recent marine transgressions in the region and to correlate the inferred sea-level changes with numerous local archaeological finds. The Board have a WLMP agreed with Natural England.	BSIDB/NE		Ops Lead	

5. Habitat and Species Action Plans

5.1 Introduction

Action plans comprise the objectives, targets and actions that the IDB has identified for each habitat and species to be included within the BAP. The following sections contain action plans for each of the habitats and species that have been prioritised by the IDB.

5.2 Habitat Action Plans

5.2.1 Hedgerows

5.2.1.1 National and Local Targets

Table 9. Hedgerows - National and Local Targets

National Targets	Local Targets
To halt the loss of all hedgerows that are both ancient and species rich and maintain overall numbers of hedgerow trees throughout the country.	To halt the loss of hedgerows & achieve favorable management of all hedgerows & plant new hedgerows, particularly to help landscape connectivity.

5.2.1.2 IDB Objectives

Table 10. Hedgerows – IDB Objectives

	IDB Objectives
1	Ensure no net loss of hedges as a result of IDB activities
2	Increase the extent of hedgerows within IDB

5.2.1.3 IDB Actions

Table 11. Hedgerows – IDB Actions

Objective ref.	Action	Measurable / Indicators	Completion date	Action Lead	Partners
1	Ensure that compensation planting takes place if any hedges are removed. To provide enhancement by being a wider species mix.	Length in m of hedges removed and hedges planted	Ongoing	IDB Ops	Landowners
2	Prevent damage to existing hedges (does not preclude management to allow watercourse maintenance, including coppicing).	Intact hedgerow in m this year compared to last	Ongoing	IDB Ops	Landowner
3	Identify location and plant 0.5 km hedgerow over 5 years.	Length of new hedgerow (m) each year	April 2025	Ecologist	Landowner
4	Avoid trimming hedgerows between 1 March and 31 July (the main nesting season for birds)	Annual reports	Ongoing	IDB Ops	Landowner

5.2.2 Reedbeds and Drainage Ditches

5.2.2.1 National and Local Targets

Table 12. Reedbeds and Drainage Ditches – National and Local Targets

National Targets	Local Targets
Reedbed is one of the rarest habitat types in the UK and is highly fragmented. Continuous expansion of existing and creation of new reedbed being the National Target.	Drainage ditches hold an unknown amount of habitat with the importance of the linear reedbed margins and banks often going underestimated. The IDB's maintenance regime should maintain this habitat in good conditions.

5.2.2.2 IDB Objectives

Table 13. Reedbeds and Drainage Ditches – IDB Objectives

	IDB Objectives
1	To enhance and maintain as a minimum the biodiversity already present within ditches
2	To increase the biodiversity within drainage ditches while maintaining drainage standards

5.2.2.3 IDB Actions

Table 14. Reedbeds and Drainage Ditches – IDB Actions

Objective ref.	Action	Measurable / Indicators	Completion date	Action Lead	Partners
1	Maintain the existing marginal fringes of vegetation of at least 45 - 60cm wide (approx.)* along at least one side of all drainage ditches where flood risk allows. *Width of vegetation fringe is dependent upon flood risk category and drainage ditch width. Where a wider channel allows a wider fringe then establish, where flood risk prevents, act accordingly. Use drainage channel biodiversity manual as a guide.	Length of marginal fringe extent in m maintained each year where flood risk allows.	Ongoing	Ops Lead	Ecologist
2	Identify ditches suitable to allow a continuous marginal fringe of vegetation at least 45 - 60cm wide (approx.) or more along at least one side of the ditch.* In areas identified, plant with suitable plugs, install coir rolls or allow colonisation naturally.	Establishment/colonisation of new marginal vegetation in m each year	31/12/2025	Ops Lead	Ecologist
3	Identify ditches which are too narrow for a continuous vegetation fringe to be installed, but where occasional patches of vegetation	Length of occasional marginal vegetation patches established in m	31/12/2025	Ops Lead	Ecologist

	fringes can be encouraged. Plant with suitable plugs, install coir rolls or allow colonization naturally.				
4	Install marginal plant ledges during bank re-profiling and plant with sedge plugs or coir rolls	Length in m of plant ledge created each year	Ongoing	Ops Lead	Ecologist
5	Alternate bank side cutting each year where risk allows. Mowing to take place between August and April to avoid bird nesting season. 45 - 60cm or more from toe of bank to be left unmown on ditches where risk and ditch profile allows.	Increased extent of uncut ditch bank	Ongoing	Ops lead	Ecologist
6	Remove bank-side cuttings where possible (with conveyor) to encourage sward diversity. Survey to identify diversity baseline and diversity following cuttings removal.	Survey highlights increased sward diversity after 5 years.	Ongoing	Ops Lead	n/a
7	Establish a pollen-rich sward following bank re-profiling	Floristic species present in bank sward.	Ongoing	Ops Lead	Ecologist

5.2.3 Wet Woodland

5.2.3.1 National and Local Targets

Table 15. Wet Woodland – National and Local Targets

National Targets	Local Targets
A UK BAP Priority Habitat, large areas of wet woodland are especially scarce in Lincolnshire.	Wet woodland within the Board's area typically occur as small stands at sites where there are open water, reedbed and fen habitats. The Board own three small Wet Woodland site in the Borne Fen, our target is to maintain these to preserve the sites.

5.2.3.2 IDB Objectives

Table 16. Wet Woodland – IDB Objectives

	IDB Objectives
1	To improve the management of our wet woodland sites with the Board's area
2	To operate long term management plans to the three sites the Board own.

5.2.3.3 IDB Actions

Table 17. Wet Woodland – IDB Actions

Objective ref.	Action	Measurable / Indicators	Completion date	Action Lead	Partners
1	Identify and map the extent and condition of wet woodland within the catchment.	Number of areas and area size. GIS layer	31/12/2025	Ops Lead	Ecologist
2	Ensure the maintenance programmes cause no harm to existing wet woodland.	No net loss	On going	Ops Lead	n/a
3	Monitor wet woodland and manage it effectively to prevent the area drying out.	No net loss	On going	Ops Lead	n/a
4	Consider options to help landowners maintain/restore wet woodland.	Number of areas and area size. GIS layer	On going	Ops Lead	LWT

5.3 Species Action Plans

5.3.1 Bank & Reed nesting Birds

5.3.1.1 National and Local Targets

Table 18. Bank and Reed Nesting Birds – National and Local Targets

National Targets	Local Targets
UK BAP Priority Species	All likely to be breeding throughout the catchment, especially in the remote and heavily reeded fens. Maintenance technique's and programme timing to be taken into consideration.

5.3.1.2 IDB Objectives

Table 19. Bank and Reed Nesting Birds – IDB Objectives

	IDB Objectives
1	Maintenance and improvement of habitat.

5.3.1.3 IDB Actions

Table 20. Bank and Reed Nesting Birds – IDB Actions

Objective ref.	Action	Measurable / Indicators	Completion date	Action Lead	Partners
1	Investigate methods for monitoring and recording various species throughout the catchments.	Records, GIS layers	On going	Ops Lead	Ecologist

5.3.2 Bats (All Species)

5.3.2.1 National and Local Targets

Table 21. Bats - National and Local Targets

National	Local
Protected under Schedule 5 of the WCA 1981 there are 16 species of bat known in the UK that are dealt with collectively. Thought to be declining due to loss of feeding habitat, loss of roosting sites, disturbance and fragmentation of habitats.	Bats are using some of the Boards pumping stations and structures as roosting sites and the watercourses as feeding sites.

5.3.2.2 IDB Objectives

Table 22. Bats - IDB Objectives

	IDB Objectives
1	To maintain and improve current habitat
2	Reduce disturbance whilst undertaking Board activities
3	Protect, maintain and enhance the features in our landscape required by Bats

5.3.2.3 IDB Actions

Table 23. Bats – IDB Actions

Objective ref.	Action	Measurable / Indicators	Completion date	Action Lead	Partners
1	Investigate methods for monitoring/survey works at select pumping station sites.	Surveys, annual report	On going	Ops Lead	Ecologist
2	Erect roosting boxes on Board buildings.	GIS Layer, annual report	On going	Ops Lead	Ecologists
3	Locate and protect roosts used by bats.	Surveys	On going	Ops Lead	Ecologists
4	Monitor and survey bat species, numbers, and locations.	Surveys	On going	Ops Lead	Ecologists

5.3.3 Water Vole

5.3.3.1 National and Local Targets

Table 24. Water Vole – National and Local Targets

National	Local
The water vole is found throughout the UK but is mainly confined to lowland areas with nearby water, there has been a significant decline in distribution and numbers within the UK.	The Boards area forms a significant local stronghold for water vole.

5.3.3.2 IDB Objectives

Table 25. Water Vole – IDB Objectives

	IDB Objectives
1	Maintain current water vole extent by reducing habitat degradation and loss through good watercourse maintenance techniques

2	Raise awareness of water vole conservation issues with the IDB machine operators
3	Better understand water vole population, movement and extent

5.3.3.3 IDB Actions

Table 26. Water Vole – IDB Actions

Objective ref.	Action	Measurable / Indicators	Completion date	Action Lead	Partners
1	Control American mink	Number of mink caught	Annually	Ops Lead	n/a
2	Work with GLNP on mink task group to monitor county water vole and mink populations.	GLNPs annual reports indicating number and results of surveys. Extent of water vole population	Annually	Ops Lead	Ecologist/GLNP
3	Continue yearly recording by operational staff.	Number and location records collected and submitted to local biodiversity records office.	Annually	Ops Lead	n/a

5.3.4 Kingfisher

5.3.4.1 National and Local Targets

Table 27. Kingfisher – National and Local Targets

National	Local
Protected under the WCA 1981, the Kingfisher is widespread throughout the UK, exact numbers are difficult to confirm	Occasionally seen throughout the Boards area along open watercourses and around pumping stations.

5.3.4.2 IDB Objectives

Table 28. Kingfisher – IDB Objectives

	IDB Objectives
1	Maintain potentially suitable kingfisher habitat, particularly breeding habitat

5.3.4.3 IDB Actions

Table 29. Kingfisher – IDB Actions.

Objective ref.	Action	Measurable / Indicators	Completion date	Action Lead	Partners
1	Maintain and avoid disturbance to potential nest sites by retaining earth cliffs and avoiding close working.	Number and extent of earth cliffs in m each year. Work schedules detail exclusion zone around known nest sites in the breeding season.	On going	Ops Lead	n/a
2	During replacement of pumping station create artificial kingfisher hole	New Kingfisher nesting hole to be present, GIS layer	On going	Ops Lead	n/a

5.3.5 Barn Owl

5.3.5.1 National and Local Targets

Table 30. Barn Owl – National and Local Targets

National	Local
Protected under Schedule 1 of the WCA 1981, widely distributed across the UK and very weather dependent on successful breeding seasons. Following a decline in numbers over the past fifty years, numbers may now be increasing.	The Barn Owl is a regular sight in Lincolnshire and widely associated with well-maintained IDB watercourses

5.3.5.2 IDB Objectives

Table 31. Barn Owl – IDB Objectives

	IDB Objectives
1	To maintain and where possible increase the range and population of Barn Owl within the Board's area.

5.3.5.3 IDB Actions

Table 32. Barn Owl – IDB Actions

Objective ref.	Action	Measurable / Indicators	Completion date	Action Lead	Partners
1	To increase nesting opportunities on land managed by the Board.	GIS Layer	Annually	Ops Lead	Hawk & Owl Trust
2	Maintain and renew nesting boxes at Pumping stations and pole sights.	Annual reports	Annually	Ops Lead	Hawk & Owl Trust
3	Monitor the use of the boxes, ring and record fledglings.	Annual reports	Annually	Ops Lead	Hawk & Owl Trust
4	Maintain areas of marginal vegetation around pumping stations and drains	GIS Layer	Annually	Ops Lead	n/a

5.3.6 Eel

5.3.6.1 National and Local Targets

Table 33. Eel – National and Local Targets

National	Local
Critically endangered	There is a legal requirement to position Eel passes at locations where their passage is impeded or likely to be impeded. Eel Regulation compliance for 'Pumping Station Passability' is ongoing in partnership with the EA.

5.3.6.2 IDB Objectives

Table 34. Eel – IDB Objectives

	IDB Objectives
1	To maintain and where possible increase the habitat range and population of Eels within the Board's area.
2	To remove any unnecessary watercourse restriction that could impede eel passage.

5.3.6.3 IDB Actions

Table 35. Eel – IDB Actions.

Objective ref.	Action	Measurable / Indicators	Completion date	Action Lead	Partners
1	Maintain the current range of eels within the Board's area through effective watercourse management.	Annual reports	Annually	Ops Lead	Ecologist
2	Install and maintain suitably approved Eel passes where necessary.	GIS layer	Annually	Ops Lead	Ecologist/EA

5.3.7 Otter

5.3.7.1 National and Local Targets

Table 36. Otter – National and Local Targets

National	Local
Protected under Schedule 5 of the WCA 1981, following a UK decline there now appears to be an increase in numbers and becoming more widespread.	Becoming more increasingly common through sightings within the Board's area.

5.3.7.2 IDB Objectives

Table 37. Otter – IDB Objectives

	IDB Objectives
1	Assist in maintaining sustainable populations by protecting, maintaining and enhancing the features required by this species.

5.3.7.3 IDB Actions

Table 38. Otter – IDB Actions

Objective ref.	Action	Measurable / Indicators	Completion date	Action Lead	Partners
1	Maintain habitat suitable for otter within the Board's area	Annual maintenance works	On going	Ops Lead	n/a
2	Record sighting by the Board's workforce	GIS layer	Ongoing	Ops Lead	n/a
3	Construct an Otter holt and maintain	Annual maintenance/inspection	Ongoing	Ops Lead	n/a

5.3.8 Grass Snake

5.3.8.1 National and Local Targets

Table 39. Grass Snake – National and Local Targets

National	Local
UK BAP Priority Species	Suffered from decline in habitat availability due to agricultural intensification but believed to be widespread throughout the remote Fens and increasing in number.

5.3.8.2 IDB Objectives

Table 40. Grass Snake – IDB Objectives

	IDB Objectives
1	To maintain and where possible increase the range and population of Grass Snake within the Board's area

5.3.8.3 IDB Actions

Table 41. Grass Snake – IDB Actions

Objective ref.	Action	Measurable / Indicators	Completion date	Action Lead	Partners
1	Create egg laying/hibernation stations throughout the Board's area.	GIS layer, annual maintenance	Ongoing	Ops Lead	n/a

5.3.9 Butterfly and Moth

5.3.9.1 National and Local Targets

Table 42. Butterfly and Moth – National and Local Targets

National	Local
UK BAP Priority Species	Thought to be rapidly declining, future plans should include more surveys, monitoring, research, site management and protection as well as publicity.

5.3.9.2 IDB Objectives

Table 43. Butterfly and Moth – IDB Objectives

	IDB Objectives
1	To undertake any watercourse maintenance adjacent to a Butterfly Garden in respect of conveyance, in an agreed and considerate way.

5.3.9.3 IDB Actions

Table 44. Butterfly and Moth – IDB Actions

Objective ref.	Action	Measurable / Indicators	Completion date	Action Lead	Partners
1	Co-ordinate lite touch essential maintenance with Butterfly Garden managers.	Annual reports from Butterfly Gardens.	Ongoing	Ops Lead	Butterfly Garden Managers (e.g., Amber Hill Butterfly Garden)

6 Procedural Action Plan

6.1 Introduction

A number of procedural targets and actions have been established to better integrate biodiversity considerations into IDB practices and procedures.

6.2 Objectives and Targets

Table 42. Procedural Action Plan – Objectives and Targets

	IDB Objectives
1	To improve all IDB employee's knowledge of biodiversity support through training.
2	To improve IDB practitioners knowledgeable about specific local biodiversity through training.
3	To maintain no net loss of open watercourse through consenting.

6.3 IDB Actions

Table 43. Procedural Action Plan – IDB Actions

Target Reference	Action	Measurable / Indicators	Completion date	Action Lead	Partners
1	Ensure all staff including contractors have received high-level biodiversity training within 6 months from the start date of this Plan, or as part of their induction, and refresher training provided every 3 years.	Numbers of staff trained	Ongoing	Ecologist	
2	Produce a manual of best practice within 12 months from the date of this plan.	Publication of manual on website	June 2022	Ecologist	NE/ WT
3	Develop and deliver 12 habitat and species specific toolbox talks, to be delivered 1 per quarter per year	Delivery of 12 toolbox talks	Ongoing	Ecologist	WT

4	Respond to applications for culverts with alternatives to maintain open watercourses. Approve no new long culvert applications.	Extent of open watercourses maintained.	Ongoing	CEO	LA's
5	Identify areas for limited maintenance	Develop the idea with the works Committees	Ongoing	Ops Team	

7 Implementation

The actions within the BAP will be executed via the following means:

1) The actions which can be delivered through adaptions or inclusions to general maintenance programmes will be identified and integrated accordingly / into the IDBs best practice manual. From this, monthly maintenance schedules will be drawn up and completed activities communicated via returned job cards or similar.

2) Actions which require independent and additional execution such as bat and bird box erection and surveys or training will identified, resources planned and engaged and / or planned in to the relevant resources' work schedules.

3) Actions which can be executed through capital works programmes will be integrated into the relevant project plans.

4) Actions which can be delivered through collaboration with partners will be formally agreed in writing with such partners with responsibilities, timescales and reporting requirements defined.

5) Actions which can be delivered through developer or consented works will be identified and integrated into project plans.

8 Monitoring

Appropriate indicators have been set for each of the IDB's biodiversity actions. Indicators have been chosen which provide the IDB with ways of measuring both the current status of biodiversity and also ways of measuring achievements in delivering biodiversity objectives and targets. The individual action plans set out the indicators and measurables which will be used to assess progress and execution against the plan. The IDB will routinely monitor biodiversity actions using the indicators and measurables and will review actions and indicators at least annually.

The overall plan will be updated at least every 5 years but is a dynamic document so may change more frequently for example in the light of monitoring outcomes.

9 Reporting

The Board is responsible for ensuring that progress against the Plans' targets are routinely reported, at least annually, at Board meetings to allow the Board to discuss and review BAP activity and to modify the BAP and actions to meet the objectives where necessary.

Annual summary progress reports will detail which actions have been progressed according to the plan, any new opportunities identified, risks and issues affecting the objectives or actions, and the contribution actions have made towards achieving the objectives. Recommendations will be made in the light of the monitoring outcomes.

Making this information available to a wider audience is important in increasing the understanding of the importance of the Boards' actions regarding biodiversity and inspiring people about biodiversity. As such, the IDB will make the summary reports available externally in the following ways:

- In the public domain via the IDB's website;

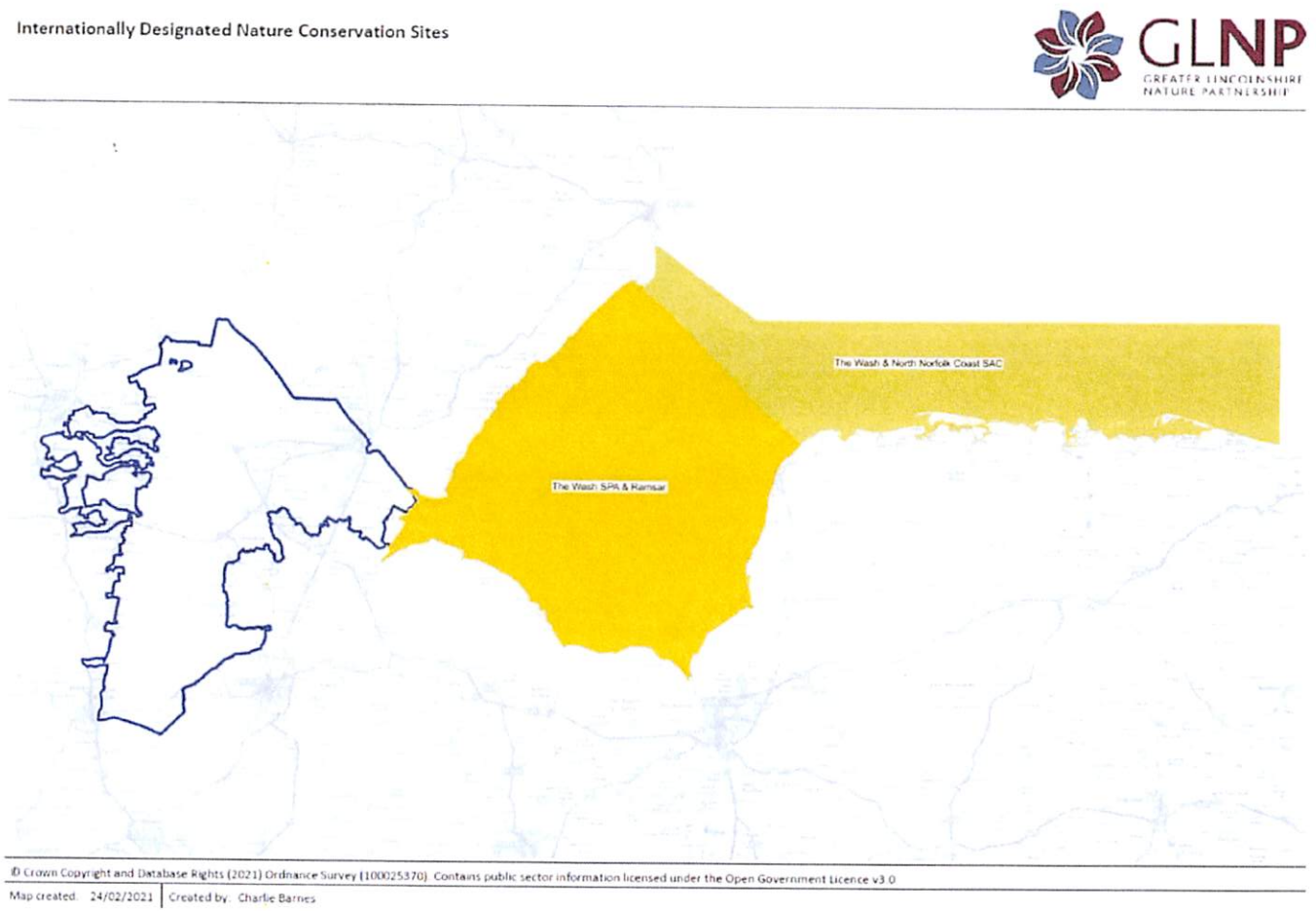
- Provided to conservation partners to assist with further local biodiversity conservation planning;

- Provided to local authorities in order to contribute towards their legislative biodiversity reporting requirements including the NERC 2006 Act, Habitats Directive, Environment Bill and the Local Nature Recovery Strategies;

- The Local Biological Records Centre.

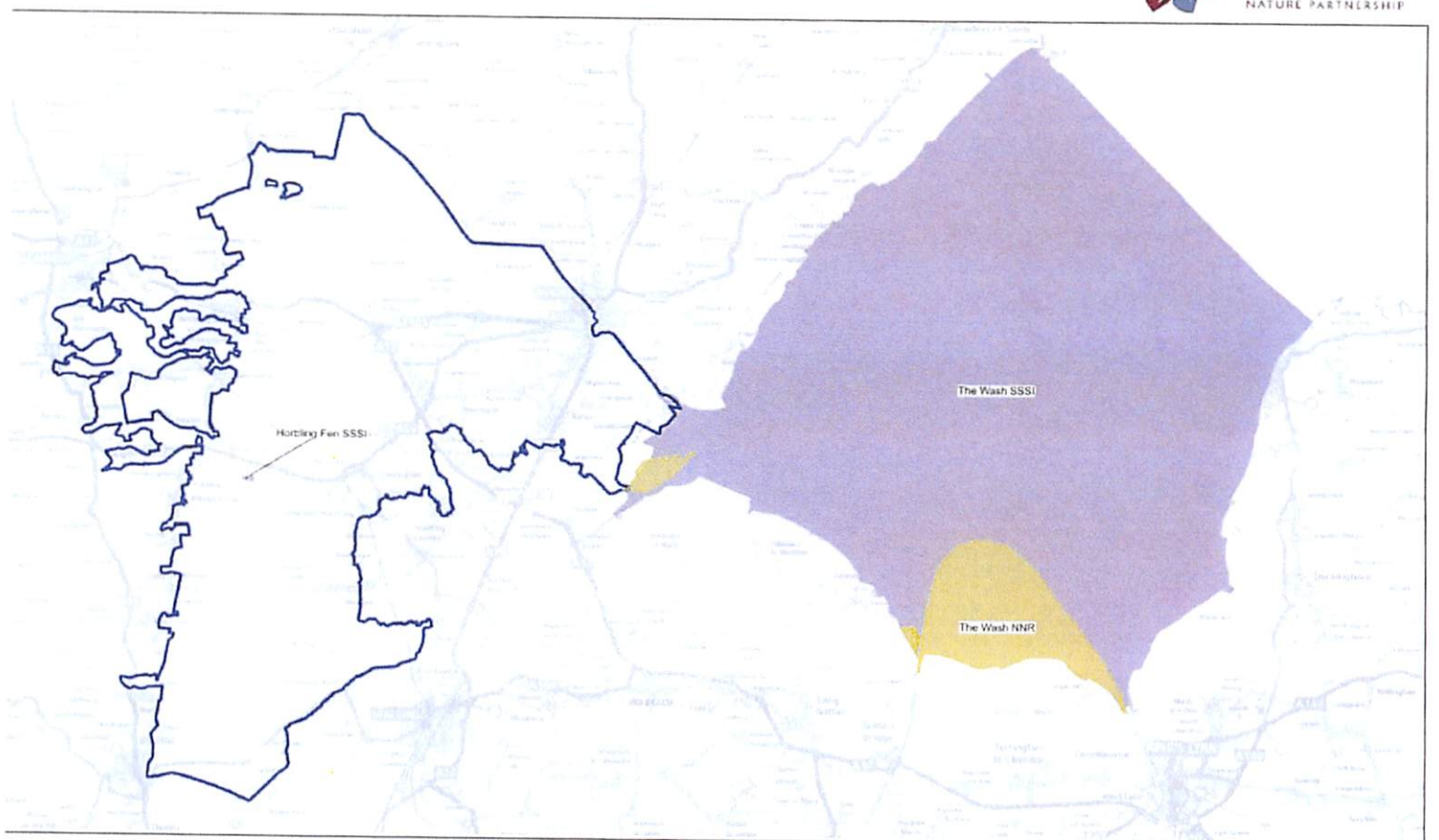
10 Appendices

10.1 Appendix 1 – Internationally Designated Conservation Sites



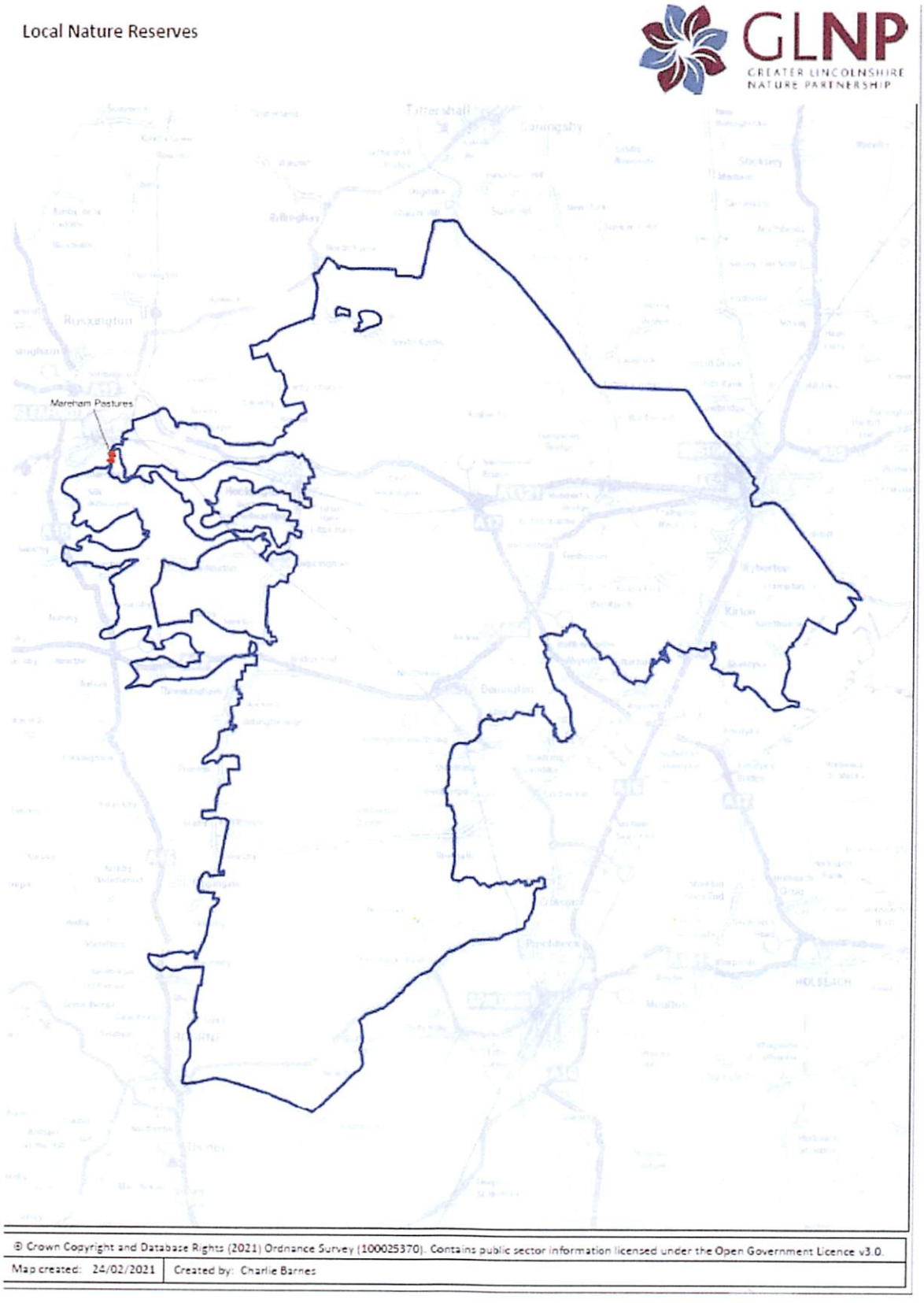
10.2 Appendix 2 – National Sites

National Sites

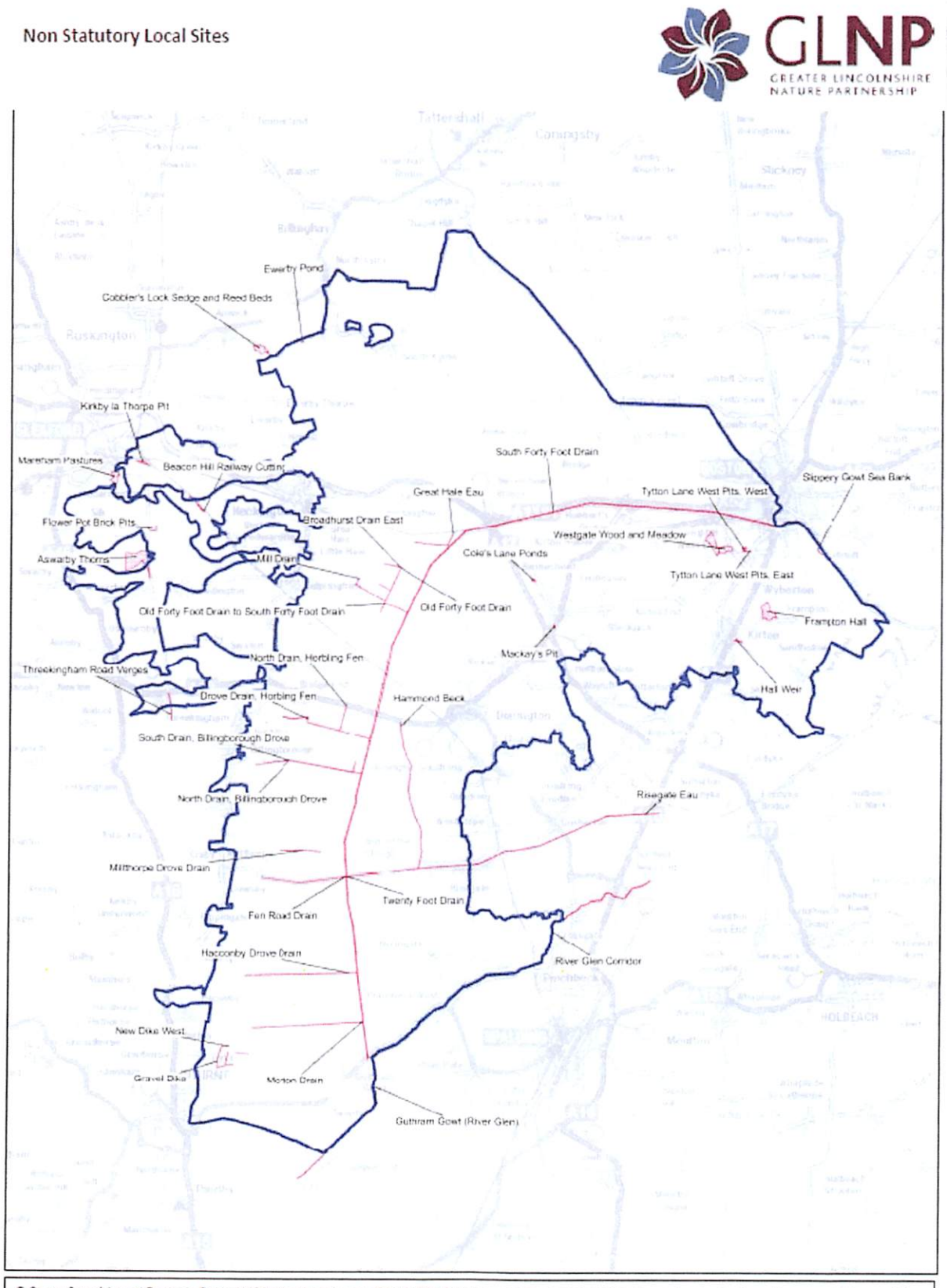


Map created: 24/02/2021 | Created by: Charlie Barnes

10.1 Appendix 3 – Local Nature Reserves



10.2 Appendix 4 – Non-Statutory Local Sites



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