

# **BLACK SLUICE**

## **INTERNAL DRAINAGE BOARD**



# **Environment Committee Meeting**

**Wednesday 10<sup>th</sup> May 2017 at 2:00pm**

**Station Road, Swineshead, Lincolnshire PE20 3PW**

# BLACK SLUICE INTERNAL DRAINAGE BOARD

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Our Ref: IMW/DPW/B10

Your Ref:

Date: 3<sup>rd</sup> April 2017

## **To all Members of the Environment Committee**

Notice is hereby given that a Meeting of the Environment Committee will be held at the Offices of the Board on Wednesday 10<sup>th</sup> May 2017 at 2pm at which your attendance is requested.



Chief Executive

## AGENDA

1. To welcome guests and receive apologies for absence
2. Declarations of interest
3. To receive and if correct sign the Minutes of the last meeting of the Committee held on 4<sup>th</sup> May 2016 (**pages 1 - 12**)
4. Matters arising
  - (a) To receive a Syndicate Proposal Update (**page 13**)
  - (b) To review the Bourne Eau Lake Angling Syndicate Proposal (V1) Final (**pages 14 - 21**)
  - (c) Letter from Centre for Environment Fisheries & Aquaculture Science – Registration Under the Aquatic Animal Health (England & Wales) Regulations 2009 (**pages 22 - 28**)
5. To review the Environment Committee Terms of Reference (**page 29**)
6. To receive a report on Environmental Work completed in 2016/17 and recommendations for proposed works for 2017/18 (**pages 30 - 35**)
7. To receive a verbal report/presentation from Scarborough Nixon Associates
8. To receive a report/presentation on Anglian Water's Pollution Watch promotion (**page 36**)
9. To receive a report on Barn Owl nesting boxes for 2016/17
  - (a) Annual Check of Black Sluice IDB and Catchment Nest Boxes 2016 (**pages 37 & 38**)
  - (b) Black Sluice IDB Owl Box Cleaning 2017 (**pages 39 - 43**)
10. To receive the draft minutes from the ADA Lincolnshire Branch Environment Committee;
  - (a) 8<sup>th</sup> June 2016 (**pages 44 - 50**)
  - (b) 14<sup>th</sup> September 2016 (**pages 51 - 55**)
  - (c) 7<sup>th</sup> December 2016 (**pages 56 - 61**)
11. Any Other Business

# BLACK SLUICE INTERNAL DRAINAGE BOARD

## MINUTES

of the proceedings of a meeting of the Environment Committee

held at the offices of the Board on  
4<sup>th</sup> May 2016 at 2.00pm

### Members

Chairman - \* Mr P Holmes

* Mr R Welberry	* Mr P Robinson
* Mr R Wray	Mr R Leggott
Cllr C Brotherton	* Mr K Casswell
* Mr V Barker	* Mr J Atkinson

\* Member Present

In attendance: Mr I Warsap (Chief Executive)  
Mr P Nicholson (Operations Manager)  
Mr I Cappitt (Fishing Syndicate)  
Mr C Reed (Fishing Syndicate)  
Mrs H Scarborough (Scarborough Nixon Associates)

The Chairman welcomed Mrs H Scarborough from Scarborough Nixon Associates, Ian Cappitt and Chris Reed of the Fishing Syndicate.

#### 943 APOLOGIES FOR ABSENCE

Apologies were received from Mr W Ash.

#### 944 TO RECEIVE A PRESENTATION FROM THE FISHING SYNDICATE REGARDING LEASING THE FISHING RIGHTS FOR BORROW PIT 2 AT BOURNE NORTH FEN, TWENTY

#### **Questions & Answer Session**

The Chairman invited questions on the presentation. Mrs H Scarborough said that the proposal could be a good opportunity to get some work done at the lake. Mr I Cappitt stated that they might have a boat with reed-cutting facilities. They would work very closely with Mrs H Scarborough.

Mr P Robinson asked why there needed to be fishermen there. Mr I Cappitt responded that the key thing was that there would be a publicity ban on the site. They would select people that they knew on the basis of their ethos and interest in conservation. They would use the membership fees for fishery management and conservation of that site.

Mr I Cappitt said that they were thinking of conserving both lakes. The Chief Executive stated that the Board did not own the smaller lake.

Mr V Baker asked about the weir adding water to the lake. The Chief Executive said that there was an overspill. Mr I Cappitt said that the ditch looked like it was blocked when they had been at the site.

Mr R Welberry enquired about access to the site. Mr I Cappitt replied that vehicles could access the sites. The Chief Executive said that they accessed the site through the permission of land owners. They would probably have recorded original depths, but he had seen an aerial photograph of the freshly dug ponds, which would give them an indication of the original depths. The full presentation would be circulated to the Committee Members for review.

Mr I Cappitt stated that members of the IDB that fished the lake would be incorporated into what they did. The Chief Executive stated that if the lake was being fished they should have an environmental theme for it and control it along those lines.

Mr K Casswell stated that he was concerned about unwanted visitors affecting the conservation of the area. Mr I Cappitt said that he did not think the lake would be known about and if anything the lake would be policed by members. The Chairman added that news would get round in the community. Mr I Cappitt noted that they would have to look at insurance for the site. They could make the lake lower-key if there were concerns about unwanted visitors.

The Chairman enquired as to whether there were any other sites being looked at. Mr I Cappitt responded that there were very few sites in the area. They had been looking at a site with Nick Morris, but this was their preferred option because it had a conservation dimension to it.

Mr P Robinson asked if the members would be local in order to monitor the lake. Mr I Cappitt replied that they would be.

### **Discussion Session**

The Chairman invited opinions on the presentation. Mr R Welberry asked if there was a set rate. The Chairman responded that they would receive £300 a year for the site. If they received nothing from the site, they would still benefit from the conservation work. They could still fine-tune the proposal at that stage.

Mr K Casswell asked about the excavation of the pond. The Chairman stated that it would be monitored by Mrs H Scarborough. The pond had clearly been deeper in the past because there had previously been fish.

The Chief Executive said that Mr I Cappitt and Mr C Reed both worked for the Environment Agency (EA) and were not doing it to make money. They would want to put a control mechanism into the lease that there would be an annual meeting.

Mr R Welberry stated that there might be a problem with the access to the site. The Chief Executive said that that would be for Mr I Cappitt and Mr C Reed to resolve.

Mr V Barker added that they must insist that there was an appropriate insurance policy in place.

Mr P Robinson stated that the agreement had to be on an organisation basis rather than personal, in case Mr I Cappitt moved away. The Chairman stated that there would be a 12-month break clause on the agreement.

Mr J Wray enquired whom the lease would be between. The Chairman replied that it would be between Black Sluice and the Fishing Syndicate. The Chief Executive stated that it was coincidental that Mr C Reed and Mr I Cappitt worked for the Environment Agency.

The Committee agreed that they would continue to review the proposal.

945 MINUTES OF THE PREVIOUS ENVIRONMENT COMMITTEE MEETING AND MATTERS ARISING

(a) Tom Tom Data Recording - Minute No 746(b)

The Chief Executive stated that on page 2, item 746(b) Mr Leggett had requested that they introduce the findings from their Tom Toms and other recordings. The Chief Executive presented the results of bats, otters and water voles. He did not think the bat survey recording data had gone back to Lincoln. Mrs H Scarborough said that they had passed the records on to Annette Faulkner, but it took about a year or so to verify the data and pass it to GLNP.

The Chief Executive stated that there had been a substantial increase in water voles. There had been 32 individual otter recordings for the past three years. They did not have any Black Sluice otter sightings. Mrs H Scarborough suggested asking for mink records as well. The Chairman asked how many of the otters might be mink. The Chief Executive replied that very few of those sightings were their own sightings. There had been one or two water vole sightings on their machines but he would be surprised if they recorded any otters on them.

(b) Wildflower Seeding on Risegate Eau Bank - Minute No 746(i)

Mr V Barker asked about item 746(i) on page 3. The Operations Manager stated that he had talked to their contractor and he had said that wildflowers could look like weeds and it was critical to remove the cuttings, which they had done, to stop the soil becoming enriched with nutrients. They had been led to believe from members' comments at the last meeting that potentially the soil was already enriched with nutrients. They would have to discuss the issue of the choice of area going forward.

The Operations Manager said that the contractor had also said that the option going forward was to spray off smaller areas and to try to introduce wildflowers into smaller areas. That was a way forward that was fraught with difficulty in terms of controlling the areas they had sprayed off. Mrs H Scarborough added that there were not any wildflowers that would withstand enriched soil. The Operations Manager said that they believed they had managed it under the guidance given. Mr V Barker stated they had to act soon if they were going to do something. The Chairman said that the site was not suitable.

Mr V Barker added that the mowing there last autumn had been much better because it had removed the nettles, so in the spring they could see the snowdrops and daffodils that grew along there.

(c) High Profile Watercourse Assets – Minute No 747(g)

The Operations Manager said that on item 747(g) page 6 the question had been asked about rapeseed and mustard seed that was growing on Board maintained watercourses. He had taken that question to the Lincolnshire Drainage Board Engineers' Forum and he had been told 'pretty unanimously' that the control should be down to the landowner and the Board were not forced to do anything if it was not a noxious weed.

Mr V A Barker stated that the issue was that it was smothering out the natural vegetation underneath. Mr P Robinson added that he had raised the same issue regarding the North Forty Foot Bank.

The Chief Executive said that it was a fantastic idea to cut down the mustard seed but they had 1,000 miles of bank they were responsible for. They could identify high profile banks. They could try to flail the banks without destroying bird nests. Mr J Atkinson said that there was not much nesting in those weeds. Mr Robinson stated that there would be nesting waterfowl in the weeds on the stretch in question. He suggested that it would have to be a chemical control rather than a physical one because they wanted to leave the grasses in place and remove the rapeseed.

The Chairman said that it was a question of timing. They would need to do it in spring when it was coming into flower, but that was a critical time of year when all the birds were nesting. They had to consider what to do and whether it was their responsibility to do it. Mr J Atkinson added that the smaller birds did not nest at all. Mrs H Scarborough stated that all nesting birds were legally protected. If they did not damage the nest they would be legally compliant.

Mr V Barker said that if they sprayed early enough in the season they would not cause a massive amount of damage. It was too late to spray now. The Chairman stated that they did not have any kit to carry that out. Mr K Casswell said that he did not know what chemicals they were cleared to spray. The Chairman stated that if they had agreed it was not their responsibility there was no point discussing it any further.

Mr V Barker said that they had to look at it more seriously where there were silt banks because they were not going to maintain the right kind of vegetation to keep the banks stable. It was in their interest to do it. The Chairman enquired whether it was their responsibility. Mr J Atkinson said that if they were responsible for mowing the banks they were responsible for looking after it.

The Chief Executive said that if maintaining the bank included reducing the heavy growth of vegetation it could be tied in. They controlled 1,000 miles of river bank and they could clearly not deal with all of it. They had two different focus points in terms of one area that was populated and one that was farmland.

The Chairman stated that he did not know if the spray had clearance to be sprayed next to a watercourse. The Chief Executive said that it would introduce another problem that they currently do not have the equipment because they very infrequently sprayed. The Chairman added that he would think if the weeds were flailed on 1<sup>st</sup> March the weeds would still establish, flower and seed. They would need to be flailing on 1<sup>st</sup> April to stop the weeds from flowering and seeding.

The Chairman stated that they would have to obtain a machine, access and a chemical to spray. Mr J Atkinson added that if they did not do anything it was going to become worse. The Chief Executive stated that if they were spraying they could only remove the vegetation when it was there and if they were flailing there was not a very big window to flail in. Mr R Wray said that they could identify the sites and then over time they could target them when there was not rapeseed there.

The Committee agreed that it was their responsibility to do something about the mustard seed and rapeseed issue. The Committee agreed that they should focus on the most elevated sites that had been brought to their attention as to mustard seed and rapeseed and identify the most suitable spraying technique to remove that growth.

(d) New Members – Minute No 751(a)

The Chairman stated that on item 751(a) page 10, Mr W Ash had put his name forward to be a member of this Committee. The Chairman proposed that Mr W Ash would join the Environment Committee. Mr J Atkinson seconded the proposal.

The Committee agreed that the minutes were an accurate reflection of the meeting.

946 ENVIRONMENTAL WORK REPORT

Completed Works 2015/16

(a) Owl Boxes

The Chief Executive stated that they had carried out, as requested by the Committee, a cleaning and prepping regime to all their owl boxes attached to pumping stations. They had attended every pumping station except Gosberton as a result of an access issue. They had been pleased by the number of owls in the boxes. They had reported the findings to Alan Ball. The boxes had been cleaned out and bark had been introduced.

(b) Tom Tom Data Recording

The Chief Executive stated that mink control had remained the same. Mr P Robinson asked if they kept records of mink. The Chief Executive said that they just recorded what they had been told. They had recorded half a dozen in the year.

(c) High Profile Watercourse Assets

The Chief Executive stated that high profile watercourses were included every year. The RSPB was still unhappy with their continuous cutting on the Wyberton Marsh drain.

(d) Control of Mink

The mink monitoring remained the same. They recorded when mink had been caught and dispatched, which was around half a dozen a year.



(e) Hedgerow Bushes

The Chief Executive said that they had not been able to complete a significant survey programme but that was proposed in the new works.

They had carried out their normal bushing work but without any burning that year.

(f) RSPB Water Abstraction for Frampton Marsh

The Chief Executive said that there had been a request to draw more water out for Frampton Marsh. They and the EA did not have any problems with the proposal, but they had set a level below which the drawing of water would have to stop.

(g) Kingfisher Nesting Site

The Chief Executive stated that a mute swan had resided at the kingfisher nesting site last year.

(h) Big Boston Clean Up

They had carried out the big Boston clean-up.

(i) Grass Snake Breeding Sites

The Chief Executive stated that Mrs H Scarborough's team had introduced some recommendations to them, which they had followed, as to grass snake breeding sites.

(j) Invasive Species

The Chief Executive said that in terms of invasive species they had recorded Japanese knotweed on several occasions.

The Chief Executive stated that they had awarded Martin Willing £300 towards his travel expenses to carry out Gulf Wedge Clam surveys. He had received an email from Martin Willing saying that he had revisited three sites on the South Forty Foot Drain and three on the tidal Witham. No Gulf Wedge Clams had been found on the tidal Witham, but they had found those clams throughout the South Forty Foot downstream from Swineshead Bridge through to the pumping station.

The Chief Executive noted that the South Forty Foot site was the only known site with the invasive Gulf Wedge Clam in Britain. Mr V Barker stated that he had informed the EA about the issue and they had not been interested.

The Chief Executive said that at the upstream points some of the shells had been recorded as being 60mm in size, which were the largest Gulf Wedge Clams recorded in Europe.

Mr R Welberry asked what was wrong with the Gulf Wedge Clams. The Chief Executive responded that there was a concern from the Board's point of view over the clams entering their discharge pipes and growing while they were not pumping and sealing those pipes up. The Chairman stated that there was also a concern on the impact on native species.

Mr V Barker enquired as to whether they had a responsibility to control the clams. The Chief Executive replied that it would be part of their negotiations regarding the EA being the 'river police'. The EA would have the controlling mechanisms but would probably involve them. He had no idea how the clams would be controlled. The Chief Executive proposed that they would allow Martin Willing to continue conducting the survey with the excess funds.

(k) Bat Boxes and Surveys

The Chief Executive stated that they had installed some bat boxes on pumping stations.

(l) South Forty Foot Drain Otter Holts

The Chief Executive said that they had built an otter holt. They had constructed some pads that would collect evidence of otters. There would be interest from otters because there were otters recorded in that area.

(m) Fish Friendly Flap Valves

The Chief Executive said that the fish friendly flap valves had been installed. The EA had paid for it because it protected properties from flooding. That had also allowed them to meet the requirements of the eel passage through pumping stations.

**Proposed Works 2016/17**

(a) Water Vole Surveys

The Chief Executive stated that they were seeking to approve the continued employment of Scarborough Nixon Associates for the water vole surveys. They had reviewed them against other providers and Scarborough Nixon represented good value for money and they had a good working relationship with them. They would carry out a post de-silting survey to look for any evidence of disturbance.

(b) Winter Bushing and Cleansing

The Chief Executive said that the winter bushing and cleansing would continue as it normally did.

The Chief Executive stated that where there was sufficient water they would identify fish.

(c) Summer Cutting and Vegetation Clearance

The Chief Executive said that they were proposing to commence summer cutting on 11<sup>th</sup> July 2016. Mr J Wray asked if they would be flailing the opposite bank where possible.

The Chief Executive said that they were trying to focus on alternating banks, but it was not always possible. They would spend more money than normal on installing side entry pipes, removing particularly awkward trees, bushes and fencing and widening bridges.

The Chief Executive said that the workforce would be presented with a summer cutting brief. They had several new employees. If they found nesting birds they would need to leave five metres either side.

The Chief Executive stated that they would monitor increasing levels of rapeseed and mustard seed and decide what they were going to do about it.

(d) Vegetation Spraying

The Chief Executive stated that they would continue to carry out spraying at tunnel ends.

(e) Owl Boxes

The Chief Executive said that they would seek approval to spend a maximum of £1,000 to repair owl boxes.

(f) Recording by Machine Drivers

The Chief Executive stated that they had eight Tom Tom recording devices and all eight are being renewed that year. They would continue with the existing sightings data that they had on those machines. They only had 11 input fields and they would divide them into 50% environmental and 50% water level management.

The Chief Executive asked whether there were any suggestions for specific wildlife to be recorded. Mrs H Scarborough suggested recording mink sightings. The Committee agreed that mink would replace newts in the monitoring.

(g) High Profile Watercourse Assets

The Chief Executive said that they would have the same early season and repeat cutting.

(h) Water Levels

The Chief Executive stated that the water levels were controlled via the pumping stations. The EA main river water levels had been lifted by approximately 600mm at Easter and would drop back down in November. They had requests to hold higher water levels for irrigation, which arguably enhanced biodiversity.

(i) Fens for the Future

The Chief Executive said that the Fens for the Future programme went against the ethos of a drainage board, but it was a strong organisation. Black Sluice had a small area at the top of the South Lincolnshire Fens Partnership area.

(j) South Lincolnshire Fens Partnership

The Chief Executive said that the South Lincolnshire Fens Partnership had already developed sites. There was a conflict in terms of the land being high status agricultural land.

The Chief Executive stated that with regards to the partnership and in conjunction with the Environmental Agency there was a botanical map showing the level of species on watercourses. The more significant botanical mapping watercourses were the watercourses that the Board maintained. Annual planned maintenance went hand in hand with environmental enhancement of the fens watercourses, which they did not advertise enough.

The Chief Executive noted that one of the poorer sections had been the lower section of the EA South Forty Foot Drain because it was not maintained, but it had had an increase in status. Some of the watercourses were missing because there had not been the resources to study those.

The Chief Executive stated that they had created a map of all the local wildlife sites in their area. The majority of the sites were in the upper catchment part of their area. There was scope for increase but they had had quite a few wildlife sites without knowing that they had them. The Chairman asked whether they had to do different cutting regimes as a result. Mrs H Scarborough said that those sites were like that because of what Black Sluice had been doing.

(k) Water Framework Directive

The Chief Executive stated that at one point officers from the EA involved with the Water Framework Directive had been extremely anxious to meet them on a regular basis as to enhancing water quality but in the last year it had gone quiet. They were continuing to negotiate and deal with them.

(l) The Wash and North Norfolk Coast European Marine Site

The Chief Executive said that they were involved in the Wash and North Norfolk Coast European Marine Site. They had to record data and feed that back.

(m) BAP Targets and Future Works

The Chief Executive stated that there were outstanding works in their biodiversity action plan. He was looking for suitable sites to create 100 metres of new reed bed. Mr R Welberry enquired whether it was obligatory to create the new reed bed. The Chief Executive replied that it was not obligatory but it was a target they had. Mr R Welberry noted that engineers should know where the river banks needed some reeds.

The Chief Executive stated that it had to be a continuous 100 metres length of reed bed. They could introduce new reeds in the Dovehurn drain. Mr V Barker stated that because the Graft drain had been over engineered there might be some scope to introduce reeds to stabilise the bank.

The Chief Executive said that they would plant and allow the reeds to develop with continued annual maintenance.

Mr K Casswell suggested that they left it to Black Sluice's operatives to identify a suitable site. The Chairman added that there would be lots of possible suitable sites.

The Chief Executive stated that they would buy some greater water parsnip plants to introduce. Mrs H Scarborough added that it might be better to wait to plant them until after the cutting regime and possibly at the Tongue End pond.

The Chief Executive stated that they had carried out a farmland bird study in 2010 and he thought it would be good to carry out a study in the same location so they could monitor it against 2010. They could also carry out a southern fen study at the same time. Mr V Barker had given him copies of a bird study that had been carried out on his land. Birds had been seen by experts that they did not normally see. A Bee Eater had been recorded, so that would be a good location to study. Mr V Barker suggested that they donate to the expense of conducting the study.

The Chief Executive stated that their proposed work did not take up their entire environmental budget. The Chief Executive invited members to add any environmental project ideas. The Chairman stated that they had saturated the area with owl boxes. The Chairman asked whether there were any other species they could help. Mrs H Scarborough stated that they had become very concerned that there had been a decline in the autumn surveys in water voles because of more numerous mink, so they could try to discourage mink.

The Chief Executive said that the only proposal he had been given to deter mink was to introduce otters. Mrs H Scarborough stated that otters would take too long to be introduced. The Chief Executive suggested that they could increase the number of traps. Mrs H Scarborough suggested that they could focus on certain areas where they had good water vole populations. She could provide them with particular areas that they could target to protect water voles from mink.

The Chairman asked whether they could employ someone for half a day a week out of the environmental budget to check the traps. The Chief Executive stated that subject to board approval they could employ someone to do that. It was a seven day a week operation. The Chairman stated that vermin control contractors were expensive, so it would be good if they could find someone in the workforce who was very keen, even if they had to put that individual on a course.

The Chief Executive said that he thought that there would be one or two interested for an hour's overtime a day to check the traps.

Mr P Robinson asked about the monitoring of traps. The Chief Executive said that they could offer the traps out to the landowner. The mink were generally caught and the traps were returned. Mr R Welberry stated that the individual setting the traps needed to liaise with Mrs H Scarborough to find out where the best sites were.

Mrs H Scarborough suggested that they could put camera traps out at pumping stations to gather more records of wildlife. They had done it for South Holland and they had quite liked it because they could use the photographs for publicity.

The Committee approved the works for 2016/17. The Chairman said that the works were fluid, so if there was something that arose they could add a piece of work.

Mr V Barker stated that they could move banks back in a couple of locations so there were hollows where they could introduce natural flowering yellow iris. There were some boards holding the water back that were leaking and needed to be replaced. The Chief Executive said that they could develop a suitable scheme along those lines.

The Chief Executive asked whether there was a need for continuous communication. The Chairman stated that it was up to the Committee Member whether they wanted to respond to or read block emails that were sent out to seek approval for works.

Mr R Welberry asked how many kingfisher banks they had. The Chief Executive replied that they had one and they were inexpensive. The Chairman said that kingfishers were very particular about where they would nest. The Chief Executive stated that they could create a brief for installing further kingfisher banks.

#### 947 VERBAL PRESENTATION BY SCARBOROUGH NIXON ASSOCIATES

Mrs H Scarborough stated that they had been conducting water vole monitoring surveys of six sites and they had recorded a decrease in the autumn due to a couple of sites being drier and the increased presence of mink. That was an issue that they needed to look at and it was not due to Black Sluice's management.

Mrs H Scarborough stated that one site, on Bicker Fen, had had no water voles. They had six core areas so that over time they could observe patterns. They would carry on with those six core areas but they might shift into some of the deeper drains on the drier sites because they now had a boat.

Mr R Welberry asked whether brown rats would discourage water voles. Mrs Scarborough responded that she did not think that brown rats discouraged water voles.

Mrs Scarborough stated that they had been conducting bat surveys. They had chosen the Kent bat box design as the uptake on those had been good on other sites. They had installed eight of those on the 20 site. Over 100 bats could sleep in the boxes that they had.

Mrs Scarborough stated that the local bat group had undertaken quite a lot of work on bats on the waterways. The group had been doing a lot of work trying to find where Daubenton's bats were roosting. They were at a stage now where as a volunteer organisation they were as far as they could progress. If they wanted to find out where the bats were roosting and what made a good Daubenton's bat roost, the group would need to have some more detailed study work, which would require professional ecologists.

Mrs Scarborough asked whether it was something that Black Sluice could support. However, the roosting bridges may not necessarily be in Black Sluice's area.

The Chief Executive enquired about the level of contribution required. Mrs Scarborough responded that each radio transmitter costed approximately £200. The Chief Executive asked to be sent the costs.

The Chief Executive stated that the project would have to be associated with their catchment area. Mrs Scarborough said that that could be an issue because they could not predict where the bats would go to roost.

948 MINUTES OF THE ADA LINCOLNSHIRE BRANCH ENVIRONMENT COMMITTEE

There was no comment on the minutes.

949 ANY OTHER BUSINESS

The Chief Executive noted that the photograph at the front of their brochure was of a juvenile common buzzard that had been photographed next to the Board's offices. The local RSPB had come from King's Lynn and had taken the buzzard. The buzzard had unfortunately had to be put down.

The meeting was closed at 16:28.

**BLACK SLUICE INTERNAL DRAINAGE BOARD**

**ENVIRONMENT COMMITTEE MEETING – 10<sup>th</sup> MAY 2017**

**AGENDA ITEM 4(a)**

**Syndicate Proposal Update**

Chris and I had another really useful meeting at the lake yesterday evening. On the basis of our discussions, I thought I would make you aware of a few tweaks we intend to make to the current proposal, that you may wish to share with committee members:

- 1) To spend up to 5 years trying to develop the lake for conservation / fishery (rather than two), hence we would not be looking to attract membership until c. 2021. In the interim, it would really be just Chris and myself working on the site (perhaps with some help from friends / IDB support for dredging etc.)
- 2) Access – speaking with Mr Ben Cook again yesterday (one of the local residents), he seemed warm to the idea of allowing Chris and I gaining access via the Bourne Eau PS track for c. 5 years if it was not on a syndicate basis i.e. just low key conservation work and developing the fishery. This would give us time / space to build a relationship with the landowner re the Twenty access track for future years. Chris / I would need to think about a possible financial contribution to local residents re our access.
- 3) We will update the proposal with more details on the aspects you have asked for last week. Re dredging, we are going to look at two options. Option 1 – dredging and removal of waste to be reused as beneficial to agricultural land either adjacent to site or away from the site. Option 2 – create bunded areas in 2 or 3 corners of the lake and move dredged material into these. The latter option is likely to be much cost efficient / realistic as option 1 would involve the Waste Regs. and this in itself is likely to be costly / difficult to deliver. The lake appears to be c. 60cm deep re water depth and c. 60cm silt depth so we are not talking about removing a lot of material down to near the original bed level. We did feel it would be really useful to meet Helen Scarborough on site ahead of submitting the dredging proposal as any work solely on-site would need to be done very sensitively etc re habitats / ecology. We recognise there may be some short term impacts re this but feel if we get it right, the longer term environmental gains and value of the site being actively managed could in itself be of much greater benefit. If you are okay with this, please can you advise how we should go about this as we assume her time is currently charged to the IDB. Would we need to make an early contribution for her to visit site?



**Bourne Eau Lake  
Angling Syndicate  
Proposal (V1)  
FINAL**



**Ian Cappitt and Chris Reeds April 2016**

## Introduction

Further to submission of an outline proposal in September 2015 to lease the small lake at the Bourne Eau Pumping Station owned by Black Sluice Internal Drainage Board (BSIDB), the following document provides more detail with regard to this initiative for consideration.

## About Us

Ian Cappitt and Chris Reeds propose to take this project forward jointly. Ian Cappitt has worked in the environmental sector since 1995 in both consultancy and with the Environment Agency. Ian has a background in aquatic ecology, environmental impact assessment and flood risk management. Chris Reeds is a fisheries specialist and has over 30 years experience in fisheries management for the Environment and its predecessors. Chris has a range of expertise including habitat management, fisheries ecology and conservation. Ian and Chris are also dedicated anglers with a strong interest in the environment.

## Proposal

The rest of this document sets out how we feel it would be most appropriate to take this initiative forward. We would like to work with BSIDB in 2016 to explore further to feasibility of our proposal (assuming it is agreed at this stage that a lease would be acceptable.) and at the end of the year, assuming we felt there was a viable fishery to be developed, take on a five-year lease from 2017 to 2022. Our rationale for this is expanded in the following sections and will help us understand better the potential the lake has to be developed as a fishery and to work within a sensitive site that has high ecological value.

## Opportunities and constraints

The opportunities (table 1), constraints (table 2) and proposed management actions to developing the lake as a low-key fishery are set out below.

Table 1: Opportunities

Opportunities	Management
<b>IDB conservation management plan:</b> Deliver some of the conservation management plan actions as a contribution in kind on behalf of the BSIDB.	For example, can undertake aquatic ecological surveys, reed management, tree management.
<b>Natural resource:</b> To provide a resource for others to enjoy and contribute to (i.e. management and enhancement of lake.)	Fishery management plan to be developed by syndicate group leaders.
<b>Fisheries conservation:</b> Create an ecologically diverse fish population representative of this type of habitat / location including fish of conservation concern in the UK.	For example, <i>Crucian carp (Carassius carassius)</i> are endangered across their natural range and are designated by the International Union for the Conservation of Nature as a <b>red listed species</b> . The number of fisheries containing Crucian carp is in decline and there is an urgent need to ensure better protection and management.
<b>Aquatic plants:</b> Increase the ecological diversity of the aquatic macrophyte community for birds, fish and invertebrates (the current community is dominated by filamentous algae.)	For example, introduction of white water lilies and other native pondweeds / emergent plants.

Table 2: Constraints

Constraints	Management
<b>Water depth:</b> April 2016 the average depth found was c. 2ft. Summer retention levels maybe an issue and also deeper areas for overwintering fish.	Full or partial removal of silt to deepen the whole or selected areas of the lake / potential to increase water levels?
<b>Filamentous algae:</b> Linked to water depth, it is very likely much of the lake could currently become unfishable during the warmer months due to the shallow depths and weed growth from the bed to surface of the lake.	Possible use of barley straw (in floating net sacks) in margins (30g/m <sup>2</sup> , so 14,000m <sup>2</sup> x 30g = 420,000g or 420kg.)
<b>Dissolved oxygen (DO):</b> shallow heavily weeded lakes	Management dependent on lake depth and weed

can suffer from extreme diurnal fluctuations in DO levels during the summer, which can impact on fish stocks.	control.
<b>Fish population:</b> the current fish stock is unknown (no fish were noted from observations and underwater video footage) and there have been unconfirmed records of historic DO problems / fish kills.	A sensible stocking plan would be developed with species suitable for this type of water body (e.g. Rudd, Tench, Carp (various sp.))
<b>Access:</b> It may be difficult to obtain access via the track to the Bourne Eau Pumping Station, as we understand this is a private road and liaison with a one of the local residents has confirmed they would not be happy with this approach.	Look into the possibility of gaining access via Twenty, which would be required for any fish stocking, machinery / equipment for lake / conservation management.

Our indicative plan to develop the fishery over the next six years is shown in table 3.

**Table 3: Indicative plan**

Year	Objective	No. Members
2016	Ian / Chris to work with BSIDB and implement actions set out in this report.	2
2017	Based on 2016 results, formalise five-year lease, construct platforms, stocking of fish as required and deliver agreed conservation actions.	2
2018	Continue management of lake (as required – fishery / conservation) and actively promote for members.	2 + 5
2019	As 2018 plus monitor success of membership and review increasing (or hold.)	2 + 5 + 3 (poss. max.)
2020	As 2019 plus monitor success of membership and review increasing.	2 + 5 + 3 + 5
2021	As 2020 maximum membership (15.)	2 + 13 (max.)

### Outline plan (2016 to 2021)

The following sections outline how we propose to progress this initiative over the next six years. We would propose to prepare and share a short report with the BSIDB annually summarising progress achieved.

#### 2016 actions:

##### What we can do:

- Monitor water levels and weed growth throughout the year.
- Agree a suitable access with the BSIDB including vehicular access to the lake.
- Source and purchase two large barley straw bales (c. 500kg), netting, floats and stakes (per application – may need more than one during the year) and begin barley straw trial to encourage a reduction in filamentous algae and an increase in higher aquatic plant diversity.
- Plant corners of the lake with suitable aquatic plants, e.g. Hornwort, Water milfoil, Lily, Perfoliate pond weed.
- Support agreed 2016 conservation actions that the pre-syndicate group (Ian and Chris) can start to implement in line with the BSIDB site conservation plan.

##### What we may be able to do in partnership:

- Year 1 - undertake some minor silt removal works in suitable areas of the lake (i.e. along one bank or in one corner of the lake) to create a deeper area of water. This will be dependent on use of machinery and support from BSIDB, available space to spread dredging's and ensuring there are no adverse ecological impacts.

Some of the above actions will require temporary the use of a suitable boat to implement and this will be supplied by the syndicate group (unless agreed by the BSIDB that they can / would like to supply.) The boat and any equipment will always be removed from site.

Assuming it was felt there was a viable fishery to be developed, we would look to agree and sign a five-year lease for the period 2017 to 2022 prior to the end of the year (for review in 2022.)

#### **2017 actions:**

##### **What we can do:**

- Continue to monitor water levels and weed growth throughout the year.
- Continue with the barley straw initiative.
- Implement year one fish-stocking programme. The details of how this would be designed and implemented are heavily dependent on what is found in 2016. To this end, it is not possible to provide a lot of detail at this stage. However, we would only plan to introduce low level stocking of native fish species and ensure that a diverse community was established appropriate for this type of habitat e.g. Rudd, Tench. As any stocking would be self funded by the syndicate group, hence numbers of fish and timescales of introductions will be dependent on finances available.
- Construct 3 X wooden fishing platforms (see Appendix 1 for proposed locations and Appendix 2, photo No. 2.) There are numerous designs from wooden walkways through the reeds to a larger platform area to fish from on the front edge of the reeds (see Appendix 2, photo No.3) to a narrow walkway to the edge of the reeds with a peg where the angler remains at the back of the reeds (see Appendix 2, photos No. 1 and 2 as examples.) It may be possible to recycle wood sourced from on-site tree management works or wood would be purchased from a local supplier.
- Support agreed 2017 conservation actions that the pre-syndicate group (Ian and Chris) can start to implement in line with the BSIDB site conservation plan.
- Engage support for membership in 2018 (five maximum.) This will be targeted at responsible anglers we already know and have confidence in to support the fishery / site conservation and the general ethos of this initiative.
- Develop and finalise fishery rules.

##### **What we may be able to do in partnership:**

- Year 2 - undertake some minor silt removal works in suitable areas of the lake (i.e. along one bank or in one corner of the lake) to create a deeper area of water. This will be dependent on use of machinery and support from BSIDB, available space to spread dredging's and ensuring there are no adverse ecological impacts.

#### **2018 actions:**

##### **What we can do:**

- Continue to monitor water levels and weed growth (algae versus higher aquatic plants) throughout the year.
- Continue with the barley straw initiative (if required.)
- Implement year two fish-stocking programme.
- Support agreed 2018 conservation actions that the pre-syndicate group (Ian and Chris) can start to implement in line with the BSIDB site conservation plan.
- Review success of membership and if deemed acceptable, engage support for membership in 2019 (three additional places on top of membership for 2018.). This will be targeted at responsible anglers and will require interview etc. prior to joining

### **2019 actions:**

#### **What we can do:**

- Continue to monitor water levels and weed growth (algae versus higher aquatic plants) throughout the year.
- Continue with the barley straw initiative (if required.)
- Implement year three fish-stocking programme.
- Support agreed 2019 conservation actions that the pre-syndicate group (Ian and Chris) can start to implement in line with the BSIDB site conservation plan.
- Review success of membership and if deemed acceptable, engage support for membership in 2020 (five additional places on top of membership for 2019). This will be targeted at responsible anglers and will require interview etc. prior to joining.

### **2020/21 actions:**

#### **What we can do:**

- An ongoing fisheries management plan will have developed over the intervening years to that will align with the BSIDBs conservation management plan and this will continue to be implemented for the benefit of the lake (fisheries, habitats and wildlife.)

## **Syndicate Philosophy**

To run a small non-profit making high quality angling syndicate with conservation at the heart of our angling ethos.

## **The Syndicate**

The following outline syndicate principles are proposed. These will be developed in more detail and a clear set of rules provided to all members. The angling syndicate would be responsible for drafting and presenting these to the BSIDB for review. The objective would be to ensure that the environment is protected, members, fish and all wildlife are safe and that no compromising behaviour takes place to spoil the enjoyment of others, landowners or local residents.

- All fishing would be pre-booked with no more than three anglers on the lake at any one time. This is to ensure there are no adverse impacts on wildlife, habitats, adjacent landowners and local residents.
- All members would be in possession of a syndicate membership and a valid Environment Agency rod licence.
- All members will partake in at least two days conservation work per year.
- Night fishing will be allowed.
- All fish will be returned alive and all members will have the required fish care products to ensure the utmost care at all times.
- Members must not damage habitats or vegetation and must make every effort to ensure minimum disturbance to wildlife.
- Access will only be from the point of parking to the lake and between each of the three fishing platforms.
- The fishery will close for a period (or periods) of time each year to allow fish to spawn and any other sensitive species to breed / nest. This will be flexible and decisions made based on what is actually happening at the lake.
- Members must not participate in any activity that may disturb or have an adverse impact on local residents.

## Financial

We propose to run a non-profit making syndicate with any fees being reinvested back into the fishery and / or conservation work.

There is little information available with regard to costs associated with leasing small lakes such as this. We are only aware of one local lease with another IDB, where the angling club leased c. 32km of IDB drains for £300 per year. Our proposed lease costs are shown in Table 4.

Table 4: Proposed five year lease (costs and profile)

Year	Notes	Lease cost
2016	Assuming lease principle agreed, fishery viable, finalise lease by end of 2016	£0
2017	Annual lease cost	£300
2018	Annual lease cost	£300
2019	Annual lease cost	£300
2020	Annual lease cost	£300
2021	Annual lease cost	£300

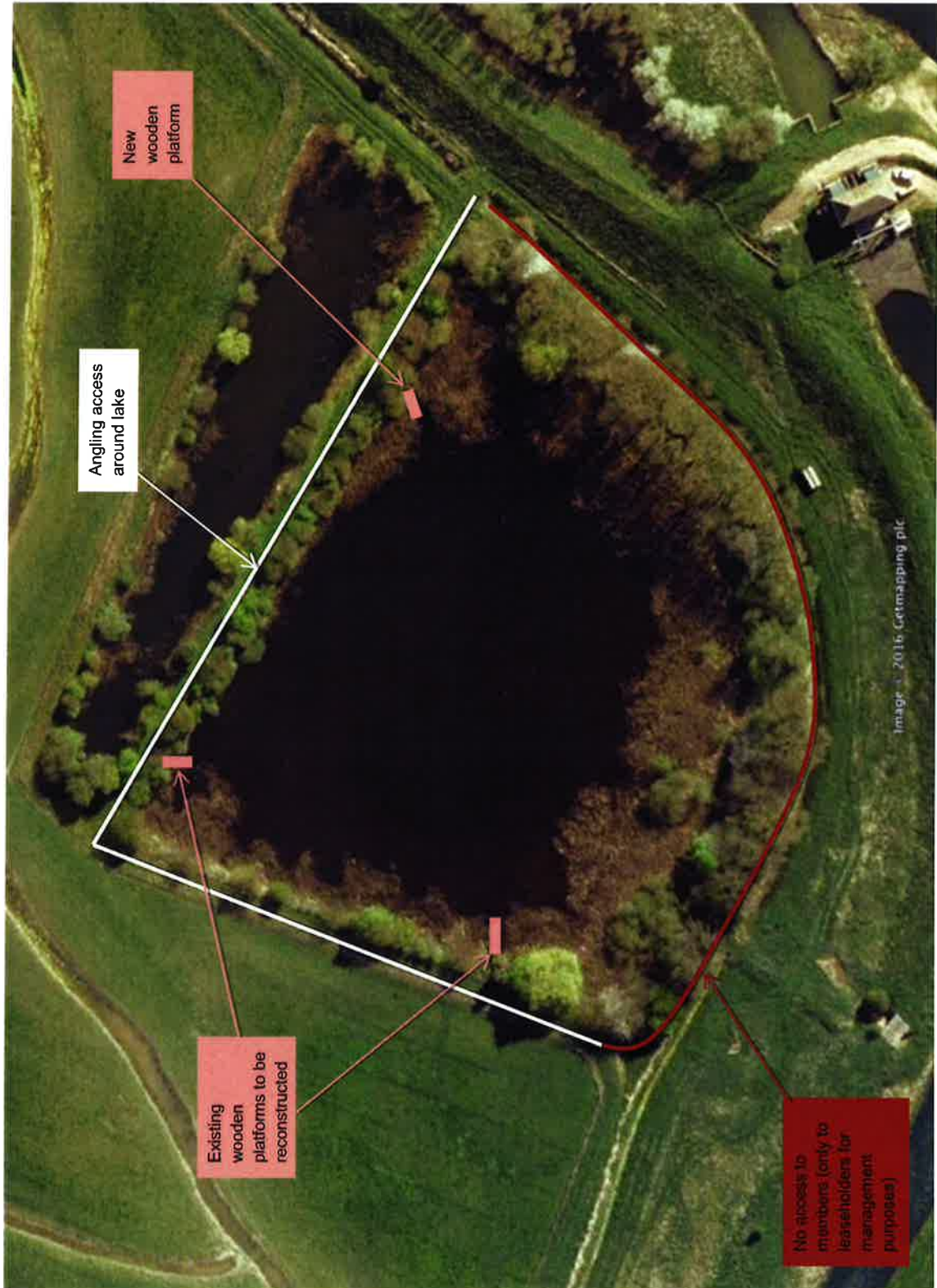
Table 5 shows an outline of potential investment by the syndicate leaders and members between 2016 and 2021.

Table 5: Syndicate income and outgoings investment (indicative)

Year	Notes	Income	Notes	Outgoing	Balance
2016	No members	£0	Barley straw (BS) etc	£100	-£100
2017	No members	£0	Lease, BS, fish stocking (1), platforms	£1,200	-£1,200
2018	£100/yr X 5 members	£500	Lease, BS, fish stocking (2)	£1,300	-£2,000
2019	£100/yr X 8 members	£800	Lease, BS	£400	-£1,600
2020	£100/yr X 10 members	£1000	Lease	£300	-£900
2021	£100/yr X 15 members	£1500	Lease	£300	£300

The above is indicative. We would propose to review membership in 2020 (it may stay at 10) and from this point any income would be invested back into the lake for both fishery management and conservation purposes.

Appendix 1: Bourne Eau Lake



**Appendix 2: Photographs (various)**

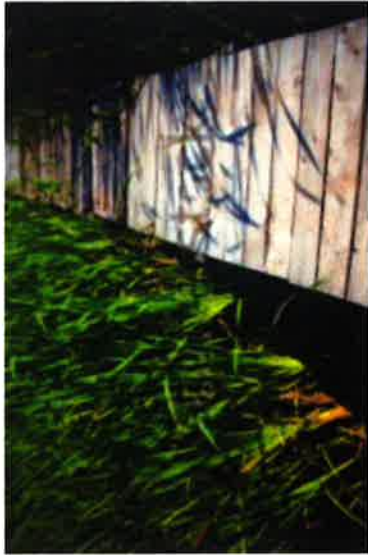
No. 1 -- Possible bankside peg design



No. 3 -- Idea showing fishing area on front edge of reeds



No. 2 -- Idea showing platform through reeds







Centre for Environment  
Fisheries & Aquaculture  
Science

Our ref: EE085-R-843

Mr I Warsap  
Chief Executive  
Black Sluice Internal Drainage Board  
Station Road  
Swineshead  
BOSTON  
PE20 3PW

RECEIVED 19 Jul 2016  
21 JUL 2016

Dear Mr Warsap

## Registration under the Aquatic Animal Health (England & Wales) Regulations 2009

Following your recent application, I enclose your Registration document; it outlines your legal obligations under the Aquatic Animal Health (England and Wales) Regulations 2009. Please would you carefully read this document, paying attention to the conditions listed and particularly your obligation to notify the Fish Health Inspectorate, or Veterinarian, of any increased mortality in the fish stocks.

The registration document is valid for the duration of your operation / ownership of the waters. It does not require renewal on an annual basis, but should any information change please notify us as soon as possible.

Also enclosed is a map of your registered waters. Should this not be an accurate representation of the location and/or names of the waters, or if any information has been omitted, then please notify us as soon as possible with the correct details.

Please note fish movements to or from this site require consent from the Environment Agency.

Further information and forms relating to both the Aquatic Animal Health (England and Wales) Regulations 2009 and Environment Agency consenting procedures are available from [www.gov.uk](http://www.gov.uk).

If you have any further questions, or require any more information, please contact us using details below.

Yours sincerely

Aquatic Trade & Technical Advice Team

Encs



**Fish Health Inspectorate**  
Cefas  
Barrack Road, The Nothe  
Weymouth  
Dorset, DT4 8UB

Tel +44 (0)1305 206700  
Fax +44 (0)1305 206602  
Email [fhi@cefas.co.uk](mailto:fhi@cefas.co.uk)  
[www.gov.uk/cefas/fhi](http://www.gov.uk/cefas/fhi)



**Registered Fishery**  
**Bourne North Fen Ponds**  
Registration Number: **EW085-T-845F**



This registration document must be made available for inspection by the Cefas Fish Health Inspectorate.

This is to Certify that

**Black Sluice Internal Drainage Board, Station Road, Swineshead, Boston, Lincolnshire  
(EE085-R-843)**

Is hereby registered by the Cefas Fish Health Inspectorate (FHI) under the Aquatic Animal Health (England and Wales) Regulations 2009 as an Operator of a Fishery known as **Bourne North Fen Ponds, Spalding Road, Twenty, Bourne, Lincolnshire** grid reference **TF15481892**, subject to the details and conditions as set out below:

Details of Registered activity.

1) Fishery comprising of the waters known as Pond 1 and Pond 2.

Legal Obligations.

1) The fishery operator must notify the FHI in writing of any changes to ownership, waters, species present or if the fishery ceases operation within 90 days of the change.

2) The fishery operator must notify the FHI of any suspicion or knowledge that a listed disease is present in the fishery.

3) The fishery operator must notify the FHI or a veterinarian of any increased mortality in the aquatic animals within the fishery.

4) The fishery operator must provide assistance or information that may be reasonably required by the FHI in discharging its functions under the Regulations.

It is an offence under the Aquatic Animal Health (England and Wales) Regulations 2009 to fail to accord with these legal obligations.

\* Failure to comply with legal obligations may result in prosecution under the Aquatic Animal Health (England and Wales) Regulations 2009.

\* This registration is without prejudice to the application of other relevant legislation.

Signature:  Name of Authorised Signatory: **W. FRIENDSHIP** Dated: 19 July 2016

(On behalf of the Secretary of State for Environment, Food and Rural Affairs)

EW085-T-845-FIS1-1

Fish Health Inspectorate  
Centre for Environment, Fisheries & Aquaculture Science  
Barrack Road  
The Nothe  
Weymouth  
Dorset  
DT4 8UB

Tel: +44 (0) 1305 206700  
Fax: +44 (0) 1305 206602  
Email: [FHI@cefass.co.uk](mailto:FHI@cefass.co.uk)  
Web: [www.defra.gov.uk/aahm](http://www.defra.gov.uk/aahm)



Google earth

feet  
meters

700  
200



Affects all varieties of common carp, *Cyprinus carpio*, including varieties such as mirror, leather, koi and ghost koi

Outbreaks occur over 16°C

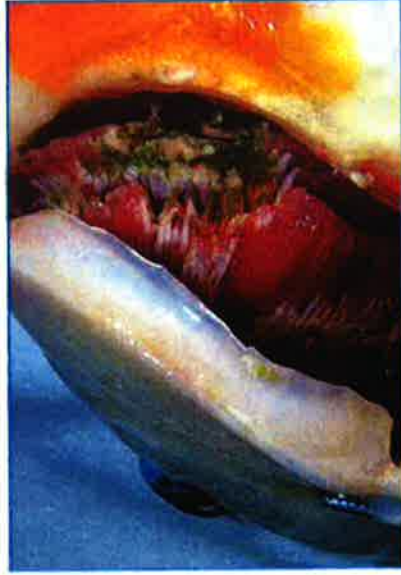
Can cause serious economic losses in coarse fish

No treatment

Notifiable disease in the UK

Large scale mortalities up to 100%

Clinical signs include lethargic or erratic behaviour, loss of mucus, and sunken eyes. Gills often have dead patches.



Example of the gill in a KHV infected Carp

**KHV disease is notifiable.** There is a legal obligation to report any suspicion of an outbreak to the FHI immediately.

### Contact address for further information:

Fish Health Inspectorate (FHI)  
Centre for Environment, Fisheries & Aquaculture Science  
Barrack Road, The Nothe  
Weymouth  
Dorset  
DT4 8UB, UK

Tel: 01305 206700

Fax: 01305 206602

Email: [fhi@cefas.co.uk](mailto:fhi@cefas.co.uk)

Web: [www.gov.uk/cefas/fhi](http://www.gov.uk/cefas/fhi)

Facebook: [www.facebook.com/fhi.gov](http://www.facebook.com/fhi.gov)

# Koi herpesvirus disease and your fishery



Centre for Environment  
Fisheries & Aquaculture  
Science

## Introduction

**If the water temperature is over 16 °C, mostly carp dying and their gills look pale or rotten, then it might be KHV.**

Don't hesitate, you must call the Fish Health Inspectorate (FHI) on 01305 206700.

As water temperatures rise - with the warmer weather - anglers and fishery managers must remain vigilant to the threat of koi herpesvirus (KHV) disease.

## What is KHV?

KHV is a viral disease of common carp (*Cyprinus carpio*), and all its varieties - such as mirror, leather, ghost, koi etc. The disease occurs during higher water temperatures (16 °C+), is highly contagious and may cause up to 100% mortality.

The disease is transmitted by fish to fish contact, and has been shown to transmit via angling equipment and contaminated water. The virus can shed through faeces, urine, gills and skin mucus.

## What do I look for?

Is it mostly carp dying? Is it summer? Do the gills look damaged?

The affected carp appear lethargic, "hanging" in the water, gathering at water inlets or points of aeration. They can appear similar to besking fish, but a sick fish will not "spook" away as vigorously as a healthy fish - if at all.

The mucus covering the skin can appear like it's flaking off and the fish can feel dry and rough when handled. The eyes can appear sunken and, on closer examination, the gills can show patches of dead or rotting tissue.

In addition there may be effects of secondary infections caused by parasitic, fungal or bacterial pathogens.

## How did it get into my fishery?

The most likely route of introducing KHV is through live fish movements of infected animals. This includes introductions of unwanted pet koi or ghost carp, and carp from other fisheries. The rehoming of pet koi into fisheries is illegal and poses a high risk of introducing KHV disease.

The virus can also be transmitted via nets, mats and slings. Anglers moving from one water to the next with wet slimy equipment kept in "stink bags" are a proven risk

## Can I treat my fish?

There is no treatment for KHV. Also any fish that survive the disease may carry the virus and act as a source of infection. This means that fishery management and biosecurity are key to managing the stock after the outbreak.

## How do I reduce the risk of getting it in the first place?

Carp may have already been exposed and carry the virus. Go and inspect the stock before buying them, research your supplier online, and speak to other fishery owners. Find out the stock's origin: is it a farm or fishery? You can also look at sites which have the disease on the FHI GOV.UK pages.

Fisheries should supply their own nets, mats and slings. This will be a running cost, but budget for it via fees or take deposits. The cost of replacing stolen or damaged nets will not be as much as losing and replacing all your carp.

Install equipment disinfection points where you can, and maintain and use them. Encourage anglers to come to your site with clean and dry equipment.

**You cannot rely on others to protect your fishery. You must do it yourself.**



Example of sunken eyes

## When I report it, what happens?

The fishery will not be forced to close permanently and the remaining stock will not be culled - unless the fishery owner decides to do so themselves.

The FHI will investigate and place specific control measures to contain the virus in affected waters, and prevent further spread. Prompt action will protect the rest of your fishery and other waters.

If KHV is suspected or confirmed, then the FHI may temporarily close the affected water. This is to reduce stress on the fish and allow them to recover. Specifically the FHI stop the movement of equipment on and off the affected water whilst the mortalities continue. Equipment movements are allowed on any unaffected waters, but biosecurity - such as net dips - will be set up, if not already in place.

When the mortalities have stopped, disinfection facilities must be maintained and used by anglers when leaving the fishery. Ideally, the fishery would supply their own nets, mats and slings for use on the affected site only.

The FHI will place movement controls on the fish: restricting movements into, within and out of the fishery. After a fish mortality, the temptation is to restock with new fish - replacing those that died. But KHV can be carried by survivors. So, susceptible species (carp) cannot be stocked until after the following summer and only if there hasn't been a second outbreak. FHI permission must be obtained for all fish introductions. New fish may contract the disease from the survivors of the initial outbreak, and even after one year there is no guarantee this will not happen.

# STOP THE SPREAD



**Are you unknowingly spreading invasive species on your water sports equipment and clothing?**

Invasive species can affect fish and other wildlife, restrict navigation, clog up propellers and be costly to manage. You can help protect the water sports you love by following three simple steps when you leave the water.

**CHECK**

**Check** your equipment and clothing for live organisms - particularly in areas that are damp or hard to inspect.

**CLEAN**

**Clean** and wash all equipment, footwear and clothing thoroughly.

If you do come across any organisms, leave them at the water body where you found them.

**DRY**

**Dry** all equipment and clothing - some species can live for many days in moist conditions.

Make sure you don't transfer water elsewhere.

**For more information go to [www.direct.gov.uk](http://www.direct.gov.uk) and search for Check Clean Dry**



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your information**

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- **Smuggling fish from abroad**
- **Illegal fish movements  
between waters**
- **Fish theft and poaching**
- **Tackle theft**



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[www.crimestoppers-uk.org](http://www.crimestoppers-uk.org)

## **BLACK SLUICE INTERNAL DRAINAGE BOARD**

### **ENVIRONMENT COMMITTEE MEETING – 10<sup>th</sup> MAY 2017**

#### **AGENDA ITEM 5**

##### **DRAFT - ENVIRONMENT COMMITTEE – TERMS OF REFERENCE**

###### **1. GENERAL**

The Committee shall have TEN members who will be appointed by the Board, five members from each of the Works Committee.

The Membership shall include:

- Chairman of the Board
- Vice Chairman of the Board

The Committee Chairman shall be appointed by the Board at the tri-annual meeting being the first meeting following an election.

###### **2. MEETINGS OF THE COMMITTEE**

The Committee shall meet at least once in every 12 month period and a quorum shall be five members.

No one other than the Committee members shall be entitled to attend Committee Meetings, but any other persons may attend meetings if invited by the Committee.

###### **3. POWERS OF THE COMMITTEE**

The Committee has the authority to utilise a budgetary amount as agreed by the Board at the beginning of each financial year on Environmental Projects and Works.

###### **4. RESPONSIBILITIES OF THE COMMITTEE**

The responsibilities of the Committee shall be:

1. To monitor the Board's performance in relation to the Lincolnshire Biodiversity Action Plan and Government's Environmental Targets.
2. To promote best practice through employee training and awareness.
3. To inform the public of the Board's commitment to Environmental issues.
4. To promote initiatives, within watercourses maintained by the Board under statutory powers, that result in a meaningful environmental gain.



**BLACK SLUICE INTERNAL DRAINAGE BOARD**  
**ENVIRONMENT COMMITTEE MEETING – 10<sup>th</sup> MAY 2017**

**AGENDA ITEM 6**

**REPORT ON ENVIRONMENTAL WORKS**

**Completed Works in 2016/17**

1. Owl Boxes

Repairs were completed to some boxes and all boxes fixed to pumping station buildings were cleared, cleaned out and suitably 're-dressed'. A full report can be found in Agenda 9.

2. High Profile Watercourse Assets

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

The RSPB expressed concern with reference to the early and continuous cutting along the Wyberton Marsh Drain but unfortunately this is such a high profile watercourse taking water away from the Marsh Lane Industrial estate the banks and channel must be cut to a higher frequency.

3. Water Vole Monitoring Surveys

Scarborough Nixon Associates (SNA) have carried out monitoring surveys for water vole evidence on the six pre-agreed watercourses. SNA will be presenting their reports under Agenda 7.

4. Control of Mink

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

5. 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 2016/17 surveys or works. The extensive bushing works undertaken on the raised banks of the South Forty Foot Drain were pre-walked/inspected on a daily basis prior to each days work. No active nests were located (21<sup>st</sup> March 2017) therefore all works have been completed.

6. RSPB water abstraction for Frampton Marsh

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

7. Big Boston Clean Up

The Board's workforce were once again involved with the Big Boston Clean Up in April 2017.

8. Fly Swat Team

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

9. Invasive Species

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

10. Bat Boxes and Surveys

Bat boxes have been erected and surveys were completed by SNA at our pumping stations, the full results will be introduced by SNA in Agenda Item 7.

11. Environmental Schemes

(a) Eel Passability at the Boards 'Category A' pumping stations.

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. At this time no further actions from the EA are being instructed.

## Proposed Works in 2017/18

### 1. Water Vole Surveys

Committee approval is requested to continue to employ SNA to undertake further surveys for water vole evidence at the monitoring sites and on some 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.

### 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.

### 3. Summer Cutting and Vegetation Clearance

The Boards summer cutting programme will commence on or around the 10th July, the mechanical flails will go out a few days beforehand in order to 'get in front' of the excavators. 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).

Following recommendations from this Committee officers will monitor the increasing levels of rape/mustard seed growing on banks with a view to early season cutting or spraying before seed development.

### 4. Owl Boxes

Approval is sought to spend c£1,000 on repairing/replacing existing boxes during 2017/18.

### 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 voles, minks, eels, grass snakes, frogs and toad sightings along with other specialist environmental sighting will be recorded.

## 6. High Profile Watercourse Assets

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 be 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).

A total of c67Km of further high profile watercourse assets (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) summer water levels were raised by the EA in late April (one month extension due to the desilting works being completed within the SFF) 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. Fens for the Future

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 for the Future Partnership Mission Statement is to make the Fens one of the main UK landscape scale wetland complexes by 2020, within a matrix of sustainable agriculture.

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.

## 9. South Lincolnshire Fen Partnership.

Associated with Fens for the Future, the Partnership covers part of our catchment north of the Bourne Eau and the River Glen. Recent developments held at meetings with the Black Sluice Catchment Steering Group and the Water Resources East (WRE) could develop additional areas of fen wetland associated with water storage reservoirs.

10. 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?

11. The Wash and North Norfolk Coast European Marine Site

The Wash and North Norfolk Coast European Marine Site (WNNC EMS) management scheme has been running since 2002 with the aim to safeguard marine wildlife and habitats designated under EU and UK law, while encouraging sustainable use of the European marine site. The management objectives are broken down into time scaled actions which were drawn up in consultation with the various relevant authorities and stakeholders.

Being one of the relevant authorities we have a statutory duty under the UK Habitats Regulations to report on progress against these 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.

12. BAP Target Works.

Works identified for 2017/18 are:-

- To create 100m of new reed bed (site to be agreed)
- Survey and map (GIS layer) all historically established hedgerows (by officers)

- Improve a habitat/plant and establish the Greater Water Parsnip (site to be agreed)
- Complete a farmland bird study (agreed to study Wyberton Marsh and assess against the 2010 study) and a Southern Fen study, Dunsby Fen/Hacconby Fen
- Invertebrate survey at Tongue End pond
- Incorporate Windmill Lodge, Chapel Lane, Amber Hill ([www.homeforbutterflies.com](http://www.homeforbutterflies.com))

## BLACK SLUICE INTERNAL DRAINAGE BOARD

### ENVIRONMENT COMMITTEE MEETING – 10<sup>th</sup> MAY 2017

#### AGENDA ITEM 8

##### Anglian Water Pollution Watch

I am writing to inform you of a new campaign Anglian Water are looking to launch called "Pollution Watch". It is all about ensuring we **Spot, Report** and **Stop** sewage pollution incidents as quickly as possible and minimise the impact to the environment.

A key part of our business is to return used water from homes and businesses safely back into the environment. This is no small operation and requires a huge number of assets, including over 76,000km of sewer pipes - that's enough to go around the world twice! We work hard to ensure that these operate effectively at all times. However, very occasionally sewage escapes from the system causing a pollution incident. Pollution can kill fish and other aquatic life and also affect the use of water and land for agricultural, business, community purposes.

Escapes from the sewage system are commonly caused by the build-up of fats, oils and greases, sanitary waste and wipes; all of which cause blockages and reduce the flow of sewage through the network.

There are many tell-tale signs that pollution has entered a river or a stream. These include:

- sewage solids
- toilet debris such as toilet paper, condoms and sanitary products
- soap suds or a milky-looking discharge in the water
- grey coloured water
- a noticeable sewage smell

Our Love Every Drop strategy, which puts water at the heart of a whole new way of living, includes a business goal of No Pollutions. We're investing millions in pollution prevention through continually maintaining and improving our asset base and enhancing our understanding of its performance. This includes £5.5 million of network maintenance; analysis to predict potential sewer blockages; enhanced maintenance at pumping stations; increasing the number of staff on pollution control and working with river-users to help us identify and report problems quickly.

We are working hard to minimise pollution incidents from our assets, and we'd really like your help to look after rivers and waterways too. By calling our Pollution Hotline on **03457 145 145** and informing us about potential sewage pollution issues, we can respond sooner meaning we have the best opportunity to minimise any environmental impact. To support this, we plan to launch the "**Pollution Watch**" campaign to raise awareness of sewage pollution, the causes of it, and what to do if you spot it. If you would like to be involved in our project, please do get in touch.

# Annual Check of Black Sluice IDB nest boxes – 2016

Boxes checked by Alan Ball on dates shown



Box No	IPMR	Grid Ref	Location	Description	Date	Usage
3290		TF154188	Richardson's Borrow Pit, Twenty	WCP Pole box		
3291		TF173211	Gandy's Borrow Pit, Twenty	WCP Pole box		
3292		TF138195	Cook's Borrow Pit, Bourne N.Fen	WCP Pole box		
1365	DYF	TF152227	Dyke Fen Pump	WCP pump box	27/05	Jackdaw – 2 nests -4 chicks EZ19257-60 <b>Kestrel</b> – in top – failed on eggs
1366	RSI	TF167251	Black Hole Drove Pump	WCP pump box	26/05	Jackdaw – 2 nests - 4 chicks EZ19179-82
1367	RSI	TF166257	Haconby Fen Pump	WCP pump box	26/05	Jackdaw – 2 nests – 5 chicks EZ19174-78
1368	RSI	TF166266	Starlode Drove Pump	WCP pump box	26/05	<b>Barn Owl</b> – 6 eggs, female = GV24753
1369	RSJ	TF165271	Dunsby Fen Pump	WCP pump box	26/05	Jackdaws – 2 nests – 6 chicks EZ19183-88
1370	RSJ	TF164275	Rippingale Fen Pump	WCP pump box	26/05	Jackdaw – 2 nests
1371	DOW	TF162284	Dowsby Fen Pump	WCP pump box	26/05	Jackdaw – 3 nests – 6 chicks EZ19165-70
1293	DOW	TF162284	Pole at Dowsby Fen Pump	Mk.7 pole box	26/05	Jackdaw
1372	DOW	TF167294	Gosberton Pump	WCP pump box	26/05	<b>Barn Owl</b> – 4 small chicks, Jackdaw – 3 chicks in top EZ19162-64
1373	RSQ	TF164318	Neslam Fen Pump	WCP pump box	26/05	Jackdaws – 2 nests – 4 chicks EZ19153-56
1374	RSV	TF168331	Quadring Fen Pump	WCP pump box	26/05	Jackdaw – 2 eggs
1375	RSV	TF168333	Billingborough Fen Pump	WCP pump box	26/05	Jackdaw – 3 small chicks
1376	RSG	TF170346	Horbling Fen Pump	WCP pump box	26/05	Jackdaws – 2 nests – 4 chicks EZ19148-52
1377	RST	TF174364	Swaton Fen Pump	WCP pump box	22/05	Jackdaw – 1 chick EZ19124
1378	RST	TF176370	Donington Ing Pump	WCP pump box	26/05	Jackdaws – 2 nests – 4 chicks EZ19139-42
1379	HLF	TF177375	Helpingham Fen Pump	WCP pump box	26/05	<b>Barn Owl</b> – 2 chicks + 2 eggs
1380	RSH	TF186397	Bicker Fen Pump	WCP pump box	26/05 24/06	<b>Barn Owl</b> – 3 chicks + 2 eggs, female = ret/GV08879 - 3 chicks ringed GV24927-29
1381	RSU	TF206425	Great Hale Pump	WCP pump box	27/05	Jackdaw – 4 chicks EZ19270-73
1383	HKF	TF185466	Heckington Pump	WCP pump box	04/06	Jackdaw – 2 nests – 5 chicks EZ19379-83 Barn Owl – roosting – female may breed
1384	SKF	TF207469	South Kyme Pump	WCP pump box	04/06	<b>Barn Owl</b> – 3 tiny chicks and 2 eggs
1385	EWV	TF159484	Ewerby Pump	WCP pump box		
1386	SKG	TF194507	Damford Grounds Pump	WCP pump box	04/06	<b>Barn Owl</b> – 4 small chicks, female = GV24766
1387	WYB	TF359400	Wyberton Marsh Pump	WCP pump box	24/06	<b>Barn Owl</b> – 2 chicks GV24925&26 <b>Kestrel</b> – in top – 3 chicks EZ65221-23
1388	KIR	TF343350	Kirton Marsh Pump	WCP pump box	24/06	Jackdaw – fledged, Stock Dove in top – 2 eggs



3169		TF341370	Kirton Skeldyke		WCP pole box	10/06	Jackdaw – 3 chicks EZ65017-19
3165	BFK	TF340359	Kirton Bucklegate		WCP pole box		
3170	KME	TF281388	Kirton Meeres		WCP pole box	10/06	Jackdaw - fledged
2802	BSG	TF236477	Gill Bridge (Barry Hall)		WCP pole box	08/06	<b>Barn Owl</b> – 4 eggs, female = GV24786, male = GV24787
2803	BSH	TF205529	Hart's Grounds (Andrew Means)		WCP pole box	08/06	Jackdaw – 3 fledged chicks 1 = EZ19492
2804	BSM	TF204484	Maryland (Pocklington Bros)		WCP pole box	08/06	Stock Dove – 2 eggs – adult EZ19493
2969	BST	TF248464	Holland Fen (Two Hundred Fm)		WCP pole box	08/06	<b>Barn Owl</b> – 6 tiny chicks, female = GV24784 <b>Kestrel</b> – in top – 6 chicks EZ19494-99
2971		TF199521	Chapel House (ex Bridge Ho.)		WCP pole box		
2973	PAH	TF192484	South Kyme (Patingden House)		WCP pole box	04/06	<b>Barn Owl</b> – sitting on ? eggs – left undisturbed

**BLACK SLUICE INTERNAL DRAINAGE BOARD**

**ENVIRONMENT COMMITTEE MEETING – 10<sup>th</sup> MAY 2017**

**AGENDA ITEM 9(b)**

**BLACK SLUICE INTERNAL DRAINAGE BOARD OWL BOX  
CLEANING 2017**

South Kyme Pumping Station (2):  
Before



After



Heckington Pumping Station (3):  
Before



After



Ewerby Pumping Station (4):  
Before



After



Helpringham Pumping Station (6):  
Before



After



Swaton Pumping Station (7):  
Before



After



Horbling Pumping Station (8):  
Before



After



Billingham Pumping Station (9):  
Before



After



Dowsby Lode Pumping Station (12):  
Before



After



Dunsby Fen Pumping Station (14):

Before



After



Dyke Fen Pumping Station (15B):

Before



After



Bicker Fen Pumping Station (16):

Before: (no image to high)

After



Donington North Ing Pumping Station (17):

Before

After



Pinchbeck North Fen Pumping Station (19):

Before

After: no image



Kirton Marsh Pumping Station (21):

Before

After



# **Association of Drainage Authorities Lincolnshire Branch** **Environment Committee**

*Committee Chairman: P. Lundgren*

*Committee Vice Chair: N.Watts*

*Committee Secretary: S. Ireland*

## **Minutes of 39<sup>th</sup> meeting of the committee, held on 8<sup>th</sup> June, 2016 at Black Sluice IDB, Swineshead, 1.30pm**

### **Present:**

Paul Gowen (PG)	Upper Witham IDB ( <i>Board Member</i> )
Keely Tizzard (KT)	North Level IDB ( <i>Engineering Technician</i> )
Karl Vines (KV)	South Holland IDB ( <i>Engineer</i> )
Bryan Bowles (BB)	Black Sluice IDB ( <i>Board Member</i> )
David Hutchinson (DH)	Environment Agency ( <i>Catchment Co-ordinator (Witham and Ancholme)</i> )
Paul Nicholson (PN)	Black Sluice IDB ( <i>Operations Manager</i> )
Ian Warsap (IW)	Black Sluice IDB ( <i>Chief Executive</i> )
Peter Lundgren (PL)	Witham First District IDB ( <i>Ratepayer</i> )
Sam Ireland (SI)	Witham First District, Witham Third District & Upper Witham IDBs ( <i>GIS &amp; Environment Officer</i> )
Chris Manning (CM)	Lindsey Marsh DB ( <i>Environmental Officer</i> )
Nicholas Watts (NW)	Welland & Deepings IDB ( <i>Board Member</i> )

### **Apologies:**

Richard Chadd (RC)	Environment Agency ( <i>Senior Environmental Monitoring Officer</i> )
Ian Russell (IR)	Environment Agency ( <i>Partnerships Manager</i> )
Amanda Jenkins (AJ)	( <i>S. Lincolnshire Fenlands Project Officer</i> )
Martin Redding (MR)	Witham Fourth District IDB ( <i>Assistant Engineering Manager &amp; Environment Officer</i> )
Sarah Baker (SB)	GLNP ( <i>Nature Policy Officer</i> )
Alison Briggs (AB)	Shire Group of IDBs ( <i>Environment Officer</i> )
Marie Taylor (MT)	Lincolnshire Rivers Trust ( <i>Project Officer</i> )
Darren Scott (DS)	North East Lindsey Drainage Board ( <i>Works Supervisor</i> )
Anna Millard (AM)	Natural England ( <i>Lead Advisor-Lincolnshire Coasts, Marshes &amp; Marine</i> )
Peter Gilbert (PG)	Witham First DIDB ( <i>Vice Chair</i> )

	<b>Item</b>	<b>Action</b>
<b>1.</b>	<p><b>Welcome &amp; Chairman's Announcements (PL)</b></p> <p>PL welcomed everyone, and thanked BSIDB for hosting.</p>	
<b>2.</b>	<p><b>Apologies</b></p> <p>As recorded above.</p>	
<b>3.</b>	<p><b>Minutes of last meeting of the committee held on 16<sup>th</sup> March, 2016</b></p> <p>Approved as a true record.</p>	
<b>4.</b>	<p><b>Matters arising</b></p> <p>None.</p>	
<b>5.</b>	<p><b>GLNP update (SB)</b></p> <p>The GLNP's Annual Review for 2015-16 has now been printed and a copy is also available on their website. Some highlights include the data digitisation project, the annual assessment of BAP targets and last year's new Building stones of Greater Lincolnshire leaflet. Also included is an overview of policy work including responses to consultations and engagement with agricultural and tourism agendas.</p> <p>The GLNP's part-Defra funded research project into how pollinators use arable crops has reached the fieldwork stage. Pollinator specialist David Sheppard is currently out surveying maize, oilseed rape, winter wheat and peas across five farm holdings. Analysis of the results will enable assessment of the potential impacts of increased maize cropping for anaerobic digestion on pollinators.</p> <p>Despite the 3.5million digital records LERC holds, there are a huge amount of paper records held in store and a project began in late 2015 to digitise these and add them to the database. With the approval of the GLNP Steering Group funds were allocated to start digitising the archived documents and work is now continuing on this. The digitisation is being undertaken by an experienced contractor and an estimate of 2,000 records from the first box increased to 20,000!</p> <p>Sophie, the GLNP's newest member of staff, has handed in her notice. From now, Fran will be covering Sophie's work areas. They hope to recruit for a new person again soon.</p>	All

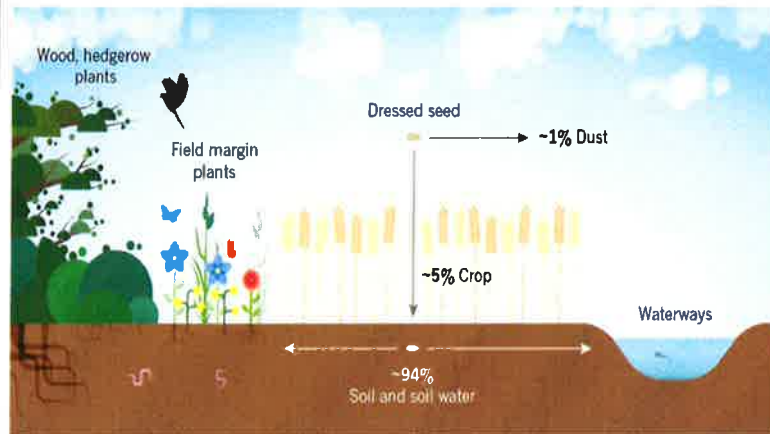


6.	<p><b>Witham Partnership Update (DH)</b></p> <p>On 6<sup>th</sup> July, the Witham Partnership has organised a tour around Marston Sewage Treatment Works.</p> <p>Limestone Becks Heritage Lottery Fund bid has been inputted. Marie might wish to talk about the project in more detail at the next meeting.</p> <p>On Tuesday 14<sup>th</sup> July an event will be held to showcase the river restoration work which has been carried out at Sleaford. SI to send around poster.</p> <p>Himalayan Balsam Project being undertaken on Witham.</p> <p>BB- weed is on the increase again-are the trust aware?</p> <p>DH- Slea Navigation Trust and Canal and Rivers Trust sit on the steering group so they should be informed.</p>	SI
7.	<p><b>EA Update (DH)</b></p> <p>EA are still waiting for WFD funding for this year. This could be because they are waiting for the results of the EU referendum.</p> <p>BB- Any news about funding of sea defence works?</p> <p>DH- The funding bid for the sea defence at Wrangle Bank is looking like it will be successful.</p> <p>IW- Peter Bateson is lead IDB contact, so please contact him for more information.</p> <p>NW- Banks in Holbeach were raised in the mid-1980s. The soil was taken from the sea side. Now the material that was taken has been replenished and it has created really good habitat for birds.</p> <p>NW-the Forty Foot and the Witham are in need of dredging. More silt leads to shallower water, more weed and less flow.</p> <p>BB- Should we make representation as IDBs re. de-silting?</p> <p>CM- In discussions about de-silting the Steeping.</p> <p>PL- Has suggested that instead of de-silting whole length of Timberland Delph, shorted, 200-300m sections from each of the Delphs could be de-silted. Would it fit the funding criteria?</p> <p>DH- There are longer term ecological benefits from de-silting.</p>	
8.	<p><b>Watercourse Contamination and impact on aquatic organisms (PL)</b></p> <p>Neonicotinoids are insecticides. They are thought to be</p>	

implicated in the reduction in the number of bees and other pollinators.

At the Humbolt Forum, it was stated that a ban on neonicotinoids would cost £620million in the UK. PL worked out the figures for his own farm and found that not using neonicotinoids on his own farm has saved him money on winter wheat, and has cost £2.20/ha on oilseed rape. He has noticed no difference in yield through not using neonicotinoids.

Neonicotinoids have a half-life of 3 years in soil. The following diagram demonstrates where neonicotinoids end up (diagram courtesy of Dave Goulson):



Neonicotinoids are soluble in water and are therefore highly mobile in the soil. Neonicotinoids have been found to be present in the pollen and nectar of wildflowers, trees and bushes. The level of neonicotinoids found in Hawthorne for example is 10x higher than that found in the crop. 97% of neonicotinoid residues found in pollen collected by honey bees is from wildflowers and not the cultivated crop.

CM- The 5% statistic is very similar for most pesticides, herbicides and fungicides-they are applied to the whole crop but are only treating part of it. Information presented at last year's GLNP conference re. precision farming will start to address this issue.

IW- has dressing level been reduced to only what the crop needs?

PL- Yes, but there is likely to be a margin for error.

	<p>Neonicotinoids have been found in watercourses around the world in levels that exceed what is 'safe'. It has been found that neonicotinoids break down more quickly in shallow water with strong sunlight. Traces have been found in surface water, streams, rivers, wetlands etc.</p> <p>DH Will find out who in EA is doing research on neonicotinoids.</p> <p>IW- Water Resource East Anglia project has selected BSIDB Catchment. They are not interested in the quality of the water. They will require 100-300 mega litres per day. AW are prepared to build reservoirs. AW has allocated 18 months to put the project together.</p> <p>DH- In terms of water quality, AW have many processes in place to improve water quality. There are substances, for example metaldahyde which are difficult to get rid of. The piece of equipment required costs an extra £40 million at each sewage treatment works.</p> <p>More information needed re. integrated pest management and beneficial insects. This is linked to habitat creation.</p>	DH
9.	<p><b>Barn Owl Populations (NW)</b></p> <p>Lincolnshire is a stronghold for the barn owl-particularly due to the large number of watercourses with rough grassland alongside, away from roads.</p> <p>Birds of prey including barn owls can face large fluctuations in food abundance. This, combined with weather can impact upon successful breeding. Barn owls' feathers are not waterproof-they are therefore unable to successfully hunt in bad weather. Barn owls' main food source is voles. Vole cycling is therefore largely responsible for barn owl population changes.</p> <p>2015 was a record year for barn owls with 13 pairs and 86 young being recorded on Deeping Fen.</p> <p>IW- BSIDB boxes were checked on 13<sup>th</sup>-15<sup>th</sup> February this year and there were owls sat on eggs-extremely unusual for this time of year.</p>	
10.	<p><b>Quick wins for Nature (all)</b></p> <p>W1, W3 &amp; UW IDBs: - Wildflower meadow planting with local school</p>	

	<ul style="list-style-type: none"> <li>- Bug hotel creation</li> </ul> <p>NLIDB:</p> <ul style="list-style-type: none"> <li>- Grass snake egg laying &amp; hibernation site</li> </ul> <p>SHIDB:</p> <ul style="list-style-type: none"> <li>- Grass snake egg laying sites</li> <li>- Orchid area</li> <li>- Vertical bank for sand martins</li> <li>- Tree sparrow nest boxes</li> </ul> <p>BSIDB:</p> <ul style="list-style-type: none"> <li>- Hydroseeding (although unsuccessful due to land being too fertile)</li> <li>- 8 TomTom species recorders</li> <li>- Bat boxes positioned on every pumping station</li> <li>- Otter holt construction</li> <li>- Weed at PS for grass snakes</li> </ul> <p>W&amp;DIDB</p> <ul style="list-style-type: none"> <li>- Leaving heaps of dredgings and mowings for grass snakes</li> <li>-</li> </ul> <p>EA:</p> <ul style="list-style-type: none"> <li>- Paper Mill Weir (DH will present in full at next meeting)</li> </ul>	DH
11.	<p><b>Updates on remaining groups</b></p> <ul style="list-style-type: none"> <li>- <b>Fens for the Future (MR)</b></li> </ul> <p>N/A</p> <ul style="list-style-type: none"> <li>- <b>Operation Fly Swat (MR)</b></li> </ul> <p>N/A</p> <ul style="list-style-type: none"> <li>- <b>ADA Technical committee (CM)</b></li> </ul> <p>Working on Biodiversity 2020 guidance which will be released later this year.</p>	
12.	<p><b>AOB</b></p> <p>IW- Oil Seed Rape falling on river banks stopping vegetation from growing underneath. Could compromise stability of banks. They are trialling flailing in June to see if it resolves issue. How can we take this forwards?</p> <p>CM will forward a report on the topic.</p>	CM

	IW- Any news on Gulf Wedge Clam? DH will find out	DH
	SI- Next meeting will include a visit to Vine House Farm	All

# Association of Drainage Authorities Lincolnshire Branch

## Environment Committee

*Committee Chairman: P. Lundgren*

*Committee Vice Chair: N.Watts*

*Committee Secretary: S. Ireland*

### Minutes of 39<sup>th</sup> meeting of the committee, held on 14th September, 2016 at

### Welland and Deepings IDB, 12.30pm, followed by a visit to Vine House

### Farm

#### **Present:**

Sarah Baker (SB)	Greater Lincolnshire Nature Partnership ( <i>Nature Policy Officer</i> )
Karen Daft (KD)	Welland and Deepings IDB ( <i>Chief Executive</i> )
Kelly Hewson-Fisher (KHF)	Anglian Water ( <i>Catchment Advisor</i> )
Sam Ireland (SI)	Witham First District, Witham Third District & Upper Witham IDBs ( <i>GIS &amp; Environment Officer</i> )
Peter Lundgren (PL)	Witham First District IDB ( <i>Ratepayer</i> )
Chris Manning (CM)	Lindsey Marsh DB ( <i>Environmental Officer</i> )
Ian Moodie (IM)	Association of Drainage Authorities ( <i>Technical Manager</i> )
Keely Tizzard (KT)	North Level IDB ( <i>Engineering Technician</i> )
Karl Vines (KV)	South Holland IDB ( <i>Engineer</i> )
Nicholas Watts (NW)	Welland & Deepings IDB ( <i>Board Member</i> )
Rachael Yeowell (RY)	South Holland IDB ( <i>Technical Assistant</i> )

#### **Apologies:**

Bryan Bowles (BB)	Black Sluice IDB ( <i>Board Member</i> )
Andy Carrott (AC)	Witham Fourth District IDB ( <i>Engineer</i> )
Richard Chadd (RC)	Environment Agency ( <i>Senior Environmental Monitoring Officer</i> )
Peter Gilbert (PGi)	Witham First DIDB ( <i>Vice Chair</i> )
Paul Gowen (PG)	Upper Witham IDB ( <i>Board Member</i> )
David Hutchinson (DH)	Environment Agency ( <i>Catchment Co-ordinator (Witham and Ancholme)</i> )
Martin Redding (MR)	Witham Fourth District IDB ( <i>Assistant Engineering Manager &amp; Environment Officer</i> )
Darren Scott (DS)	North East Lindsey Drainage Board ( <i>Works Supervisor</i> )
Marie Taylor (MT)	Lincolnshire Rivers Trust ( <i>Project Officer</i> )

	<b>Item</b>	<b>Action</b>
1.	<p><b>Welcome &amp; Chairman's Announcements (PL)</b></p> <p>Welcome to Kelly Hewson-Fisher from Anglian Water and Ian Moodie from ADA. Introductions were made around the table. Welland and Deepings were thanked for hosting.</p>	
2.	<p><b>Apologies</b></p> <p>As recorded above.</p>	
3.	<p><b>Minutes of last meeting of the committee held on 8<sup>th</sup> June, 2016</b></p> <p>Approved as a true record.</p>	
4.	<p><b>Matters arising</b></p> <p>None</p>	
5.	<p><b>GLNP update (SB)</b></p> <p>GLNP have appointed a new local sites officer.</p> <p>The GLNP 'health and nature' conference will be held on 9<sup>th</sup> November at Bishop Grosseteste University.</p> <p>The field work for the pollinator study is complete and GLNP are working with Lincoln University on the outcomes.</p> <p>On 2<sup>nd</sup> November, an event will be held to work with farmers regarding resource protection issues.</p> <p>PL- Lincoln University are attracting professors looking at soils and the biodiversity within them. Contact Isabel Davies with any project ideas.</p> <p>IM- Keen to expand the recipients of the ADA Gazette- PL to pass on university details to Ian</p>	<p>All</p> <p>PL</p>
6.	<p><b>Witham Partnership Update (DH)</b></p> <p>LRT spent the summer surveying and spraying and strimming Himalayan Balsam on the upper Witham. They would like to thank Upper Witham IDB for helping to trim a section of Running Furrows (a side tributary of the River Witham).</p> <p>LRT are working on an upper Witham tree strategy and looking to plant trees later this year. If the IDBs know of any areas in</p>	

	<p>which there would be opportunities to plant trees with the aim to keep rivers cool and connecting existing tree habitat please contact LRT.</p> <p>The work completed earlier this year on the Slea has helped to provide ideal feeding habitat for water voles.</p> <p>There will be a meeting with EA, Wild Trout Trust and HLF on 14<sup>th</sup> September to discuss the Lincolnshire Limestone Becks bid proposal which will hopefully lead to a full application shortly.</p> <p>NW- What is the spray used on Himalayan Balsam? SI to find out</p> <p>PL- 70% grant available from the Woodland Trust for the cost of trees.</p>	<p>All</p> <p>SI</p>
7.	<p><b>EA Update (DH)</b></p> <p>There is currently a big focus on delivering habitat improvements works in Grantham as identified in the Grantham, River and Wetland Plan. FBG have funding this year to complete some of the works.</p> <p>EA are still waiting to hear from the developers on Spittle Gate Level so things have not progressed since the last meeting. Nothing on the ground is anticipated to happen for at least a couple of years.</p> <p>EA have not yet received any indication at present on the likely impacts of WFD on Brexit. Should any changes come from it they are likely to be some time off and it is unclear what they might be. Business as usual until they hear differently.</p> <p>Lincolnshire Chalk Streams Project: WREN funded habitat enhancement projects completed on the Great Eau at Claythorpe and the Thoresway Beck tributary.</p> <p>Funding in place and some issues have been resolved around Stewardship which should now allow delivery of the river restoration project at Ludford on the Bain. Needs to be completed by end March 17.</p>	
8.	<p><b>Lincolnshire's Plants: Past and Future</b></p> <p>3 year project, commencing next year to create a small herbarium at the Joseph Banks Centre in Horncastle, which would eventually be moved to the Lawn in Lincoln. The project will be jointly carried out by Lincolnshire Naturalist Union,</p>	



	<p>Lincolnshire Wildlife Trust, St. Joseph Banks Society and the Natural History Museum. The project will cost £600k, £477k of which is from HLF. The remainder of the funding will be from volunteer time. Lincoln University will be doing the DNA analysis on the species and volunteers will be trained in botany.</p> <p>A herbarium enables species to be preserved for hundreds of years. Water based plants will be difficult to manage as they normally have the water to support their weight. CM will keep the committee informed of any training opportunities.</p>	CM
9.	<p><b>Anglian Water</b></p> <p>Kelly is the catchment advisor to Anglian Water-the largest water company in England and Wales.</p> <p>Lincolnshire has high demands for water, in part, due to the highly productive agricultural land.</p> <p>By the end of 2028, there will be no permitted end of pipe solutions for pollution. Tackling the source of the pollution is therefore the priority.</p> <p>Abstractions are often turned on and off depending upon the pesticide levels within them. This can however cause increased pressure on other sites. Winterton Boreholes for example, have been 'switched off' since 2012 due to pesticide levels. Improvements have been made in pesticide handling areas, creating catch pits and bunded areas to tackle point source pollution.</p> <p>There are further studies being carried out, for example cover cropping trials. Pesticide amnesties have also been carried out. 3.5 tonnes of illegal and unused products have been collected. There is also a focus on metaldehyde as there is currently no treatment able to break it down. One metaldehyde pellet in an Olympic sized swimming pool would take the reading over the permitted limit.</p> <p>If anyone would like to arrange a visit to a treatment works, please contact Kelly.</p> <p>IM- Wessex Water are proving machine calibration to farmers to aid with accurate pesticide application.</p> <p>CM- Are levels for metaldehyde unrealistic? Studies suggest that a person would have to drink over 1,000 litres of water per day at levels far exceeding those permitted for metaldehyde to have health implications.</p>	All

10.	<p><b>Good Ecological Potential in the Fens (presentation by Ian Moodie on behalf of Lou Mayer).</b></p> <p>Since 2009, organisations have been working under WFD to achieve good ecological status in artificial or heavily modified water bodies by 2027. In 2014, a workshop was held and a working group was formed to generate some guidance about good ecological potential in the Fens. The guidance focusses on channel modifications rather than water quality.</p> <p>This guidance will also be applicable to other geographical areas as well as the fens. The final document should be available by next summer with a working draft available by the end of this year.</p>	
11.	<p><b>Updates on remaining groups</b></p> <ul style="list-style-type: none"> <li>- <b>Fens for the Future (IM)</b> Looking at a HLF application for ‘giving nature an edge’ in the Great Levels area. The bid is to create bermed channels. Currently looking at barriers to implementation and pilots. A bid should be submitted in 2018.</li> <li>- <b>Operation Fly Swat (MR)</b> N/A although KV said that they were out and about today!</li> <li>- <b>ADA Technical committee (CM)</b> The next meeting is on Thursday of this week. They are currently working through a series of workstreams including Biodiversity 2020 aspirations and how IDBs can demonstrate a contribution to the targets.</li> </ul>	
12.	<p><b>‘Quick wins’ for Nature-Biodiversity Manual</b></p> <p>Please see attached draft.</p>	
13.	<p><b>AOB</b></p> <p>Water vole course being held on 16<sup>th</sup> and 17<sup>th</sup> November at Whisby Nature Reserve. Contact SI if interested.</p> <p>KT- Badgers have been a problem for North Level on the Nene. There was a 25m sections which needed re-profiling. North Level got a licence from Natural England to move them but week later they had re-colonised further along the bank.</p> <p>IM- The same mas happened in Witham Fourth’s area-the badgers got into the bank below the mesh.</p> <p>CM- One solution for a smaller watercourse would be to put low level culverts in the bed of the watercourse.</p>	All

## **Association of Drainage Authorities Lincolnshire Branch** **Environment Committee**

*Committee Chairman: P. Lundgren*

*Committee Vice Chair: N.Watts*

*Committee Secretary: S. Ireland*

### **Minutes of 40<sup>th</sup> meeting of the committee, held on 7<sup>th</sup> December, 2016 at Ness Farm End at Far Ings Nature Reserve (DN18 5RG), 1.30pm, including a tour around the reserve**

#### **Present:**

Richard Chadd (RC)	Environment Agency ( <i>Senior Environmental Monitoring Officer</i> )
Karen Daft (KD)	Welland and Deepings IDB ( <i>Chief Executive</i> )
Lionel Grooby (LG)	North East Lindsey IDB ( <i>Vice Chairman</i> )
David Hutchinson (DH)	Environment Agency ( <i>Catchment Co-ordinator (Witham and Ancholme)</i> )
Sam Ireland (SI)	Witham First District, Witham Third District & Upper Witham IDBs ( <i>GIS &amp; Environment Officer</i> )
Peter Lundgren (PL)	Witham First District IDB ( <i>Ratepayer</i> )
Chris Manning (CM)	Lindsey Marsh DB ( <i>Environmental Officer</i> )
Darren Scott (DS)	North East Lindsey Drainage Board ( <i>Works Supervisor</i> )
Marie Taylor (MT)	Lincolnshire Rivers Trust ( <i>Project Officer</i> )
Nicholas Watts (NW)	Welland & Deepings IDB ( <i>Board Member</i> )
Richard Williams (RW)	Environment Agency ( <i>Senior Environmental Officer-Land &amp; Water</i> )

#### **Apologies:**

Sarah Baker (SB)	Greater Lincolnshire Nature Partnership ( <i>Nature Policy Officer</i> )
Alison Briggs (AB)	Shire Group of IDBs ( <i>Environment Officer</i> )
Anna Millard (AM)	Natural England ( <i>Lead advisor-Lincolnshire Coasts, Marshes &amp; Marine</i> )
Paul Holmes (PH)	Black Sluice IDB ( <i>Environment Committee Chairman</i> )
Paul Nicholson (PN)	Black Sluice IDB ( <i>Operations Manager</i> )
Martin Redding (MR)	Witham Fourth District IDB ( <i>Assistant Engineering Manager &amp; Environment Officer</i> )
Keely Tizzard (KT)	North Level IDB ( <i>Engineering Technician</i> )
Tammy Smalley (TS)	Lincolnshire Wildlife Trust ( <i>Head of Conservation (Designate)</i> )
Ian Warsap (IW)	Black Sluice IDB ( <i>Chief Executive</i> )

	<b>Item</b>	<b>Action</b>
<b>1.</b>	<b>Tour of Far Ings Nature Reserve by Lionel Grooby</b>	
<b>2.</b>	<b>Welcome &amp; Chairman's Announcements (PL)</b> PL thanked LG for the excellent tour and LWT for hosting the meeting. PL welcomed RW from the Environment Agency to the meeting.	
<b>3.</b>	<b>Apologies</b>  As recorded above.	
<b>4.</b>	<b>Minutes of last meeting of the committee held on 14<sup>th</sup> September, 2016</b>  Approved as a true record.	
<b>5.</b>	<b>Matters arising</b>  None	
<b>6.</b>	<b>GLNP update (SB)</b> <ul style="list-style-type: none"> <li>• 'Benefits to health from the natural environment' was the subject of the Greater Lincolnshire Nature Partnership's (GLNP) annual conference held in November.</li> <li>• Discussions looked at how access to the great outdoors can be good not only for our wellbeing but also provide a better and more cost-effective choice for patients and healthcare professionals.</li> <li>• The conference marked the launch of the GLNP's 'being well with nature' workstream and delegates were asked to feedback on what the Partnership's focus should be. Analysis of the responses is now underway to help inform next steps.</li> <li>• Assessment of 2016 LWS survey data will begin in earnest later this month.</li> <li>• The Panel will be meeting between December and March to consider around 140 sites, the majority of which are located in South Kesteven thanks to a major resurvey effort by the district council.</li> <li>• The GLNP's year-long research project into the impact of increased maize cropping on pollinators has come to an end.</li> <li>• Results from the pilot study were analysed with support from the University of Lincoln and demonstrated the diversity of pollinator communities in the farmed environment.</li> </ul>	

	<ul style="list-style-type: none"> <li>• Maize recorded lowest overall numbers of invertebrates but was found to support a relatively varied population. Three of the four crop types surveyed demonstrated distinct pollinator communities while winter wheat appeared more generalist in nature highlighting considerations for rotations and variety of cropping at a landscape scale. Other findings included the potential for bare ground in maize fields to provide important basking habitat for invertebrates if well managed.</li> <li>• The full report can be found at <a href="http://glnp.org.uk/our-publications/agriculture.php">http://glnp.org.uk/our-publications/agriculture.php</a> and a non-technical summary will also be made available later this month. Comments and feedback are welcomed: <a href="mailto:sarah.baker@glnp.org.uk">sarah.baker@glnp.org.uk</a>.</li> <li>• The GLNP is currently considering next steps to utilise and build on the valuable information gathered during the project.</li> </ul>	All
7.	<p><b>Witham Partnership Update (MT)</b></p> <ul style="list-style-type: none"> <li>• The Witham Catchment Partnership meeting was held last month. It included site visits to Dunston Beck to see the habitat works the Lincolnshire Rivers Trust carried out with the EA and Wild Trout Trust, along with the proposed future work on the Beck.</li> <li>• The draft Witham Catchment Plan is available on the website. LRT is working on changes.</li> <li>• Thanks to partners for help with invasive project. A report will go on the website in the new year.</li> <li>• Next year, work will be undertaken in Wyndham Park to create an accessible berm.</li> <li>• Lincolnshire Limestone Beck HLF bid is underway. The majority of work so far has focussed on Dunston Beck. LRT are looking to roll out the project along the whole of the limestone ridge. Project plan includes re-meandering 2km of watercourse which will increase the length by 30%.</li> <li>• Getting local support will be the key to success. All of the local parish councils have been contacted and have replied with the exception of Welton.</li> <li>• PL can help with contacts.</li> <li>• MT and DH will provide information for 'quick win' guide. There may be some information in the Wild Trout Trust guide.</li> <li>• Could IDBs offer support for volunteer days?</li> <li>• RC noted there has been a problem with floating pennywort on the Fosdyke. CM- there is much less now as it has been sprayed.</li> </ul>	PL MT, DH IDBs
8.	<p><b>EA Update (DH)</b></p> <ul style="list-style-type: none"> <li>• EA are putting together a bid for WEIF funding (used to be WFD).</li> <li>• DH will send through project list</li> <li>• Ruth is back from maternity leave at the Chalk Streams</li> </ul>	DH

	<p>Project</p> <ul style="list-style-type: none"> <li>• RC- The upper Witham is being invaded by signal crayfish. The population is currently downstream of Claypole. The plan is to move the native crayfish to 'arc sites' as they are the last native population in Eastern England. Meeting on 08.12.17 to evaluate receptor sites. Looking at still water sites on private land-preferably in Lincolnshire.</li> </ul>	
<p>9.</p>	<p><b>Pollution prevention, oil storage, chemical storage and good practice</b></p> <ul style="list-style-type: none"> <li>• Richard Williams is a Senior Environment Officer in the Land and Water team.</li> <li>• The team deal with pollution incidents, looking at the source of the pollution and impact upon water quality, invertebrates etc.</li> <li>• Potential sources of pollution can include EA works, IDB works, agriculture etc.</li> <li>• EA has procedures and kit in place to minimise impacts.</li> <li>• Pollution getting into groundwater could be very serious. Vulnerable areas are mapped and source protection zones are created.</li> </ul> <p>Case Studies:</p> <ul style="list-style-type: none"> <li>• In 2012 there was a pollution incident where was fertiliser leaked into a ditch. The pollution only affected a very small section of watercourse so was assigned as a category 3 incident (minor impact). The watercourse wasn't blocked off, causing the fertiliser to get into the Witham. The incident was then assigned as a category 1 incident, and caused fish to die 13km downstream, 6 days after the event. The person responsible was fined £36,000.</li> <li>• In another incident, an act of vandalism at a chemical storage site caused 3 insecticides (totalling 2,000 litres) to get into the surface water system and into the River Nene. The incident killed 4,000 fish. The cockle beds in the Wash were closed for 2 days as a precaution.</li> </ul> <p>Pollution prevention:</p> <ul style="list-style-type: none"> <li>• Awareness of site (office, depot, pumping station etc.) - identification of potential pollution pathways.</li> <li>• What can be implemented to prevent pollution, and should it occur, how would the pollution be contained?</li> <li>• Spill kits can be purchased for approx. £50, absorption pads and dammit mats can be kept in stock, along with</li> </ul>	

	<p>improvised solutions for example sand, car mats, wood etc.</p> <ul style="list-style-type: none"> <li>• Best practice includes tanks with internal and external bunds enabling secondary containment.</li> <li>• The siting of tanks is important-will it be hit by a vehicle?</li> <li>• There is strict liability with regard to pollution incidents. Even if the pollution was a result of vandalism, the owner may be liable.</li> <li>• RC- have to assume that vandals will assume that the contents of the tank is fuel and take necessary precautions.</li> <li>• It's appropriate to allocate areas where contaminated vehicles can be washed and the runoff contained, preventing it from entering surface water drainage systems.</li> <li>• The EA inspect pesticide stores. They are looking at: <ul style="list-style-type: none"> <li>○ Whether areas are bunded or not</li> <li>○ Locations where pesticides are loaded/unloaded from vehicles-are they away from surface water systems,</li> <li>○ Are drainage plans available?</li> <li>○ Are there plans for fire?</li> <li>○ Where are hazardous areas/ stores/ washdown areas/ locations of spill kits</li> <li>○ Are staff trained in the use of spill kits and plans</li> </ul> </li> <li>• EA can provide guidance on pollution prevention</li> <li>• Are reporting systems appropriate?</li> <li>• Stop the pollution at source and let EA know.</li> </ul>	
<b>10.</b>	<p><b>Review of Biodiversity Manual (SI)</b></p> <p>Due to time constraints, members to e-mail SI with comments.</p>	All
<b>11.</b>	<p><b>Future of the committee including expiry of terms of office (SI)</b></p> <ul style="list-style-type: none"> <li>• Chair, Vice Chair and Secretary terms of office all expire in March. Please e-mail SI with nominations.</li> <li>• Suggestion that it might be better to have 2 meetings per year, with one fieldtrip. Include as an agenda item in March meeting.</li> </ul>	All SI
<b>12.</b>	<p><b>Updates on remaining groups</b></p> <ul style="list-style-type: none"> <li>- <b>Fens for the Future</b> No-one present to report</li> <li>- <b>Operation Fly Swat</b> Work continuing and successful</li> </ul>	

	<ul style="list-style-type: none"> <li>- <b>ADA Technical committee (CM)</b></li> <li>- Flood Ex 2016 was deemed a success. It will be held again in 2017 on 17<sup>th</sup>-18<sup>th</sup> May.</li> <li>- ADA has called for additional funds to facilitate further research into fish and eel passage. Research so far indicates that 93% of eels would be deterred by a 4 inch trash screen.</li> <li>- Biodiversity 2020 guidance should be released in January.</li> </ul>	
<b>13.</b>	<p><b>AOB</b></p> <p>None</p>	