

MIDDLE LEVEL COMMISSIONERS

At a Meeting of the Middle Level Board held at the Middle Level Offices
March on Thursday the 7th November 2019

PRESENT

M E Heading Esq (Chairman)	J E Heading Esq
J L Brown Esq (Vice Chairman)	Mrs D Laws
C D Boughton Esq	A Miscandlon Esq
J R Clarke Esq	S T Raby Esq
The Lord De Ramsey	W Sutton Esq
C F Hartley Esq	P W West Esq
S W Whittome Esq	

The Chief Executive/Chief Engineer, the Solicitor/Assistant Clerk and the Treasurer were in attendance.

Apologies for absence

Apologies for absence were received from P W Allpress Esq, G P Bliss Esq, R C Brown Esq, C J Crofts Esq, M R R Latta Esq, and H W Whittome Esq.

B.3553 Declaration of Interests

The Chief Executive reminded the Board of the importance of declaring an interest in any matter included in today's agenda that involved or was likely to affect any of them.

Councillor Mrs D Laws, Fenland District Council appointee, declared an interest in all matters relating to planning as she is the Portfolio Holder for Planning with Fenland District Council and she is also a town councillor on Whittlesey Town Council.

Councillor Sutton declared an interest in all planning matters as a member of Fenland District Council.

B.3554 Confirmation of Minutes

RESOLVED

That the Minutes of the Meetings of the Board held on the 25th April and 28th June 2019 are recorded correctly and that they be confirmed and signed.

B.3555 Land Drainage Act 1991 **Board Membership**

The Chief Executive reported that:-

- a) The Borough Council of Kings Lynn and West Norfolk had appointed Councillor C J Crofts to be a Member of the Board under the provisions of the Land Drainage Act 1991.

The Chief Executive also reported that Councillor Roy Groom was not re-appointed.

- b) Fenland District Council had re-appointed Councillor W Sutton and appointed Councillors Mrs D Laws and A Miscandlon to be Members of the Board under the provisions of the Land Drainage Act 1991.

The Chief Executive also reported that Councillors Booth and Garrett were not re-appointed.

The Chairman welcomed Councillors Laws and Miscandlon who were attending their first meeting of the Board.

RESOLVED

- i) That a letter be sent to Councillor Groom to thank him for all his hard work on behalf of the Board.
- ii) That there should be an induction tour and seminar on drainage for new members who had been recently elected.

B.3556 Fens Biosphere Project

The Board received a presentation from Kate Carver, Project Manager for the Great Fen Project and Biosphere Project.

Kate Carver entitled her talk “Think the Unthinkable” and gave Members an update on the work being carried out at the two nature reserves Holme Wood and Woodwalton Fen and outlined the work being carried out around them to create a nationally important wetland. Work had been carried out over a number of phases to change the face of the landscape developing different habitats in the area. Under the monitoring programme 159 species of bird had been identified on the site. Mammals including water voles and Chinese Water Deer had been supported and movement had been created for wildlife. She referred to the new website for the Great Fen project recently launched and spoke on the use of volunteers for much of the work carried out and outlined how they were developing sustainable tourism in the area. It was an ambition to build a visitors centre, but as yet no funding was available. She made reference to money obtained through the Postcode lottery and the work being carried out towards achieving a UNESCO designation.

Another important development was the work on paludiculture which involved experimental work with wet crops which had practical applications for food, industry and bio-medical applications. A book had been written about the history of the Great Fen and this was to be published in January 2020.

RESOLVED

That a copy of Ms Carver’s presentation be forwarded to Members.

B.3557 Annual Report for the year 2018/2019

The Board considered and approved the Annual Report for the financial year ended on the 31st March 2019 for submission to the Commissioners.

B.3558 Payments by the Commissioners

The Board examined and approved payments amounting to £521,423.13 made during the period from 1st April to 30th September 2019.

(NB) – The Chairman declared an interest in the payment to Curf & Wimblington Combined IDB.

(NB) - Messrs Hartley and Sutton declared an interest in the payment to Upwell IDB.

(NB) – Councillors Mrs Laws, Miscandlon and Sutton declared interest in the payments to Fenland District Council.

B.3559 Miscellaneous Receipts

The Board examined and approved particulars of receipts amounting to £39,840.01 during the period from 1st April to 30th September 2019.

B.3560 Determination of annual values for rating purposes

The Board considered the recommendations for the determination of annual values for rating purposes.

RESOLVED

- i) That the determinations recommended be adopted by the Commissioners.
- ii) That the Chief Executive be empowered to serve notices and to take such other action as may be necessary to comply with statutory requirements.
- iii) That the Chairman and the Chief Executive be empowered to authorise appropriate action on behalf of the Commissioners in connection with any appeals against the determinations.

B.3561 Rate arrears

Consideration was given to writing off rate arrears amounting to £610.21.

RESOLVED

That the Commissioners be recommended to write off rate arrears amounting to £610.21.

B.3562 Contributions from Developers

With reference to minute B.1779, the Chief Executive reported that development contributions had been received by the Commissioners in the period from the 1st April to 30th September 2019 towards the cost of dealing with the increased flow or volume of surface water run-off and treated effluent volume.

B.3563 Staff

a) Senior Engineer's request to investigate reduced working hours

Further to minute B.3522(d), the Chief Executive reported that he had had further discussions with the Senior Engineer who had confirmed that it was still his intention to reduce his working pattern to 2/3 days per week. An update on this matter would be reported to the next meeting in April.

b) Planning staffing

Further to minute B.3522(iii), the Chief Executive reported that he had now interviewed and appointed a replacement for Leigh Middleton in the planning section (Tanya Gravenor) who would take up her new position in January 2020.

c) Changes to the mobile phone contract

The Chief Executive reported that the existing EE contract has been reviewed and a lower cost arrangement moved to (with the same supplier) which has increased data, has a capped tariff and includes penalty free roaming.

d) Applications for re-grading

The Chief Executive referred to the re-grading applications from Jon Fenn and Lewis Ransom which had been deferred from the previous meeting of the Board to enable Jon and Lewis to undertake health and safety training.

The other three applications for re-grading should be deferred for further consideration.

RESOLVED

That Jon Fenn and Lewis Ransom be awarded a salary rise of one spine point subject to them completing their training and achieving a qualification.

e) Review of the Mechanical and Electrical Department

The Chief Executive reported that a review of the Mechanical and Electrical Department staffing levels had been carried out.

RESOLVED

That the Chief Executive should consult on the possible re-structure of the Mechanical and Electrical Department and take appropriate action.

B.3564 Health and Safety Matters

i) Recorded Accidents/Near Misses

The Chief Executive reported that there had been no recorded accidents and that minor accidents or near misses were recorded at monthly meetings and appropriate action taken.

ii) IDB Service Provision

Further to minute B.3523(ii), the Chief Executive provided an update on the employment of Cope Safety Management who provide additional support to the administered IDBs.

The Chief Executive confirmed that all three Health and Safety requirements set out by the Board's insurance had now been fulfilled and signed off.

B.3565 Property

a) No 10 Deerfield Road, March

Further to minute B.3525(a), the Solicitor/Assistant Clerk reported that a contract and transfer document had been sent to the purchaser of 10 Deerfield Road, March who was also to acquire the garage which was formerly used by Steve Kingham.

b) Cardea site

Further to minute B.3528, the Solicitor/Assistant Clerk reported that external solicitors had been appointed to complete the transaction with Persimmon. The solicitors were carrying out a due diligence investigation to ensure that all conditions attached to the planning application and the Section 106 agreement had been adhered to and were not attached to any land that was to be conveyed to the Middle Level Commissioners.

c) Improved security at Bevills Leam pumping station

Further to minute B.3527(ii), the Chief Executive reported that additional measures had now been introduced at the pumping station following the diesel thefts.

d) 33 Sluice Road – tenant issues

The Solicitor/Assistant Clerk updated the Board on various tenant issues which has arisen with regard to the property. Maxey Grounds & Co, estate agents, were currently carrying out an inspection of the property and would prepare a report.

RESOLVED

That the Solicitor/Assistant Clerk obtain a quotation from Maxey Grounds & Co for management of this property.

B.3566 Maintenance Work
Tin Dump Culvert

Further to minute B.3527(iii), the Chief Executive reminded Members of the issues with weed and reed blocking the culvert screen at this location and the need for regular, often abortive visits to site. He reported that he was still investigating this matter and looking for solutions which may include an automatic weedscreen cleaning solution.

RESOLVED

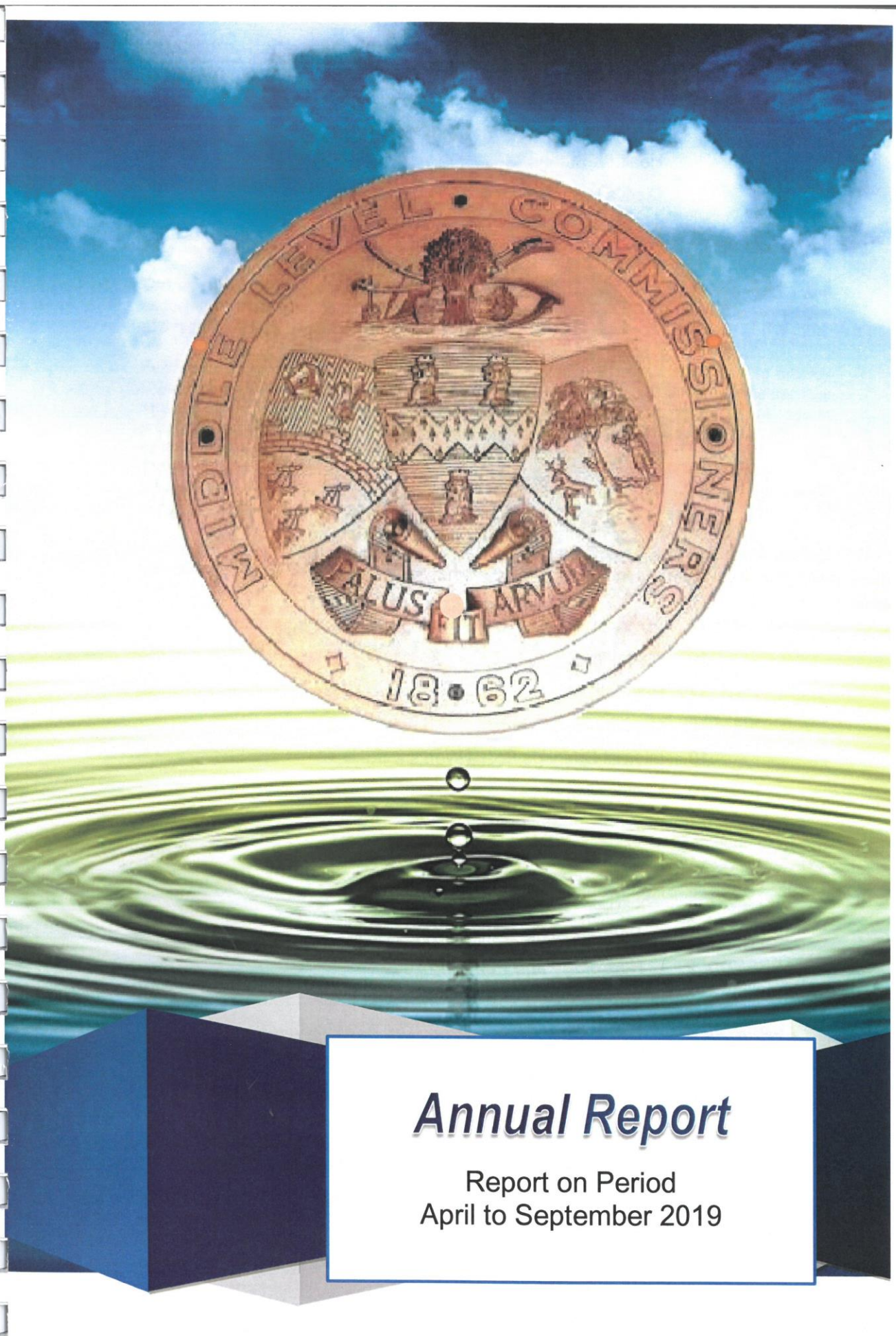
That this matter be reported further at the next meeting of the Board.

B.3567 Plant & Vehicles
Replacement of Iveco lorry

Further to minute B.3527(iv), the Chief Executive outlined issues that had arisen with the Iveco truck and he reported that the vehicle would be sold after the improvement works at the Tin Dump were completed.

B.3568 Chief Executive's Annual Report

The Board considered the Report of the Chief Executive, viz:-



Annual Report

Report on Period
April to September 2019

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APPENDIX 1 - *Rainfall 2019*

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ANNUAL REPORT NOVEMBER 2019

April to September 2019

1. **Health & Safety**

- 1.1 ***Croner Consulting*** – continues to provide the Middle Level Commissioners (MLC) and associated Internal Drainage Boards (IDBs) with help and advice on health and safety issues at a high level with Cope Safety consultants providing more practical advice.

Following this year's round of IDB meetings it was agreed by all but one Board to employ Cope Safety Management to supply 'delivery end' advice on health and safety matters. This arrangement is initially for three years and includes two site visits in year one and one in years two and three to every Board. IDBs can also purchase additional ad-hoc advice and support as and when required. Each site visit is backed up by a report with recommendations. This is delivering the requirements of our insurers and during a recent teleconference the insurers were able to confirm that we had now delivered upon the three specific requirements on health and safety they had stipulated.

Accidents and near misses are recorded at the monthly Works Meeting and any actions identified to reduce the risks linked to these occurrences are taken. Good practice is also shared between IDBs as appropriate.

2. **Clerk's Report**

- 2.1 ***Anglian Water Issues*** – a meeting was held with Anglian Water (AW) on the 16th April 2019 to review areas of shared interest and partnership working. One item on the agenda was once again the need for AW to advise developers that consent is required for discharges of treated effluent into MLC and IDB waters (even when they are passed via sewage treatment works).
- 2.2 ***Partnership Working and Public Sector Cooperation Agreements (PSCAs)*** – it is pleasing to be able to report that the use of the MLC PSCA agreement has been extended (with Swavesey IDB's agreement) to include works within the Swavesey area. The maintenance works carried out were welcomed by both the IDB and Environment Agency (EA) and are likely to be repeated and extended next year. Haddenham Level Drainage Commissioners are also using the MLC PSCA to deliver works for the EA this year. This is in addition to the dredging works for the EA carried out at Salter's Lode and Denver.
- 2.3 ***Letter from defra on IDB1 analysis*** – in Appendix 8 is a letter received from Thérèse Coffey of defra which details an analysis carried out on the IDB1 returns submitted every year by all Boards. The level of detail within these returns was significantly expanded in 2018 to provide more meaningful information. The conclusion to the report enclosed is a positive one, which is especially important following on from the NAO report issued in March 2017 which was quite critical of IDBs in terms of aspects of governance and transparency. There remain areas where defra feels that more work is required though, which include; member training, covering H&S and welfare, finance and communication and engagement. The adoption of the latest model byelaws is also sited, but for the MLC and associated Boards work on addressing this is already in hand.
- 2.4 ***Water Resources East (WRE)*** – the Chief Executive has been offered, and has accepted, a place on the Board of WRE. This is a non-executive position and is initially a paid for place (£15K annually), funded by IDBs in the region. The MLC and associated Boards will not be asked to contribute as the time spent on this is considered to be this Board's contribution. The aim will be to ensure that the interests of IDBs are placed and remain within the mix of thinking and planning of future water resources in the Eastern region.

WRE is supportive of this and is currently seen as the pilot example of cross-sector collaboration nationally.

- 2.5 Board Tour of Inspection** – it was generally felt that the tour of inspection to Boston was successful and that visiting other IDB areas helped members understand both the similarities and differences which exist between Boards, based upon geography and the local economy.

Members are asked for their thoughts on next year's tour of inspection. Options may be a visit to the new Wolverton and Stow pumping stations and to the site of the Islington pumping station where construction will be well advanced, or to the Upper Ouse IDB area.

- 2.6 Badgers and banks** – following on from the flooding in Lincolnshire in June the Chief Executive wrote to Steven Barclay advising him that he had heard suggestions that badger activity had been a contributory factor in the breach which occurred in the EA managed bank. The response which came back via the EA at the end of September, advised that badger activity was not a contributory factor in the breach. See full response in Appendix 7.

- 2.7 The Agriculture Bill** – this Bill failed to complete its passage through Parliament before the end of the last session. This means the Bill will make no further progress at the moment.

- 2.8 The Association of Inland Navigation Authorities (AINA)** – met on the 28th June 2019 for its AGM and will meet again on the 22nd November. During the period AINA has responded on behalf of its members on two consultations;

- HMRC consultation on the Implementation of the Court of Justice of the European Union judgement on diesel fuel used in private pleasure craft. This judgment will impact upon boaters who currently use red diesel but only pay duty on the element used for propulsion (and not heating).
- The Regulatory Reform (Fire Safety) Order 2005: Call for Evidence. AINA is concerned that there is a growing demand for residential boat rentals and that the current fire safety regulations are unclear, allowing some to suggest that their boats are fire compliant when they may well not be safe.

- 2.9 Land Charges Register** – in response to ongoing fustigation that developers and their agents were not implementing appropriate solutions for managing excess rain water and that the planning authorities neither had the expertise nor staff to ensure a viable solution was implemented, the Commissioners had resorted to requesting that planning authorities placed notes on the Land Charges Register. The aim was to alert potential buyers to problems that they may inadvertently be acquiring with the property. Earlier this year this practice was challenged by John Maxey, who sought a barrister's opinion. The barrister concluded that it was not legal to place a land charge linked with an IDB byelaw on the Register (it was never our intention to do this but apparently KLWN had done this in error) nor did he consider that notes could be placed on the Register, as it was his opinion that there was no legal mechanism to do so. As a result of this we have, for the time being, ceased requesting notes be placed on the Register and have instead turned our attention to seeking a better solution through working with partner organisations. See below for one example of this.

- 2.10 The Cambridgeshire, Norfolk and Peterborough Flood Risk Management/Water Management Partnerships** – (Inter Agency Working on Flood & Water Management Issues) met last on the 12th September 2019. The Chief Executive took the opportunity in the meeting to flag up the issue of soakway drainage for minor developments, which has been the cause for ongoing concern, particularly since the agents' challenge to the placement of notes on the Land Charges Register. A separate meeting to see if an agreed approach can be developed and signed up to has been arranged for 4th November and the outcome of this will be reported upon at the meeting.

2.11 Cardea site – a plan of the areas to be adopted has been produced and agreed and an external solicitor appointed to liaise with the Persimmon Homes' solicitor to produce a legal agreement. At the time of writing our solicitor is checking on the site planning obligations to make sure that any that could be attached to, or associated to, the land which is to be transferred have been discharged; or if not would not be likely to put the MLC in a disadvantaged position.

2.12 Consultations – the MLC continue to respond to defra consultations either directly or through correspondence with ADA as and when appropriate to do so.

2.13 Reform of Water Abstraction Licensing – defra considers that the current abstraction licencing arrangements are outdated and want to modernise them to enhance and expand the range of digital services available and to simplify regulatory requirements. It believes that this will underpin more widespread work to improve both the environment and access to water by providing a modern and simple service for abstractors. Defra states that its approach has two elements to it which are as follows:

- modernise the water resources licensing service by upgrading the systems that it depends on and moving paper-based licences into a digital format
- modernise regulations by moving water resources licensing into the environmental permitting regulations (EPR) and making sure all significant abstractors are regulated

Some of these upgrades are relatively straightforward administrative improvements designed to save time and reduce regulatory burden. Others underpin defra's broader goals of better protecting the environment and improving access to water.

Improvements to the availability of information on river flows and groundwater levels is sited as an example of the links between service upgrade and wider goals. Many abstraction licences currently include requirements to reduce or cease abstraction at particular river flows, river levels or groundwater levels. Defra wants to improve the availability and usability of this information to make it easier and quicker for abstractors to comply with their licences and help them improve the way they plan their water use.

Defra considers that a modern and responsive licensing system is also essential to support water trading. By providing clear information on potential trading partners and by reducing the time it takes to make a trade, modernisation will make trading easier and therefore improve access to water.

The MLC and associated Boards input into these proposals through ADA and through representation on the NFU Water for Food Group.

2.14 Middle Level Barrier Banks Works – these works, required for safety reasons under Section 10 (6) of the Reservoirs Act, have resulted in a project to raise the Middle Level Barrier Bank to address changes to the bank crest level caused by settlement. EA's contractor commenced work in the summer of 2017 on this four-year scheme which protects the Middle Level district and neighbouring Boards from flood risk from the Washes. The most recent news report on this scheme is included as Appendix 5.

2.15 River Great Ouse Dredging Pilot – unfortunately once again these works have been delayed, on this occasion it appears that staffing shortages and prioritisation of works have been the issue. EA staff have however been in contact with the Chief Executive following criticism of the delays at the recent precept meeting and assurances have been given that this pilot will be progressed.

2.16 Eel Regulations – the EA continues its work on the ChERP project (Changes to Eel Regulation Process) and has issued guidance which now removes the need to prove that an eel screen is uneconomic for pumping stations which do not have a gravity bypass

(none of the MLC or associated Boards have stations with gravity bypasses). The requirement is therefore to install fish friendly pumps where doing so is cost beneficial and affordable.

This is encouraging and can be seen as a positive step linked with the IDBs showing their commitment to finding the right solutions for eel movement through financially supporting research. The findings of the three years of research undertaken by HiFi (Hull International Fisheries Institute) has been enlightening but remains incomplete and for this reason ADA is asking Boards to consider matching their previous support for a further two years.

The Board is asked to approve continuing the modest financial support to eel research at previous levels for a further two years.

- 2.17 *Future Planning for the MLC and Associated Boards*** – the fourth Chairs’ meeting date has been moved and will now be after this Board meeting. The Chief Executive will however provide an update on the response to the consultation on setting up a single MLC Board with area-based operations delivery committees.
- 2.18 *Woodwalton Fen Potential to be reclassified as a reservoir*** – the Chief Executive has formally notified the EA that this flood storage area is believed to be a reservoir and in addition has appointed a Panel Engineer to undertake an inspection and prepare a report under Section 8 of the Reservoirs Act. As part of this process the Panel Engineer will issue a preliminary certificate, after which the reservoir should remain under the supervision of a qualified engineer for a period of three years before a final certificate can then be issued. It is important to note that for any reservoir a Supervising Engineer must be appointed at all times. The fee for the first phase of this work is a lump sum of just under £6K.
- 2.19 *The New Rivers Authorities & Land Drainage Bill*** – the second reading of this Bill took place in the Lords in May, but following the proroguing of parliament for the recent Queen’s Speech the Bill has fallen. It may of course be reintroduced, but if it is it will effectively have to start its Parliamentary passage again from scratch.
- 2.20 *Environmental & Land Management Scheme Trials*** – members will recall that defra approached ADA who in turn contacted a number of IDBs in regard to the possible replacement for Entry Level Environmental Stewardship schemes (ELSSs). Defra was looking to run trials to road test its new arrangements and it seemed appropriate for the MLC to offer to be involved in this as they have bankside land parcels which they were looking to offer for ELS. The joint submission led by the Welland and Nene IDB was however unsuccessful. We will now continue with plans to secure ELS on the land strips in question.
- 2.21 *Lower Nene Water Resources Planning Group*** – this group met on the 24th April, 22nd May (for a workshop) and the 11th July. The outcome of the current round of meetings has been firstly to implement computer runs on the Anglian Water Rutland Reservoir fill model to examine the impacts of releasing consented abstraction water to the MLC and other environmental and agricultural stakeholders during critical periods. This has been extremely successful and has, for the first time, led to a significant voluntary release of water by AW which, if the rainfall had not arrived when it did reducing the drought potential, would have made a huge difference to the growing season. The second strand is to develop water trading models which will facilitate informed trading in line with the aspirations of defra and the EA.
- 2.22 *Proposal to hold an open day*** – the ADA Great Ouse branch is encouraging IDBs to consider holding open days to engage with the public. The members thoughts on this would be welcomed.
- 2.23 *Tactical Plans for the Fens Agreement*** – the EA has set up a multi-partner group (FRM for the Fens) to steer work on developing strategic plans for managing flood risk in the lower Great Ouse catchment. This work is considered necessary to address the impacts of

population growth and climate change, which are particularly relevant in this area. In Appendix 9 is a request to approve the approach being taken in principle which follows the letter sent in January 2019. The perceived value of this work is that it pre-apportions the benefits (land and property which would flood if not defended) so that applying for grant should be more straightforward and the amount of grant possible clearer. This should give increased certainty and clarity and resolves the issue of double counting benefits where, for example, a property is protected from flooding by both EA and IDB assets. Work on developing the strategy could take up to 15 years though and the proposal also therefore includes a mechanism for allowing grant-in-aided works to progress during this time on a hold-the-line basis.

Is the Board happy to approve in principle the approach being taken as outlined?

3. Navigation Registration and Byelaws and NAC

Under the Act the Commissioners must appoint people to represent various areas of interest. This was completed at the April meeting. Below are changes that are proposed to two of the members, as requested by the member organisations. No changes to the organisations themselves or the areas they are representing are being sought;

Nathan Arnold to replace Paul Separovic (EA), Kye Jerrom to replace Chris Middleton.

Members are asked to confirm their support for these changes

If approved the varied committee will be made up of the following members;

M Heading (MLC Chair), S W Whittome (MLC Board representative), R Sexton (East Anglian Waterways Association), A Wildman (RBOA), Chris Howes – Chair (IWA), N Arnold (EA), Kye Jerrom (EA) and P Syred (Fox's Boats).

The final draft of the byelaws was completed following consultation with selected organisations. The byelaws are now being advertised in relevant local and national publications and on the MLC website. The closing date for comments on them is 18th November. Any submissions made by this date will be considered and the necessary steps taken which will end with the byelaws being submitted to the Secretary of State for sign off. At which point they will come into force.

Meetings have been held with the EA to discuss registration and reciprocal licencing. The meetings have been fruitful in as much as the EA has confirmed that it will be happy to enter into reciprocal arrangements and also that it would be happy to manage the registration and the issuing of licences, subject to receiving some form of navigation maintenance work in-kind as repayment. The EA has, however, stated that due to current work load and other pressures it would not be able to incorporate the registration process in time for a 1st April 2020 launch. As a result, MLC officers are speaking with the Cams Conservators to see if they can assist. The fall-back position will be either to delay launch or to issue licences directly, perhaps utilising temporary staff.

In terms of charges the NAC has recommended that the Commissioners align themselves with EA Anglian Waterways, mirroring its charges and charging structure. This will provide clarity to boaters. It is also proposed that the MLC work with the EA to agree a reciprocal arrangement which incorporates only a modest uplift for boaters wanting to use both MLC and EA waters. The final proposal is that for the first year, and to encourage registration, boats which will exclusively use MLC waters should be offered up to 25% discount.

The Board is asked to support the recommendations made by the NAC as outlined above.

The Assistant Clerk/Solicitor is drafting the Protocol for boat removal which is well advanced and should be in place by the time the byelaws have been approved.

Some work has been carried out on link route facility provision and efforts are being made to capture detail on what boats are present within the MLC system. An update on these will be given at the meeting.

4. Staff

4.1 *Vacancies/Appointments/Departures* – the Senior Engineer who has asked to move to a two- or three-day week advises that this remains his intention but has yet to define a date when he will move to the reduced hours. It is the intention to employ a person part time to cover the lost days but the role of the incoming person is likely to be adapted to reflect the current and future needs of the Commissioners, for example the introduction of navigation vessel registration and the focus the Boards want to place on improving how planning and consenting matters are dealt with. The work of the Assistant Engineer, who resigned in July, is being covered on a short-term contract basis, two days a week, by a consultant engineer. The vacancy has been advertised locally, with ADA and ICE but responses have been disappointing and seem to reflect the state of the industry at the moment where jobs adverts outstrip the supply of suitable engineers.

4.2 *Pensions* – there is nothing further to report on this matter at this time.

4.3 *Spine Point Advancements* – applications for spine point advancement will be discussed at the Executive Committee meeting and any subsequent recommendations brought before the Board.

4.4 *Electronic Timekeeping* – a device has been installed in the reception area which, through the use of key fobs, logs the entry and exit of members of staff. Weekly reports are produced summarising data collected on the monitoring of hours worked and timekeeping. This followed the recommendation of a sub-committee setup to consider how best to deal with concerns expressed by some individuals over timekeeping in general. The use of the OkayAlone app allows a similar level of scrutiny to be applied to the workforce.

4.5 *Sickness*

Staff – of a total staff of 22, with an approximate expected maximum of 2,335 working days over the six-month reporting period, 8 members had 33½ days sickness. The sick leave is broken down as two people taking 15 days and 6 days respectively following operations, two people having 3 days, two people having 2 days, one person having 1½ days and one person having 1 day. The remaining 14 members of staff did not take any time off for sickness. **Note: one member of staff left part way through the reporting period and one member of staff works three days a week.**

Operatives – during the six month reporting period the workforce of 11 men, with an approximate expected maximum of 1210 working days, shared 95 days sick leave over 7 men. One of the seven taking a further 30 days following on from the last period (due to a knee injury and recovery from an operation), another taking 34 days (which is ongoing following a road traffic accident), 20 days were taken by another (following an operation), 6, 2, 2 and 1 day respectively were taken by others and the remaining 4 members of the workforce did not take any time off for sickness.

4.6 *Training was provided as follows:*

- IOSH Course, 1 member of workforce
- Driver CPC, 1 member of workforce

5. **Publicity**

- 5.1 **General** – The Chief Executive and Solicitor/Assistant Clerk accepted an invitation to join a boat trip for councillors passing through March town. This gave rise to an article in the Cambs Times including the following quote referencing the Chief Executive.

"The river is an unexploited resource.

When our byelaws come into force it will mean boat users will be charged for the first time using Middle Level waters. More importantly it will require boats to be insured and have a safety certificate. There will be better facilities too, so it will springboard opportunities to create great tourism in the area. Dredging of the river, which removes silt and other debris from the bottom, could also be an option in the future - but would come at a hefty price."

Mr Thomas continued:

"Dredging is something that is on our radar but it could cost in excess of £100,000 through March. Cutter-suction dredging could be a better solution as it would pump out silt instead, but at the moment we are just concentrating on the short-term opportunities."



Picture: Harry Rutter / ARCHANT

- 5.2 **Visits** - the following visitors were received at St Germans Pumping Station:

9 th May 2019	-	Swavesey IDB
23 rd May 2019	-	Capita/EA (FRM for the Fens)
25 th June 2019	-	UK Irrigation Association (Researchers from India)

- 5.3 **Media** – the Commissioners' 'Twitter' presence now has 329 followers, up from 319 six months ago and 259 a year ago.

- 5.4 **Web site** – www.middlelevel.gov.uk is updated regularly to deliver information to those who may be interested or who require information. Most recently it has been amended to include a prominent space of the home page to display the latest news.

6. **ICT Report**

6.1 **Hardware** – TSG continues to provide support for the Commissioners' physical and virtual servers.

Other than the usual ongoing replacement of failed or outdated items, including the purchase of a replacement laptop for use by the Operations Engineer and a new GIS dedicated machine, no significant hardware purchases have been made during the period.

6.2 **Software** – there have been no purchases of new software worthy of report.

7. **Engineering Executive Commentary**

This section broadly summarises the key activities of each of the three engineering departments serving the MLC and client IDBs. It is intended to provide an overview of work carried out during the above period and that planned for the future.

A brief summary of progress on the Middle Level Strategic Improvement Scheme and progress on GiA applications is also included.

7.1 **Technical Services Department**

The work carried out by the Technical Services Department during the last six months can be briefly summarised as follows:

On a consultancy basis:-

Outfall Culvert Replacement Crooked Bank – the Hundred of Wisbech IDB employed the MLC to design and tender for the replacement of a 1.8m diameter culvert with twin culverts of the same diameter. This project, valued at £0.3M, is currently on site.

Holly Bank Culvert replacement – this scheme follows on from the Crooked Bank scheme and is currently in the design phase.

Stow Bardolph Pumping Station – this scheme, valued at close to £2M, has been designed by the MLC, is on site and is nearing completion.

7.2 **Works Department**

Water Resources and Control of Water Levels

Spring/Summer 2019

The EA Water Situation Report for August 2019, confirms a continuing trend of 16 months of below average rainfall for the East Anglia region. Cumulative rainfall figures for the previous 12 months indicate the fourth lowest totals since records began in 1910.

The EA held its Pre-Season Lower Nene Water Resources Meeting in its Peterborough offices on 2nd April. The Commissioners' attendance at this meeting allowed for a continuation of positive dialogue with colleagues from both EA, AW and other Lower Nene abstractors. Feedback and working progress from the meeting were relayed to the Commissioners' Water Resources Committee meeting which was held the following week.

Most spring sown cropping was established in near perfect seedbed conditions, which aided germination and early season growth of most crops. Hence early season pressure on water resources in the MLC system remained low.

Additional water supplies from the EA Nene became available during mid-May, while AW undertook essential works on its intake at Wansford, requiring full closure of this structure. This allowed for both intake penstocks at Stanground Lock to be opened to near maximum capacity for 48 hours, almost doubling the normal intake volumes to virtually 225 thousand cubic metres a day (tcmd), during this time. This resulted in both St Germans and Bevills Leam ponds being filled to maximum summer capacity in a shorter period than would normally be anticipated. Text messages were relayed to IDB slacker operators to ensure they maximised any spare water, holding capacity in their own systems while the additional water supply was made available.

The equilibrium of water availability from the EA Nene against abstraction demand was finely balanced during early June. A couple of text messages were sent to the IDB slacker operators during this time, instructing them to close down over weekend periods, when MLC river levels fell rapidly as abstraction pressures outstripped availability. 50mm of rainfall in the second week of June significantly changed the abstraction requirement, and provided temporary relief to the Commissioners' system, allowing both the MLC watercourses and IDB drains to be fully recharged. The welcome rainfall also increased flows in the EA Nene which proved vital during early July, when once again abstraction pressure increased.

Twice weekly telecoms were held during the summer abstraction season, allowing the MLC Operations Engineer to have direct conversation with EA colleagues, and possibly more importantly AW. This resulted in AW agreeing to give up an additional 60ml/day for use by Lower Nene abstractors, including the Nene Washes, North Level IDB and the Middle Level. This gesture was most welcome and timely, and allowed for our Stanground Lock intake to be opened up to near maximum intake capacity for 7 consecutive days.

Further rain fell during the last weekend of July. Again, the rainfall was very welcome, and came at a point where abstraction requirements in the MLC system were outstripping the EA's restricted intake through Stanground Lock.

As most spring sown cropping had been established in good conditions, during the early season, in general abstraction requirements during August were lower than would normally be anticipated and demand was managed quite comfortably.

Some late season 'soil conditioning' irrigation has been required to reduce crop losses and quality issues during September. General abstraction rates have been low, and the effect on MLC water level management during this time has been negligible.

At the time of reporting, and continuing the EA's increasingly flexible approach to abstraction, the EA has sent notice to the 88 licence holders in the MLC system, inviting them to consider filling their farm reservoirs earlier than normal, in order to take advantage of surplus water that is currently available.

Banks and Channel Maintenance Dredging and Bank Raising

Bank raising and levelling works of previously dried dredgings was unavoidably delayed until late June, to prevent disturbance to ground nesting birds and other wildlife in close proximity to Woodwalton Fen Nature Reserve, which Members will be aware is afforded RAMSAR and SSSI status.

Works were completed in early July and the banks re-seeded to establish the grass sward.

Aquatic weed clearance was required on three separate occasions along Pig Water Drain. The first two rounds were undertaken between Farcet Overspill and Yaxley Overspill and the remaining round covered the entire length of Pig Water, from Horsey Toll inlet to Yaxley Overspill.

Programmed maintenance dredging work was undertaken following harvest this year on the Catchwater Drain between the upper extent of Glatton Road downstream to Straight Drove Bridge, Sawtry

Channel clearance works to remove submerged aquatic weed were undertaken during September on Yards End Dyke, from Stilton Attenuation Ponds to Yaxley Overspill.

Well Creek - Bank Subsidence – no further correspondence has been received. The affected bank from Church Bridge, Upwell to the British Legion Footbridge remains in an unsatisfactory condition.

Bank Seepage – a number of seepage issues have been noted during the last reporting period. It was necessary to return to site to extend the previously undertaken length of clay puddling work along the north east bank of Yaxley Lode to arrest visible bank seepage.

Monitoring of bank seepage has been required along the east bank of the Old River Nene at Ramsey St Marys, the north bank of New Dyke adjacent to the Great Fen Project depot at Corney's Farm, and to the east bank of Great Raveley Drain near to Green Dyke Pumping Station. No further action was sanctioned as the source of the seepage at all three locations was not visible. All of the aforementioned affected reaches have previous histories of seepage episodes, which seem to only manifest during the summer months when the locally sourced material that the raised banks are generally constructed of dries out, combined with raising water to summer retention level within Bevills Leam pond. At the time of reporting, and with water levels being dropped towards winter levels, the three affected sites have dried to a point that seepage is no longer evident.

Herbicide Trials – no further information has been forthcoming during the last year. It is understood this may be the result of the continuing Brexit implications during this time.

Navigation – the summer 2019 navigation season passed without notable incidents occurring. Dense aquatic weed growth during September was widely reported by navigators travelling through the Commissioners' Link Route. The growths of weed have been dealt with and removed from the affected watercourses by the Commissioners' fleet of workboats on a priority basis.

Fly-tipping – a spate of fly-tipping at Kings Dyke watercourse has been experienced during the reporting period. Numerous sofas and arm chairs have been removed on multiple occasions from Horsey Toll Sluice and Ashline Overspill. It is believed the source may be an unscrupulous house clearance business, operating in the local vicinity. Several supermarket trollies have been reported through the office and removed from the Old River Nene in March town centre.

An abandoned, discarded Citroen car revealed during the recent maintenance dredging works at Great Raveley drain was removed from the bankside and transported to the vehicle recycling facility at Floods Ferry. The scrap value of the vehicle was credited to the Commissioners' account.



Ralstonia solanacearum in watercourses – a decision was taken by defra/APHA last autumn to undertake one more year's surveying of the Commissioners' watercourses for the presence of Ralstonia solanacearum, on a considerably reduced scale. No further sampling of IDB systems was deemed necessary as widespread surveying in 2017 and 2018 had only revealed one positive point of infection in Euximoor IDB. Sampling of the Commissioners' watercourses was limited to those in "reasonably close proximity" to points previously designated as infected. For the 2019 survey, 25 sampling points were selected,

23 of these had previously tested clear, with two known positive infection sites (New Popham's Eau and Forty Foot River at Horseway Arm) to act as controls. This season's sampling took place on four consecutive weeks commencing on 31st July. APHA has intimated the two previously infected control samples have again tested positive on all four weeks. In addition, one new site has tested positive for all four weeks, and at the time of reporting its location is yet to be disseminated. It is understood defra will be adding this new positive test site to the previously designated watercourses in due course.

7.3 Mechanical & Electrical Engineering Department

Along with MLC work, major overhauls and maintenance of IDB pumping plant have been completed during the period.

A brief description of the works carried out over the past twelve months, together with recommendations for future works, follows:

- It has been a fairly uneventful six months at St Germans, with the only significant issue being the breakdown of the number 4 generator. Routine maintenance and repairs are instigated as and when needed and the 5 yearly electrical condition report has been carried out.
- Pump and motor repairs have been completed at two IDB pumping stations and a replacement pump in being installed at one other. The Aqueduct pump was lifted and replaced with the spare unit and the removed pump overhauled.
- Portable Appliance Testing has been completed.
- Periodic electrical condition reporting/remedial works are being carried out at IDB installations as and when required.
- Repairs to several automatic weedscreen cleaners have also been carried out together with a major overhaul of the Bevills Leam machine.
- One new automatic weedscreen cleaner has been installed complete with new weedscreen and orders placed for another unit.

7.4 Middle Level Strategic Improvement Scheme

Following an EA mid-term GiA review all allocated funding for this scheme has been deferred until 2021 or beyond. Work on developing the business case for bank raising will commence over the next period. The scheme benefits should be clearly defined by the Strategic Investment and tactical plans referred to earlier in the report.

8. Water Resources & Control of Water Levels (see Appendices 1 & 2)

8.1 Rainfall – mean rainfall over the area for the six month reporting period was 351.5mm which is 51mm more than the standard average.

April 2019 was a notably dry month. Rainfall was sporadic, and produced only 26% of the Long Term Average (LTA). The EA indicated, at the end of April, the cumulative rainfall for the previous 12 months had been the fourth driest in East Anglia since records began in 1910, and recorded only 71% LTA during that time. This led to the majority of spring cropping being established into well-conditioned, moist ground conditions, a total contrast from the spring of 2018.

The generally dry trend continued through May, and although not as dry as April, it returned precipitation totals of 83% LTA by the month end. Abstraction pressures within the MLC system during this time were met comfortably, without any major issues.

In contrast to the previous two months, June was considerably wetter than average. The majority of the rainfall fell in a seven-day period from 7th – 13th. With rainfall totals in excess of 50mm during this period, abstraction pressures dropped dramatically. The opportunity was taken to recharge both Middle Level ponds to maximum summer retention levels whilst water was readily available from the EA controlled River Nene. IDBs were also encouraged to recharge their systems via the text messaging system.

July was a more typical month for rainfall. EA records show the month was classed within the 'normal range' and rainfall totalled 82% LTA by the month end. The dry weather trend continued and intensified into August. Although the dry weather was welcomed by farmers and growers harvesting cereal crops, the same cannot be said for root crop growers who continued with their spray irrigation programmes well into the month. The month returned values of just 68% LTA in terms of rainfall.

September was also remarkably dry, with very little rainfall for the first three weeks of the month. Late season irrigation, to provide soil conditioning by potato growers requiring mechanical damage free samples of produce, has been notable. The abstraction demand during this time has been easily met with incoming flows from the EA River Nene via Stanground Lock intake.

8.2 Soil Moisture Deficit (SMD) - as dry settled weather prevailed throughout April, the SMD value rose approximately 50mm during the month, ending at 81mm. This was remarkably high for the early part of the season, and a direct contrast to April 2018, when values were recorded at the month end in single figures.

Values rose further during May and produced month end totals of 107mm in the Fenland catchment. The SMD value decreased during the second half of June, following significant rainfall mid-month. However, as generally warm, settled conditions were experienced during July, the SMD values rose throughout the month, returning the value to the 'normal' banding. The month end value for July was 115mm. August was another dry month, and this was reflected in higher SMD values, the highest recorded was the week ending 27th August at 134mm. Early September was warm, predominantly dry and settled. Again, this was reflected in the 'high' band value, which peaked during the mid-month period at 138mm.

8.3 Water Levels (Main System)

Spring/Summer 2019

Water levels during the spring period were maintained within automated pumping parameters at both St Germans and Bevills Leam Pumping Stations. Levels were gradually raised towards maximum summer retention levels during April, as dry weather prevailed. Pressure on water availability from the EA Peterborough Nene intensified during early May, to a point where intake restrictions were imposed on the Commissioners' intake at Stanground Lock, leading to a 5-day voluntary closure of IDB slackers to allow water levels in both St Germans and Bevills Leam ponds to recover. This early stage intervention was required again during the first week of June, to allow water levels to stabilise. Welcome rainfall during the second week of June negated abstraction pressure from the system for the following two weeks, and allowed a period of recharge for the EA Peterborough Nene. IDBs were encouraged during this time to refill their systems to summer retention levels whilst surplus water was available. Water availability on the EA Nene intensified during mid-July. IDB intakes were voluntarily closed for a 4-day period, during which daytime temperatures soared into the mid 30°C.

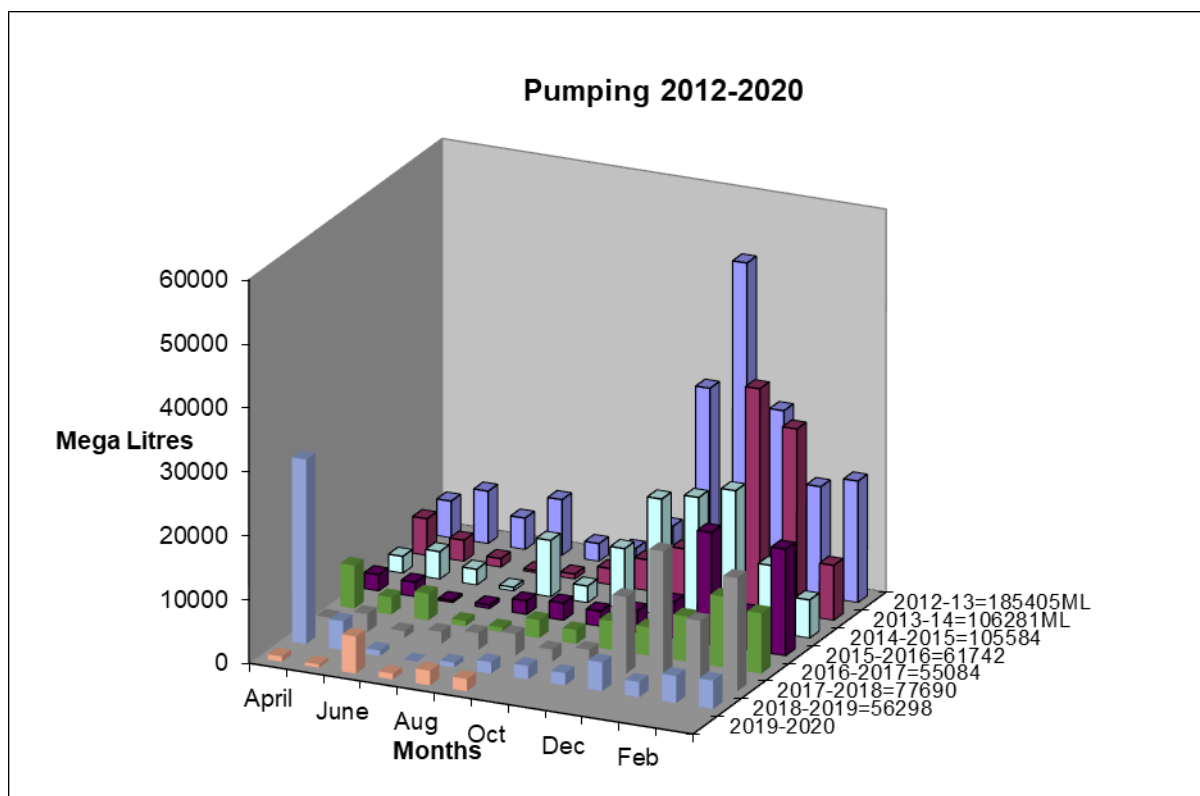
Although the abstraction season was not an easy one, early intervention and the voluntary closure of IDB slackers, combined with our close working partnership with colleagues from both AW and the EA did, without doubt, prevent further irrigation restrictions, as had been experienced during the previous season. In mentioning collaborative working, a particular note of gratitude should be extended to AW, who was able to give up an additional 60 tcmd

(thousand cubic metres a day), during an intense pressure period in mid-July. The majority of this additional water was made available to abstractors within the Middle Level area.

8.4 Water Levels (Well Creek) – water levels have been maintained in the Well Creek by pumping water into it from the Main Drain at the Aqueduct to pre-set parameters throughout the summer of 2019. A pump failure occurred during the early summer season. It is unfortunate to report that following further investigation and subsequent pump removal from the watercourse by the MLC workforce, it became apparent that an inquisitive otter had become trapped in the pump casing, resulting in the failure. A backup pump, having been previously refurbished and dry stored at the Commissioners' March Depot following a previous pump failure incident, was transported to site and swapped with the failed pump. A flap valve has now been fabricated and fitted to the discharge pipework on the Well Creek side, to ensure similar situations regarding wildlife entering the discharge pipework when the pump is non-operational cannot occur.

8.5 Pumping – during the six month period, 12240 and 3465 megalitres of water were pumped at St Germans and Bevills Leam respectively (refer to Appendices 1 and 2).

Pumping from April to September 19 was very low and in keeping with the last 5 years.



9. Maintenance Work

9.1 St Germans Pumping Station – it has been a largely uneventful time at St Germans this period with only routine maintenance taking place with the exception of Generator No 4. The engine was shutting down on a major voltage instability. This fault proved to be very hard to diagnose, because as the engine started it shut down leaving no time to analyse the fault. The services of Finnings were enlisted and, with the software protected voltage regulator bypassed, the fault was tracked down to a bespoke voltage monitoring transformer costing £200 with 7 weeks delivery lead in. It is very unusual for such a component to fail but without it the engine will not operate.

At the time of writing this report the elver pass was operating satisfactorily and no appreciable build-up of mussels was noted as present.

In March 2019 36,000 litres of diesel was delivered to St Germans, it is intended that a further 36,000 litres will be ordered in October 2019.

Periodic electrical condition reporting has recently been completed.

The following picture shows the weed pulled out in one 24 hour period (**7hrs pumping**), whilst this is an impressive amount of weed for one day looking closely it can be seen that approximately $\frac{1}{4}$ of the weed had already been removed before the photograph was taken. The weed is being moved and deposited elsewhere on site for composting, with non-compostable items being removed from site. It should also be noted that the Board's decision to remove the skips and replace them with weed bays was clearly beneficial in this instance, as with the previous arrangements the station would have shut down on the 1st and 2nd October.



Weed bay at St Germans in use September 2019

9.2 ***Main Drain/Station Intake and Surrounds:***

Bed Level – no dredging or re-profiling has been required and none is planned for at least the next few years.

Grass Cutting - Kew Grass Care continued to provide the grass management services to St Germans pumping station surrounds, with an extended return period to reflect the grass regrowth rate during the drier summer months experienced during the last two summers. As previously reported, the inter-planted tree areas are no longer mown as part of the mowing contract. The contract will continue to be reviewed annually.

Tree Planting Scheme – species other than affected Ash continue to proliferate. Most trees are reaching semi-maturity in their ninth growing season, and provide an effective visual screen from neighbouring residences and properties.

9.3 Aqueduct Bridge – there is nothing further to report at this time.

9.4 Bevills Leam Pumping Station - the Station has operated satisfactorily with only very minor issues over the period.

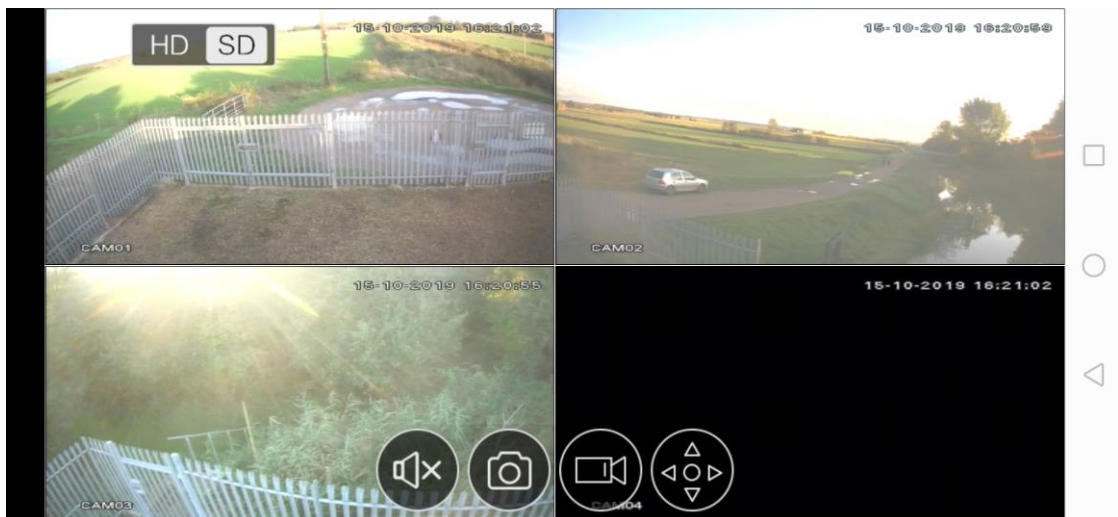
Engine Overhaul Programme/Inspections – as previously reported it is currently anticipated that the three diesel engines should provide adequate service for a while. This is to be reviewed in 2 years' time, ie 2021.

As previously reported the trolley drive has developed a fault; and, therefore, the assembly was removed for inspection and overhaul during the summer, it has now been returned to service.

During July it was discovered that a further theft of some 3000 litres of diesel had occurred, both thefts have been covered by our insurance policy.

To address security issues and reduce the likelihood of further thefts two quotations were obtained for active CCTV monitoring. The Executive approved acceptance of the lowest quote and an order was placed with Chubb to enhance their existing system and add new equipment. This was installed and commissioned during early September.

9.5 Control Sluice – recently an attempted break in occurred at this site, a CCTV system has therefore been installed



Screen grab from a mobile phone

9.6 Tin Dump Culvert – to address the long-standing issues at this site it is considered that an automated weedscreen cleaner should be installed.

Due to the large amount of Cott that builds up on the screen we have some reservations that the traditional weedscreen cleaners may be unable to penetrate and clear the screen. A back raked machine is currently being investigated.

Drawings of the existing structure are currently being prepared in order to obtain quotations for a suitable machine, power supply and site modifications.

9.7 Navigation Structures & Abandoned Craft

Salter's Lode Lock – this lock has operated successfully with the only issue over the period being the failure of the hydraulic hose reel which was replaced. As previously reported, it is now over 10 years old and a detailed inspection of the condition of the seals, guides, etc was to be carried out in late spring, together with a full service of the hydraulic power unit. However, due to the early start of the boating season the work has been postponed until late autumn/early winter.

Stanground Lock – the downstream lock gates will require refurbishment soon. Works will be planned for either next year or the year after when an income stream for maintenance will at last be in place.

Horsey Toll Sluice - this very old sluice controls the only water resource supply into the Bevills pond during dry summer periods. It is suffering from corrosion and due to its current format, blocks with weed impeding the flow, as can be seen below:



Consideration has been given to replacing the mild steel penstock with a full width tilting gate constructed in stainless steel and HDPE. Two budget prices have been obtained, one being £8k **supply only**, the other being some £30k **installed**, neither of the prices include for damming off and dewatering which would add considerable additional costs.

As can be seen there is a high-pressure gas main crossing the structure and any work on site would have to be approved by National Grid Gas.

9.8 Cardea Site SuDS adoption – this is covered earlier in the report.

9.9 Weed and Grass Control on Banks & Channels

Rigid Hornwort – late season growths of this semi buoyant aquatic plant have been evident throughout the system. The worst affected channels are the larger arterial watercourses including Bevills Leam, Twenty Foot, Forty Foot, Sixteen Foot, New Popham's Eau and the Main Drain. The weed has been cleared from the affected channels using the Commissioners' work boats. The automated weed screen cleaners at both Beville's Leam and St Germans have dealt with the weed mass during pumping operations successfully.

Azolla – no significant infestations of the weed had been noted this last season.

Reed/Lily/Drain Bed Spraying – emergent aquatic weed growth was treated with an application of Roundup Herbicide during the early summer period. The treatment was undertaken under EA licence conditions along the Sixteen Foot, Forty Foot, Twenty Foot, Bevills Leam, New Dyke, Whittlesey Dyke and Old River Nene.

Weed-cutting (boats) – the newly acquired Conver boat has worked well during its first season. The trailing knives have been particularly successful, and have proved themselves to give significant advantage over the ‘T Cutters’ previously employed. The remaining boats in the fleet have also worked successfully with minimal breakdowns or downtime. Priority has been afforded to keeping the Commissioners’ “Link Route” as clear of the submerged weed mass as possible, but significant late season growths during September have proven to be challenging to clear.

Flail Mowing – dry weather and good ground conditions provided the opportunity for the Commissioners’ flail mowers to operate throughout the spring and summer months. The first round ‘Conservation cut’ was completed during March and early April. This was followed by a second subsequent health and safety round during late May. All work was completed following the MLC Operations Manual guidelines.

The main cut commenced in mid-July. Following a request from the EA for the Commissioners to consider some additional flailmowing work under a PSCA (Public Sector Co-operation Agreement) to EA controlled watercourses in the Swavesey area. With our own flailmowing works progressing well, a decision was made to undertake the additional work on a fully rechargeable basis. One of our two Herder mounted flail mowers was dispatched to Swavesey for 6 days work.

Periodic breakdowns leading to significant downtime of the Spearhead Energreen SPV3 machine have been experienced during the reporting period. A compressor unit on the Deutz engine left the machine in ‘limp mode’, and obviously unworkable. Eventually, a replacement compressor unit was sourced and fitted, at a quoted cost of £3200. Fortunately, this was covered by the 5-year extended warranty, but inevitably cost the Commissioners two weeks in downtime and loss of productivity. Latterly the heavy-duty replacement wheel rims, supplied earlier in the season by Spearhead at no cost to the Commissioners, have proved to not have solved the issue of wheel rims splitting. A recent split rim led to lengthy delays while a replacement was sourced from an Italian manufacturer during September, with approximately 3 weeks’ work being lost on this occasion.

The Commissioners’ Chief Executive and Operations Engineer will be meeting with the Managing Director of Spearhead, Anthony Prince, and other Spearhead colleagues in the near future, to raise continuing concerns as to the machine’s reliability and ongoing component failure. The Commissioners will be updated following this meeting.

9.10 *Trees and Bushes* – minimal tree and bush works of a ‘reactive’ nature have been required during the reporting period.

9.11 *Maintenance Works & Machine Cleansing, Banks and Channels*

Spring/Summer 2019

Catchwater Drain – this year’s phased programmed machine cleansing works were undertaken along the Catchwater Drain from the upper most reaches of Glatton Road to Straight Road Bridge, Sawtry using a contractor’s 18m long reach excavator.



Pig Water Drain – machine cleansing was required to remove filamentous algae, (cott) from the water channel on three separate occasions during the summer. The entire length of the watercourse required machine cleansing on the third round, to remove dense infestations from the upper reaches between Horsey Toll Sluice and Farcet Overspill. The channel forms a vital link for summer water transfer for subsequent abstraction in the Bevills Leam pond.

The summer season has again proved to be challenging regarding manual weed clearance from the Commissioners' "Tin Dump" weed screen situated at Great Fen Drove, Yaxley. Of most concern was the inability to clear the weed mass from the weedscreen during the hours of darkness, when additional water had been made available by AW for abstractors use within the Commissioners' system.

Old River Nene, Greenvale Factory (Floods Ferry to Copalder Corner) – following the last report, Greenvale was contacted again earlier this season to ascertain the availability of material situated on its Floods Ferry site to allow completion of the bank raising programme at this site. No response was forthcoming. It was therefore fortuitous that an offer of free bank raising material, of suitable quality (transported to the site), was received from a local haulage contractor. The offer was taken up, and the material has been stockpiled on-site for incorporation along the remaining length of unraised bank crest during the summer months next year.



Forty Foot River – an industrial forklift was recently spotted partially submerged in the Forty Foot River. The incident was reported to the constabulary. A subsequent drive-by inspection revealed that the forklift had been recovered. No further information has been received from the police.



Well Creek – Salter’s Lode Spoil Receiving Site – following completion of Phase V Well Creek Dredging during January and March 2019, a contractor’s machine was employed to bank-up the dried material into the stock pile.

Phase VI Well Creek Dredging (Proposed) – following successful completion of the previous five phases of dredging over the corresponding number of years, it is proposed to undertake a sixth phase during early 2020. A survey of siltation along the river bed of reaches of Well Creek that remain to be dredged has been undertaken. The survey indicates minimal variation in the depth of silt between the Boat Basin at Outwell and Salter’s Lode Lock. However, it is probable that the maximum cost benefit can be achieved by dredging to bankside disposal where this is possible, the cost of this method of dredging being already proven to be far less per linear metre than the cost of dredging urban sections nearer the village reaches, where bankside disposal is not afforded. The proposal for the sixth phase of dredging will be to dredge the Well Creek from Hawthorn House, Nordelph to Salter’s Lode Lock, approximately 2150 metres.

Please refer to the following location plan.

Budget Estimate - Proposed Future Dredging Works, Old River Nene, (March Town Centre) Royal Smals Dredging UK Ltd - Royal Smals remain in sporadic contact with the Middle Level Commissioners’ office. The Chief Executive/Chief Engineer and Operations Engineer briefly met with the UK representative at Whittlesey Road recently to discuss the wider benefits of cutter-dredging works required to maintain urban watercourses such as the River Nene in March town centre. Further detailed discussion with Smals can continue when funding streams become available.

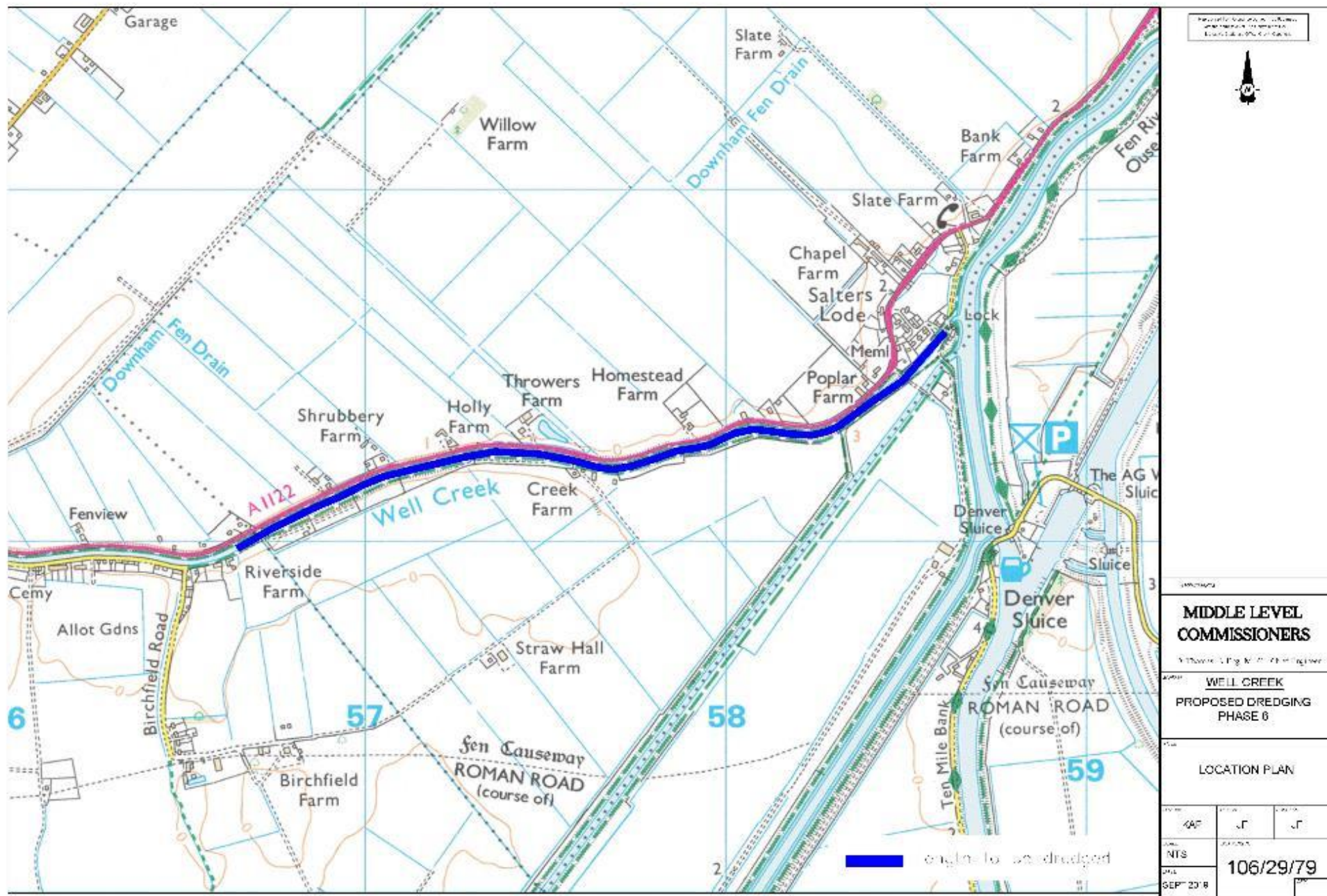
9.12 Bank Slips and Seepage

Catchwater Drain, A1 Culvert to Cooks Lane – bank subsidence and slippage has been evident along the aforementioned reach for a number of years. Relatively short lengths of bank revetment, including mid bank and toe board piling having been undertaken in previous attempts to arrest the subsidence and return the bank to its former design profile. Recently, the affected lengths of bank deterioration and slippage appear to have accelerated to a notable level. Whilst the Commissioners can afford, in some cases, to monitor bank slippage areas, to allow ‘self-healing’ and natural regeneration of bankside vegetation to occur, this unfortunately is not the case with the Catchwater Drain, given the ‘flashy’ nature of the channel in the uppermost area of the catchment.

A recent site survey of the worst affected bank subsidence has been undertaken. The results of the survey reveal the hydraulic capacity of the Catchwater Drain has been compromised and requires intervention in order to return it to its former design specification. Please see Appendix 4.

Yaxley Lode, Yaxley Overspill to Yaxley Lode Railway Bridge – bank seepage was noted following the raising of summer water retention levels in the Bevills Leam pond. Given the previous history of seepage at the site a further 120 tonnes of puddling clay was transported to site from the Commissioners’ clay store at Holme. A clay puddle trench was excavated through the centre line of the bank and filled with the imported material. The site will be monitored during the coming months for signs of further seepage.

Old River Nene, Exhibition Bridge to Bevill’s Leam Junction – following a report from a concerned adjacent land owner/occupier that seepage had been occurring, the site was visually monitored over the summer months. Despite initial concerns that the seepage was severe, subsequent inspections revealed this not to be the case. As levels have recently been dropped down towards the winter levels, the signs of seepage seem to have diminished.



New Dyke, Charterhouse Farm Bridge to Speed the Plough Junction – the Great Fen Restoration Manager reported an incident of suspected bank seepage along the north bank of New Dyke. Whilst the Great Fen Manager was not concerned with the relatively small wet area of bankside, a subsequent inspection confirmed bank seepage was evident in close vicinity to Corney's Farm. The site was monitored, and seems to have dried up as water levels in Bevills Leam pond have been dropped, negating further intervention.

Great Raveley Drain, MLC Control Sluice to Speed the Plough Bridge – a further report of seepage was received from a concerned occupier along the east bank of Great Raveley Drain, near to Green Dyke Pumping Station. The area has a history of bank seepage during the period of higher summer retention levels. Similar to other occurrences of seepage this season, the seepage was monitored and seems to have subsided since water levels have been dropped. Monitoring of the site will be continued.



Bank Seepage at Great Raveley Drain

10. Telemetry

Investigation into an alternative telemetry system has been carried out and a Sitewatch system from Lee Dickens seems to be a promising alternative to the Oriel system we use. This company has offered to install a trial system at Bevills Leam Pumping Station for our evaluation. It would be a hosted system not requiring any Materstation/Server in the MLC offices. The company is based in Desborough and is therefore quite close for future maintenance. Any move to a new system would have to be staged and initially, at least, it would be planned to draw funds only from the telemetry funding pot identified in the accounts to prove the new system and begin the transition.

If this proves successful the failed obsolete rain gauge at Holme will be replaced together with the recently failed outstation at Wild Goose Leys.

11. Property

- 11.1 **Offices** – an internal group has been set up to look at environmental steps that can be implemented that, for example, will result in reduced plastic use, more recycling and other small changes that help reduce our carbon footprint.
- 11.2 **Electrical Testing** - Portable Appliance Testing was carried out at the Depot, Office, St Germans, Bevills Leam and Control Sluice sites during September 2019.
- 11.3 **10 Deerfield Road, March** – the house has been sold and now that the land upon which the garage sits has been registered it will be disposed of.

12. Plant & Vehicles

- 12.1 **General** – on the whole the plant and vehicles operated to an acceptable standard during the period, with the exception of the Energreen SPV3 which continues to exhibit problems.
- 12.2 **Vehicles** - if the Commissioners resolve to permanently address the problems at Tin Dump the case for retaining the four wheel drive lorry and Hiab is diminished. **The estimated cost of replacement with a second hand unit is £100K. Note: the plant replacement strategy assumes this lorry will be replaced this year at present.**

A new Transit van has recently been purchased and the 2007 pool pickup truck has been sold via ebay for £5,352 including VAT.

- 12.3 **Mowers** – see section 9.9 of this report.
- 12.4 **Weed Boats** – the new 2019 Conver weedboat has operated well in its inaugural season. The trailing knives have been operated extensively throughout the Commissioners' system, and have proved to be successful. Feedback from the boat operator has been positive, with the wider hull giving the boat additional stability. It is envisaged the side cutting arm will be operated during the marginal vegetation cutting operation this autumn. The 2003 Hemos weedboat it replaced within the Commissioners' fleet was successfully sold via the ebay online auction website during early summer for £10,100 including VAT.

13. Asset Records

The Commissioners planned systematic closure of historic non-operational penetrations through their maintained banks, which in some cases are in poor condition, continues; but as previously reported take up is slower paced than desirable.

14. Improvements & Surveys

- 14.1 **River Works** – the extent of bank raising works is described elsewhere in this report.
- 14.2 **Bevills Leam Pumping Station** – the priorities for this station are:
1. Replacement of the main pump control components within the next 10 years.
 2. Replacement of the Dorman engines and gearboxes for pumps 4, 5 & 6 within the next 10 years.
 3. To review the lack of smoke/heat detection and fire alarm equipment.
 4. To permanently stop the rain ingress through the station roof.
 5. To facilitate the passage of eels through or past the station.

15. Environment Agency (EA) Studies/Works/Plans

15.1 *Ouse Washes Reservoir Works* – this is covered elsewhere in the report.

15.2 *Cranbrook Drain/Counter Drain (Welches Dam Pumping Station) Strategy Study* – the EA is revisiting and updating its strategy and will be liaising with the MLC as the study progresses.

15.3 *Stakeholder Representation and/or Consultation* - is maintained in respect of the following:

- i. Cambridgeshire and Peterborough Local Flood Warning Planning Group – Chief Executive
- ii. Great Fen Steering Committee – Chief Executive
- iii. Wet Dredgings – Operations Engineer
- iv. British Standards Institute CB501 – Chief Executive representing ADA
- v. EA National Asset Management Technical Advisory Group (AMTAG) – Chief Executive representing ADA
- vi. CIWEM (Chartered Institute for Water and Environmental Management) – Rivers and Coastal Group Committee – Chief Executive [Chair]
- vii. AINA Wet Dredgings Group – Operations Engineer
- viii. Huntingdonshire Local Plan & SFRA – Planning Engineer
- ix. Fenland Local Plan – Planning Engineer
- x. Peterborough Flood & Water Management Partnership – Planning Engineer
- xi. KL&WN Local Plan & SFRA – Planning Engineer
- xii. East Cambs Local Plan, SFRA & WCS – Planning Engineer
- xiii. Peterborough Local Plan, SFRA & WCS – Planning Engineer
- xiv. South Cambs Local Plan – Planning Engineer
- xv. Fenland Developers Forum – Planning Engineer and Chief Executive
- xvi. March Flood Investigation Group – Planning Engineer
- xvii. EA/IDB Eel Liaison Group – Chief Executive [Co-Chair]
- xviii. Cambs ACRE, New Life on the Old West – Chief Executive and Conservation Officer
- xix. Well Creek Trust – Operations Engineer
- xx. Anglian Waterways Group – Operations Engineer
- xxi. NFU Water for Food Group – Chief Executive and Operations Engineer
- xxii. Great Fen Hydrology Working Group – Chief Executive [Chair]
- xxiii. ADA Technical & Environmental Committee – Chief Executive and Conservation Officer
- xxiv. ADA Great Ouse Branch – now administered by the MLC
- xxv. Lower Nene Water Resources Planning Group WRE – Chief Executive and Operations Engineer
- xxvi. EA Lower Nene Water Abstractors Group – Operations Engineer

16. Planning

16.1 *Planning Applications* – monitoring of response times for enquiries and issuing of consents is helping to focus efforts but the loss of a planning engineer has had an effect on the speed of progress towards meeting target times.

16.2 *Riverside Enhancements Ramsey Basin* – there appears to be some movement on this and interest is now being expressed by the Town Mayor (who is also a HDC Councillor) who wants to see the scheme progress. The Planning Engineer recently met with Metro Dynamics who

have been employed by HDC to look at bidding for improvements to Ramsey Town, and the part that High Lode could play in this was identified at this meeting.

17. **Recreation**

17.1 Navigation – MLC specific navigation matters are covered elsewhere in this report.

17.2 Anglian Waterways Group – the Operations Engineer attended meetings of this group on the 8th May and the 31st July 2019. The next meeting will be held on the 6th November 2019.

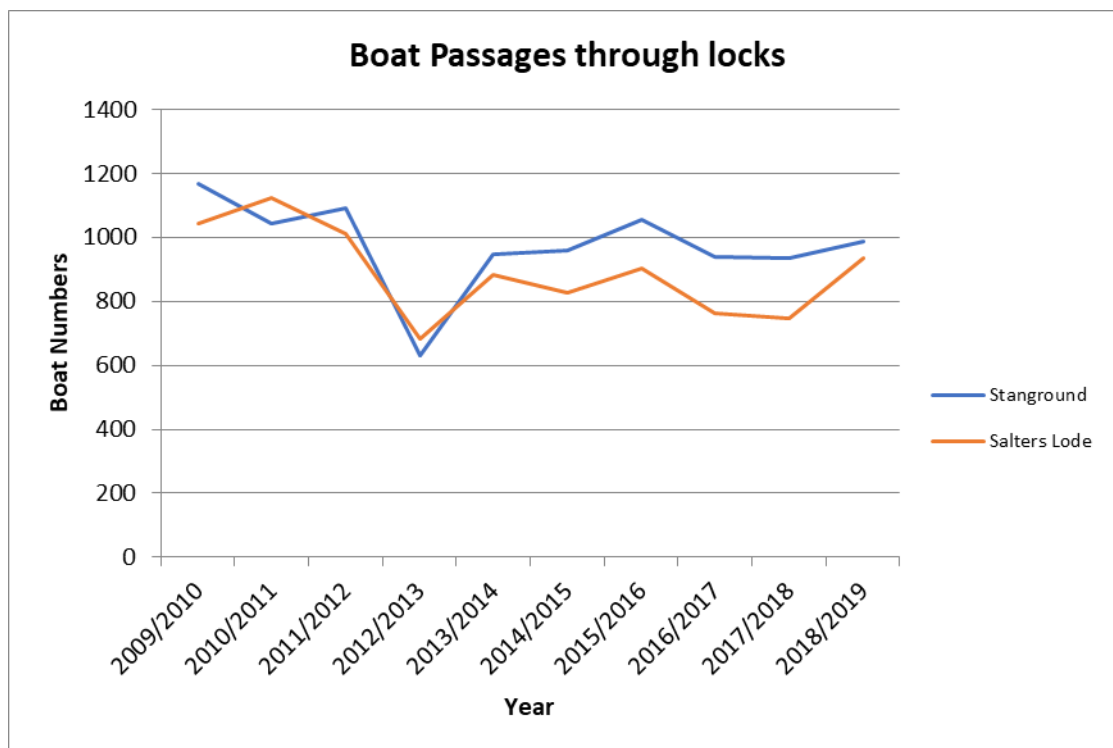
17.3 Passing of EA Navigation Assets to CRT – it has been confirmed that no assets will be passed between these authorities at this time and talks are believed to have ceased for the time being.

17.4 Well Creek Trust Moorings at Salter's Lode – further actions will be guided by the Navigation Advisory Committee as part of the ongoing facilities review.

17.5 Inland Waterways Association (IWA) Volunteering - it is anticipated there will be a continuation of bush and tree cutting works this year along the Horseway Arm of the Forty Foot River, working towards the Horseway Bridge reach of the watercourse, undertaken by members of the Peterborough branch of the IWA. The working progress will be monitored by the Commissioners' Conservation Officer and Operations Engineer. There is possible scope for further decoration works at various navigational lock structures throughout the Commissioners' system, which would be of joint benefit to the navigation community and to the Commissioners' navigation budget. Dialogue concerning the additional work will be sought with IWA in the near future.

17.6 Boat Passages - boats movements through Stanground and Salter's Lode Locks were as shown below (figures for the previous year are shown in brackets):

Boat Passages – 2019				
Month	Salter's Lode Lock		Stanground Lock	
	In	Out	In	Out
April	38 (25)	21 (21)	40 (16)	45 (23)
May	42 (41)	49 (47)	54 (51)	69 (65)
June	51 (65)	61 (88)	73 (103)	62 (94)
July	74 (104)	74 (106)	72 (81)	69 (97)
August	73 (107)	69 (116)	88 (123)	95 (103)
September	47 (94)	42 (46)	57 (39)	54 (85)
TOTAL	(325) (436)	(316) (424)	(384) (413)	(394) (467)



17.7 **Angling**

National Fishing Matches – this season's National Pike Angling Championship is due to be held on the Commissioners' waters (Glassmoor Bank and Twenty Foot River), on Saturday 16th November 2019, hosted by Whittlesey Angling Association.

Club Reports – no club or match reports have been received during the reporting period.

17.8 *Middle Level Waterways Users Committee* - the Committee met on the 12th April 2019 and will meet again on the 18th October 2019.

18. Conservation – this is covered in detail in the Conservation Officer's Report.

18.1 *The Operations Manual* – a review of current operational practice detailed within the current guidelines has been partially completed. It is envisaged this process will be completed by the end of the calendar year, with any changes implemented within the 2020 manual. Likely changes will reflect the use of trailing knives, which have been successfully utilised this year to control submerged aquatic weed growth throughout the Commissioners' system.

18.2 *Environmental & Land Management Scheme (ELMS) Trials* – recent correspondence received from defra indicates it considers the Commissioners' joint bid with Welland & Deeping IDB and the York Consortium, in a pilot trial of the ELMS, will not now be possible. The best option now seems to be to opt for a mid-tier ELS application.

Approximately 5.5ha (13.7 acres), comprising of numerous Bank Lots along the Main Drain remain vacant at this time, and could be included. Registering the Commissioners' interest in the vacant Bank Lots is now a high priority.

18.3 *The Commissioners' and local Drainage Boards' Biodiversity Action Plans* – the next wave of plans awaits guidance from ADA expected to be issued later this year.

18.4 *Conservation Committee* - the Committee met on 19th September 2019.

- 18.5 *Woodwalton Fen Alternative Storage*** – there is nothing further to report on this item at this time.
- 18.6 *Great Fen General*** – steering committee meetings are held quarterly which the Chief Executive attends. He also continues to chair the projects Hydrology Working Group.
- 18.7 *Eel Studies*** – this matter is covered in detail in item 2.16.
- 18.8 *Fen Biosphere Project*** – a presentation is to be given on this subject at the Board meeting.

19. Internal Drainage Board Works

19.1 *Weed Control & Channel Maintenance*

Inspections/advice/assistance – during the reporting period recommendations were made on aquatic weed control to constituent IDBs. Middle Level operatives undertook herbicide applications on a rechargeable contract basis, to 14 IDB/DDCs, including a herbicide application trial, undertaken under EA licence for Downham & Stow Bardolph IDB.

Maintenance Dredging and Associated Channel Works – during the reporting period work has been organised and co-ordinated in 13 Board's areas this season.

19.2 *Pumping Station Maintenance*

Service Visits – the Commissioners' engineers made 160 visits to IDB pumping installations to carry out routine inspections/maintenance and/or rectify breakdowns.

Other Maintenance Works:

Beezlings Pumping Station (Benwick IDB)	<ul style="list-style-type: none"> Automatic weedscreen cleaning equipment and replacement weedscreen – complete.
Binnimoor Pumping Station (March East IDB)	<ul style="list-style-type: none"> Replacement weedscreen – awaiting installation
Broadalls Pumping Station (Benwick IDB)	<ul style="list-style-type: none"> Plant repairs – complete.
High Causeway Pumping Station (Swavesey IDB)	<ul style="list-style-type: none"> Level control/monitoring system installed
High Fen Pumping Station (Warboys Somersham & Pidley IDB)	<ul style="list-style-type: none"> Obtain quotes for weedscreen cleaner, replacement weedscreen and control equipment.
New Fen Pumping Station (Ramsey Upwood & Great Raveley IDB)	<ul style="list-style-type: none"> Surge chamber subsidence being monitored. The Board's insurance company has declined to cover the subsidence.
Nightlayers Pumping Station (Nightlayers IDB)	<ul style="list-style-type: none"> Dam off intake sump for removal of obstruction in pump and repairs to pump drive.
Nordelph Pumping Station (Upwell IDB)	<ul style="list-style-type: none"> Metering issues with SSE/UKPN – issue now re-occurred – ongoing.
Sawtry Pumping Stations x3 (Sawtry IDB)	<ul style="list-style-type: none"> Obtain quotes for weedscreen cleaner at three pumping stations.
Stocking Fen Pumping Station (Ramsey IDB)	<ul style="list-style-type: none"> Weedscreen Cleaner order placed - installation imminent.

Mepal Pumping Station (Sutton & Mepal IDB)	<ul style="list-style-type: none"> • Replacement pump procured installation in hand
Upwell Fen Pumping Station (Upwell IDB)	<ul style="list-style-type: none"> • Fencing – complete
Various IDB's	<ul style="list-style-type: none"> • Automatic weedscreen cleaner repairs.

Electrical Condition Reporting – re-testing of fixed equipment and remedial works at IDB pumping stations continue as and when required.

19.3 **Improvement Works**

IDB Projects - progress is as follows:

Catchment Improvement Works at A47 (Hundred of Wisbech IDB)	<ul style="list-style-type: none"> • Highways England has set back the implementation of its element of this scheme. The IDB element, business case development, remains on hold.
Crooked Bank Culvert (Hundred of Wisbech IDB)	<ul style="list-style-type: none"> • Design and tender produced, contract awarded and works commenced on site.
Green Dyke Pumping Station replacement (Ramsey, Upwood and Great Raveley IDB)	<ul style="list-style-type: none"> • Business case development instructed but EA has advised that scheme cannot be accelerated in GiA terms so further work is currently on hold.
Inlet Structures – modifications to inlet structures and access platforms. (Hundred Foot Washes IDB)	<ul style="list-style-type: none"> • Further phases are expected in future years.
Stocking Fen Pumping Station Automated Weedscreen (Ramsey IDB)	<ul style="list-style-type: none"> • Business case for an automated weedscreen approved by EA and grant at 45% of scheme cost issued.
Stow Bardolph Pumping Station (Downham & Stow Bardolph IDB)	<ul style="list-style-type: none"> • Design complete and tenders returned. Works on site approaching completion.

Work organised by the Works Department and carried out by Middle Level Labour - assistance has been given with the following:

Benwick IDB	<ul style="list-style-type: none"> • Herbicide application to Board's drains. • Install replacement inlet penstock & pipework at Ramsey Mere Pumping Station. • Arrange and oversee machine cleansing works to Board's drains.
Curf & Wimblington Combined IDB	<ul style="list-style-type: none"> • Herbicide application to Board's Drains. • Arrange and oversee machine cleansing works to Board's Drains.
March East IDB	<ul style="list-style-type: none"> • Herbicide application to Board's drains. • Arrange and oversee machine cleansing works to Board's drains.

March Fifth DDC	<ul style="list-style-type: none"> • Herbicide application to Commissioners' drains. • Arrange and oversee machine cleansing works to Commissioners' drains.
March Fifth DDC continued	<ul style="list-style-type: none"> • Clearance of fly-tipped materials from Commissioners' drains. • Replace water control structure at Point 35.
March Sixth DDC	<ul style="list-style-type: none"> • Herbicide application to Commissioners' drains. • Arrange and oversee machine cleansing works to Commissioners' drains.
March Third DDC	<ul style="list-style-type: none"> • Herbicide application to Commissioners' drains. • Arrange and oversee machine cleansing works to Commissioners' drains.
March West & White Fen IDB	<ul style="list-style-type: none"> • Herbicide application to Board's drains. • Assist contractor with approximately 350 m of bank piling works (double row), • Arrange and oversee machine cleansing works to Board's drains.
Needham & Laddus IDB	<ul style="list-style-type: none"> • Arrange and oversee machine cleansing and bank reprofiling works to Board's drains. • Arrange for contractor to undertake herbicide application to Board's drains. • Clearance of fly tipped materials from Board's drains
Nightlayers IDB	<ul style="list-style-type: none"> • Arrange and oversee machine cleansing works to Board's drains. • Dam off main drain & de-water pump well at Pumping Station for inspection.
Ramsey First (Hollow) IDB	<ul style="list-style-type: none"> • Herbicide application to Board's drains. • Arrange and oversee machine cleansing works to Board's drains. • Installation of gate at Meggs Drove.
Ransonmoor DDC	<ul style="list-style-type: none"> • Herbicide application to Commissioners' drains. • Arrange and oversee machine cleansing works to Commissioners' drains. • Clearance of fly tipped materials from Commissioners' drains
Swavesey IDB	<ul style="list-style-type: none"> • Herbicide application to Board's drains. • Arrange and oversee PSCA works on EA watercourse in Swavesey on Board's behalf
Waldersey IDB	<ul style="list-style-type: none"> • Herbicide application to Board's drains. • Arrange and oversee machine cleansing works to Board's drains.

20. **Engineering Fees**

- 20.1 **Fees** – the fee outlook for this and the next financial year looks likely to be average or below average, with no significant schemes currently in the pipeline. It may not be until 2021 and the new round of grant-in-aid allocation that this situation is reversed.

21. **ADA**

- 21.1 **Meetings** - the Chief Executive (secretariat) continues to attend the ADA Technical and Environmental Committee meetings and also continues to represent ADA on the BSi panel and EA/defra – national AMTAG (Asset Management Theme Advisory Group) and the EA/IDB Eel Liaison Group. Most recently the Chief Executive is representing ADA on the board of WRE.
- 21.2 **The Annual ADA Conference** – the next conference will be held on the 13th November 2019 at 1 Great George Street, Westminster, London.
- 21.3 **NFU** – the Chief Executive represents ADA on the NFU Water For Food Group.
- 21.4 **Great Ouse ADA Branch** – a Branch Executive meeting was held on the 11th June 2019 a further meeting will be held on the 29th October 2019. The next AGM is planned for 3rd March 2020 and will be held at Prickwillow Hall exploiting the successful 2019 format of a workshop in the morning and meeting in the afternoon.

22. **EA Sanctioned Project List**

- 22.1 **A list of the EA ‘Sanctioned Project List’** follows, covering all MLC and MLC consultancy projects for 2018 - 2021:

- | | |
|------------------------------------|-------------------------------------------|
| ▪ Downham and Stow
Bardolph IDB | Stow Bardolph Pumping Station Replacement |
| ▪ Ramsey IDB | Stocking Fen Automatic |

23. **Renewable Power**

FITs payments linked with the office PV cells installation continue to remain ahead of predictions. As can be seen in Appendix 3 the installation has just about paid for itself. For future years the savings will help offset a portion of the offices ongoing running costs.



David Thomas
Clerk, Chief Engineer & Chief Executive

17 October 2019

RAINFALL – April to September 2019

Month	Abbeville Ribbon	March	Zhangmound Locke	Freddie Bridge/ Kenville Leam	Monthly Average	Cumulative Monthly Average	Standard Average	Cumulative Standard Average	Excess of rainfall over standard average	Cumulative difference
2019						Apr - Sept		Apr - Sept		
April	9.6	7.9	12.1	10.4	9.90	8.8	42.81	42.2	-0.6	-0.6
May	95.6	33.0	48.6	45.9	45.69	22.9	50.34	50.9	-4.7	-57.9
June	114.8	135.5	120.0	110.0	120.06	126.7	45.13	188.6	76.8	27.7
July	58.2	90.0	87.3	66.0	66.36	241.9	57.29	182.3	8.1	45.8
August	40.3	32.0	53.4	46.0	42.93	284.8	58.94	254.3	-18.0	28.7
September	64.9	65.0	77.2	63.0	67.53	351.5	46.26	300.5	21.3	21.0
TOTAL	343.4	321.0	396.6	340.9	551.43	101.2	300.47	300.2		21.0

The standard average is for the current standard reference period 1995-2017.

Average summer rainfall in recent years

April 2019 - September 2019	551.6
April 2018 - September 2018	222.0
April 2017 - September 2017	351.3
April 2016 - September 2016	274.6
April 2015 - September 2015	233.7
April 2014 - September 2014	319.1
April 2013 - September 2013	217.4
April 2012 - September 2012	430.6
April 2011 - September 2011	191.9
April 2010 - September 2010	272.2
April 2009 - September 2009	273.7
April 2008 - September 2008	329.2
April 2007 - September 2007	324.2
April 2006 - September 2006	291.8
April 2005 - September 2005	291.1
April 2004 - September 2004	362.3
April 2003 - September 2003	214.3
April 2002 - September 2002	275.4
April 2001 - September 2001	354.7
April 2000 - September 2000	353.1
April 1999 - September 1999	312.1
April 1998 - September 1998	431.9
April 1997 - September 1997	211.4
April 1996 - September 1996	234.3
April 1995 - September 1995	195.3

HYDROLOGY AND PUMPING - April to September 2019

Month	Rainfall			Estimated Potential Evapotranspiration mm	Soil Moisture Deficit (month end) mm	Rain Days		Pumping			Maximum Water Levels m.A.D.	
	Monthly Average mm	Standard Average mm	Deficit mm			Days	Standard Average *	Mega Litres Pumped	Equivalent Runoff mm	Depth Lessen Mega Litres Pumped	Boatley Bridge	Great Ravelsly Drain
April	9.90	42.51	32.61	53	81	6	12	631	1.20	296	99.70	99.58
May	45.68	50.34	4.66	71	107	3	12	503	0.70	146	99.72	99.60
June	120.08	45.13	74.95	104	99	13	12	5783	8.30	968	99.80	99.60
July	65.36	57.29	8.06	72	115	5	12	945	1.30	786	99.73	99.60
August	42.93	58.84	16.91	58	134	14	13	2303	3.30	534	99.72	99.58
September	67.53	46.26	21.27	19	89	9	11	1966	2.70	773	99.67	99.58
TOTAL	301.48	300.47	91.01			61	72	12240	17.50	3465		

* Standard average (1988 - 2017) rain days taken from available information

Mega Litres Pumped at Germans

April 2019 - Sept. 2019	12240
April 2018 - Sept. 2018	38779
April 2017 - Sept. 2017	13296
April 2016 - Sept. 2016	17901
April 2015 - Sept. 2015	10439
April 2014 - Sept. 2014	21319
April 2013 - Sept. 2013	14051
April 2012 - Sept. 2012	33330
April 2011 - Sept. 2011	2651
April 2010 - Sept. 2010	8688

Mega Litres Pumped at Bayville Leam

April 2019 - Sept. 2019	3465
April 2018 - Sept. 2018	7823
April 2017 - Sept. 2017	3311
April 2016 - Sept. 2016	4538
April 2015 - Sept. 2015	3811
April 2014 - Sept. 2014	3868
April 2013 - Sept. 2013	802
April 2012 - Sept. 2012	12000
April 2011 - Sept. 2011	268
April 2010 - Sept. 2010	1877

assumes savings of £4K per year.

Solar Panel Returns - Actual vs Predicted

Year	Reading		Unit Cost (p)	Night (kWh)	Unit Cost (p)	Savings	Energy Generated (kWh)	Maint. Cost	FITS (p)	FITS earned	Total Saved	Investment Minus Savings	
	Day (kWh)	Reading										Actual	Target
-1	111,500	9.77	5.01	29,870		N/A				£0.00		£28,215.00	£28,215.00
0	170,507	9.77	5.01	48,932		N/A	N/A				N/A	£28,215.00	£28,215.00
1	209,536	9.77	5.01	66,738		£4,835.13	24,755		13.57	£3,658.69	£5,814.27	£23,400.73	£24,215.00
2	246,485	9.77	5.01	83,621		£4,622.63	47,775		13.57	£3,411.96	£5,759.64	£16,641.08	£20,215.00
3	284,232	9.77	5.01	99,669		£4,652.37	66,978		13.57	£3,142.28	£5,460.63	£11,180.46	£16,215.00
4	321,300	9.77	5.01	114,326		£4,502.43	89,416		13.57	£3,028.91	£5,497.19	£5,683.26	£12,215.00
5	366,244	9.77	5.01	131,678		£3,433.88	96,496		13.57	£1,049.26	£2,586.08	£3,594.37	£10,112.00
6	391,454	9.77	5.01	142,951		£3,140.52	108,426		13.57	£1,768.03	£1,768.03	£3,915.24	£8,215.00
7	400,299	9.77	5.01	148,054		£1,170.85	123,804		13.57	£2,279.02	£4,938.36	£1,023.12	£6,215.00
8						£0.00				£0.00	£0.00	£1,023.12	£215.00
9						£0.00				£0.00	£0.00	£1,023.12	£3,785.00
10						£0.00				£0.00	£0.00	£1,023.12	£7,785.00
11						£0.00				£0.00	£0.00	£1,023.12	£11,785.00
12						£0.00				£0.00	£0.00	£1,023.12	£15,785.00
13						£0.00				£0.00	£0.00	£1,023.12	£19,785.00
14						£0.00				£0.00	£0.00	£1,023.12	£23,785.00
15						£0.00				£0.00	£0.00	£1,023.12	£27,785.00
16						£0.00				£0.00	£0.00	£1,023.12	£31,785.00
17						£0.00				£0.00	£0.00	£1,023.12	£35,785.00
18						£0.00				£0.00	£0.00	£1,023.12	£39,785.00
19						£0.00				£0.00	£0.00	£1,023.12	£43,785.00
20						£0.00				£0.00	£0.00	£1,023.12	£47,785.00
21						£0.00				£0.00	£0.00	£1,023.12	£51,785.00
22						£0.00				£0.00	£0.00	£1,023.12	£55,785.00
23						£0.00				£0.00	£0.00	£1,023.12	£59,785.00
24						£0.00				£0.00	£0.00	£1,023.12	£63,785.00
25						£0.00				£0.00	£0.00	£1,023.12	£67,785.00

123304 kWh

£90K

Total Units Generated as of 3rd October 2019

Predicted income at year 25 (allowing for say £10K maintenance)

* readings taken when FITS applied for

** half year readings to savings will be estimated

Middle Level CommissionersCatchwater Drain – Proposed Bank Revetment ProgrammeScope of WorksA1 Culvert to Footbridge (A)

530m Berm Formation – South & West Banks
 330m Berm Formation – North Bank (860m total)
 200m Bank Piling (Toe and Intermediate row) - Adjacent Wooded Area

Footbridge (A) to Footbridge (B)

420m Bank Piling (Toe and Intermediate row) East Bank
 420m Bank Piling (Toe and Intermediate row) West Bank

Footbridge (B) to Cooks Lane Bridge

400m Bank Piling (Toe and Intermediate row) East Bank
 300m Bank Piling (Toe and Intermediate row) West Bank

Estimated Costs**(Year 1)**Proposed Phase i – Footbridge (A) to Footbridge (B)

840m Bank Piling (Toe and Intermediate row) East and West Banks Materials, Contracted Plant Hire and MLC Labour etc	£44,000.00
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(Year 2)Proposed Phase ii – Footbridge (B) to Cooks Lane Bridge

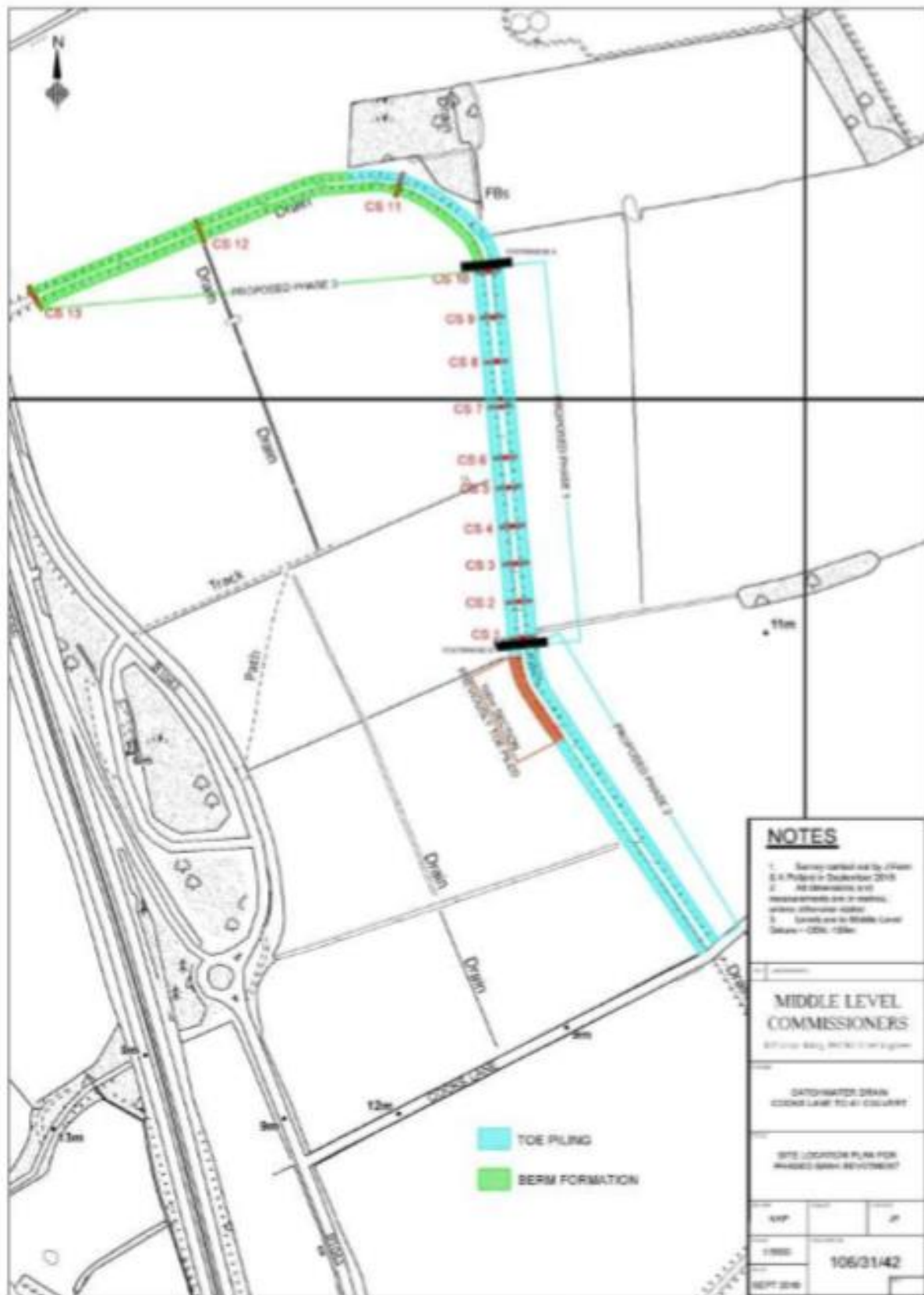
700m Bank Piling (Toe and Intermediate row) East and West Banks Materials, Contracted Plant Hire and MLC Labour etc	£38,000.00
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(Year 3)Proposed Phase iii – A1 Culvert to Footbridge (A)

200m Bank Piling (Toe and Intermediate row) North East Bank Materials, Contracted Plant Hire and MLC labour etc 860m Berm Formation (8m wide) North and South Banks District Valuers fee, Freehold land purchase of approx. 0.688Ha Contracted Plant Hire, Temporary Loss of cropping for one season Levelling of arising to adjacent arable fields post-harvest	£78,000.00
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------

Total Estimated Costs £160,000.00

APPENDIX 4



Ouse Washes



Middle Level Barrier Bank works

September 2019

What's happening?

What a start! During the UK heatwave we worked hard to keep the dust down, bringing in extra water bowsters at each workface to dampen down the haul road. This was followed by heavy rain which flooded the haul road resulting in the water needing to be pumped away, and then there were high winds to add to the mix. Our contractor, JacksonHyder dealt with these difficult conditions efficiently with little or no disruption to the local communities.

Welmore Lake Sluice – Welney

We have now completed the haul road improvement works in this section. We have inspected and reopened the public footpath in September 2019.

Welney to railway bridge

We received 90,000 tonnes of clay to the bank to date with 135 lorries deliveries per day. The material is being delivered to Welney from the quarry in Mepal using the A142, A10 and A1101 to avoid disruption through the local villages.



The footpath diversion will be in place along the Low Bank and Bedford Bank West until summer 2021. A road sweeper is in operation to ensure the highway is kept clear of debris.

We are regularly monitoring vehicles using GPS trackers which are installed in each lorry. We also use onsite speed boards to monitor all vehicles on site.

Railway bridge to Welches Dam

We are progressing with the haul road widening works ready for next season's work.

The footpath and access to the bird hides north of



Welches Dam will remain closed until Autumn 2020.

Mepal to Welches Dam

We have received 124,000 tonnes of clay to the bank to date. The dumper trucks are using a temporary access road and bridge direct from Mepal quarry to the bank to avoid using the local roads. We removed the bird hides to the south of Welches Dam for the bank works to be undertaken and we will replace and reopen to the public in the Autumn 2019. However, please note that the footpath along the top of the bank will remain closed until Summer 2020 to allow the grass to establish.



The footpath diversion remains in place and diverted to the Low Bank until Summer 2021.

Earith

We have decommissioned and removed the disused telemetry hut. We have completed the bankworks at Earith bridge and is ready for grass seeding to take place.

We started the bridleway improvements and bank works during September 2019 and we are close to completion.

We are receiving material from Mepal Quarry using the A142, B1050 and A1123 to the site access at Earith Bridge.

We will re-open the public footpath/bridleway from Short Drove, Earith towards Sutton Gault 1 November 2019. The access at Sutton Gault will be restricted to one way the bankworks at Sutton Gault needs time for the grass to establish. The public footpath/bridleway from Earith Sluice to Short Drove, Earith will remain closed until summer 2020.

Sutton Gault

We started the works on the retaining wall in August 2019 and we will complete this by 31 October 2019.

We receive material using A142, B1381, turning right onto Bury Lane.

customer service line
03708 506 506

incident hotline
0800 80 70 60

floodline
03459 88 11 88

Sutton Gault to Mepal

The footpath closure will stay in place until September 2019. Once we conduct the final inspection we can then decide if we can reopen it.

Sutton Gault to Chain Corner

We have now completed the access road improvement works.

Once we conduct the final inspection and cut the grass we can then decide if we can reopen the bank.

Public footpath diversions

The grass is important on the reservoir bank. As the grass grows, the roots help to stabilise the bank and reduce erosion. We use a mixture of different seeds to get a variety of different grass species.

The grass is growing and the footpath diversions will stay in place until there is sufficient cover to the bank. We will post diversions and closures on the local site noticeboards. Details of where these are located is below.

Public surgery events

Come along to one of the surgeries we are holding throughout construction until 31 October 2019. Our Public Liaison Officer will be available to answer any questions that you may have.

Wednesdays

Earith

Rector's Hall, Colne Road
10.00am - 12.00pm

Thursdays

RSPB Reserve

Welches Dam, Manea
10.00am - 12.00pm

Welney

The Lamb & Flag
3.00pm – 5.00pm

Improving the image of construction



The Considerate Constructors Scheme was set up to improve the image of the construction industry. The scheme aims to encourage best practice beyond statutory requirements and show the industry to be considerate. The scheme's monitor visited our site in September and was very impressed with the high standards set by the team. Jackson's have improved on last year's award of 'Beyond Compliance' and have this year achieved the award of 'Excellence' which is awarded to sites that are excelling at being a considerate constructor.

Site registration no: 116973 / Freephone 0800 7831423

Our environment

Due to environmental constraints on the Ouse Washes, our construction works can only take place between 15 July and 31 October.

We delayed our grass cutting activities in June and July at Welches Dam to allow for the crossing of the Redshank.



Known as the "sentinel of the marshes" they often guard their young by perching on high vantage points like field fencing. The RSPB have a healthy population on what they call their "pilot project", land that they have reverted back to wet meadows safe from flood conditions on the adjacent Ouse Washes. Once the young are mobile, the parents often transport them across to the wash-lands where the numerous pools provide great conditions for fast growing chicks.

How to find out more

We have notice boards on the bank near Earith Sluice, in the Anchor Inn car park at Sutton Gault, at Welches Dam on the RSPB Reserve and near the Old Parish Hall at Welney.

If you have any questions or comments about the project, please contact our Public Liaison Officer Monica Stonham on 07534 457348 Email: ousewashesprojectEA@gmail.com

Working in partnership

The project is being carried out by JacksonHyder on behalf of the Environment Agency with support from:



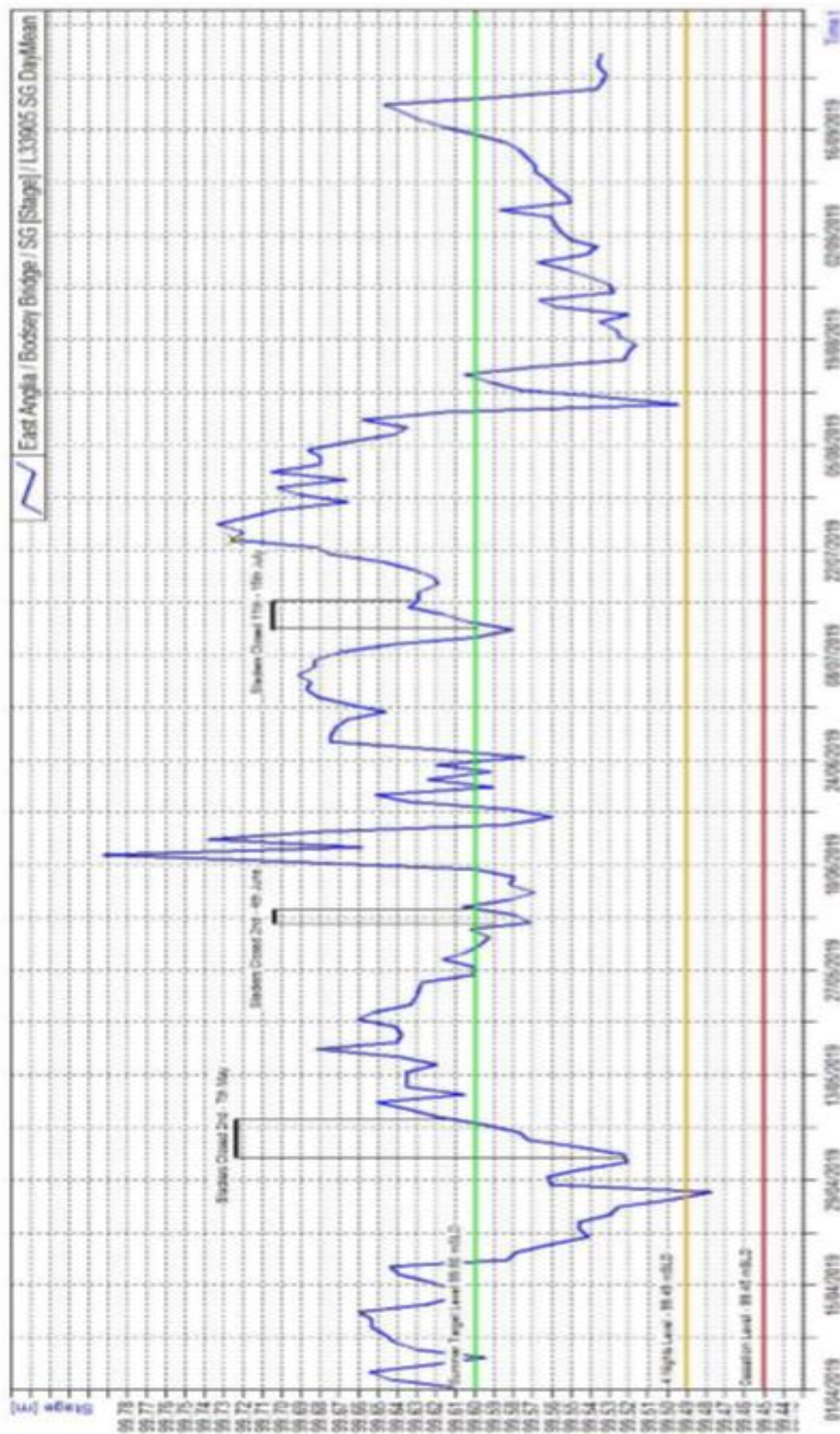
www.gov.uk/environment-agency

customer service line
03708 506 506

incident hotline
0800 80 70 60

floodline
03459 88 11 88

Middle Level – Bodsey Bridge – Summer 2019 Water Levels



creating a better place
for people and wildlife



Our ref: AMC/2019/1684

David Thomas

David.Thomas@middlelevel.gov.uk

Date: 1 October 2019

Dear David,

Recent floods in Lincolnshire

Thank you for your email of 21 June regarding the breach at Wainfleet and its potential causes. I apologise for the delay in responding to your query; the priority for our staff has been the immediate flood response and recovery for the communities affected.

The Steeping River catchment received two and half times the monthly average rainfall in the area over three days between 10 and 12 June, with 130mm of rain being recorded. This significant amount of rain was almost double the rain which led to fluvial flooding across Lincolnshire in 2007. This amount of rainfall led to a volume of water running off the Wolds which exceeded the storage capacity of the Steeping River and Wainfleet Relief Channel. Flood defences do not remove the risk of flooding, they can only reduce it. There will always be a residual risk when defences are overwhelmed.

In the last five years we have spent over £2m in the catchment on works including the refurbishment of Burgh Sluice, toe embankment reinstatements, bank repairs and routine maintenance such as grass cutting, vermin control, weed cutting in channel, clearing large vegetation, alongside mechanical and electrical maintenance of sluice gates,

Maintenance work was most recently completed on this section during May 2019 by Lindsey Marsh IDB on behalf of the Environment Agency. The works in May 2019 were to repair cattle damage and rutting of the bank. Badgers were not a contributory factor in the breach at Wainfleet; the system was overwhelmed by the volume of water running off the Wolds, defences overtopped and ultimately that overtopping caused a breach in the river defence in one location.

Where badgers are identified in flood defences, the Environment Agency has a bespoke organisational licence from Natural England allowing us to manage badger setts, which applies across all areas in England.

We work very closely with partners like the internal drainage boards to keep up a regular programme of works on the banks which includes routinely removing badgers. We identify the setts, and mindful of the law as they are a protected species, we move them out, close the setts and repair the banks.

Bromholme Lane, Brompton, Huntingdonshire, PE28 4NE or Icení House, Cobham Road, Ipswich, Suffolk IP3 9JQ
customer service line 03708 506 506
gov.uk/environment-agency

creating a better place
for people and wildlife



I trust this has answered the matters raised to your satisfaction. If I can be of further help in this, please do contact me.

Yours sincerely

A handwritten signature in black ink that reads "S. J. Hawkins".

Simon Hawkins
Area Director
East Anglia Area
Tel: 02030 258358

Email: areamanagercorrespondence.eastanglia@environment-agency.gov.uk

Bromholme Lane, Brompton, Huntingdonshire, PE28 4NE or Icení House, Cobham Road, Ipswich, Suffolk, IP3 9JD
customer service line 03708 506 506
gov.uk/environment-agency



Department
for Environment
Food & Rural Affairs

2 Marsham Street
London, SW1P 4DF

T: 03459 335577
helpline@defra.gsi.gov.uk
www.gov.uk/defra

APPENDIX 8

August 2019

To: The Chairs of all Internal Drainage
Boards in England

Dear All,

Thank you for completing last year's IDBI reports. From analysis Defra officials have undertaken of these returns, I am pleased to see that you and your Boards have been able to demonstrate continued improvement in many areas, including on governance and accountability. I would like to thank you and reiterate my continued support for the work that you do. I also welcome ADA's work on the Good Governance Guidance. A copy of our summary report is attached for your information.

You will have received IDBI forms for 2018-19 to be completed and returned to us by 30 September 2019. I encourage you to continue with this upward trend and ensure that you adopt all relevant model governance documents as soon as possible, as well as continuing to address all other aspects of your work. I look forward to seeing this progress continue and I am keen that your boards aim for zero audit qualifications this year.

As you may know, the report from our recent research into IDB membership will be published shortly. I am particularly keen that local authorities are properly represented on your boards and my officials will continue to work closely with ADA and others to ensure that actions to address the findings are taken.

By working together in these areas, I am confident that IDBs can remain on a firm footing to contribute widely to the needs of society in the long-term.

Yours sincerely,

Dr Thérèse Coffey MP

Internal Drainage Boards (IDBs): Annual report summary and analysis - 2018

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Introduction

1. In response to the findings of the NAO report into Internal Drainage Boards (IDBs) that was published back in March 2017, Defra has been working closely with Association of Drainage Authorities (ADA) to address the issues raised with regard to IDBs' governance and accountability.
2. A number of steps have been taken to strengthen IDBs governance, including adding more questions to the IDB1 form. We worked closely with ADA and the IDBs, EA, NE, RSPB, CLA and NFU in updating the form.

IDB1 forms published annual returns

3. An IDB makes an annual return to the Defra via a standard IDB1 form. This reports on the IDB's finances and confirms that IDBs have performed appropriately over the previous year. There are three parts to the return:
 - Financial information from their internal audit report setting out income (for example, drainage rates, special levy and other contributions) and expenditure,
 - A forecast of next year's levy incomes; and
 - A series of declarations that the IDB has complied with relevant guidance and best practice for the sector during the preceding year.
4. The information collected from IDB1 forms will be used to identify:
 - Broad trends and themes within the sector;
 - Areas where the sector as a whole may require additional support and guidance to come into compliance with expected requirements; and
 - Individual IDBs who may require support.
5. Initial analysis received from all the 113 IDBs as shown in Annex A on some of the key themes is set out in the following sections.

Policy delivery statement

6. Nearly all boards report that they have in place an up to date policy statement.

Question	Percentage in 2018	Percentage in previous year (2017)
Boards that have an up to date statement	90%	64%

Biodiversity action plans (BAPs)

7. Nearly all boards report (96%) that they have in place a biodiversity action plan, and in most cases this is available to the general public.

Question	Percentage in 2018	Percentage in previous year (2017)
Boards that have a biodiversity action plan	96%	66%
Boards that have made their plan publicly available	77%	66%
Boards that have reported progress on BAP implementation	49%	39%
Boards that have a biosecurity process	38%	N/A

SSSI water management (WLM) plans

8. A small number of IDBs (27%) reported that they are responsible for SSSI WLM plans.

Question	Percentage in 2018	Percentage in previous year (2017)
Boards that are responsible for any SSI WLM plans	27%	N/A

Access to environmental expertise

9. The majority of boards (84%) report that they have access to environmental expertise via contracted persons or consultants.

Question	Percentage in 2018	Percentage in previous year (2017)
Boards who have appropriately skilled Board Members (e.g. Board member from an Environmental Body/Authority)	19%	18%
Boards who have Co-opted members	4%	N/A
Boards who have directly employed staff	18%	11%
Boards who have contracted persons or consultants	84%	66%
Boards who have environmental Partners/NGOs	26%	20%
Boards who have other	9%	8%

Asset management

10. All boards (100%) report that they have continued to undertake visual inspections and update asset.

Question	Percentage in 2018	Percentage in previous year (2017)
		Different ways of recording
Boards who have ADIS systems/database	35%	
Boards who have Paper records	36%	
Boards who have Other electronic systems	42%	
Boards who have continued to undertake visual inspections and update asset	100%	

Health and Safety (H&S)

11. Practically all boards (98%) report that they have a current Health and Safety policy and a good number (86%) of boards have a responsible officer for H&S.

Question	Percentage in 2018	Percentage in previous year (2017)
Boards who have a current Health and Safety policy	98%	Not reported
Boards who have a responsible officer for H&S	86%	Not reported
Boards who have had any reportable incidents in past year	1%	Not reported

Guidance and Best Practices

12. Nearly all boards have adopted good guidance and best practices recommendations such as: (93%) report that they have adopted a formal scheme of delegation, (92%) boards have reported to have website information current for this year, (98%) have adopted computerised accounting and rating systems, as specified in the IDB Review, (100%) have ensured that environmental impacts are taken into account and Standing Orders and Byelaws are adopted. (99%) boards that have adopted Code of Conduct for board Members, (80%) boards have adopted Anti-fraud and corruption policy.

Question	Percentage in 2018	Percentage in previous year (2017)
Boards that have adopted a formal Scheme of Delegation	93%	64%
Boards that have provided training for members in the last year on Governance	22%	63%
Boards that have provided training for members in the last year on Finance	13%	N/A
Boards that have provided training for members in the last year on Environment	21%	N/A
Boards that have provided training for members in the last year on health, safety and welfare	16%	N/A
Boards that have provided training for members in the last year on communications and engagement	10%	N/A
Boards that have provided other means of training for members in the last year	4%	29%
Boards that have website information current for this year (Board membership, audited accounts, programmes of works, WLMPs, etc.)	92%	67%
Boards that have adopted computerised accounting and rating systems, as specified in the IDB Review	98%	68%
Boards that have published all minutes of meetings	86%	N/A
Boards that have publish approach to maintenance	86%	N/A
Boards that have ensured that environmental impacts are taken into account	100%	N/A
Boards that have adopted Standing Orders	100%	70%

Boards that have adopted Standing Orders that have been approved by Ministers	96%	66%
Boards that have adopted Byelaws	95%	64%
Boards that have adopted the latest set of Byelaws published in 2012	41%	N/A
Boards that have had their byelaws approved by Ministers	88%	66%
Boards that have adopted Code of Conduct for Board Members	99%	70%
Boards that have adopted Financial Regulations	99%	70%
Boards that have adopted Register of member's Interests	100%	70%
Boards that have adopted Anti-fraud and corruption policy	80%	N/A

Board membership and attendance

13. Nearly all boards (93%) report that they have held elections in the last three years.

Question	Percentage in 2018	Percentage in previous year (2017)
Boards that have held elections in last three years	93%	Not reported
Boards that held elections that comply with requirements	94%	Not reported
Boards that have complaints procedure accessible from their websites	91%	Not reported

Public Engagement

14. Nearly all boards (97%) report that they have websites in place. IDBs report that the most popular way of engaging with the public is via meetings (82%) and newsletters (77%).

Question	Percentage in 2018	Percentage in previous year (2017)
Boards that have conducted press Releases	8%	Not reported
Boards that have had newsletters	77%	Not reported
Boards that have websites in place	97%	Not reported
Boards that have conducted meetings	82%	Not reported
Boards that have conducted shows/events	40%	Not reported
Boards that have had consultations	38%	Not reported
Boards that display notices	66%	Not reported

Findings

The following finding are based on comparisons of 2017 and 2018 reports. It is important to note that a number of steps have been taken to strengthen IDBs governance, including adding more questions to the IDB1 form from this year. Therefore, some of the questions were not in the 2016 - 2017 IDB1 form and therefore it is not possible to carry a comparison check on progress.

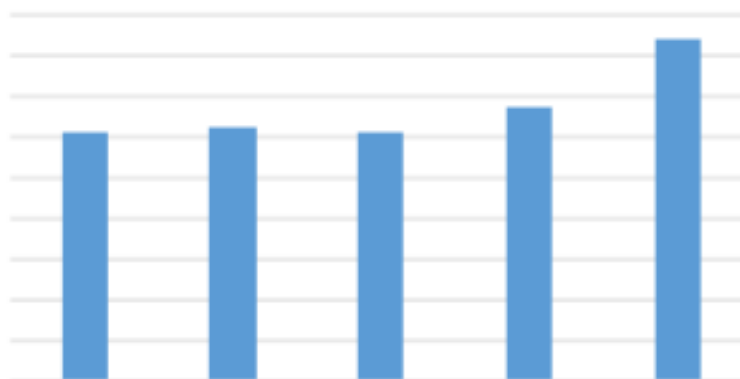
15. Based on the responses, there are some positive results. It is showing that majority of IDBs are making good use of their websites as a platform to share important information as a way of being transparent. It is also showing that majority of IDBs have adopted good guidance and best practices such as having in place code of conducts, financial regulations and approved statutory instruments such as standing orders and byelaws. IDBs are also ensuring that that environmental impacts are taken into consideration.
16. Based on the responses, there are some positive results. It is showing that majority of IDBs are making good use of their websites as a platform to share important information as a way of being transparent. It is also showing that majority of IDBs have adopted good guidance and best practices such as having in place code of conducts, financial regulations and approved statutory instruments such as standing orders and byelaws. IDBs are also ensuring that that environmental impacts are taken into consideration.
17. However, there are still some areas which require further improvement, for instance more work needs to be done around providing training on health, safety and welfare for their board members. Training for finance, communication and engagement etc is also on a low side and requires further attention. IDBs also need to ensure that biodiversity action plans are more publicly available. Furthermore, even though majority of the boards have byelaws in place, there is a need for some of the boards to adopt the latest sets of Defra byelaws, but this may depend upon local needs.

Funding

18. IDBs reported a total income of £83,8m for financial year 2017-2018.

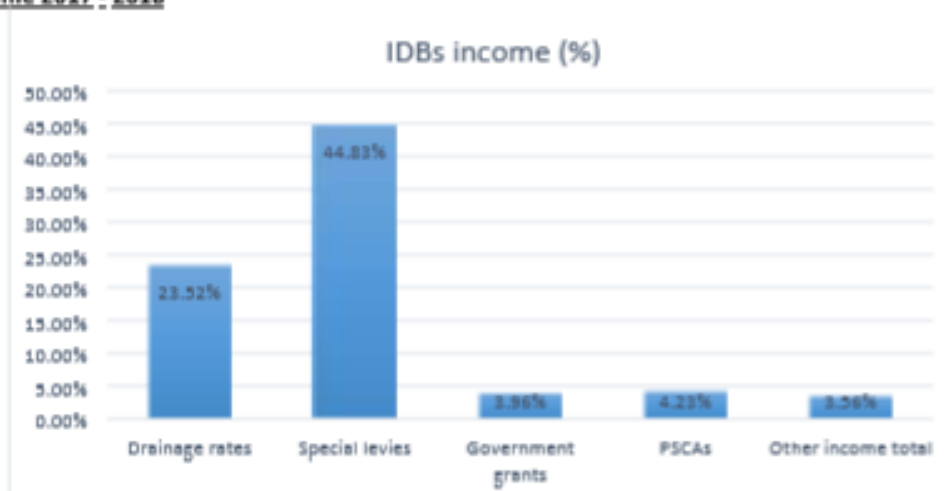
Trend in funding

19. The sector's reported total income has increased for the last five years and by around 20% in real terms over the last year as the chart below shows.

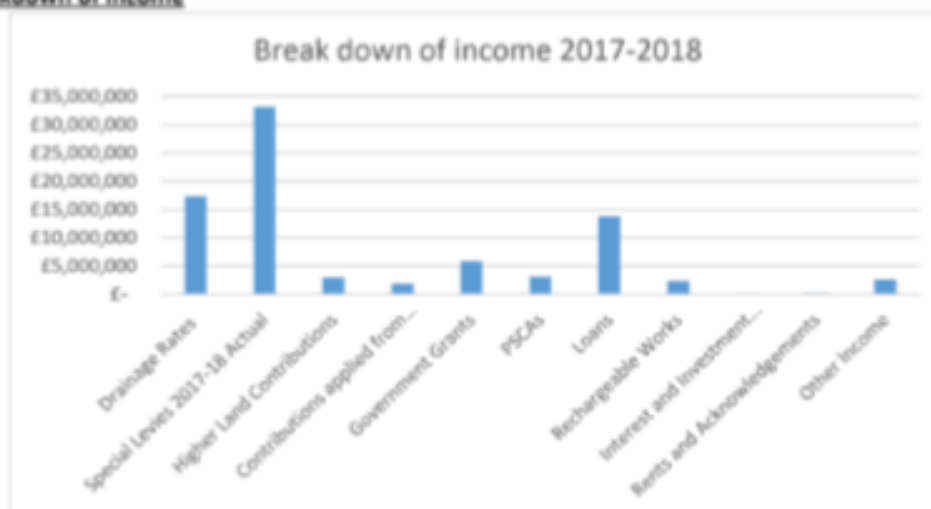


20. 80% of the sector's income comes from special levies (paid by local authorities) and drainage rates (paid by landowners within the internal drainage district). The remainder comes from a variety of sources including government grants and rental income as demonstrated below.

Income 2017 - 2018

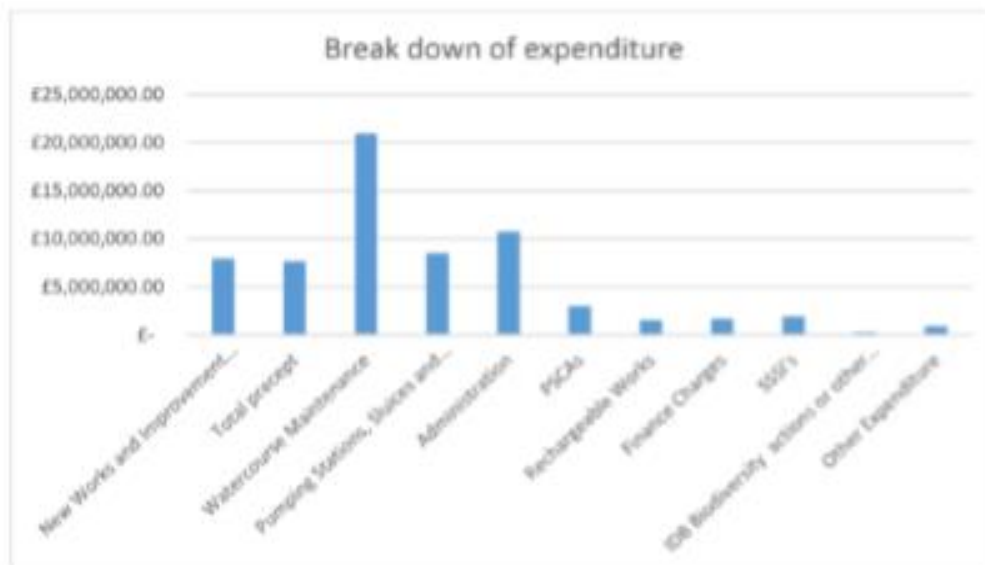
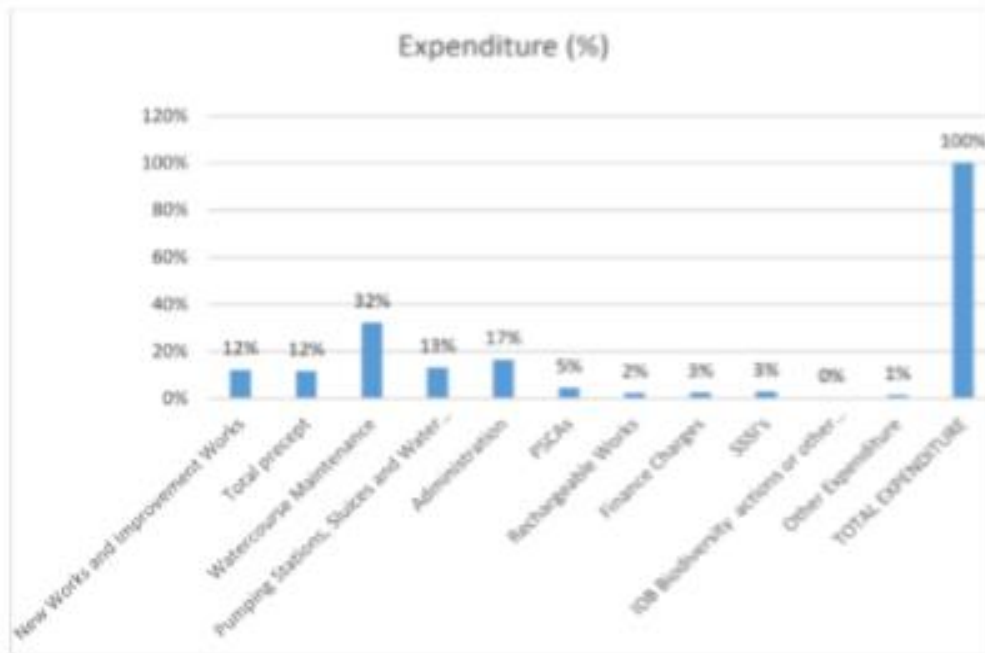


Breakdown of income



21. In 2017 – 2018 reporting year alone, around 45% of the sector's income came from special levies.

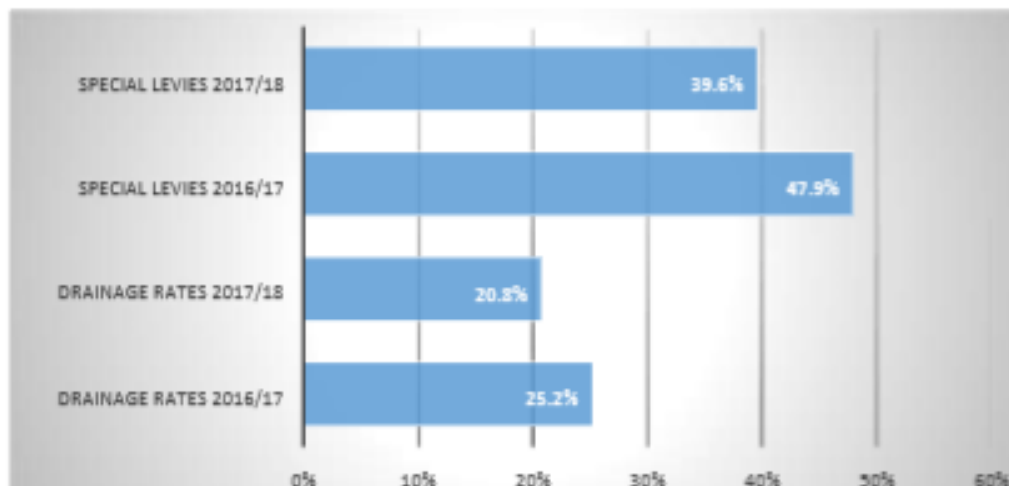
Expenditure



22. 32% of the sector's is around watercourse maintenance. The remainder is around a variety of activities such as administration costs and new work and improvements.

Comparison of the major funding

23. Drainage rates have slightly decreased as a percentage of total income from the previous year 25% in 2016-17 to 20% in 2017-18 and special levies have decreased from 47% in 2016-17 to 39% in 2017-18. However, monetary value has increase from the previous year from £16,930,773 in 2016-17 to £17414981 in 2017-18 and special levies has increased from £32215377 in 2016-17 to £33184557 in 2017-18.



Conclusion

- 24. Based on the responses from the IDB1 forms, IDBs are showing willingness and good cooperation in addressing concerns that have been raised. However, some areas still need to be addressed.
- 25. However, there are still some IDBs who are not yet fulfilling some of these requirements. Such as implementation of BAPs and ensuring all of the guidance and best practices are implemented fully.

Recommendations

- 26. Defra should continue to work closely with ADA, IDBs and other key players such as EA, NE, RSPB and other public bodies to ensure that IDB guidance that has been published recently is exercised fully by all of the board members. More work is needed such as encouraging IDBs to implement more training for their boards and making their biodiversity plans publicly available. Furthermore, even though the majority of the boards have byelaws in place, there is a need for some of the boards to adopt the latest set of Defra byelaws, but we also need to ensure the byelaws are updated and fit for purpose.

Annex A

List of IDBs who submitted IDB1 forms

- 1 Ainsty (2008) IDB
- 2 Airedale DC
- 3 Alconbury and Ellington
- 4 Ancholme Internal Drainage Board
- 5 Axe Brue
- 6 Axeholme & North Notts
- 7 Bedfordshire and River Ivel
- 8 Benwick
- 9 Beverley and North Holderness IDB
- 10 Black Drain DB
- 11 Black Sluice IDB
- 12 Bluntisham
- 13 Braunton Marsh DB
- 14 Broads
- 15 Buckingham and River Ouzel
- 16 Burnt Fen
- 17 Cawdle Fen
- 18 Churchfield and Plawfield
- 19 Connington & Holme
- 20 Cowick & Snaith
- 21 Curf and Wimblington Combined IDB
- 22 Danvm Drainage Commissioners
- 23 Dempster IDB
- 24 Doncaster East
- 25 Downham & Stow Bardolph
- 26 Earby & Salterforth
- 27 East Harling
- 28 East of the Ouse, Polver and Nar IDB
- 29 East Suffolk IDB
- 30 Euixmoor
- 31 Feldale
- 32 Foss IDB (2008)
- 33 Goole and Airmyn IDB
- 34 Goole Fielde
- 35 Haddenham Level
- 36 Holmewood and District DB
- 37 Hundred Foot Washes IDB
- 38 Hundred of Wisbech
- 39 Kings Lynn
- 40 Kyle and Upper Ouse IDB
- 41 Lakenheath
- 42 Lindsey Marsh DB
- 43 Littleport and Downham
- 44 Lower Medway IDB
- 45 Lower Severn IDB(2005)

46	Manea & Welney
47	March 3rd
48	March 5th
49	March 6th
50	March East
51	March West and White Fen
52	Melverley IDB
53	Middle Fen and Mere
54	Middle Level Commissioners
55	Mildenhall
56	Needham & Laddus
57	Nightlayers
58	Nordelph
59	Norfolk Rivers
60	North East Lindsey
61	North Kent Marshes
62	North Level District IDB
63	North Somerset Levels IDB*
64	Northwold
65	Old West
66	Ouse and Derwent IDB
68	Ouse and Humber
69	Over and Willingham
70	Padnal and Waterden
71	Parrett
72	Pevensey and Cuckmere
73	Ramsey
74	Ramsey 1st (Hollow)
75	Ramsey 4th (Middlemoor)
76	Ramsey Upwood & Gt. Raveley
77	Ransonmoor
78	Rawcliffe DB
79	Rea IDB
80	Reedness and Swinefleet DB
81	River Lugg IDB
82	River Stour (Kent) IDB
83	Romney Marshes Area IDB
84	Sawtry
85	Scunthorpe and Gainsborough WLM Board
86	Selby Area IDB
87	South Holderness
88	South Holland
89	Southery & District
90	Sow and Penk DB
91	Stoke Ferry
92	Strine IDB 93 Stringsides
94	Sutton & Mepal
95	Swaffham
96	Swale and Ure
97	Swavesey

98	Thorntree IDB
99	Trent Valley
100	Upper Medway IDB
101	Upper Witham
102	Upwell
103	Vale of Pickering
104	Waldersey
105	Warboys, Somersham and Pidley
106	Waterbeach Level
107	Waveney, Lower Yare and Lothingland
108	Wellend and Deepings
109	Whittlesey and District
110	Witham 1st
111	Witham 3rd
112	Witham 4th
113	Woodwalton

Tactical Plans for the Fens

Seeking Agreement in Principle and support from each Risk Management Authority for the approach taken.

In both Defra Policy Statements (Appraisal of Flood and Coastal Erosion Risk Management June 2009 and Partnership Funding May 2011) demonstrating and evidencing a strategic approach to flood or coastal erosion risk is a requirement for every project, to ensure value for money for Flood and Coastal Erosion Risk Management Grant in Aid (FCERM GiA).

With climate change projections and many of our assets in the Great Ouse Fens coming to the end of their design life, we now collectively, need to take a more strategic and long term approach. This will enable us all to maximise financial leverage and present a stronger, more considered investment case to funding bodies.

The current approach to flood risk management in the Great Ouse Fens area is one which generally has considered flood risk projects on a case by case basis, when assets require repair or are coming to the end of their life. Evidence and learning from the initial years of the FCERM six year programme, shows that each individual Risk Management Authority (RMA) has tended to consider its programme of work in isolation, not taking in to account the plans and programmes, and importantly the benefits being claimed, of other Risk Management Authorities.

In January 2019 all IDB Chairs and LLFA Chief Executives, in the Fens area were sent a letter, explaining the Fens project and how it fitted with the Strategic Approach as set out in the Partnership Funding Policy.

The approach we have followed is the same benefits apportionment approach as that used for the Isle of Axholme and a recommended method by the National Flood Risk Assessment and Investment team. We have been working with the relevant RMAs over the last year, to produce a plan for each of the South Level, Middle Level, and Tidal areas. For each sub catchment the relevant RMAs have identified the assets, which provide a flood risk benefit. These have then been ranked depending on the benefit they provide in terms of flood risk and then using this ranking to apportion benefits, Present Value Benefit (PVb) and Outcome Measures, for the area. The rankings and related benefits have been agreed for all the sub catchment areas and we have also ensured this work has linked in with the latest 6 year programme refresh. This approach also ensures there will not be duplication of benefit claiming in the future.

The headlines from this work show there is a £217.6M investment need for the Fens over the next 15 years, of which £125M would be funded by FCERM GiA and £92.6M partnership funding. This is based on a raw Partnership funding score of 54%, for the Fens area under current Partnership Funding rules.

We are seeking agreement in principle to the approach by RMAs, so that future investment and the use of FCERM GiA on assets in the Fens can be more easily facilitated and collectively understood.

The agreement to the plans is on the basis that any work in the Fens area will be to maintain the current Standard of Service (SoS)* for the area, until the Flood Risk Management for the Fens project has set out the preferred direction and options for managing flood risk in the Fens. If RMAs are not able to agree the plans, then the maximum grant rate allowable would be reduced to 45% for any projects in their area, which are requesting FCERM GiA.

The apportionment allocated to assets will be subject to all standard funding and business case rules, when future works on those assets are undertaken using FCERM GiA.

The outputs from the work show those assets which are affordable and cost-beneficial and sets out how many benefits each asset is able to draw upon as each asset business case will need to be assessed at the time of the works.

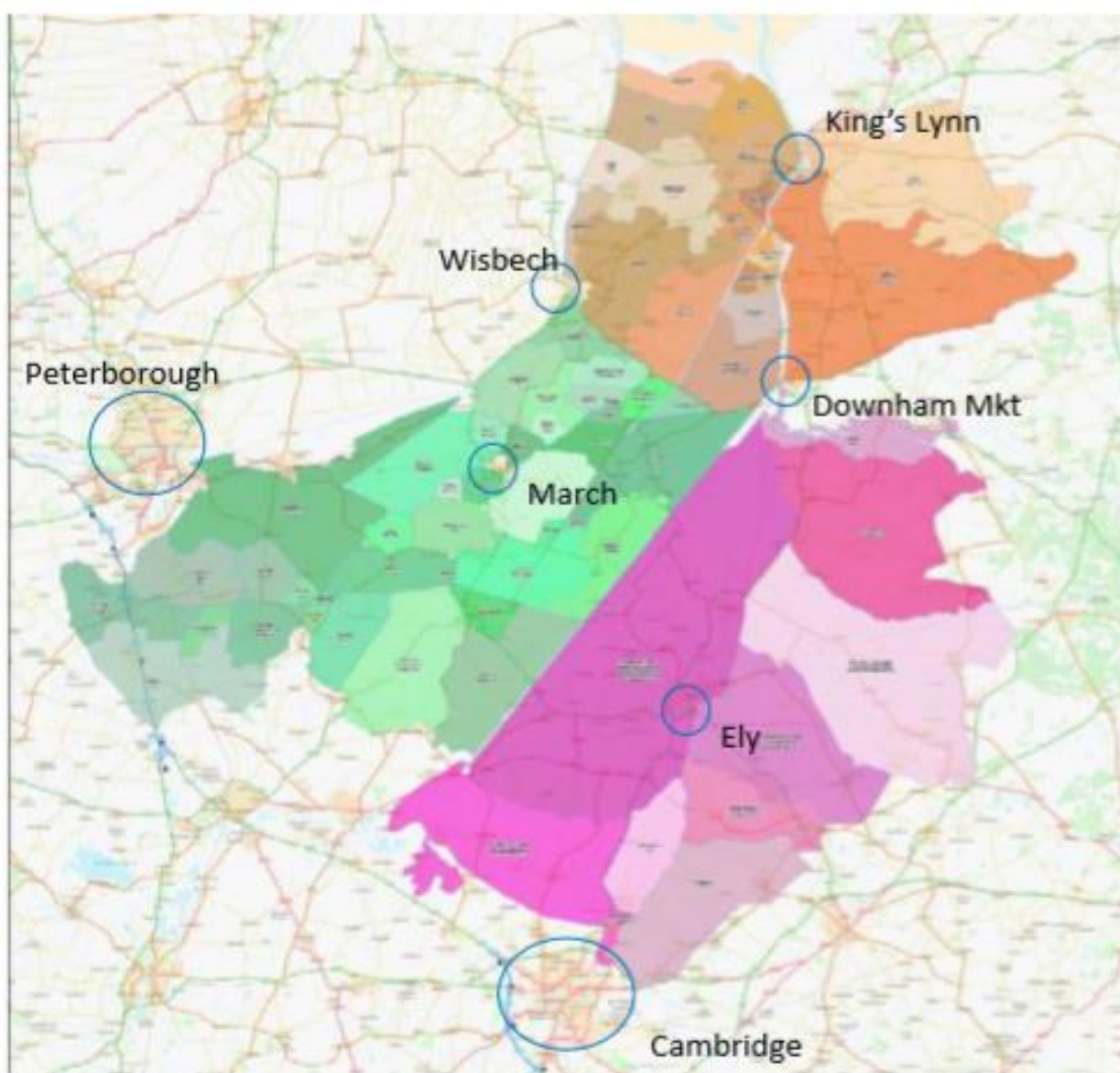
It is essential therefore that each RMA confirms support for the Tactical Plans and the principles of the benefit apportionment for the Great Ouse Fens. Please could you send an email or letter confirming your support to this approach, to Paul Burrows Area Flood and Coastal Risk Manager, Environment Agency, Brampton Office, Bromholme Lane, Huntingdon PE28 4NE. paul.burrows@environment-agency.gov.uk

***Definition of Standard of Service (SoS)**

The measurable and objective description of an asset such as the crest level of a wall or pumping capacity and a minimum condition grade.

Definition of Standard of Protection (SoP)

The design standard, measured by Annual Exceedance Probability (AEP) that an existing asset or proposed scheme provides, based on the current assessment of risk. The SoP changes over time due to climate change impacts and asset deterioration.



The Chief Executive confirmed that he had arranged for a reservoir inspection to be carried out under the Reservoirs Act 2010 on water being stored on Woodwalton Fen which was considered to fall within the parameters of the Act. He stated that he had arranged for Peter Brett Associates to carry out an inspection and it was estimated that the report and certificate would cost in the region of £6,000. The land was owned by the Wildlife Trust and managed by English Nature.

The Chief Executive reported that, due to ground conditions, the Catchwater Drain had lengths subject to bankside failure and works were required to reprofile it to achieve design capacity.

The Chief Executive reported on some bank lots on the Main Drain which had been recently vacated by tenants. He advised that he was proposing to investigate obtaining ELS grant funding for leaving the lots vacant for conservation purposes.

The Chief Executive discussed the outcome of his consultation with the administered Boards on his proposal to amalgamate boards and reported that two of the Boards had started down the amalgamation process and the matter was on the agenda for the future Middle Level and administered Boards Chairs meeting which was to be held on the 26th November 2019.

The Chief Executive updated the Board on the progress being made with implementing the Middle Level Act 2018 and that the Byelaws were still out to consultation for comment until the 18th November 2019. The Chief Executive advised that a survey of the existing boats on the Middle Level system had been carried out and there were currently approximately 576 boats and it was likely that once the registration system was introduced the number of boats would drop.

The Chief Executive reported that he had been approached by the Middle Level Watermens Club, who are a member of the Association of Nene River Clubs, and that the March branch were proposing to host a rally on the late May bank holiday 2020. To support this venture and to tie-in with the introduction of registration for navigation 2020, the Chief Executive had agreed the use of the Middle Level premises for the event including camping and caravans and the erection of a marquee. He had also offered to the Club the use of the Commissioners' moorings for the weekend. The Chief Executive said that he would take the opportunity at this event to publicise the work of the Middle Level Commissioners' and the proposals for registration and licensing of boats.

The Council representatives present said they would use the Fenland District Council and March Town Council websites to advertise the event. The Chief Executive discussed the need for a revised policy on consenting moorings and the need for greater flexibility in urban areas. As the Local Plan was currently under revision by Fenland District Council this was an opportune moment to review the policy.

The Chief Executive advised Members that this year's Annual Inspection and tour would be visiting the Kings Lynn area with visits to the Stow and Islington pumping stations and that on the way he would arrange for a stop at St Germans pumping station.

RESOLVED

- i) That the Report and the actions referred to therein be approved.
- ii) Catchwater Drain

That the Board approve the scheme in principle and the Chief Executive to work up the scheme and undertake costings for this work.

iii) Revised policy on moorings

That this matter be delegated to the Executive Committee following discussions with Fenland District Council planners.

B.3569 Executive Committee

Members considered the minutes of the Meetings of the Executive Committee held on the 30th July and 19th September 2019.

RESOLVED

That the Executive Committee's minutes and recommendations be approved

B.3570 Public Sector Co-operation Agreements (PSCAs)

Further to minute B.3529, the Chief Executive reported that the Commissioners had previously signed up to a Public Section Co-operation Agreement with the Environment Agency and were now carrying out works on behalf of the Agency around Denver/Salters Lode and for the Swavesey IDB. These arrangements were proving highly effective for delivery.

B.3571 Future Planning for the MLC and Associated Boards/IDB Amalgamation proposals

The Chief Executive reported that a briefing paper on future proposals for MLC and associated Boards had now been circulated to all IDBs. There had been a mixed response to the proposal and some Boards had not formally discussed the proposal. The matter would be on the agenda for future IDB meetings for further debate.

B.3572 Middle Level Commissioners and Administered Boards Chairs Meeting

Further to minute B.3530, the Chief Executive reported that the fourth meeting of the Chairmen of all of the Commissioners' administered Boards will be held on the 26th November 2019.

B.3573 Financial Update

a) Members considered the report of the Treasurer on the projected financial position at the year end.

The Board reviewed their risk management policy and procedures and approved the current insured value of properties.

The Board considered and expressed satisfaction with the current system of internal controls.

The Treasurer referred to the accounts for the year ended 31st March 2019 which had been approved by the Board and the now completed Annual Return and the comments of the auditors.

The Treasurer detailed the out-turn for the period to 30th September 2019 and the assessment of likely expenditure for the period 1st October 2019 to 31st March 2020.

The Board reviewed and approved the forecast.

RESOLVED

- i) That the Report of the Treasurer be approved.
 - ii) That the Auditors reports and comments be approved.
 - iii) That the present policies concerning risk management, budget monitoring and insured value of properties be continued.
- b) The Chief Executive referred to the completed IDB1 form for 2018/2019, which the Board noted and approved.

B.3574 New Navigation Legislation

Further to minute B.3533, the Chief Executive gave an update on the progress with implementation of the new navigation legislation and advised that the consultation on the Byelaws was open for public consultation until the 18th November 2019. Following that date any representations received would be considered and if necessary reported to the Navigation Advisory Committee and the Board.

The Chief Executive referred to a proposal from the Navigation Advisory Committee to give a discount of 15% on the Middle Level system for those who registered early. This would be for year one of the registration.

B.3575 Inspection of Works 2019

Further to minute B.3534, the Chief Executive reported that the Inspection of Works took place on the 4th July 2019 and was based around a visit to the Boston Barrier project and a presentation by the Environment Agency.

B.3576 Water Resources Committee

Further to minute B.3536(a), the Board was unable to receive this report as Mr H Whittome was not present at the meeting.

RESOLVED

That a letter be sent to Hugh Whittome thanking him for all the work he does on the Water Resources Committee.

B.3577 WRE/Lower Nene Water Resources Group

Further to minute B.3536(b), the Chief Executive reported on the setting up of this new body which was to look at current water resource demands and to plan for the future. It was currently looking at the increasing demand for water for the east of England which of course includes London plus that there will be a need for an additional reservoir.

The Middle Level Commissioners' Chief Executive has been appointed as ADA's area representative on the Board of WRE. He will act as spokesman for IDBs who have an interest in the future management and provision of water in the East of England. This is particularly important as government consider plans to make the area more resilient and as the impacts of climate change start to bite in an area of rapid housing growth. This is a 'paid for' position funded by interested IDBs, however currently the Middle Level Commissioners and IDBs in the MLC district are not being asked to pay as the Chief Executive's time is considered payment in kind.

B.3578 Water Transfer Licences

Further to minute B.3537, the Chief Executive reported that he had completed the application for the water transfer licence for the Middle Level Commissioners and the applications for individual IDBs were currently being processed.

B.3579 Ralstonia Solanacearum – Brown Rot

Further to minute B.3538, the Chief Executive reported that Defra had returned this year to re-test areas including those that had proven positive for Brown Rot last year and this testing had now been carried out. The results of the tests were however at this time not published.

B.3580 Adverse Possession Claim – Main Drain, Three Holes

Further to minute B.3541, the Solicitor/Assistant Clerk gave an update on the application that had been made by a third party to register land within the ownership of the Middle Level Commissioners near the Main Drain at Three Holes. She had objected to the application and the matter had been referred to the Lands Tribunal for determination. However, at that stage the applicant had withdrawn his claim to the land and a consent order had been signed which included the requirement to remove the caravan and other structures from the land. The site had now been cleared by the applicant, the electricity supply disconnected and no further action was required on this matter.

B.3581 Smart Level System

Further to minute B.3542, the Chief Executive reported that he estimated the cost of the introduction of an integrated monitoring and control system would be in the region of £500,000. This would therefore need to remain a long term aspiration at this time.

B.3582 Conservation Committee

Members considered and approved the minutes of the meeting of the Conservation Committee held on the 19th September 2019.

B.3583 Association of Drainage Authorities

a) Annual Conference

The Chief Executive reminded Members that the Annual Conference of the Association of Drainage Authorities would be held in London on Wednesday the 13th November 2019.

The Chief Executive reported that:-

b) Annual Conference of the River Great Ouse branch

The Annual Conference of the River Great Ouse branch of the Association would be held in Prickwillow, Ely on Tuesday the 3rd^h March 2020. The format will be as per the 2019 conference with a workshop in the morning and the conference in the afternoon.

c) Good Governance

ADAs workshops were well attended and are helping to deal with the questions being raised by Defra following the Audit Commission Report which criticized aspects of IDB governance. At least one member of this Board attended one of the two local workshops in the area and hence the Board will be able to record in the IDB1 Defra return that training has been provided on Governance. In addition to governance Defra appear to expect over time that training will be given for the following; Finance, Environment, Health, safety and welfare and Communications and engagement. The Board may wish to consider an order of priority for future training and a timetable for delivery.

d) Further Research on Eels

Further to minute B.3450, ADA have advised that the valuable research work being carried out by Hull University on eels and eel behaviour in pumped catchments will be continuing for at least another two years. ADA consider that the financial support to the project to date provided by IDBs has been positive and noted by the regulator (EA), leading to positive engagement on finding practical solutions at pumping station sites. They therefore consider that it would be useful if IDBs could consider whether they would be willing to continue their annual contributions to this research over that period.

RESOLVED

That the Board contribute £1000 over the next 2 years towards further research on eels. [i.e:- £500 in Year 1 and £500 in Year 2].

e) Floodex 2019

That Floodex 2019 will be held at the Peterborough Arena on the 26th and 27th February 2020.

B.3584 Update on the EA grant-in-aid position

The Chief Executive reported that the EA undertook a 'refresh' of its grant allocation schedule and optimised it to increase the likelihood of meeting the government outcome measure targets. As part of this some schemes were deferred in favour of those which could be delivered within the next two years with certainty and the programme has, as a consequence, become financially oversubscribed. This effectively means that there will be little or no chance of receiving grant for any new schemes between now and 2021 (at the earliest). This date marks the end of the six-year funding commitment and whilst it is understood that the EA are pressing hard to have another six-year settlement and, if agreed to by treasury, for this to be larger than the previous one to help address the increasing investment required to tackle climate change driven impacts. At this point in time we do not know what will happen and changes could be made in any event to the funding model, what outcome targets are or the process of securing grant. What is clear is that the further ahead that IDBs collectively plan their investment needs the more likely whatever grant is available will be accessible by them.

B.3585 Environment Agency consultation on changes to the Anglia (Central) RFCC

The Chief Executive reported that a consultation took place on the constitution of three RFCCs following a formal proposal for two new unitary authorities to be formed in Northamptonshire (West Northamptonshire and North Northamptonshire) and was submitted and approved by the Government. These authorities will come into existence on the 1 April 2020.

In Buckinghamshire the decision to create a single unitary authority replacing the existing five councils has been made by the Government, subject to Parliamentary approval. Again this will come into existence on the 1 April 2020.

Each new authority will be a unitary authority, delivering all local government services in their respective areas, including their functions as a Lead Local Flood Authority (LLFAs).

The membership of Thames RFCC, Anglian (Central) RFCC, and Anglian (Northern) RFCC included representation from one or both county councils. To reflect the changes, membership of all three RFCCs will be varied before 1 December 2019.

At the same time to better reflect a catchment-based approach the name of Anglian (Central) RFCC has been changed to Anglian (Great Ouse) RFCC. ADA stated that it supported the naming revision

B.3586 Tactical Plans for the Fens Agreement

The Chief Executive reported that the Environment Agency have set up a multi-partner group (FRM for the Fens) to steer work on developing strategic plans for managing flood risk in the lower Great Ouse catchment. This work is considered necessary to address the impacts of population growth and climate change, which are particularly relevant in this area. The EA is requesting approval to the approach being taken in principle and follows the letter sent in January 2019. The perceived value of this work is that it pre-apportions the benefits (land and property which would flood if not defended) so that applying for grant should be more straight forward and the amount of grant possible clearer. This should give increased certainty and clarity and resolves the issue of double counting benefits where for example a property is protected from flooding by both EA and IDB assets. Work on developing the strategy could take up to 15 years though and the proposal also therefore includes a mechanism for allowing grant-in-aided works to progress during this time on a hold-the-line basis.

RESOLVED

That the Board approve in principle.

B.3587 Applications for byelaw consent

The Chief Executive reported that the following applications for consent to undertake works in and around watercourses had been approved and granted since the last meeting of the Board, viz:-

<u>Name of Applicant</u>	<u>Description of Works</u>	<u>Date consent granted</u>
Richard Moore	Construction of conservatory, curved garden wall and decking – Old River Nene, March	16 th April 2019

Jeffrey Stevens	Construct 3no. 5m long landing stages - reinstate wall and railings, summerhouse, fountain, arbour, electric and water points – river frontage – Old River Nene, March	15 th July 2019
John & Beverly Chappell	Construct 2 no 5m long landing stages - Including provision of services – Old River Nene, March	15 th July 2019
Mrs J Gooch	Extend hair salon by 4.6m to front – Well Creek, Outwell	5 th August 2019
Mr D Russell	Construction of two dwellings - Old Pophams Eau	1 st October 2019

RESOLVED

That the action taken in granting consents be approved.

B.3588 Rental of Grass Banks

With reference to minute B.3509, the Board considered arrangements for the hiring of the Commissioners' grass banks in 2020.

The Chief Executive reported that Bank Lots 26 and 27, let to N & S J Russell, had now been surrendered and that this tenancy would end on the 30th November 2019.

(NB) – Members were reminded that the grass banks are let on short on short term grazing licences only.

RESOLVED

That no change be made in the rents for the hiring of the grass banks in 2020 and that the present hirers be offered a licence in 2020.

B.3589 Fisheries

Further to minute B.3437, the Chief Executive reported that the fishing rights listed viz:- The Twenty Foot River, Bevills Leam, North West Cut, Kings Dyke, New Dyke, Hook's Lode, Monks Lode, Great Raveley Drain, Black Ham, Yaxley Lode and Yards End Dyke and Middle Level Main Drain would come up for renewal for the period 1st April 2020 to 31st March 2023.

The Chief Executive also reported that other parties had expressed an interest in the fishing rights for Lot 27.

The Chief Executive reminded Members that the Whittlesey Angling Association's fishing rights had been let to them under a long-term 10 year agreement.

RESOLVED

That those fishing clubs which presently hire fisheries be offered lettings at the same rent for the period 1st April 2020 to 31st March 2023.

B.3590 Dates of next Meetings

RESOLVED

That the next meetings of the Commissioners and the Middle Level Board be held as follows in 2020, viz:-

- i) Thursday the 30th April 2020
- ii) Thursday the 5th November 2020
- iii) That the Inspection be held on a date to be arranged.
- iv) That the next meeting of the Executive Committee be held at 9.00am on Tuesday the 14th January 2020.

B.3591 Middle Level Commissioners' staff

The Board requested that the Chief Executive prepare a list of all staff at the Middle Level Commissioners with their contact details, photograph and a summary of the work they do and the areas that they cover. The Chief Executive was also requested to give consideration to the replacement of paper agendas by electronic copies of the agendas for each meeting.