MIDDLE LEVEL COMMISSIONERS

Report of the Middle Level Board on the financial year 2022/23 for submission to the General Meeting of the Commissioners to be held on Thursday 2 November 2023

MEMBERS OF THE MIDDLE LEVEL BOARD – 2022/23
(year in which first elected in brackets)

JONATHAN BROWN (Chairman)	(2006)
PATRICK ALLPRESS	(2011)
GREGORY BLISS	(2011)
DUNCAN BOUGHTON	(1985)
ROBERT BROWN	(2013)
THE LORD DE RAMSEY	(1980)
JOHN HEADING	(1991)
MARC HEADING	(2004)
MATHEW LATTA	(2012)
ANDREW LENSEN	(2021)
SAM RABY	(1991)
PAUL WEST	(2012)
HUGH WHITTOME (Vice Chairman)	(2002)
STEPHEN WHITTOME	(1989)

CHRIS CROFTS
(representing the Borough Council of King's Lynn and West Norfolk under the provisions of the Land Drainage Act 1991)

Mrs DEE LAWS
(representing Fenland District Council under the provisions of the Land Drainage Act 19921)

ALEX MISCANDLON
(representing Fenland District Council under the provisions of the Land Drainage Act 1991)

WILL SUTTON
(representing Fenland District Council under the provisions of the Land Drainage Act 1991)

JEFFREY R CLARKE
(representing Huntingdonshire District Council under the provisions of the Land Drainage Act 1991)

Ms SALLY HOWELL
(representing Huntingdonshire District Council under the provisions of the Land Drainage Act 1991)

OFFICERS:

Chief Engineer, Clerk and Chief Executive to the Commissioners - D Thomas B.Eng, M.C.M.I.

Clerk and Chief Executive – P Burrows FCIWEM C.WEM CEnv

Chief Engineer – Mrs N Oldfield IENG MICE ACIWEM

Solicitor and Assistant Clerk – Ms L McShane

ACCOUNTS IN RESPECT OF THE FINANCIAL YEAR 2022/23

The Commissioners' revenue balance on 31st March 2022 was £4,567,902.46 and during the year was decreased by £142,461.11 to £4,425,441.35.

The sum of £258,846.24 was received from the Environment Agency (EA), being the standard annual calculated contribution in respect of highland water contributions for maintenance works.

The precept paid to the EA amounted to £1,985.51 compared with £1,946.57 in 2021/2022.

The Commissioners have borrowed £11 million from the Public Works Loan Board for the St Germans Pumping Station replacement scheme and the balance outstanding at 23rd March 2023 was £7,402,634.19. A loan of £1.75 million has also been taken with the Public Works Loan Board for the office/depot relocation to Whittlesey Road, March. The balance outstanding on this loan at 23rd December 2022 was £780,970.97.

Development contributions were received in respect of all development which would give rise to an increase in the rate or volume of surface water discharge to maintained watercourses within the catchment.

There are no unusual features in the Navigation (Middle Level Act 2018) and Adventurers' Accounts. Within the (2018) Navigation Accounts the sum of £196,830.67 was received during the year for Navigation Registration/Licence Fees and the retained balance at 31st March 2023 for the installation of facilities as required by the Act was £88,047.30.

MEMBERS ATTENDANCE

The attendances of most of the Members of the Board have been excellent as usual.

ETHNIC MONITORING

The Commissioners' workforce is ethnically classed as white European.

During the reporting period two members of staff resigned and two retired and these were replaced with four appointments following a staff restructuring.

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THIS REPORT IS PROVIDED AS IT WAS PRESENTED TO THE BOARD AT THE APRIL 2023 MEETING

(with the removal of employee matters and appendixes)

April 2022 to March 2023

Chief Executive's Summary

I feel privileged to have been asked to succeed David Thomas and the last 3-months have provided me with a useful insight into the challenges and opportunities ahead. I have been impressed by the passion and loyalty the team have for the work we deliver on behalf of the Commissioners and the IDBs we provide services for.

There is a wealth of knowledge, experience and ideas that I'm looking forward to nurturing and I trust that my style of leadership coupled with my ideas, experience and hands-on nature, will help drive us forward collectively into what is a hugely pivotal time for the Middle Level.

With new leadership inevitably comes a fresh perspective and energy. It's become clear already, based on feedback from staff, IDBs and from customers that there are a number of critical priority areas that require concentrated focus. In my view, and in order of priority, these are:

- Health & Safety
- Environmental stewardship
- Our services to IDBs
- Navigation enforcement and business planning
- Bank raising scheme full business case
- The proposed Fens reservoir's integration into the Middle Level system

However, underneath all of this are a suite of organisational 'foundations' that are not all in place in a way that I feel are needed to support our staff and enable effective service delivery.

This includes a focussed and proportionate 'Corporate Plan' that clearly sets out objectives, priorities and measures of success, with a pay, reward, people and performance management approach that is cohesive with any plan. I will share more on this at the November Board session and will need the Board's input and support.

I feel there is an 18–24-month journey ahead to fill the gaps in these foundations and stabilise, whilst focussing improvements around the six priority areas above. All this whilst continuing to deliver all the services to ratepayers and the public that don't stop to give you the time you need to make changes.

The Board should note that in order to focus on the above I am not looking to replace David Thomas in his previous roles on Water Resource East's Board and his role as Vice Chair of the Association of Inland Navigation Authorities (AINA).

Within the above there are a couple of aspects to bring the Board's attention to so far, and other priority topic areas have a bespoke focus in sections within this report.

Firstly, David Thomas had previously been providing the organisation's IT support alongside his dual leadership roles. We now have a Whittlesey based firm called Streamline IT Solutions providing day to day support.

Secondly, in my role as Clerk to the administered IDBs, we held a clerking 'stock-take' session, where Cllr Will Sutton represented the MLC Exec. We felt it important to first define the standards we want to set for our services that we should be judged against once improvements have been made.

We also identified three targets that could become part of a suite of Key Performance Indicators adopted by the Board within any new 'Corporate Plan' that may need to be developed.

Proposed Service Standards:

The Clerkship Services provided by the Middle Level Commissioners (MLC) to Internal Drainage Boards (IDBs) will become known for being:

- Professional
- Personal & user friendly
- Proactive, timely & responsive
- Efficient & value for money

It needs to be recognised that there is a tension between providing services that feel personal to each Board and delivering the most efficient service in support of all Boards.

Proposed Targets:

1. Board agendas and papers will be circulated to members at least 5 working days before scheduled meetings.
2. Draft minutes will be published on our website within 1-month of the meeting.
3. A target for customer satisfaction will be developed and introduced in 2024

A range of clerking improvement actions have been identified, with the summer period after the April/May/June peak of Board meetings targeted for a refresh and re-vamp of agendas, papers and approach to minutes ready for the 2024 Board meeting season. We also want to trial building a network of local minute takers, such that our senior officer time can then become more effectively deployed (see 'Staff' section).

There may also be a need to update and re-set the arrangements and scope of the Commissioners' clerkship services to IDBs. These activities would be considered as a core component of today's clerkship services by the Commissioners' employees, the Commissioners and IDBs alike, but are not included or explicitly covered within the terms and fees of the agreements that have been in place since June 2014.

Once all of the above are in place, we will be in a much better position to tackle the next set of priorities which for me include our asset management approach, incident management preparedness and carbon reduction strategy.

The Board is asked to recognise the scale of the challenge ahead, the immediate priorities and the range of foundation building blocks that need to be refreshed and/or introduced over the coming 18-24 months.

I look forward to working closely with the Board.

Paul Burrows, Chief Executive & Clerk

Health & Safety

On the important topic of Health & Safety (H&S), the ADA Good Governance guide states that "The Board should set the direction for effective H&S management".

On 1st March 2023 we had the first visit of COPE Safety Management, our new H&S advisors, under our new senior leadership.

We now have an up-to-date H&S Policy Statement and the H&S Policy to underpin this is in development. The headline from our policy statement is:

> *Our policy is to provide and maintain safe and healthy working conditions for all our employees, contractors, and agency staff working on our behalf. In addition, we will seek to ensure the work that we carry out does not affect the health and safety of others, e.g., our customers, visitors and members of the public.*

However, there are serious deficiencies and gaps in our approach to H&S that need to be addressed in a planned, prioritised and coordinated way. These will require additional investment of time, resource and finance.

There are 39 H&S topic areas we need to have a robust approach towards. We have undertaken an initial prioritisation and the following are the 'Top 6' that we propose to focus on first:

1. H&S management
2. Manual handling
3. Monitoring performance (including active monitoring/compliance checking/ investigations)
4. Stress
5. Workplace HS&W
6. Navigation enforcement

Whilst the requirements and actions we need to take to get us into a suitable state are not yet fully understood, we have budgeted to double the support we receive from COPE over the next two years to help.

In addition, there are also safety requirements known to be needed at our offices (including a new fire alarm panel and site road/safety markings) and at our assets (where we ought to undertake Public Safety Risk Assessments in line with industry good practice).

The Board is asked to consider the above and re-set their direction for effective H&S management.

<u>Accidents and near misses</u>
These 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. During the period there have been no significant accidents and one driving near miss which has highlighted the need for improved safety measures at our offices.

<u>Insurance</u>
Historically the number of insurance companies willing to quote for the insurance requirements of the MLC and administered Boards is limited.

Our insurance portfolio is complex and includes a range of policies e.g., Commercial Combined (largest component), Motor Fleet, Engineering & Construction, Terrorism, Management Liability, Marine Craft and Professional Indemnity.

The overall cost of our insurance portfolio for 2023/24 will be £192,275 (£152,373 in 2022/23) a 26% increase, although increases will differ Board by Board depending on their individual insurance needs.

Key factors and changes are highlighted below:

- For Commercial Combined insurance, 2022/23 was the last year in our previous five-year agreement with AXA which included a 7% price reduction woven into the deal. For 2023/24 Towergate, our brokers, approached several companies and all bar AXA were not willing to quote given the size and complexity of our portfolio. Independently we also approached the NFU who declined to quote for the same reason.
- There has been an increase in fleet, property and marine assets included within our cover.
- In view of rising inflation most Boards agreed to index link their insured sums from 1st April 2023. AXA have increased insured sums by 15%, which has resulted in an increase within the overall premium.
- AXA have offered a 2-year stability deal, where any premium increases, subject to claims not exceeding 50% of the written premium, will be capped for 2024/25 at 2.5%. This excludes any increases in sums insured.
- AXA will not extend the stability deal as they plan a review of their whole IDB scheme in 2025.
- Commercial combined policy excess has increased from £350 to £2,500. None of our four 2022/23 claim values were above this new excess.
- Excesses are dictated by AXA's overall scheme for all IDBs and this is apparently now standard and has been imposed due to the number of lower value claims across the whole IDB industry. As other IDB/IDB Groups come out of their previous agreement with AXA the above will apply.

For future years Boards ought to consider index linking their valuations of properties and pumping stations every 3-5 years rather than annually, to mitigate annual premium increases and balancing having suitable cover without being over-insured.

It should also be noted that personal accident and sickness cover only covers employees or members up to 80 years of age. **Boards may need to consider the implications of this.**

Other Clerk's items

Imbanking Commissioners
The Imbanking Commissioners own a small parcel of land near to the junction of the Forty Foot and Sixteen Foot Drains. They also have some funds within a bank account in their name. They were set up originally to maintain shorts lengths of what has since become Middle Level System maintained banks and consequently their function is redundant. The land ownership was gifted to them to create an income stream to cover bank maintenance costs. Many of the Imbanking Commissioners are also Curf and Wimblington IDB rate payers and would like to see the funds spent in their district. However, this would not be legally permissible.

It has therefore been suggested that the land and funds could be passed to the MLC and used by the MLC to maintain the banks defined under the Act. The Imbanking Commissioners would then simply become dormant with no land or funds under their control. The terms of this arrangement would, of course, need to be agreed. In November 2022 the Board approved the transfer to MLC in principle and authorised that negotiations be commenced for the transfer of the land from the Imbanking Commissioners to the MLC if they wish this to happen. This will be discussed at the Imbanking Commissioners' next meeting on 11th May 2023.

ADA

The Assistant Clerk continues to attend the ADA Policy and Finance Committee meetings.

Great Ouse ADA Branch
The Annual Conference of the River Great Ouse ADA Branch was held on Tuesday 7th March 2023.

Morning workshops were re-introduced for the first time since the COVID-19 outbreak and members who attended took part in an excellent discussion focussed on three topic areas; Fens2100; Water Resources East and Climate Change. Steven Trewhella (consultant to the EA on Fens2100) and Daniel Johns (Chief Exec, WRE) took away a wide range of ideas centred around how the two topics were connected by the work of IDBs.

Within the AGM, Marc Heading was re-appointed as Chair and Doug McMurdo as Vice Chair with approval that the secretariat of the branch be transitioned from the MLC to the Bedford Group of IDBs over the coming months. Ian Moodie (Technical Manager, ADA) gave an overview of ADA's activities, including their important inputs on behalf of IDBs into the long-awaited implementation of schedule 3 of the Floods & Water Management Act. Tom Pickover introduced himself ahead of starting as Operations Manager at the EA (covering the lower Great Ouse catchment) and was joined by Darren Trumper who between them gave an overview of EA flood management activities and budgets.

Mr John Heading's term as Great Ouse Branch appointed member to the ADA Board ends in April 2023. He was thanked for his service and contribution and the Branch delegated the appointment of a replacement to the Branch Chair and Executive Committee.

Comms & Engagement

Regular news articles are placed on the MLC website and on our social media channels.

Fascinating Fens
Fascinating Fens aims to bring people together to explore, share and discover more about The Fens through heritage, nature, creativity, wellbeing and accessibility. Nicola Oldfield gave a talk about engineering in the Fens at a recent monthly meeting. We have offered to open St Germans Pumping Station for a day for 'Celebrate the Fens' on the weekend of 17th June 2023.

Social Media and Branding
Since January 2023 our approach to social media has changed. The MLC now have an active presence across LinkedIn, Facebook and Twitter.

LinkedIn is a professional social media platform and our page was created in January 2023, at the time of writing we now have 180 followers. Our Facebook site had been dormant since 2012, this is now back in use and currently has 190 followers. Our Twitter handle has been rebranded and now has 670 followers. All can be accessed via our website.

Working within the constraints of our current website arrangements, we have recently undertaken a 'spring–clean' reducing duplication, removing out-of-date pages and improving the ease of use of the site for the different user/customer groups. Over the course of the next six months, content will be reviewed, honed and added as appropriate.

Whilst there is no current intent to change the Commissioners' logo, the quality of our existing digital set of logos is very poor. To use our logo effectively at either small and large scale, we need an improved set of images along with a clear and consistent approach to branding (including colour schemes, fonts etc).

This requires the skills of an illustrator (given the nature of our logo) and a graphic designer. We are working on an approach to receive the logo improvements and basic design products at bare minimum/no cost. Once this is in place, then any future more involved design work will likely need to be procured externally but there would be a broader range of suppliers to access so future costs would be controlled to a minimum.

ICT Report

TSG continues to provide support for the Commissioners' physical and virtual servers.

Streamline IT Solutions are now providing our day-to-day IT support requirements for desktops and laptops. They have also been commissioned to rationalise and improve the WiFi arrangements at the office and explore the server replacement needs previously reported to the Board.

Software – additional licences continue to be required as staff changes occur, and upgrades to existing software are implemented as required.

Fens Reservoir

The Fens Reservoir proposal is moving forward at pace. The Gateway 2 draft decision was published by OFWAT on 30th March 2023 with the final decision due on 28th June 2023. Within the draft decision:

> *"The evidence suggests that the solution is a potentially valuable way of supplying water to customers. However, there are concerns regarding the progression of the strategic solution due to the Fens Reservoir having notably high unit costs and the limited evidence provided to us that the Fens Reservoir solution is the best value option for meeting the need. We would like to see clear and robust evidence around the selection of Fens Reservoir as a best value option, including how the solution performs against other feasible solutions. On that basis, we will allow the solution owners to continue to develop the solution up to a conditional review point of 29th January 2024 ("Conditional Review Point"), after which partner regulators will make a final recommendation on progression beyond the Conditional Review Point to Ofwat."*

Anglian Water are addressing the concerns raised and also moving forward with the critical enabling elements of design. If the project passes the Conditional Review Point, the Gateway 3 date will be September 2024 and by this time the outline design will likely be finalised.

Since January 2023, we have had a different approach to influencing and engaging with the project, and now have confidence that Anglian Water and their design consultant, Mott MacDonald, are actively listening and recognise the need to better understand the water management system within which the Reservoir will integrate and hopefully transform.

We now have bespoke and focussed engagement with the project team and have identified four themes where we are uniquely placed to input and where ultimately there is the greatest opportunity for ratepayers, local communities and navigators. Thus, we are focussing our limited technical capacity to these themes:

- St Germans pond as a potential source of water
- Options for emergency drawdown
- The Reservoir footprint
- Potential open water transfers

The Chief Executive, Vice Chair and Navigation Advisory Committee Chair are members of the Fens Water Partnership, facilitated by Water Resources East, to act as a multi-sector steering group for the project. At their session on 6th April 2023 there was a specific focus on the opportunity to integrate the Reservoir within the Middle Level system.

We are working to secure a cost recovery arrangement with Anglian Water for technical staff time and are providing in-kind contributions of data. Whilst we are working on the basis that the opportunity we see within the Reservoir design is core, and should be funded by the project, **the Board is asked to consider earmarking funding with authority for expenditure delegated to the Chief Executive and Vice Chair, should there be a need to invest promptly within the Gateway 2 window to secure significant benefits before the Gateway 3 date.**

Environment

The statutory duties of IDBs with respect to the natural environment fundamentally changed with the Environment Act 2021. There is now a statutory duty to enhance the natural environment, including delivering biodiversity net gain.

Building from the foundations that have been created over recent years, there is an onward journey we need to go on to demonstrably achieve enhancement.

This will require a continued upfront investment in resources as well as an even greater range of partnership and collaborative working with other organisations to achieve more and at lesser cost to ratepayers than if we were working independently. Collectively our assets, land, water level operations, knowledge and ideas are marketable commodities that we need to showcase confidently and effectively.

Sofi Lloyd, our Environment Officer, joined us from the Association of Drainage Authorities (ADA) 6-months ago having authored ADA's Environmental Good Governance Guide. As such, she has had an early focus on baselining where the MLC and the IDBs we administer are at in their journey, as well as implementing priority improvements, advising and training the MLC workforce and getting hands-on within the district.

Overall, there is confidence that our base operations are conducted using approaches that are sound, but with a necessity to improve how we evidence, record and report our environmental considerations.

We also need to evolve from a somewhat reactive, piecemeal and opportunist mind-set to a place where environmental considerations become part of the DNA, considered proactively and in a planned way at the outset of activities.

Our environmental priorities over the coming 18 months are, in order:

- To ensure we have the right measures in place for protected species.
- To develop the ecological method statements for the Bank Raising Scheme whilst the Environmental Impact Assessment is being completed.
- To ensure we feature within the local biodiversity net gain off-setting strategy.
- To clarify the scope of the MLCs environmental service for the administered IDBs (and other IDBs that request services), e.g., what's included; what is not; what is achievable within existing capacity; how far towards enhancement that will get us; what resource inputs are needed from within IDBs; and what additional resourcing may be required.
- To start to create a step change in how we secure enhancement through the planning and consenting service.

The Biodiversity Action Plans that Boards have in place will likely need reform starting in 2024/25 so they become the documents that showcase a Board's journey towards enhancement. The main focus until then is ensuring that a robust process is in place to ensure that the incremental steps that need to be taken to achieve the BAP objectives are incorporated into routine operations and are reviewed regularly.

The Board is asked to consider and support the above.

Environmental & Land Management Scheme (ELMS) Trials
Applying for ELS or ELMs without MLC land being registered would be challenging and is not considered worthwhile. Registering the Commissioners' interest in the vacant Bank Lots has therefore been identified as a priority and continues to progress, albeit at a modest pace. Most recently a Land Charges search has been carried out on MLC owned land. This, together with the successful digitising of all relevant documents, should complete the bulk of the work needed to get to the point where a submission can be made.

Conservation & Climate Committee
The Committee met on 15th September 2022 and the meeting scheduled for March 2023 was postponed. Sofi Lloyd, our Environment Officer, also led and delivered a successful Middle Level Environment Conference in December 2022 and delivered a slot on ADA's Environment Day that was held locally and well attended.

Lowland Peat and Water Resource Opportunities
At the time of writing, we are still awaiting Defra's publication of the Lowland Agricultural Peat Taskforce's report.

It has also been intimated that there may soon be a time limited pot of funding available for IDBs to bid for, to invest in infrastructure improvements that enable improved water level management for the benefit of lowland peat.

The Great Fen vision alongside the water transfer from the Nene, will hopefully enable the MLC to be prime candidates for any funding that does become available.

The Board is asked to delegate the authority to the Chief Executive to act in consultation with the Chair and Vice Chair on any opportunity if and when it becomes available. This includes authorising additional expenditure should consultant staff need to be employed to supplement MLC staff in order to create robust bids. It is anticipated that any new funding would also cover the project management costs associated with delivery.

Navigation

For the 2022/23 licensing season we issued 283 licenses for an income of £181k. The 2023/24 licensing season has started strongly. In terms of the Anglian Pass, in 2022/23 653 passes were issue.

We are learning as we go in terms of regulation and enforcement of unlicensed and abandoned boats. Our activity seems to be working with notices issued resulting in license requests and/or removal of boats. So far, we have moved three cases to prosecution, and two owners have subsequently removed their boats from the water.

We have recently started a monthly licensing and enforcement monitoring session so we can keep track of all the regulatory and licensing actions that are in-train and make timely decisions. Over the coming months, we will improve the reporting and statistics which will then underpin conversations within the Navigation Advisory Committee (NAC).

Improvements delivered in 2022/23 include; Ashine Lock urgent repairs and downstream mooring refurbishment; Salter's Lode upstream and downstream mooring refurbishment and Glady Dacks rural mooring (replacing previous). The main improvements planned for 2023/24 are the replacement gates at Marmont Priory Lock and site improvements at Stanground Lock. We also hope to install further rural moorings.

We would benefit from developing a business plan for our navigation that caters for the 'behind the scenes' improvements that are needed to make our operation as efficient and effective as possible, as well as set out the 'on the ground' improvement ambitions that users of our waterways can inform and influence.

This would include the choices around re-investment of the 25% of income that we have committed to invest in the link route to meet IWA minimum standards, as well as the pot of partnership funding the MLC have made available to stimulate further improvements with investment from others.

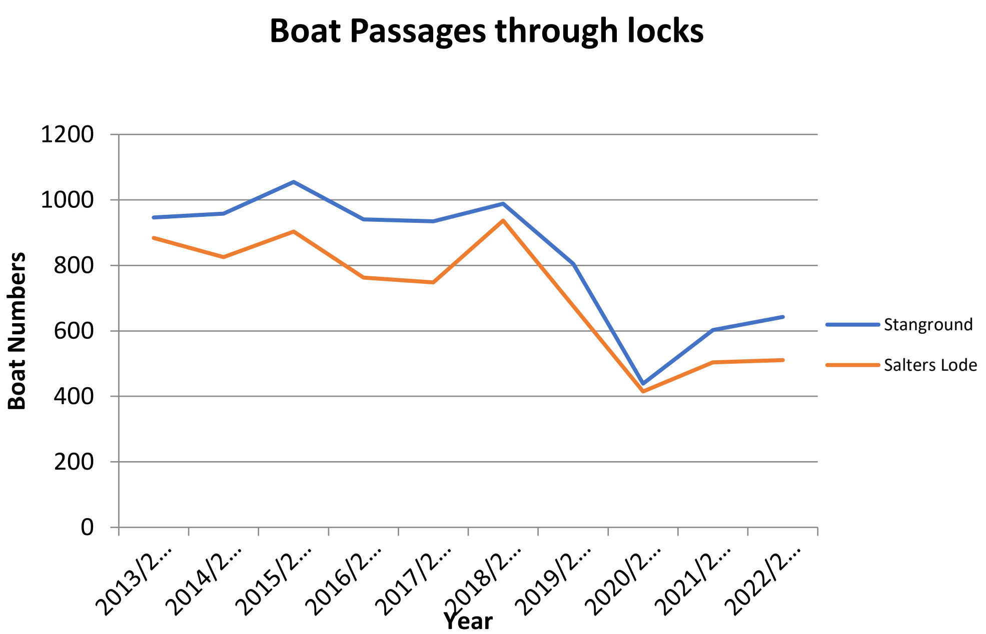
The NAC agreed that we should charge for licensing the use of unpowered vessels. In 2023/24 we aim to formalise arrangements with British Canoeing for canoeing, kayaking and paddleboarding securing an annual fee from them in return for our waterways being formally included within their waterways license. The intent within any arrangement would be to also facilitate the opening up of commercial and club paddling within our network.

The Board is asked to support the development of a business plan for their navigation, advise how they would like to input and provide an indication of how they would like to see any plan formally approved and adopted. A small amount of funding ought to be allocated to this to ensure any business plan is professional and creates an attractive proposition to help lever outside investment.

Boat Passages

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

Boat Passages 2022/23				
	Salter's Lode Lock		Stanground Lock	
Month	In	Out	In	Out
April	26 (22)	24 (18)	34 (22)	39 (31)
May	23 (26)	18 (32)	44 (30)	52 (34)
June	39 (10)	52 (55)	48 (43)	46 (50)
July	58 (29)	63 (62)	68 (50)	57 (55)
August	64 (51)	51 (49)	61 (64)	78 (61)
September	23 (53)	21 (41)	38 (57)	39 (47)
October	13 (16)	16 (15)	20 (21)	9 (15)
November	3 (4)	5 (6)	4 (4)	2 (4)
December	3 (0)	1 (1)	0 (0)	0 (0)
January	0 (0)	0 (0)	0 (0)	0 (1)
February	2 (2)	2 (1)	2 (1)	1 (2)
March	2 (4)	2 (7)	1 (1)	0 (10)
TOTAL	256 (217)	255 (287)	320 (293)	323 (310)



Registration/Byelaws and Navigation Advisory Committee (NAC)

Under the Act the Commissioners must appoint people to represent various areas of interest. There are no proposed changes to the Committee at this time. It is also noted that the Board has delegated the appointment making process to the Executive Committee for the time being.

Chief Engineer's Summary

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

Improving Capital Delivery

Since being in post I have made a number of observations regarding the operations and services provided by the Engineering/Technical Services Department. The officers are knowledgeable, dedicated and committed to delivering a service to the Commissioners and the IDBs; working in partnership with the EA and local planning authorities/LLFAs is clearly evident; the operations team do an excellent job managing water resources in an extremely complex system; our capital delivery programme is growing as assets come to the end of design life; we have some significant changes and challenges ahead (biodiversity net gain requirements, the climate emergency and Fens Reservoir amongst others) which need careful planning and resourcing if we are to properly represent members and local communities and secure the best outcomes for the catchment.

We have an increasing capital delivery programme, with several ongoing projects and many identified for future delivery. I have identified improvements needed to deliver these projects better and to improve communications between the MLC, as 'consulting engineer', and the Boards.

Staff in MLC's Technical Services are currently stretched in terms of capacity and capability. There is a significant lack of suitable people across the engineering and project delivery profession generally, which impacts not only MLC's ability to recruit, but also the availability of consultant and contractor resources.

As well as our services to IDBs, and the Bank Raising Scheme over the next 4-5 years, and delivery of the pumping station refurbishment programme, there is an immediate need to provide resources to support MLC input to developing plans for Anglian Water's Fens Reservoir as detailed in the Chief Executive's Summary.

There are also the additional requirements set out in the Navigation Byelaws 2020. This is a work in progress, but again sets additional demands on our internal resources and our ability to be proactive.

We are now looking at resource solutions to support the wider engineering department.

I have implemented some standard project management tools to control, manage and deliver the Bank Raising Scheme and will be adopting some of these for the services we provide to IDBs. This will ensure that project objectives are clearly defined and that suitable project governance is in place. This should improve the quality and speed of delivery of our services and ensure that funding opportunities and benefits are maximised for the Boards.

To that end, I am undertaking a review of the current FDGiA programme. This includes prioritising the projects, identifying which projects might be packaged together for efficient delivery, and how the projects might be delivered, either in-house or by external consultants. There may be an opportunity to use the consultants being appointed for the Bank Raising Scheme.

The Board is asked to confirm their delegation to the Executive Committee for project escalation from the Chief Engineer and associated decision making on their behalf for future MLC projects.

Service Delivery Frameworks

The Board is asked to resolve that the Clerk, on their behalf, be authorised to enter into user and/or access agreements for public sector delivery frameworks (for example, EA Delivery Frameworks and SCAPE). The Board is asked to note that the MLC already has a signed user agreement with the EA for Collaborative Delivery Framework (CDF) and Client Support Framework (CSF). This will open up access to the fees, terms and conditions of these Frameworks so our Consulting Engineers can compare and choose the most suitable procurement route for delivery of the Boards' future needs. This does not tie the Boards to using any Framework they then have a user/access agreement with, and Frameworks are not the only procurement route for delivery that will be considered. Having this resolution from all the Boards we administer is key if we are to package work across Boards to exploit economies of scale and become more efficient and effective in the delivery of services.

Middle Level Bank Raising Scheme

Project governance has been reviewed and a team structure has been defined.

The Board is asked to reaffirm their delegation to the Executive Committee for project escalation from the Chief Engineer and associated decision making on their behalf.

There is a significant amount of work required to plan the scheme, undertake environmental assessment, manage delivery of the desilting work, undertake outline design, produce design and build work packages, manage the tender process and coordinate and supervise the subsequent construction works. This requires significant resources to ensure that the scheme can be delivered on programme (target completion is March 2027) and as efficiently as possible.

We have implemented some standard project management tools to control, manage and deliver the project: An 'exception report' was raised to the Project Board/MLC Executive Committee outlining the existing situation and mitigation measures being put in place; A project plan and outline programme is now in place; Clear project governance has been identified; A data management plan is being drafted; Risks and issues are being identified.

External project management resources have been appointed to support the Chief Engineer, who will take on the role of Project Executive leading delivery of the scheme. MLC specialist officers have the skills, knowledge, experience and organisational capability to advise and support consultants and contractors, however they lack the time available to deliver the project requirements alongside their 'day jobs.' Blue Compass is retained as Independent Technical Advisor, providing advice and support on environmental assessment requirements, stakeholder engagement, and commercial processes. Ongoing procurement support and advice is provided by Weightmans LLP, via the EM LawShare framework.

Stage 1 (Desilting) is being managed in-house at present, with Drake Towage providing a large dragline excavator and operator. This work will be carried out over the next 4 years with additional plant and resources being employed.

A contract has been awarded to Royal Smals to undertake suction cutter dredging on the Old River Nene through March town. This is planned for October 2023. Discussion has started with local landowners to inform the locations of silt storage lagoons east and west of the town.

Material sources have been identified and the team is working with D&J Transport Ltd, to stockpile suitable material in key locations ready for bank raising works.

Surveying of the Middle Level watercourses has started following some technical difficulties with the remote-control survey boat.

The project team is developing a scope of works for consultancy services for Stage 2 to be appointed in June following a tender process though the ESPO framework.

Outline design and work packages will be tendered in the autumn with construction works expected to start early in 2024. Discussions are in progress with a potential contractor on the SCAPE framework for Stage 3 (Construction).

Public engagement is in progress and engagement events are being planned for the summer. A webpage will be developed dedicated to the project, providing a comprehensive on-line location for all project related information.

The temporary project office is now up and running and will house the co-located project team for the duration of the project.

Woodwalton Fen Flood Storage Reservoir
Measures in the interests of safety instructed by the All Reservoirs Panel Engineer have been completed (construction of overspill and localised bank raising). Certification of the works under the Reservoirs Act is expected in May.

A retrospective application for FCRM Grant in Aid has been made to the EA following a discussion between the Chief Executive and the EA's Flood Risk Manager. There is precedent to fully grant fund works required for reservoir safety, however a retrospective application is not usual process so securing funding is far from a certainty. The value submitted for approval is £155k. A decision on the application is expected imminently.

<u>Woodwalton Fen Alternative Storage</u>
Royal Haskoning has been appointed to review previous studies and propose suitable site(s) for alternative flood storage. The key driver for the project is to improve water quality and reduce ecological decline on Woodwalton Fen. This stage of the project is 100% FCRM Grant in Aid funded.

<u>Works Department</u>

<u>Water Resources and Control of Water Levels</u>

Autumn/Winter 2022/23

Rainfall
Mean rainfall over the area for the twelve-month reporting period was 508.12mm which is 77.05mm less than the standard average.

Rainfall was experienced during the second half of October, with a succession of Atlantic frontal systems bringing in wet weather. This weather pattern continued during most of November, leading to cumulative rainfall totalling that of the previous three months. Although the first half of December was somewhat drier, the second half of the month saw a return to unsettled wet weather. February in comparison, was an exceptionally dry month, with very little rainfall in the Middle Level catchment leading to approximately 25% of the LTA rainfall being recorded. It was recorded as the driest February since 1993. The dry conditions were short lived. Rainfall totals of up to three times the LTA were experienced during March throughout the East Anglia region when, on 9th March, rain and snow showers swept across resulting in approximately 30mm of rainfall throughout the system, leading to a 'mini' rainfall event. This was the most significant rainfall event since Christmas 2020 and the month was recorded by the EA as the wettest March in the Anglian region since 1981.

Rainfall during October reduced the Soil Moisture Deficit (SMD) value to a month end total of 114mm, falling within the 'normal' category. The value reduced further during November and December, resulting in month end values of 56mm and 32mm respectively. The value continued to decline into January leading to a value of 20mm by the end of the month. Due to the exceptionally low rainfall during February, the SMD value rose during the month ending at 30mm. Values fell again during March, ending the month at 11mm.

Water levels in the Main System were generally managed comfortably during the late autumn and winter period. Sporadic rainfall in late December was dealt with by reactive pumping and frequent remote monitoring of telemetry during the Christmas and New Year holiday period. Due to a distinct lack of rainfall during the second half of January and the entire month of February, minimal pumping at both St Germans and Bevills Leam stations was required during this traditionally busy winter pumping period.

Water levels were raised during the quiet pumping period in February, to conserve a supply of water for the diesel-powered generator running sessions at St Germans Pumping Station, with the ambition of running the diesel-powered generator sets up to full operating capacity and temperature at least once a month to retain their good operational status.

Heavy rainfall, interspersed with sleet and snow showers during the second week of March required water levels in both ponds to be lowered back to winter retention levels, and required three electrically driven pumps to operate simultaneously at St Germans, along with 5 pumps (3 electric and 2 diesel) to run for a 6-hour shift at Bevills Leam Pumping Station. This ‘mini event’ was the most significant since Christmas 2020. Control of the system was maintained at all times and although water levels in the west of the catchment remained elevated for approximately 24 hours, this was mainly due to the prevailing north easterly wind holding water back in the west of the system.

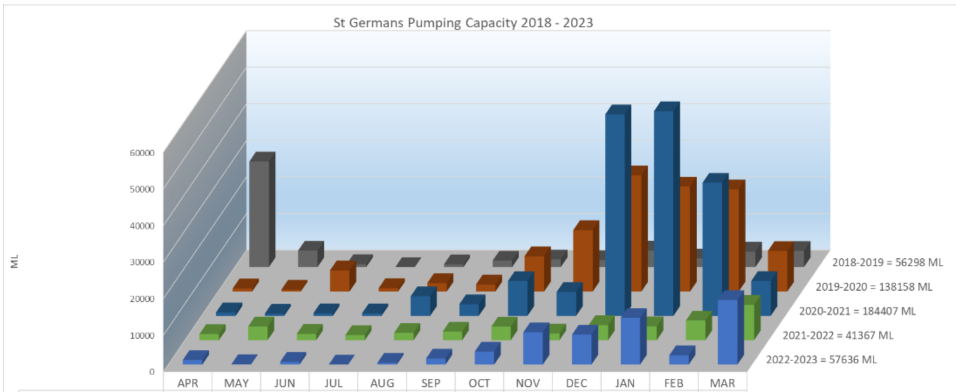
It is suggested a review of the general resilience procedures, and the Commissioners’ resource capacities of office based staff, who could be utilised during future rainfall events, may prove to be a worthwhile and useful exercise and to check the Commissioners retain sufficient strength in depth in terms of providing adequate response, engagement and communication capability with our constituent IDBs, Navigators and other external stakeholder/partners, such as the EA, Local Councils and Lead Local Flood Authorities.

An early season Lower Nene Abstractors meeting, hosted by the EA has recently been held. It is pleasing to report that Anglian Water have indicated their Rutland Water reservoir has achieved a winter fill of 96% capacity, giving them flexibility to offer the ‘give and take’ arrangement again during the coming season during pinch points in peak abstraction season. The EA have proclaimed summer abstraction prospects for the Middle Level catchment, the water being fed in exclusively from the Lower Nene, remain in the moderate/poor category for the coming season.

At the time of compiling this report, at the end of March, the SMD value has reduced to 11mm in the Fenland catchment. It is anticipated recent notable rainfall and the subsequent reduction of the SMD value will now significantly delay the start of the abstraction and irrigation season. Water levels are being maintained at near winter retention level. They will be closely monitored and raised as soon as weather conditions allow.

Water levels in Well Creek were maintained by pumping water into it from the Main Drain at the Aqueduct to pre-set parameters. No issues have been experienced with the electrically powered pump allowing navigable water levels to be maintained in Well Creek throughout the period. The new telemetry system gives better control of the pump to make optimising for low tariff running much easier.

Pumping



	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
2022-2023 = 57636 ML	1254	102	724	0	466	1641	3514	8824	8181	12745	2543	17642
2021-2022 = 41367 ML	1685	3730	1723	1407	1990	2344	3721	1849	4113	3781	5370	9654
2020-2021 = 184407 ML	957	562	707	691	5352	3176	9506	6522	55086	55935	36390	9523
2019-2020 = 138158 ML	831	503	5783	915	2303	1905	9654	16786	31772	28708	27922	11076
2018-2019 = 56298 ML	28891	4486	825	0	760	1757	2082	1925	4510	2384	4232	4446

During the twelve-month period (April 2022 to March 2023) 57798 and 16303 megalitres of water were pumped at St Germans and Bevills Leam respectively.

Pumping during April to September was unsurprisingly low each month and is considered unexceptional when compared to other years.

Banks and Channel Maintenance Dredging and Bank Raising
Well Creek - Bank Subsidence – no further progress has been made with this matter and no indication has been received from Norfolk County Highways as to their intended course of action or a timescale to implement bank stabilisation works. It is the Commissioners' intention not to undertake dredging works along this affected length for fear this may exacerbate the current situation with regards to bank stability.

It is recommended that a Bank Stability Investigation be undertaken to evidence the cause of the slips, recommend remedial solutions and associated costs, inform future dredging works and provide a case to present to Norfolk County Highways to seek partnership funding for proactive bank and road stabilisation works before further failure occurs.

The Board is asked to support this proposal with an anticipated cost of £10k. A plan for any recommended works will be presented to the Board for separate approval on completion of the investigation.

Bank Seepage
The northern bank of New Dyke was monitored over the winter months and further investigations will be undertaken in spring when water levels are raised.

Fly-tipping
Incidents of fly tipping of general domestic, garden and garage type waste continue. Incidents are dealt with in conjunction with, and where applicable, the relevant local authority, on a site-by-site basis. Some incidents of larger items being dumped have also been evident, including touring caravans and waste growing medium from illicit cannabis cultivation. More recently there has been a steady rise in the incidence of fly-tipped domestic sofas and armchairs, which for a time were no longer accepted at local council-administered tip facilities. Councils are now accepting these items again.

<u>Mechanical & Electrical Engineering Department</u>
Along with MLC work, plant repairs and maintenance of IDB pumping plant have been completed during the period.

<u>St Germans Pumping Station</u>
As previously highlighted faults are becoming more regular as the Station ages. The following is an overview of the significant issues and the actions taken to resolve them during the period.

- There have been issues with level sensors on both inlet and discharge sides of the Station. This is mainly due to the age of the units and hence the stock of spares has been increased to allow for quick repair.

- Failure of control timers and relays has become more frequent and stock of these small parts has been increased to aid swift repair.

- The position sensor rail for the weedscreen has been problematic for some time, during the summer this was modified to increase the security of the sensor flags and minimise faults.

- The Station lighting fixtures are becoming less reliable, especially the emergency lighting backup batteries, and consideration should be given to upgrading these to LED ones during 2023 to improve reliability and reduce costs as LEDs are much more efficient.

- A quote has been received for the upgrade of the CCTV system at St Germans. CTS Security sent a quote in October for £10,475.00 + VAT plus an annual monitoring charge of £1,800.00 + VAT. CTS also manage the fire system at St Germans and provide a good service.

The Board is asked to approve the upgrade/replacement of the CCTV system which is in the region of £12k for a new up-to-date system.

The plans to inspect the pump impellers and wear rings had to be postponed again last summer as an initial survey showed around 600mm of silt build up in each of the intakes and over the stop log grooves, making it difficult to dewater the intakes. An assesment of the type of silt will be made to determine if it can be disturbed and fed through the pumps. If this is deemed too much of a risk, specialist contractors (suction dredging pumps) will have to be sought to remove the silt to enable the stop logs to be installed. It is planned to inspect at least one pump during summer 2023. Prepation for this is underway, the stop log lifting brackets have been removed from the stop log store for the first time since construction (which involved lifting off the roof sections for access) and have passed the insurance inspection. Cope has visited site to advise on the H&S aspects of the dewatering and inspection.

It should be noted that over the years the vibration recorded by the pumps' bottom bearings' sensors has increased significantly when pumps are operating with a low suction level (below 99.00). It is believed that this is a direct consequence of the silt build up in the intakes referred to above and not a sign of bearing wear. In order to ensure pumps do not shut down, the warning and shut down vibration levels have been raised but further increasing of the allowable vibration levels should only be done with extreme caution.

Energy Use

Electricity use at St Germans is being monitored to better understand the way in which the Station uses electricity so that we can ensure we are running efficiently and explore opportunities for improvements.

Electricity Base Load

Data from previous years shows approximately 25% of the energy used is baseload. That is the amount the Station uses when not pumping. We have then worked to break this down further and found that approximately 35% of this is due to HV transformer losses. This is in line with the manufacturer's specification and there is no quick fix to reduce this. The remaining 65% is used by the Station LV transformers, control systems, backups and ventilation. These are all needed to ensure the Station always remains active and is ready to react when necessary. It also promotes reliability of the Station as switching the control systems on and off is likely to cause issues with electronic components. When investigating this usage, it highlights the fact the Station was designed to be dependable and able to react quickly when needed. This comes at a cost.

To offset this high baseload use we have started to look at the possibility of onsite renewable energy. An initial assessment has shown that there are suitable ways to integrate a renewable supply into the complex power distribution system at St Germans and the site has adequate space for a solar installation. This will be progressed into a more detailed assessment with a solar specialist to determine the size, cost and effectiveness of a solar installation.

Electricity Pumping Load

The Pumping Station control system is designed to operate the pumps at the most efficient point in their curve to give the flow rate needed to maintain water levels while ensuring we are pumping at the most cost-effective times which are low tide (<2m head for 30 mins) and low energy tariff (night 00:00 to 07:00). The SCADA trends show that the system works well in auto and prioritises low tide and low tariff as it should.

There may be opportunity to improve this, but it will require more investigation as it is a hard balance between rainfall, wind, tide, tariff and maintaining system navigation levels. I believe there are savings to be made by manually operating the Station in certain conditions.

Electricity vs Diesel pumping costs

As part of this work on energy use, we have been looking at the cost of pumping. It is difficult to quantify the overall cost per megalitre as this varies considerably depending on drain and tide levels, energy tariffs and how fast the water needs to be pumped. These factors vary the amount of power (kilowatts) the pumps need per megalitre pumped. An annual average can be determined but it is necessary to understand that the energy used varies dramatically with pump head and flow. For example, to pump 10 cumecs at 4 metres of head takes around 530kW whereas at 2 metres of head it only takes approximately 280kW. What can be determined is how the price of electricity from the grid compares with the price for electricity produced onsite with the backup generators. Initial testing has been done utilising the readings available from the SCADA system and the existing internal meters on the site, these are not calibrated but give a good indication.

The initial results from November last year showed that at the time the grid supplied electricity was a similar cost to that of the generator supplied electricity, when the generator was running at its most efficient which is at higher head levels and pumping capacities. The generators perform best when loaded up. This is not how the Station runs in auto, it favours low heads where the diesels are less efficient. These comparisons do not consider the extra costs involved with running the generators such as increased servicing, man hours and potential loss of reliability due to wear.

Recent results show that the electricity generated onsite (with generators running at high heads) is now cheaper than the grid. This is due to energy prices rising and diesel prices falling. The cost when running at low heads (which is how the system is designed to run in auto) is now similar to that of the grid, so when extra servicing and man hour costs are factored in the grid may still be cheaper. There is less data available of energy used on generator supply during low heads as this is not a preferred method of running as we know it is less efficient and not good for the generators.

Summary
Base load offset by renewable installation will continue to be investigated with a plan to have initial costing and returns this autumn.

Pumping automatic control system works well and although some small improvements may be possible these will have to be looked at closely to ensure they do not compromise the dependability of the Station.

We are now at a point where there is the potential that the Station automatic operation costs could be exceeding the costs of manually operating the Station. When having to pump at high heads the electricity produced onsite is cheaper than the grid. Further testing needs to be done to give more accurate low head diesel pumping costs. To do this a more accurate engine flow meter needs to be fitted, cost approximately £2k. In testing carried out on the 6th April 2023 the potential saving over the 500ML pumped could have been in excess of £1500 if the water needed to be pumped at high head levels, or around £300 if pumped at low head levels.

A decision needs to be made whether using generators and manning the Station is even an option to consider. During the summer months I do not believe it is currently viable but will be during the winter months.

I propose that during wet periods the Station be operated manually whenever possible. The savings made by doing this could be set aside to fund a renewable installation to power most of the base load of the Station which would offset the environmental impact of running on generators during the trials.

The Board is asked to approve:

1. **The installation of accurate flow measurement on 1 of the generators to allow more accurate readings to be taken.**
2. **Further trials to be carried out to investigate more efficient and cost-effective ways of pumping. To include running generators through a range of head levels and capacities to identify most efficient pumping range and increasing electricity low tariff and low tide offsets to push more capacity during low tides.**
3. **Trial a manned operation of the Station. The overall goal of the trial would be to reduce energy used per megalitre of pumping both on electricity and diesel with a long-term view to reducing costs and carbon footprint. We believe this can be achieved by allowing us to react to changes in weather that the automatic control system cannot foresee, and then adapt pumping to suit tides, tariffs and energy sources.**

Main Drain/Station Intake and Surrounds

In terms of bed level, no dredging or re-profiling have been undertaken since the Station was constructed. Survey work is to be undertaken to determine what if any are required.

The St Germans Pumping Station grass mowing contract was undertaken last season by local contractors Kew Grass Care. Their service level, efficiency and attendance on site have been good. It is anticipated the contract will continue with Kew Grass Care again this season.

It is unfortunate to report that many of the newly planted hedging whips, that were supplied by the EA and planted by the Commissioners' workforce at St Germans Pumping Station surrounds and the Commissioners' office/depot site at Whittlesey Road last year, did not survive the very dry conditions last summer. Gapping up of the hedge line, where it has not proliferated will be required at some point in the future.

Bevills Leam Pumping Station

The winter has seen less pumping than normal. The Station has operated well through the winter period. The anti-condensation heater on electric pump 1 has failed and the insulation resistance of the windings started to drop. The pump has been set to duty and with regular running this value has increased. This will continue to be monitored and the motor overhauled if it deteriorates.

Plans are being made to modify the weed screen cleaner programme to clean only the bays which are being used, as opposed to the current regime where the whole screen is cleaned regardless of how many pumps are running.

Rands visited site to advise on securing the diesel tanks within a secure structure to prevent fuel theft. This would require adding an alarm system to the outdated existing CCTV system. It is therefore proposed that the CCTV system be upgraded in line with that proposed at St Germans. It is recommended that these items of work are included in the scope of Bevills Leam Pumping Station Refurbishment FDGiA study with a view that security improvements can be delivered early, ahead of the main refurbishment.

Control Sluice

The telemetry and remote control were replaced at this site this year, utilising the new Xylem system. All works have been completed and tested and the site is now fully operational using remote control and monitoring.

The west gate failed in December during the routine exercising of the gates. The parts needed are now obsolete so had to be reverse engineered by a local machine shop. The gate is now back running and additional spares in stock.

The Chief Engineer visited site on the 6th April and observed both gates in operation and undertook Active Monitoring of operational access arrangements. It was observed that access to the flood storage reservoir outlet penstock is unsafe, with broken steps and vegetation impeding safe access and operation. Contact will be made with the Woodwalton Fen Reserve Manager to arrange for MLC to rectify this before the winter period.

Mullicourt Bridge

Despite requests to clarify who is responsible for which element nothing has been heard since Norfolk County Council undertook a highway inspection and issued a condition report.

Tin Dump Culvert

As previously reported, to address the long-standing issues at this site, it had been agreed that an automated weed screen cleaner should be installed. However, due to ongoing issues with material availability and a reduced number of manufacturers of weed screen cleaners, the estimate for the raker had risen significantly.

This work needs to be programmed and budgeted, however it represents a candidate for the potential water resource funding pot referred to earlier in this report.

Progress on the land purchase to enable the improvement works has been delayed due to staff changes at Cambridgeshire County Council. Following a letter to the Council's CEO complaining that we were receiving no response to our attempts to communicate with the relevant department, things have again started to move forward and it is hoped that, at the very least, we will have purchased and fenced the site by the end of this financial year. The land currently has a tenant and we want to ensure the purchase is without tenancy obligation.

Salter's Lode Lock

Buffers have been fitted within the Lock to protect the seals on the tidal side of the gate from being damaged by boats moving through the Lock and tearing the seals.

Stanground Lock
The downstream lock gates will require refurbishment in the coming years. Works will be programmed into a strategic programme of lock gate refurbishment/replacement at this and other MLC maintained locks.

Horsey Toll Sluice
In view of the proximity of the gas main to the existing gate a decision has been taken to re-site the structure further downstream. This work needs to be programmed and budgeted, however it represents a candidate for the potential water resource funding pot referred to earlier in this report.

Marmont Priory Lock
Quotes were received for replacing the downstream timber gates. This work is planned for Autumn 2023.

Ashline Lock
The upstream doors are no longer sealing as they should and are leaking badly. An appraisal of all the Commissioners' navigational lock assets will be undertaken to produce a strategic lock door replacement programme, allowing for budgetary estimates to be obtained, which will assist with financial and navigational planning over future years.

Cardea Site SuDS Adoption
Payment of the commuted sum and an additional sum of £50K for bringing the assets up to design condition remains in our account but to date the finalised legal agreement has not been issued and signed off. Most recently Persimmon Homes has approached the MLC asking if there could be some flexibility over one land parcel south of the development access roundabout, which might be key to providing the future access route to serve potential development land to the west of it. It was agreed that rather than attempting to incorporate complex provisions Persimmon Homes would simply retain this small parcel of land for the time being with the MLC maintaining the reed beds within it. This arrangement is to remain in place for up to ten years. After this time the land is to be transferred free of charge to the MLC or Persimmon Homes will take over the responsibility for maintenance of the reed beds within it in perpetuity.

<u>Weed and Grass Control on Banks & Channels</u>
Rigid Hornwort – the pernicious weed continued to infest much of the Middle Level system. Clearance of the semi buoyant weed mass kept the Commissioners' work boat fleet busy during last summer, keeping the statutory navigational passage as clear as possible. All 5 work boats were deployed in August and early September to clear the weed from the main Link Route channels. It was noted last season that for the first time the weed has become established in Kings Dyke, and resulted in issues at Ashline Lock blocking the upstream inlet penstocks. The prolific nature of the weed growth last season was attributed to the warm summer, when the longer sunny days combined with warm water temperatures provided perfect growing conditions.

Azolla – infestations of this weed were limited in nature within the Middle Level system last season, although some Azolla growth colonised IDB channels.

Reed/Lily/Drain Bed Spraying – aquatic weed and reed herbicide treatment programmes continued again last season throughout the Middle Level system on a priority basis. It is noticeable that previous seasons' treatments have reduced previously excessive reed growth back to the margins on most of the Commissioners' main channels.

Weed-cutting (boats) - another season of exceptional aquatic weed growth kept the Commissioners' work boat fleet operating at full capacity last year. An additional semi–retired part time operative was employed on a contracted hourly basis to assist with the workload during the summer months. The boats generally operated without issue with only minor mechanical breakdowns being experienced. The drag knife cutting blades that are fitted to the two newest Conver boats continue to work effectively, and certainly give the Commissioners the edge when dealing with the dense infestations of Rigid Hornwort that were prolific last season.

Flail Mowing – the Commissioners took delivery of a New Holland tractor fitted with a Herder Cavalier mid mounted flail mower and front mounted Votex top mower in early spring 2022 in readiness of the first round Conservation cut. The unit replaced the 2011 Massey Ferguson/Herder Grenadier mowing unit. The second-round cut was delayed until late May as grass regrowth on most bank tops was minimal. The Main cut commenced from mid-July, and completed in December.

All three machines on the Commissioners' mowing fleet are now fitted with top mowers, which allows them to work independently if required, without the requirement of an attendant tractor mounted top mower. This should provide longer term savings with regards to both labour, fuel and should help to reduce the Commissioners' carbon footprint.

Trees, Bushes and Hedge planting - other than minimal reactive limb cutting and pruning works there is little worthy of mention. Reactive 'limb lopping' and canopy trimming works have been undertaken over the winter period where required, to retain bankside access for future maintenance works and where tree canopies required pruning to retain safe navigational passage.

<u>Maintenance Works and Machine Cleansing - Banks and Channels</u>

<u>Autumn/Winter 2022/23</u>
Yards End Dyke
The opportunity was taken to remove weed growth from the channel utilising the Commissioners' Energreen SPV2 machine with the weed basket attached. The works were undertaken following completion of the Main cut to the Commissioners' system, prior to the Christmas/New Year break.

<u>Bank Slips and Seepage</u>
Catchwater Drain, A1 Culvert to Cooks Lane
Works commenced on the third phase of programmed bank revetment scheme last autumn. The works include reprofiling the banks to their original design profile and the inclusion of a berm, which will help reduce

future bank surcharge and bankside movement, that previously led to a considerable narrowing of the design channel profile.

Photo showing slip at Catchwater Drain

It is disappointing to report that following completion of the works, heavy rainfall was experienced, which as can be seen from the picture has resulted in multiple bankside slips occurring which will require the installation of timber toe piling to secure and stabilise the entire length of bank. It is anticipated these works will be undertaken as soon as ground conditions improve during the drier spring months. The District Valuer has been engaged to deal with land owner losses occasioned by the berm formation works and following the Commissioners' request has provided a valuation report for both permanent cultivatable land loss and temporary loss of cropping for the 2023 season. The subsequent spoil pile will be transported from site and utilised as bank raising material nearby, as soon as weather and ground conditions allow.

Works will be mirrored on the north side bank in future seasons to mitigation impacts on water vole habitat.

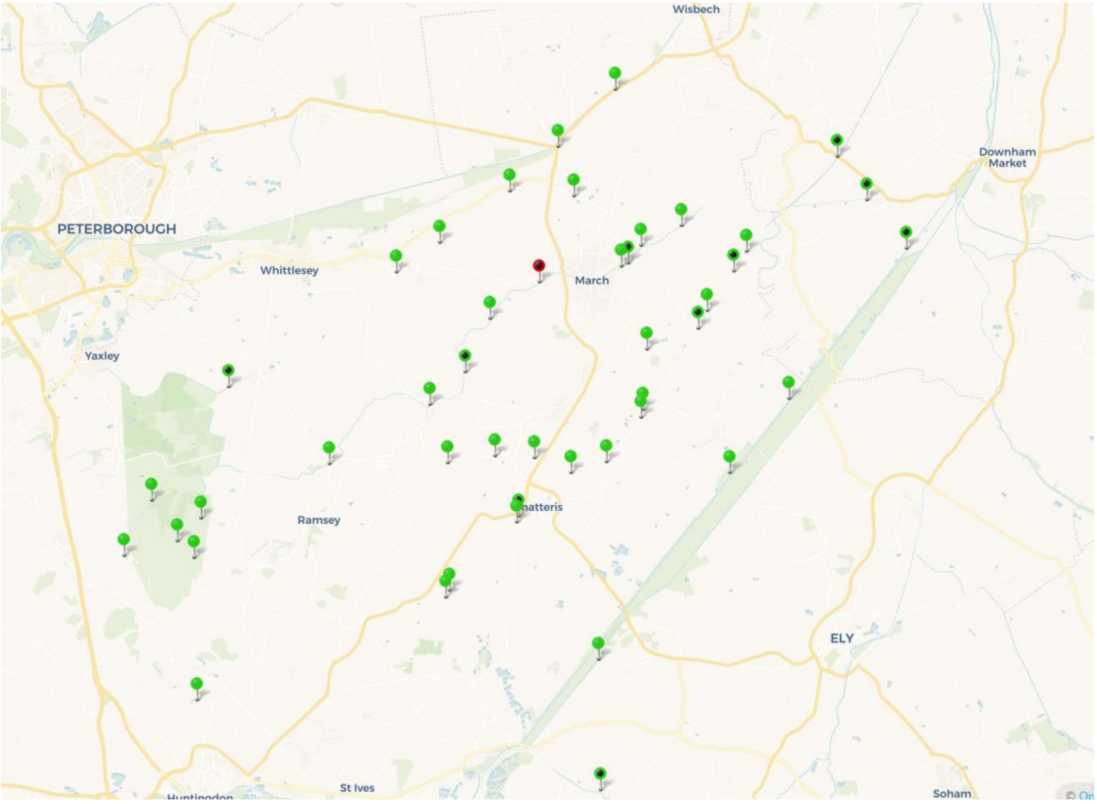
Yards End Dyke

Photo showing slip at Yards End Dyke

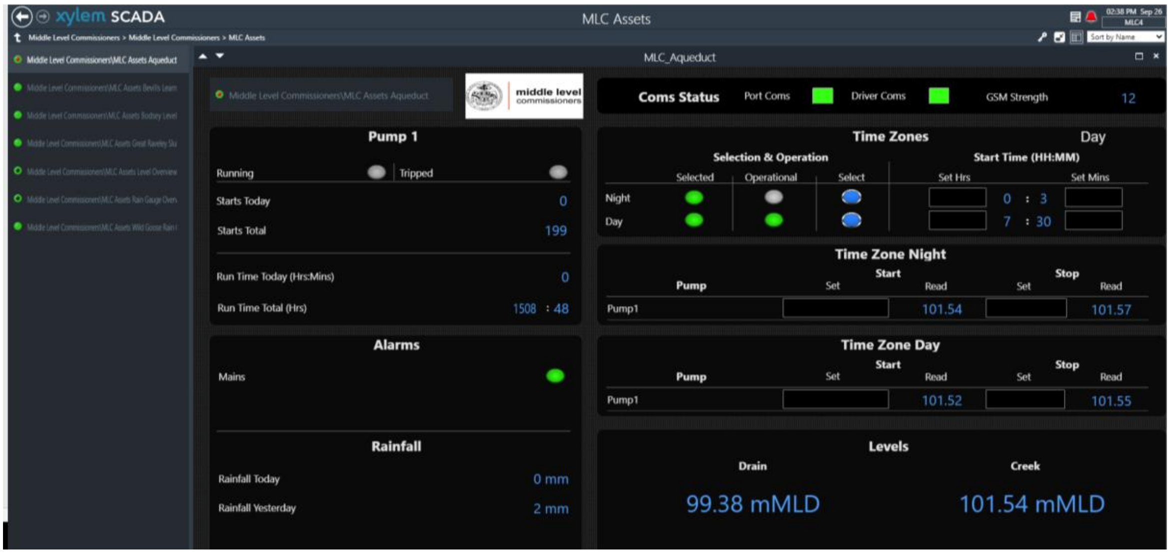
Reports of bank subsidence caused by a burst water main on the upstream side of Askews Lane Bridge, Yaxley were received prior to the Christmas/New Year break. For their part Anglian Water repaired the burst water main, but left the length of subsided bank unattended to. Subsequently Anglian Water have admitted liability for their burst water main causing the bank slip and have referred the matter on to their insurers. At the time of reporting the Commissioners are actively pursuing the matter as far as has been possible and await a response from Anglian Water's insurance company.

<u>Telemetry</u>

The new telemetry roll out continues with over 50 sites now showing up on the system. Overall, this has been well received by MLC staff. The next step will be to set up alarm criteria to ensure that key information is provided when it is needed.



MLC and associated IDB/DDC sites



Example site – the Aqueduct

<u>Property</u>

<u>Electrical Testing</u>

Portable Appliance Testing at the Depot, Office, St Germans, Bevills Leam and Control Sluice sites was completed during October 2022.

<u>Three Holes</u>

We have sought advice about applying for outline planning permission on MLC owned land either side of the A1101. However, the current advice is to hold back for a year or so. This is due to the fact that the sites are neither shown in the emerging Local Plan nor the Neighbourhood Plan so the chances of rejection are high.

<u>Rental properties</u>

Maxey Grounds undertook their periodic inspections of MLC rented properties which had not been done for the last 2 years because of COVID-19. The most urgent recommendations were to install updated smoke alarms and CO alarms as soon as possible at all properties except Stanground Lock Cottage. This has been completed and the other recommendations are now being progressed.

March Depot
The replacement gate for the depot has not been progressed following receipt of a quote for approximately £25k. It is recommended that alternative, cheaper solutions to provide a daytime barrier be investigated. The Chief Engineer also recommends that consideration be given to installing a lockable pedestrian gate.

Plant & Vehicles

General
The Spearhead Energreen SPV2 operated successfully last season.

The 2017 Massey Ferguson 7720 Herder unit will continue to be monitored for hydraulic oil overheating issues during the coming summer. The unit operates satisfactorily when weather conditions are cooler.

The 2022 New Holland/Herder unit lost power to the front PTO as the machine was nearing the end of the mowing season last year. This required the unit to be stood down from service and returned to the New Holland dealership for repair under warranty. The opportunity was also taken to replace the DOC sender unit which had previously been problematic. As the New Holland power unit has been heavily modified to allow fitment of the heavy-duty sub-frame and mid mounted Herder mower, the work required to access the sender unit required the entire cab, fender and rear wheels to be removed, making the repair chargeable.

An order was placed for a replacement JCB telehandler, the original JCB 540 140 machine being 17 years old. The new unit, a JCB 540 180, was sourced from the local dealership, Whatling JCB (Peterborough) and delivered in December last year. The 2006 machine was recently sold via an Ebay auction.

Vehicles
The Commissioners' 2013 Ford Ranger Pick-up truck, having been fitted with a replacement engine recently, was issued for use to the newly appointed Environment Officer, but remained unreliable following a series of engine management faults. Subsequently, a 2021 model Ford Ranger was sourced for the Environment Officer's use and the 2013 truck 'sold as seen' via Ebay.

Unfortunately, the two new Peugeot Partner vans ordered last year, have not yet been delivered. Current indications are that they may arrive during April.

Two 4x4 pickup trucks are specified in the current year's plant replacement programme.

The M&E Engineer has put forward a case to request the MLC provide him with a 4x4 truck instead of the essential car user allowance he receives. As the first point of contact for all pumping station breakdowns across the Middle Level and IDB catchments, it is essential that he can access sites easily, both within normal working hours and out of hours, in an emergency. His own vehicle is not suitable to carry out this role and a 4x4 would be beneficial for the following reasons:

- it has the ground clearance needed to access the majority of remote pumping stations, often in inclement weather,
- it has the space to carry the range of tools, equipment and spares that are needed to fix problems efficiently on a first visit rather than having to return,
- it can be used to tow the nifty lift and trailers.

It is requested that the Board approves the purchase of a 4x4 vehicle for the M&E Engineer as included in the Plant Replacement Strategy.

Weed Boats
A recent engine failure has been experienced with the 05 Hemos boat. Other than the failed engine, the 'main components' of the boat are still in good condition and are serviceable. It is therefore proposed to source a new 'short engine' from a Mitsubishi dealership to enable the boat to be repaired and kept in service, at least for the 2023 season. As the current plant replacement strategy indicates this boat was due for replacement this year, it is proposed to delay its replacement for a twelve-month period, to appraise the boat's performance over the busy summer period, operating with the replacement engine. The plant replacement strategy has been amended accordingly.

Asset Records

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

The closure of some of these structures could be included within the design scope of the Bank Raising Scheme. The Chief Engineer will investigate this.

Headline IDB Consultancy Services

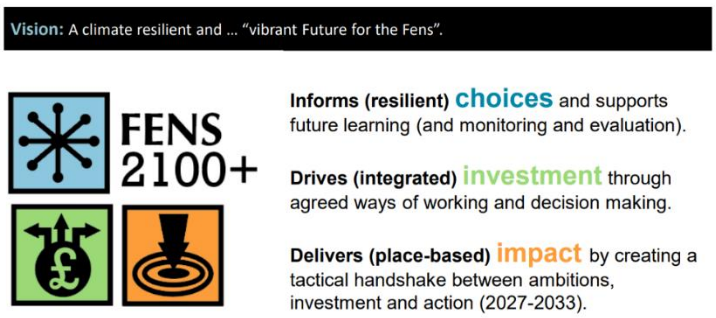
River Delph and Hundred Foot Washes Study
An application for approval to undertake s study will be submitted in May. The project has £120k FCRM GiA allocated. The purpose is to investigate options to reduce summer flood events on the Ouse Washes and improve/ensure the maintenance of and biodiversity within the River Delph.

Needham and Laddus Outfall
Issues with an Anglian Water pipe resulted in additional work and delay and increasing the total cost close to that originally approved including contingency. Works were completed in October 2022. The EA approved the use of the full contingency amount and the final grant claim has been submitted for the approved 92% of the total scheme cost.

Cock Fen Pumping Station Electrification
The target date for electrification was 2022. However, issues relating to proving land ownership have been delaying progress. A review of the scheme has been undertaken by the Chief Engineer and was reported to the Chair and Vice Chair of the Board on the 12th April. Actions were agreed to progress the outstanding legal agreements needed to progress the electrification works but the Chair and Vice Chair also requested that alternative solutions be costed for presentation to the Board in May.

Environment Agency (EA) led Studies/Works/Plans

Fens 2100+



The EA recently secured financial approval for a Fens 2100+ Full Business Case. This is a circa £10 million programme of activity to drive the long-term decision making for all Risk Management Authorities across the whole of the Fens, delivering on the unique commitment to the Fens within the National FCERM Strategy.

The ambition of Fens 2100+ is to secure and enhance regional and local FCERM investment delivery in terms of efficiency and effectiveness, through:

- Whole systems thinking and making choices visible
- Overcoming fragmented governance
- Managing deep uncertainty
- Focusing on outcome-led and place-based approaches at a landscape scale
- Adopting measures that enhance resilience and integration (now and in the future) o
- Addressing funding and finance
- Enhancing adaptive capacities of all delivery partners

Key deliverables will focus on:

1. Adaptation Investment Decision Making Framework at a landscape scale
2. Fen2100+ Adaptation (pathways) investment blueprint(s), heatmaps (prioritisation) and guidance 3. Baseline report(s) at a catchment scale
3. Phase 1 Investment Plans (2027-2033) including route-map and business case

Fens 2100+ will build on the pioneering collaborative work on the Great Ouse Fens that the MLC were integral within. To remind the Board, the Great Ouse baselining work is summarised and presented on ADA's website https://www.ada.org.uk/knowledge/future-fens/.

There are important components of the Great Ouse work still running:

- Tidal River modelling (including exploring the influence of St Germans)
- Visualisation
- Gauging and survey

A Fens 2100+ team is now being recruited, including engagement expertise, and a detailed programme of activity is now being scoped. We await clarity on how we will be part of this exciting and much needed programme of work representing the Commissioners and the administered IDBs.

<u>Middle Level Barrier Bank Works</u>
This is covered in the latest newsletter issued to all members. The project is now substantially complete, with 18 months of maintenance remaining prior to final certification by the All Reservoirs Panel Engineer.

<u>Cranbrook Drain/Counter Drain (Welches Dam Pumping Station) Strategy Study</u>
A project board and steering group have been set up. The MLC have representation on both.

The EA has been progressing with hydraulic and topographical modelling tasks to understand how much flood storage capacity is needed and how much could potentially be stored at Block Fen, based on existing restoration proposals. The next step is to appraise options for flood storage infrastructure and post-restoration uses, including benefits for water resources and biodiversity. The EA is working with the leading mineral operators to develop proposals through 2023. Engagement with MLC, other key stakeholders and landowners in the catchment is ongoing.

The announcement of Anglian Water's preferred location for the Fens Reservoir, immediately north west of the Block Fen allocated site, presents a number of opportunities and risks for flood storage at Block Fen and implications for long term flood risk management in the whole Cranbrook/Counter Drain catchment and at Welches Dam Pumping Station. The EA and stakeholders will be working with Anglian Water (AWS) to investigate these.

The development of the overall catchment strategy is reliant on both the Fens 2100+ Strategy (EA led) and the Fens Reservoir (AWS led). These are being developed over a number of years and for this reason a focus is being made on the time limited opportunity of flood storage at Block Fen. This will allow the Fens 2100+ and the Fens Reservoir to progress over the next 2-3 years, such that it is possible to start planning for the whole catchment again over the long term (100 years). This is in line with the Tactical Plans approach which the IDB are signed up to.

The focus of the next 6-12 months is on the storage opportunities in the allocated area (Block Fen/Langwood Fen) and continued engagement with stakeholders to understand future water resource needs which could be delivered through the Strategy.

Planning and Consenting

Lump Sum
We are currently consulting the IDBs on a move to a lump sum arrangement for the planning and consenting services provided by the Commissioners' Technical Services team. The key intent is to be more efficient and effective with our capacity, by releasing the time from reporting and time-recording to reinvest in the technical input and determinations.

The majority of the IDBs who have met have resolved to support the lump sum arrangements in principle, with a view to understanding and agreeing the detail.

Within their resolutions is also an agreement for no detailed reporting of planning and consenting to Boards and that the Chair (and other Member) be delegated the authority to deal with planning and consenting matters on behalf of the Board through in-year engagement with the MLC team. Reporting has been on average 22.5% of billed activity over the last 5-years.

The next steps are to develop the detail with a view to presenting a final proposal at the MLC Board meeting in November 2023, the aim being to implement the lump sum fee arrangement within 2024/25 or at the start of 2025/26.

Signatory
Not related to the lump sum proposal, **the Board is asked to note that under the Board's scheme of delegation, the Chief Executive has delegated the authority to sign consents on behalf of the Board to the Chief Engineer.** As well as the Chief Engineer being better placed to technically assure individual consents, this will enable them to effectively take ownership over the whole planning and consenting service. This also creates a mechanism for escalation in case of any issues or complaints.

Applications
Response times for enquiries and issuing of consents continues to be a problem.

The following applications for consent to undertake works in and around watercourses (Byelaw Consent) have been approved and granted during the reporting period:

Name of Applicant	Description of Works	Date consent granted
Mr G Diffey	Construction of a landing stage, including erosion protection under the landing stage and steps – Well Creek	06/04/2022
Mr B T & Mrs P C England	Construction of a garage on land between The Old Well and The Moorings, High Street, Nordelph – Well Creek	20/04/2022

Name of Applicant	Description of Works	Date Consent Granted
Lara Allen	Construction of 4.5m long landing stage including erosion protection and black steel mooring post to be retained at 88 Nene Parade, March – Old River Nene	10/05/2022
Mr & Mrs Core	Erect a single dwelling on land within 30m access strip at 10 Hollow Road, Ramsey Forty Foot – Forty Foot River	13/07/2022
Harrison Group Environmental Ltd	Inspection for top of riverbank along the northern bank Old River Nene	23/09/2022
Spirotech Group Ltd	Installation of replacement surface water and treated effluent structure at Great North Road, Sawtry	23/09/2022
W G Beaumont and Son Ltd	Maintenance works to a Cadent Gas pipe at School Farm Bridge. Requires navigation closure. Old River Nene	19/10/2022
Jones Bros Civil Engineering Ltd	Lining/Refurbishment works of Delph Siphon. Kings Dyke	31/10/2022
Upwell Parish Council	Making alterations and enhancements to bank at Town Street, Upwell – Well Creek	01/11/2022
Spreyer Holiday Parks	Consent for the relocation of 1 lodge and the addition of 4 lodges and touring pitches/pods – Old River Nene	26/01/2023
Spreyer Holiday Parks	Consent to install second twin lodge next to existing twin lodge – Old River Nene	27/01/2023

During the reporting period 631 planning applications and 2129 planning enquiries have been dealt with.

Recreation

Angling

National Fishing Matches

The 2022 National Pike Championship was held on Bevills Leam and the Twenty Foot drain on the 12th November, hosted by Whittlesey Angling Association. The match attracted 120 qualifying anglers who landed 40 fish between them. The winning weight was 15lb 13oz, consisting of two fish. The largest specimen landed on the day was 10lb 6oz

Club Reports

No club or match reports have been received during the reporting period.

Middle Level Waterways Users Committee

The Committee met on the 21st April 2022 and on 20th October 2022.

Internal Drainage Board Works

Weed Control & Channel Maintenance
Inspections/advice/assistance
Middle Level operatives undertook herbicide applications, on a rechargeable contract basis, to twelve IDBs/DDCs last season.

Maintenance Dredging and Associated Channel Works
Work has been organised and co-ordinated in eleven IDB/DDC areas since the April 2022 meeting.

Public Sector Co-operation Agreement (PSCA) Works
The MLC, representing Swavesey IDB, were engaged to undertake maintenance works on EA controlled watercourses in the Swavesey area for the 2022 season. The works progressed well last season, and included flail mowing using the Commissioners' plant and labour, a herbicide application to treat in-channel aquatic vegetation, again utilising the Commissioners' plant and labour. Weed raking work utilising a contractor's excavator plus pest control along raised embankments using a local pest control contractor. The contractor was called back to site earlier this year to undertake licenced Badger sett collapsing works under direction from the EA. All works within the contract have been undertaken on a fully chargeable basis to the EA.

Pumping Station Maintenance

Service Visits
The Commissioners' engineers made 286 visits to IDB pumping installations to carry out routine inspections. Further visits were made to rectify faults and carry out routine insurance and EICR inspections. We carried out necessary maintenance works on 10 pumping stations.

Electrical Installation Condition Reporting
Re-testing of fixed equipment and remedial works at IDB pumping stations continue as and when required with the next batch due in June 2023.

Engineering Fees

Fees for 2023/24 will be updated once the Board has approved the MLC staff salary increases.

EA Sanctioned Project List

It should be noted that the terminology 'sanctioned list' is outdated and has not been used within the EA for many years. Every March/April the EA issue a grant allocation letter for that year. This includes the projects that have secured a formal allocation of either FCRM GiA and/or Local Levy.

Not being on this list means that projects are reliant on funding becoming available in-year (due mainly to underspends or changes in project forecasts), close liaison with the EA enables us to maximise these opportunities.

For 2023/24, the only MLC sponsored project within our formal allocation is the Bank Raising scheme. Five schemes we are leading for our IDBs also have an allocation.

Carbon reduction

An initial Carbon Audit has been undertaken however there has not been the capacity to move beyond this stage and develop a comprehensive strategy to reduce carbon. We continue to take an opportunist approach to carbon reduction.

Training

The following training was carried out during the reporting period:

- Confined Space Training – 4 members of staff & 4 members of the workforce
- Water Awareness & Safety – 9 members of staff & 12 members of the workforce
- Knowledge & Understanding & CL27 Badger Licence – 3 members of staff & 8 members of workforce

Additional training needs are being identified and will be delivered over the next 6-12 months.

J Brown
Jonathan Brown
Chairman

19 September 2023