



NABO News

The Magazine of the National Association of Boat Owners
Issue 2 April 2020



TODDBROOK REPORTS

RED DIESEL

COVID-19



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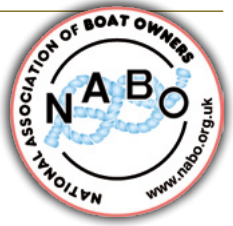
Administration

Vacant

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Articles, letters, cartoons and photos are most welcome. Images in JPEG format please. Please email or post your contributions by May 2nd 2020. Our email address is nabonews@nabo.org.uk

Cover photo

This month's cover photo was taken by the Editor.

Win a year's free membership by having your photo selected for the front cover of NABO News. Please email photos as JPEG attachments, ideally portrait format with a file size of 2MB or larger.



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CRT Emergency No: 0800 4799947
EA Emergency No: 0800 807060
Contact CRT waterway managers at canalrivertrust.org.uk/about-us/our-regions



Stay safe

Editor **Peter Fellows** has a wide range of news in these uncertain times.

both included in this issue. If one or more members in the general Thames catchment area would be willing to share the workload, it would greatly help Mike.

Treasurer, Helen Hutt was elected

Unsurprisingly, Covid-19 is foremost in most people's minds and this is reflected in this issue.

Mike Rodd has been attending EA and Thames User Group meetings on behalf of NABO. This is in addition to his many other jobs as Chair (such as responding to the Bridgewater tidal barrier consultation) and reporting as the Regional Rep for Wales and the South-West,

to CRT's Council and another boating rep, Dave Mendes de Costa has sent NABO News a report on their first meeting with CRT's National Boating Manager. Elsewhere, David Fletcher considers what might happen to red diesel, following an announcement in last month's budget. He also reviews the recently published reports on the Toddbrook Reservoir near-disaster. Ken Hylins reflects on his first couple of years on NABO Council, with a plea for more involvement in council work by members. Mark Tizard gives CRT a pat on the back for dealing with all the damage and fallen trees, caused by this winter's storms and floods. And finally, Tony Brooks casts a balanced eye over the suitability of lithium batteries in Techie's Corner.

With the uncertainty around the effects of Coronavirus, boating could reasonably be said to be one of the safer places to be, so enjoy the better weather and keep well.

Covid-19

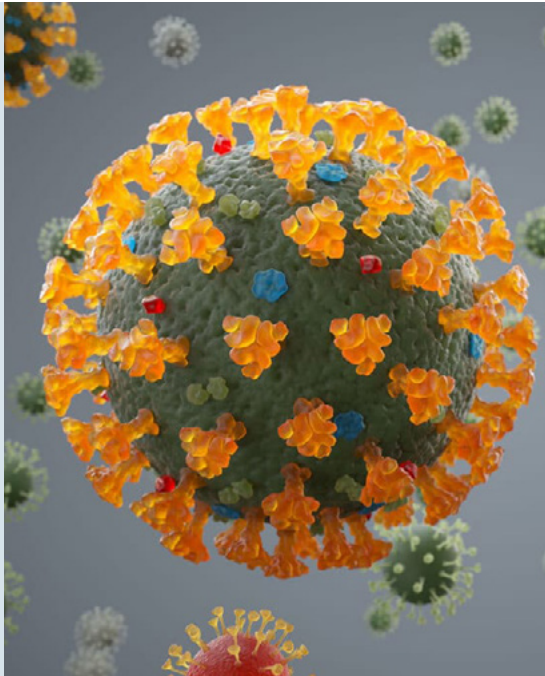
Your Council hopes all members, whether afloat or ashore, stay healthy and urges you to follow the available advice. Please keep an eye out for your fellow boaters and offer to help them, should they be in need. If you are concerned for yourself or someone else while afloat, contact CRT licensing support should you need to over-stay.

Other support can be found from the CRT Welfare Officer via Customer Services on 0303 040 4040 or the Waterways Chaplaincy at www.waterwayschaplaincy.org.uk

canalrivertrust.org.uk/enjoy-the-waterways/safety-on-our-waterways/coronavirus

canalrivertrust.org.uk/enjoy-the-waterways/safety-on-our-waterways/coronavirus/coronavirus-and-boating-faqs

and, of course, we'll keep you up-to-date in the NABO Facebook Group www.facebook.com/groups/26001922752/



Although being on a boat is a good place to self-isolate, if you are not a liveaboard, going to your boat is no longer an option. If you are already on board, CRT and the EA are asking boaters to stop all travel on the waterways, with the exception of accessing facilities. The suspension will be kept under review, applying initially until 14th April. During this period they are suspending the requirement to move every 14 days.

It has been a busy time for meetings with the senior EA management and it is very important to acknowledge that, as they look to make their navigational responsibilities less dependent on the public purse and explore becoming more commercially viable, they are making every possible effort to consult all the boating and water-related organisations that are involved. While the outcomes are not yet clear, my own view is that the new senior folk, who have experience of making other organisations move towards becoming less government-dependent, are being very realistic in analysing potential funding sources. And they accept the responsibilities they have, to maintain their historically-precious infrastructures. I also have a strong feeling that they are determined to make themselves ready to become part of CRT!

It is also important to mention that the EA issued a call for tenders from relevant organisations to oversee the management of all the EA's Thames moorings under contract. While not being specific about how this should be implemented, and indeed, about how the actual enforcement should happen, it is a clear signal as to how the EA plans to handle mooring enforcement in the future. This is based on the pilot exercises it has run over the past few years—parts of which were success-

ful and welcomed by most boaters. By the time this edition of NABO News is published, the outcome of this exercise should be close to implementation.

I have to say this changing and widely consulting approach by the EA's senior management is not reflected in the way CRT's Board of Trustees seem to be heading. To organisations like ours, the CRT Board seems to want to be remote from the boating communities. Or at least, maybe they only want to talk to their friends at the IWA and now the AWCC (Association of Waterways Cruising Clubs)? The latter is a recent development, in which CRT suddenly and generously decided to

The need for representation

NABO Chair **Mike Rodd** compares the attitudes of two navigation authorities.

give the AWCC an automatic seat on its Council. This—to us and to other boater-based organisations—seems to have happened behind smoky mirrors, as none of the other (possibly larger) boater-representative organisations were even consulted. I have to repeat, though, what I said last month: that CRT's senior staff are being exceptionally welcoming to our approaches.

One would have thought, though, that with the whole funding of CRT coming up for consideration, CRT Trustees would like to have all the support available on-side. It is also a concern to us that the IWA seems to be 'protecting' the All Party Parliamentary Waterways Group from organisations like ours. Unlike the practice in the past, as the secretaries to this important group of MPs, the IWA does not appear to

see any value in asking other representative organisations to attend (as observers) the APPWG's meetings of interested MPs.

Returning to the CRT Council, we are naturally delighted that our liveaboard NABO Treasurer, Helen Hutt, was elected as one of the four boating reps. However, the number of boaters who bothered to vote must be sending seriously worrying messages to the CRT Board of Trustees about how irrelevant most canal users feel that the CRT Council is to their interests. This is a double-edged sword, of course, but we in NABO feel strongly that the more we can do to influence CRT the better. Sadly, however, this view evidently is not the opinion of many boaters. It was also worrying that in the end only one 'CRT Friend' stood for election to the 'Friends' seat on CRT's Council—and fortunately this was NABO's ex-Chair Stella Ridgway.

As we mentioned in last month's NABO News, your Council is very concerned about the impact on boaters of the current barrage of emotionally charged environmental initiatives. Thus, while a recent paper by the IWA is interesting and suggests ways ahead, it rather falls into the same trap as many others by implying how terribly polluting our boats are. There is much in this work that provides the eco-warrior with 'ammunition', whilst ignoring the fact that the overall pollution created by boats, compared with other forms of transport and accommodation, is minimal. Indeed, in London, the overall pollution caused by all the boats together is probably less than that derived from a handful of diesel-powered buses! Certainly, applying smokeless zone control requirements to all boats would reduce pollution, as would including emission tests during the four-yearly

BSS inspection. However, there are considerable ecological costs involved in extracting the required raw materials (many of them rare), needed to manufacture the electronics and batteries, and then the environmental cost of transporting them and installing them etc. What is also ignored is that boats' engines have a long life and replacing them would simply increase their lifetime pollution costs. Some very bad science has been at work here! Boaters are among the most environmentally aware communities, so it's senseless to attack them with lots of utter nonsense by encouraging regulations that are meaningless in the long term.

We have been following the work by the Association of Inland Navigation Authorities (AINA) and British Marine on proposed changes to the existing Code for the Design, Construction and Operation of Hire Boats (The Hire Boat Code). While most of the proposals seem sensible and will have no major impact on us as private boaters, a couple of points are worth mentioning: first, I see, all too often, day boats that are clearly unstable, especially with all 12 passengers sitting (or often jumping around!) on the roof! Secondly, I think we are all often concerned by the behaviour of a small number of hire boaters. On both of the canals I frequently cruise, most hire boat companies do an excellent job of ensuring that their hirers know how to handle their boats. However, again on 'my' canals, there are notable exceptions—and clearly this needs addressing. Watching a DVD, followed by a quick handover, is totally inadequate.

Finally, in these extremely difficult times for all of us, I wish you everything of the best and I hope you enjoy more self-isolation in your boat.

Fly on the wall

Observes proceedings at the Council meeting in March

I listened in as Council members held a teleconference for the March meeting. This was partly due to the Covid-19 pandemic, with some members wishing to self-isolate, partly because others were unable to travel to Tamworth Cruising Club.

In a packed agenda, they agreed to support the IWA's submission to the Bridgewater tidal barrier consultation. They also noted the disruption caused to waterways by recent storms, which caused major damage to the Calder and Hebble navigation at the Figure of three locks near Ossett, a landslip in a cutting on the Shroppie and a blockage on the GU Leicester Arm that requires dredging. Last year, CRT had to deal with nearly 900 trees that blew down in storms and blocked canals. All of this stretches CRT's resources and affects maintenance plans and budgets.

There was discussion of the new hire-boat code, noting that some hire companies are better than others in enforcing existing rules—especially for day-boats—which can have stability issues, especially when most of the crew are on the roof! Trip boats that have more than 12 passengers are inspected by the Marine and Coastguard Agency, more familiar with ocean-going liners than inland craft, and it would be much better to transfer responsibility to the BSS.

Councillors congratulated Helen Hutt on her election as one of the four private boating reps to CRT Council and also Stella Ridgway, who was the only candidate for the Friends of the Trust rep. They noted

that the number of votes for the boating reps was down to 2040, from 7000 last time, from around 32,000 private boaters, and suggested that this reflected a loss of support for CRT by boaters.

The EA is exploring ways to diversify its income, Councillors noted that the Henley Regatta pays nothing for EA's support for the event, and there will soon be an announcement on which of the two tenders for managing EA mooring enforcement has been accepted. Mike Rodd commented favourably on the EA's support for input from boating organisations as it feels its way forward in financially difficult times.

CRT is getting to grips with widebeams on narrow canals, especially on the North Oxford. It seems that some marinas don't have facilities to crane boats in, so they are put in at Braunston and move up to by canal. Even if there is no specific arrangement between marinas and CRT over widebeams, the marinas should tell owners that widebeam boats can't leave the marina.

The meeting concluded with a discussion of the effects that Covid-19 is having on hire-boat businesses and the canal societies and trusts that get most of their income from trip-boats. Bookings have collapsed and this will have major impacts. Councillors noted that the stern of a narrowboat is probably one of the safest places to self-isolate. The next few meetings will be teleconferences until the effects of the pandemic become clearer.

Byeeee and keep safe.



NABO calendar 2020

Council meetings are normally held at boat clubs in the Midlands area. However, with Covid-19 they will be held by teleconference until the autumn. Members are welcome to join in the teleconferences; please just let the Secretary or Chair know in advance (contact details inside cover). The dates for Council meetings in 2020 are as follows: April 25th, June 20th, September 5th, October 10th and November 14th (includes AGM).

Wales and the South West

Mike Rodd

A very positive meeting at the Crofton Pumping Station was held with Mark Evans, recently appointed as the Waterways Director.



I emphasised how pleased NABO was, and indeed most boaters were, that Mark was now in this position, especially as he would be building on his previous excellent work running the K&A & B&T. Mark was very positive about the future, although noting that there were many staffing changes that needed to be in. He also acknowledged that CRT's management of its contractors often needed attention. I could only agree with this, especially noting the dreadful mess their vegetation cutters had left the Mon & Brec tow-path in—over long sections (and for over three months now) it was a mud-path, so bad that many of its regular users had to avoid it.

Around the regions with NABO's regional reps

I did though take the opportunity to also congratulate Mark on CRT's (and indeed its contractors!) work at Crofton, where major engineering is taking place, largely related to improving the water feed for the K&A. Here the collaboration between CRT and the K&A Canal Trust, responsible for restoring and now running the accompanying historic pumping station, was excellent. Part of this work included relocating underground the historically-unsightly CRT pipeline—presently located right across the front of the station. It is responsible for moving water from the Wilton Water reservoir up to the feeder leat, which then provides water for the canal from its highest point.

Membership issues

David Fletcher and the Membership Team

Renewals and Covid-19

We have been on a path to fully computerise the membership system, taking full advantage of web-based technology and safe banking systems. The virus pandemic means now we have to take further steps. For more than two years we have been sending out simple membership reminders by email. The system works and has proved reliable. In January, we upgraded this by sending out fully populated renewal notices generated by the membership system. We now need to make maximum use of this system and minimise the use of Royal Mail. So from May 2020, paper renewals will be sent only to those for whom we have no email address. This is a very small number.

In addition we have to ask members' co-operation by avoiding paying by bank cheque if at all possible. Again this affects only a very small number of members. You will appreciate that a

cheque is of no use if we cannot go to the bank and, with the membership team already under restrictions, we must avoid doing this. Bank standing orders are the preference for us, but direct transfer or PayPal are good too. Perhaps someone could make the payment on your behalf? Use your membership number so that we can identify the payment.

Having said that, if there is no alternative, we ask that you give us a call and we will sort out something, perhaps extend membership for a few months, until this is over.

Please be sure that we remain committed to supporting all members who don't use the internet and similar systems. We need to use the time-saving technology wherever possible so that we can concentrate efforts on those who really need a paper reminder. The membership team will really appreciate your cooperation to keep things going in these difficult times.

CRT Council Elections

Representatives were elected as follows:

Private boating:	Volunteers
Tim Allen	Ian McCarthy
Helen Hutt	David Williams
Dave Mendes da Costa	<i>Votes: 498</i>
Phil Prettyman	Employees
<i>Votes: 2040</i>	John Ellis
Business boating	<i>Votes: 490</i>
Heather Duncan	
Carl Onens	
<i>Votes: 117</i>	

Stella Ridgway has been appointed as the new representative for Friends of the Trust and **David Kent** the new angling representative, both without election as they were the sole candidates. Each elected candidate took up their voluntary post in March for four years.

Phil Prettyman was the only current member to stand for re-election and two of the current private boating members will continue in different roles. **Andrew Phasey** continues on the Council as AWCC's nominated representative.

The turnout for the private boating constitu-



ency was very poor with only about 7% of the electorate voting, compared to the 25% turnout in the first election.

Full results for the private boating reps are at canalrivertrust.org.uk/about-us/how-we-are-run/the-council/council-elections-2019-20.

Hurleston Lock Repairs

Hurleston lock flight on the Llangollen Canal was opened in 1805 and the four locks raise the water level 34 feet (10.4 metres) above the Cheshire Plain.

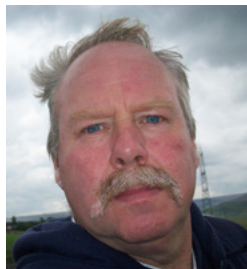
Major repairs have been made to Lock 4 on the flight. The walls of the Grade II Listed lock have gradually bowed over time, due to ground movement around it, making passage by boats increasingly difficult. The work to repair and straighten the lock is costing over £1 million and involved an archaeological survey before the lock wall on the towpath side was carefully dismantled. A new hidden concrete retaining wall will stabilise the ground and prevent any further movement after the original stonework and new brickwork was put in place.



Photo: David Fletcher

NABO Council: the inside view

Ken Hyllins shares his thoughts on his first couple of years as a council member.



If you can help, please contact me for a chat, or email me at NABO 07852 911539 kenh@nabo.org.uk

I am probably the most recent member to be elected to the Council, about two years ago.

At first, I was apprehensive about taking the jump from helping with disability afloat to being a full council member. The reason I did so was that I was generally helping and advising boaters before being a NABO member.

I chose to join NABO after a fellow boater, who was a member, gave me good feedback and recommended the association to me. At the time, I was sorting out my own conditions as I was living with a disabled boater and I needed to find out more information from whatever source. On contacting the NABO General Secretary, keeping him up to date with what I was doing, I was invited to be NABO's Assistant for the Disabled, which I accepted. As a result, I had the backing of NABO and I had the knowledge of living with disability afloat to help NABO members who needed it.

At the same time, I was unofficially speaking to boaters to recruit new members, so I also sent my views on getting new members onto the Council. Like all boaters, I had my opinions and views as to what

was going on with the respective changes and conditions of living 365 on a canal. I contacted the council members, discussing my wish to join the Council and, in my own little way, put something back into the canals.

My time on the Council has been most rewarding, along with my fellow council members, fighting for our conditions, reacting to changes in laws, and closures of facilities the length and breadth of the country by all the managing waterway authorities.

I would like to raise another point to the membership of NABO: all of my council colleagues are filling several positions on the Council and as regional reps, to name a few, and we are not getting any younger. NABO members have many skills, so we need you to help. Ideally, this would be to help us to fill the vacant regional reps positions, and relate back issues that you come across on your travels. This does not involve a lot of time and you will find it very rewarding and, if nothing else, you get to meet your council members—we are quite a sociable bunch.

All that's left to say is, have a good time cruising and stay safe.



Boater reps' meeting with CRT

A report from Dave Mendes de Costa, newly elected boater representative

Yesterday the boater representatives on the CRT Council met with Matthew Symmonds (National Boating Manager).

Many thanks to everyone who sent me their thoughts. As expected, the main area of discussion was around Covid-19. The tone was positive, there seems to be a desire to support people, but through individual arrangements rather than blanket measures. So the main message is: If you need support, contact CRT immediately on 0303 040 4040.

- If anyone is having problems with the payment of licence or mooring fees, then get in touch with CRT and they can help work out a way to potentially defer or delay payments. Several of us pushed that CRT should follow whatever government policy is put in place for private rent.
- If you are self-isolating or are in the 'at risk' category, then contact CRT to arrange an overstay. They understand people may need to stay close to roads, supplies and support groups.*
- If you are supporting another boater who is self-isolating and cannot move, then get in touch with CRT to let them know.
- If you are self-isolating and are worried that you don't have a support network, then CRT are using their local rangers and licence officers to help support you. Get in touch with your local team so they can assist you.
- CRT has looked to contact all

elderly or vulnerable boaters using information they have. If you've not been contacted and feel you need support, then let them know.

- Finally, if you are operating a local support group for boaters, then let CRT know as they may be able to help link up boaters needing support with others offering it.
- There was understanding that canal-based businesses, including roving traders, will be struggling. CRT is operating on the basis that the navigation will stay open (however, many festivals are being cancelled).

As with the points above, if you need support from CRT then get in touch with them, e.g. there may be ways to change business licences to leisure licences to save costs.

I appreciate there is a lot of 'let CRT know' in the messages above, rather than proactive blanket measures. I think that, for now, this is reasonable. We have to meet them halfway by contacting them—only then will we see how far they are willing to help.

If you have contacted CRT and are not getting anywhere, then let me know. I can't promise to be able to fix individual issues but, if there's a pattern, then we can build a case for CRT to act differently.

Keep safe and well, and supporting one another.



*The latest, at time of going to press, was that CRT has suspended the 14 day requirement for the duration of the emergency

Latest news here; canalrivertrust.org.uk/enjoy-the-waterways/safety-on-our-waterways/coronavirus/coronavirus-and-boating-faqs

Thames Navigation Users Forum

Mike Rodd reports

On 3rd March, I represented NABO at the above Forum which brings together relevant EA personnel and representatives of a wide cross-section of users of the Thames, including the eight River User Groups (the RUGs) and many other representative groups. Chaired by the Thames Director, Julia Simpson, the very long meeting was valuable and, above all, illustrated that the new-look EA is making every effort to listen to its key river users in moving its navigational responsibilities forward over the next five years.

Following an overview of recent operational activities, the meeting was given a rundown of the issues caused by the recent flooding and it was clear that all the staff had been working long hours to cope.

Reports also discussed the pressure of environmental issues, especially relating to pollution from diesel and solid fuel stoves. Here the EA approach is similar to CRT's in pointing out the dependence of the majority of boats on diesel/petrol etc. and the huge costs involved if required to change to electric power. It was reported that 2030 was the target to achieve carbon neutral operation right across the Thames.

The financial report was important and the restructured manner in which the information is presented made it very interesting reading. It was also evident that the EA is deeply involved in exploring how financial stability can be achieved. Although it is early days to see the proposed direction, it is apparent that it's not just boating users who are being focused on!

The various RUG representatives provided valuable feedback on their major issues and it was clear that there are huge problems with a lack of cutting back of vegetation (especially trees). It was also interesting to hear that RUGs have had serious problems getting active involvement from local councils.

The question of the moorings contract, which will cover all of EA's moorings on the Thames, was dealt with, noting that, although there had been 12 expressions of interest, only two tenders

NABO's view on air pollution

NABO supports the Government's recent announcement to phase out of the sale of non-smokeless coal and unseasoned wood for domestic use.

Indeed, NABO raised this idea some years ago during a previous consultation on air pollution by the Mayor of London. It should be noted that coal boats have been selling only smokeless fuels to boaters for some time.

NABO recently updated its environmental policy which states, amongst other things, that NABO believes that, as a group, boaters are among the most environmentally aware in society. We actively encourage our members to consider the environment in all aspects of boating activity, in particular regular engine maintenance, non-polluting waste disposal, use of smokeless fuel, alternative energy sources etc.

NABO supports the use of diesel engines to provide power for navigation and electricity and hot water for domestic use, until low-cost practical alternatives are readily available and can be phased in. NABO will encourage navigation authorities to install waterside power supplies for battery charging, where this is appropriate, to reduce the use of diesel engines at moorings.

were submitted. It was also made very clear that the EA did not have any specific enforcement methodologies in mind, but was seeking tenders to propose solutions.

There was deep concern that the evaluation of the tenders would not directly involve anyone with boating expertise. The timetable is tight as it is hoped to launch the scheme by Easter this year.



Fallen trees

Mark Tizard gives a (qualified) pat on the back for CRT

Well done CRT. What a difficult start to the year it has been for CRT with severe storms and flooding causing problems in many parts of the network.

My inbox has been filled daily with CRT notices advising of navigations being closed as a result of fallen trees, landslips and rivers in flood.

I asked CRT's Head of Boating if he could give me an indication of the number of trees they remove in a typical year and I'm grateful for the time taken to pull this information together, which was gathered from monthly and emergency orders. The estimated number of fallen trees cleared in 2019 was 884—this is an amazing effort. I am sure these numbers will rise dramatically in 2020 if the first three months are anything to go by. The majority of this tree clearance resulted from emergency orders that were raised as they were blocking navigations. The contractor, Fountains, has a four-hour response time to attend to remove the trees and I'm told that this response time is normally achieved. In my view (and that of other boaters I've talked to) CRT and their contractors are very successful in reopening navigation in these circumstances. All this comes at substantial cost; CRT spent around £500k removing trees that were blocking navigations. Many fell from private land on the non-towpath side, yet only rarely are the costs recovered from the landowner because of the difficulties and time involved. Given these costs, perhaps this needs to be looked at again; it might be attractive to some lawyers on a no-win, no-fee basis.



Fallen Tree on the Shropshire Union Canal
Photo: Shropshire Star

But I do have one beef: why is the language used in CRT's notices not constant? Why, when the original notice starts with 'Navigation Closed' is this subsequently repeated, even though the notice then tells you that the navigation is now open and the tree has been successfully removed? Come on CRT, when you have done such a good job getting a blockage cleared, or a lock repaired, shout it out loud. Why not start with the heading 'Navigation Reopened'. The best notice by far came out in early March: 'Due to resounding customer feedback, we are having to revisit previous repairs at Filance Lock (Lock 37, Staffs & Worcester)'—one can only guess at the content of this 'resounding feedback'—and I suspect it was not good.

On the whole, I think that CRT and their contractors have done a cracking job in keeping the navigation cleared of blockages promptly and they are to be congratulated that the winter stoppage programme is generally on track, despite this terrible weather.

Bridgwater tidal barrier consultation

Mike Rodd responds to DEFRA for NABO

www.waterways.org.uk/news/campaigns/press-releases/bridgwater-tidal-barrier-scheme

Having studied the submission prepared by the Inland Waterways Association, NABO supports its objections to the proposed order.

- Land is required within the de-commissioned bypass channel for the future construction of a lock to mitigate the impact of the tidal barrier;
- Navigation over its lifetime has not been safeguarded;
- Insufficient minimum headroom for navigation is permitted under both the vertical lift gates and the foot- and cycle-bridge;
- Detailed design information for the penstocks to be included within the tidal barrier has not been specified;
- Insufficient minimum headroom for navigation purposes has been provided for the temporary bridge across the bypass channel, required while the tidal barrier is being constructed.

Background

A tidal barrier on the River Parrett at Bridgwater in Somerset is a key part

of a 20-year flood action plan, developed after the 2014 Somerset Levels flooding.

It would have two vertical lift gates to allow water to be stored and to flow downstream at a controlled rate, or to prevent very high tides travelling upstream and overtopping defences. When the barrier is completed, the EA estimates that 11,300 homes and 1,500 non-residential properties will be protected from flooding. The IWA West Country Branch has been running a campaign for nearly three years with the aim of making the best use of the proposed tidal barrier to enhance navigation on the River Parrett through using the barrier to pen water on certain occasions during the boating 'season'. The campaign includes promoting the regeneration of Bridgwater Docks and restoring the Barge Lock and Bascule Bridge to reconnect the River Parrett with the Bridgwater & Taunton Canal. This will potentially make a longer route available for navigation, with all the leisure, recreation, tourism and economic benefits that this can bring.



Paddington bookable moorings

In 2019, CRT launched a trial from June to November of six pre-bookable moorings in Paddington Basin.

These proved popular, with berths fully occupied over the summer and strong demand continuing into the autumn. Feedback from boaters included the need for clearer information about the moorings on the booking website, more informative signage on site, more mooring cleats and better management of transitions between bookings.

Booking slots for 2020 were released at the end of March. Two more sites are also being developed at Kings Cross (on Argent's offside mooring) and on a section of towpath on the Lee Navigation in the Queen Elizabeth Olympic Park. Visit the CRT website to find out when these sites will be ready for bookings licensing.canalrivertrust.org.uk/prebookablemoorings

Islington eco-mooring zone

A trial project for two years aims to reduce environmental pollution around the Regent's Canal in Islington, through the installation of electric charging points.

During this time, boaters may not run engines or generators while moored and they will receive advice about how to reduce smoke emissions from solid-fuel stoves. Further information will be published about the start of the trial to give boaters notice of when the current mooring arrangements will change.

Towpath improvements in west London

Over 16 miles of towpaths on the Grand Union Canal and Paddington Arm between Paddington and West Drayton are being improved, with better quality surfaces, wider paths, more accessible

places to join the towpath, new signs, and Share the Space campaigns to promote the Towpath Code. Improvements have been completed from Ladbroke Grove to Old Oak Lane, through Alperton and Southall, between Stockley Park and High Street Yiewsley, and between Alperton and Greenford.

There is also improved access onto the towpath at Bankside in Southall, Ruislip Road, Bridport Road, Oldfield Lane, Manor Farm Road and Portobello Dock, with repaired steps and bike wheeling channels. Work in the Spring includes the resurfacing and widening to two metres of 2.3km of towpath between Hayes and Stockley Park, and resurfacing the Printing House Lane ramp.

Other upcoming works along the route include the maintenance of the River Crane Aqueduct between Bull's Bridge and Hayes, funded by the People's Postcode Lottery www.canalrivertrust.org.uk/BetterTowpaths

Pennywort on the River Stort

Canoeists from Whoosh Explore canoe club have used their canoes to clear an estimated 6-7 tonnes of floating pennywort off the river. The group has now turned its attention to the back channels that lead into the Stort to control the return of the invasive species.

New Boating & Customer Service Manager

Sarah Lee, a liveaboard boater in London, has been appointed as the CRT London & South East boating and customer services manager with responsibility for customer service in the region, the boat licence support team and mooring rangers.

Sorwar Ahmed has moved to become the interim community engagement manager after six years of managing boating matters in London and latterly the whole region.

Threat to navigation on the Broads?

A report published by 'William Ballast', a pseudonym to protect the author's identity, claims that the Broads Authority (BA) is attempting to reduce the rights to navigation on the Norfolk and Suffolk Broads.

'Friend or Foe?—The Truth behind the Myth', available at drive.google.com/open?id=18DD_g ea42 G1HtvsjFhT1-1GT_KZ9GOX

"In an ideal world, this report would have been published by an organisation representing them. Sadly, following the abolition of the Broads Forum by the BA, no such organisation exists. Therefore, the author had no alternative but to publish it personally."

The laws enshrined in the 1988 Norfolk and Suffolk Broads Act, under which the Broads Authority must manage the Broads, recognise its very special nature. They state that its three primary responsibilities ('purposes') of conservation, recreation and navigation must be given equal weight in the event of a conflict. The author writes: "The purpose of this report is to provide evidenced facts (213 of them, excluding those on supporting documentation), demonstrating that balance has been, and still is, under threat, with the potential outcome being conservation given greater 'weight' than the other two. There may come a time in the future when ancient Public Rights of Navigation, introduced in written laws dating back 2,000 years, may become threatened. Parts of the 125-mile waterway system may become 'no-go' areas. The legal status of the Broads excludes it from becoming a national park. It would require at least one, if not two, Acts of Parliament to change that. Unlike the Broads, a National Park has only two 'purposes', conservation and recreation, and a statutory obligation to give conservation 'greater weight'. In other words, navigation and recreation interests could be over-ruled by conservation matters. The potential result could be the curtailment of those ancient rights. That is why,

despite numerous attempts to subvert it by the BA, the 1988 Act has remained in force."

In 2019, a Government-sponsored 'National Landscapes Review' was carried out. This has yet to reach Parliament. The author claims that: "Its recommendations are a clear attack on the safeguards of the 1988 Act, which have proved effective in preserving navigation and recreational interests. The BA submission to this review recommended re-wording a core part of the 1988 Act to remove its obligations to "protect the interests of navigation" and replace it with "protecting the right of navigation". It may sound the same, but in legal terms, this would greatly reduce the BA's navigation responsibilities. In addition, it proposes: "Where there is a conflict between any of the three purposes, and the further navigation purpose assigned to the Broads, then greater weight must be given to the first of these purposes (recover, conserve and enhance natural beauty, biodiversity and natural capital, and cultural heritage). In other words, the report recommends that the Broads becomes a 'National Landscape', along with current National Parks and AONB's, with navigation as an additional 'purpose'. This gives greater weight to conservation, removing the protections to navigation and access.



Boats at Horsey Mere

Photo: Christopher Hill [chill_photography](#)

Lockage Report

Mark Tizard comments on the figures

CRT has published the annual lockage ranking for 2019 for those locks that are fitted with telemetry. The five most-used locks were in the West Midlands and North West Regions, as was the least-used lock.

If you compare 2017 with 2019—ignoring 2018 because of the drought and really hot weather affecting many navigations—there has been a dramatic reduction in lock usage. We are told that the growth in boat ownership in recent years has been driven by a marked increase in continuous cruisers with the number of marina-based boats being broadly static. If this is the case, then you would expect year round lock usage to have increased, but instead the drop in

lock movements averages just over 10% across the network, which is remarkable. The average drop per region between 2017 to 2019 varies: Wales & the South West is 12.5%; W. Midlands is 12%; London & SE is 11%; E. Midlands and Yorkshire & North East are both 9%; and the North West is 8%.

Overall, given the increase in licensed boats over the period this would appear to be a significant change in boaters cruising patterns and worthy of investigation. As the decrease is spread across the regions, it can't be a specific issue like the Middlewich breach, but a wider downturn in movement. Are boaters being put off by perceived or actual infrastructure failures or has there just been a change in cruising patterns? Perhaps CRT needs to change the boaters' questionnaire to understand why.

Ranking	Region	Canal	Site	Nº lockages
1	West Midlands	North Oxford	Locks 2 & 3 Hillmorton	8362
2	West Midlands	Llangollen	Lock 2, New Marton	7711
3	North West	Shroppie	Lock 4, Cholmondeston	7545
4	West Midlands	Trent & Mersey	Lock 21, Colwich	7188
5	North West	Shroppie	Lock 1, Wardle	6747
156	North West	Shroppie	Lock 1, Graving	127

CRT to act on 'Improper' Mooring



Moored on a lock landing
Photo: John Hammond

There are plenty of examples of poor mooring in 'Moored like a Twat' at www.facebook.com/groups/1786496984898811

The Trust is addressing the problem of boats that are poorly moored, blocking facilities, or making it unsafe for boats to navigate. It intends to do this by promoting more considerate mooring, letting those who are moored inappropriately know that there is a problem, and ultimately acting against persistent rule-breakers. The aim is to educate boaters that may be new to the water or unaware of the issues caused by poor mooring.

Every boater can recount seeing a badly or dangerously moored boat, whether it's someone moored for days on a water point, or boats blocking sightlines on bends.

From February, an 'Improper Mooring' process will be applied where a boat is moored in a way that affects safety or impedes other boaters or waterway users. The process will be as follows:

- Initially, CRT will contact boats that are seen to be moored inappropriately with a polite reminder of good mooring practice, so that they move somewhere safer, or where they won't be affecting others. It will be recorded by the Licence Support Team and a letter will be sent to the owner highlighting the problem. The boater will also receive a booklet including extracts from the boat licence terms & conditions, byelaws, the navigation rules, and Boaters' Handbook to help them moor more appropriately.
- If there are further instances of

poor mooring, CRT will send a formal reminder that sets out how T&Cs and/or byelaws have been breached, which could result in the termination of their licence.

- If there is no resolution or a repeat of the behaviour, a second reminder will be sent, detailing the circumstances, the action the boater needs to take, and issuing a final warning.
- A final letter will be sent if the problem is not addressed, informing the boater of their licence being immediately suspended. The boater will be directed to remove the boat to a specified location, where it must remain until investigation into the mooring conduct is concluded.

Examples of improper mooring include: mooring in a lock, lock approach or a lock flight; blocking services; mooring near a bridge or under a fixed bridge; mooring near a weir, near a sharp bend, or on the outside of a bend; mooring in or opposite a winding hole or on the approach to it; mooring at a junction; mooring to the bank on a tidal river; mooring on a canoe landing place; mooring in a stretch marked for an angling match; or where there are signs that prohibit mooring.

Mark Tizard comments:

My initial reaction is to wonder whether writing a series of up to five letters to a boater, who is unlikely to have a 'home' address, is going to achieve very much.

Overstaying on visitor moorings has a threat of a £25 charge/penalty, but mooring on a water point risks you getting a letter.

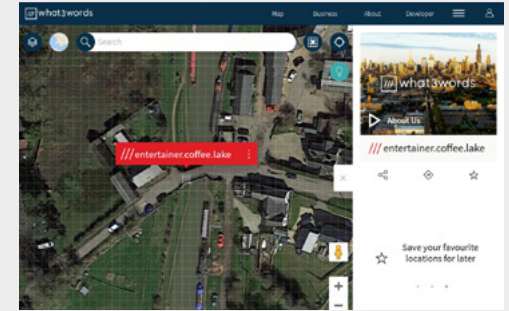
What3words

what3words.com

What3words is an app for mobile phones that can pinpoint a location exactly. It was developed by company founder, Chris Sheldrick, who divided the world into 57 trillion squares, each measuring 3m by 3m.

Each square has a unique, randomly assigned, three-word address, which is as accurate as GPS coordinates. The English what3words language has a wordlist of 40,000 words and covers the sea as well as land. The lists are sorted by an algorithm that takes into account word length, distinctiveness, frequency, ease of spelling and pronunciation. Homophones are treated to minimise any potential for confusion and offensive words are removed. The algorithm distributes similar-sounding three-word combinations around the world so that if a three-word combination is entered slightly incorrectly, the location will be so far away from the user's intended area that the error will be obvious.

When you've downloaded the app, to find your three-word location:



- Tap the 'Locate me' icon to find your current location;
- Zoom in, switch to satellite mode and drag the map to find the exact location you want;
- Tap to select a square and its three-word address is displayed at the top of the screen.

As of October 2019, 75 English and Welsh emergency services have signed up to the system.

The usefulness for boaters is obvious, especially where there are no nearby buildings or roads to find a postcode that can be given to the emergency services. But it is also useful to arrange rendezvous points with crew or visitors.

CRT and Sustrans sign MoU

canalrivertrust.org.uk/media/original/41196-canal-and-river-trust-and-sustrans-sign-memorandum-of-understanding.pdf

A new Memorandum of Understanding has been signed between CRT and the walking and cycling charity, Sustrans.

The MoU covers areas where the charities will collaborate, including: promoting the benefits of walking and cycling by the waterways to the Government and other third parties; identifying third-party funding streams; promoting the pedestrian-priority Towpath Code; working to manage interaction between different towpath users; addressing accessibility and increasing community involvement. Both charities agree that the needs of walkers and people using the waterspace, for example boaters and anglers, have to come first. We watch and wait



The Budget and red diesel

What does it mean for us?

David Fletcher consults his crystal ball

Source: www.gov.uk/government/publications/budget-2020-documents/budget-2020
Section 2 Item 39

The current guidance for red diesel can be read at www.gov.uk/guidance/fuels-for-use-in-vehicles-excise-notice-75.

I acknowledge the support of our friends in the DBA in the preparation of this article.

In the March budget, the Chancellor made reference to the tax on red diesel. What does it mean for boaters? t

The answers need some history, but the quick answer is three things:

First, the expectation is that private boaters are going to change to white diesel anyway for propulsion, so the tax on red diesel is irrelevant for this part. The issue for us is whether there is an ongoing concession on tax for the element for power generation (the 60/40 split).

Secondly, if boaters are using red diesel for heating (stove or Webasto type), how do they manage dual tanks, and is this reasonable? Or do they have to burn white diesel?

Thirdly, is the supply chain which would have to supply red diesel to commercial craft (including hire boats), also the same as white diesel to non-commercial boats. How will this work?

So taking these in turn; first, the change to white diesel:

This has been coming for some time, following the 2019 European Court of Justice ruling on the use of red diesel in the UK. HMRC consulted last year and the trade and boating user groups had lobbied, hoping to convince them that the implementation of this was complex and needed time to implement. The hope was that this could be kicked down the road until that we were out of the EU and we would not have to implement the ruling. But the consultation was not concluded because of the 2019 general election (very naughty!). Now we have a move of the goal posts because the

The Budget statement

The government will also remove the entitlement to use red diesel from April 2022, except in agriculture, fish farming, rail and for non-commercial heating (including domestic heating). By removing this tax relief on pollution, the government will encourage businesses and industry to improve the energy efficiency of their vehicles and machinery or look for greener alternatives. The development of these alternatives will be supported by the government more than doubling its investment in the Energy Innovation Programme.

Government sees a wider issue of environmental impact of the use of red diesel for construction and power generation, and we are caught up in the middle of this. The logic is that it is wrong to subsidise these dirty uses of fuel, and the industry should be driven to find alternatives. Farmers and fishing are safe, but the construction industry is facing a £500m p.a. hit. The cost of HS2 just went up by another few billion. Importantly, for inland waters, we understand that commercial craft (including hire boats) will continue to be able to use red diesel. The budget papers do not specifically mention this and it remains to be confirmed, but the papers talk only about private boats. We expect, in this scenario, that non-commercial (private) boaters will have to use white diesel and there will be no 60/40 split, because

the Government will not subsidise power generation. They are silent on this at the moment. For significant users, this would encourage more use of solar panels and/or hook ups for power, which is hard to argue against.

On the use of two fuels, normally there is a desire for two separate tanks for users with stoves or a heater that uses the red fuel. Most of the narrowboat and cruiser-style craft have only one tank, and little spare space to have second of any size. A small tank for heating might be feasible in larger craft. A quick review of widebeam specifications does not indicate a common practice for two tanks. So we are little prepared for this. We know that our friends in DBA have been pushing this in the widebeam world for some time. On this, the budget says:

Where they have one tank for propulsion and heating, the government will explore options that prevent them from having to pay a higher rate of duty on their heating use than they would otherwise have to pay.

So the pros and cons for having a second tank is worthy of another article devoted to this—written by our Chair who is an expert on the subject. Don't panic yet; just wait to see how this plays out. All private craft will have to do some cleaning of tanks that are contaminated with red diesel before filling with white diesel. This is no bad thing for many of us with old craft. We could do with a good clean out anyway for crud and biodiesel products. But don't do it just yet, unless you have a crisis, or you will face doing it twice. The marina cost is around £100-200, depending on how much fuel is in the tank and whether the fuel is recoverable. Bankside it will cost a lot more.

Finally there is the old issue of

the supply chain. How will this react to the supply of two fuels? We hear of suppliers saying that it is not economic to hold two fuels, when turnover is low. The added cost will make the fuel uncompetitive with forecourt prices. The low turnover will lead to more diesel bug issues. Will marinas supporting hire fleets tend to stock red diesel and fuel trading boats to stock white diesel? What will the unintended consequences of this be? Boaters humping cans of diesel from supermarket forecourts, and then spilling it into the cut? Additional fire risk from on board storage? Loss of business from marinas and their going out of business? There is a briefing document on the web under 'Fuel Duty changes for diesel used in private pleasure craft'. This is a key extract:

This measure, if introduced, is also expected to have a negligible impact on fewer than 100 fuel suppliers that supply refuelling stations. One-off costs would include familiarisation with the new rules and could include changing what fuel they supply to marine Registered Dealers in Controlled Oil. It is expected that there would be no ongoing costs.

It is absolutely clear to us that HMRC has not listened to the consultation last year, and they don't know what they are talking about.

So out of all this, don't panic yet. The Government is saying that this will not come in until 2022, and they will consult about all this during this year. We think that, with all that is going on with the virus issues, there are things more pressing to be dealt with, and the plans will slip a bit, maybe get forgotten. We can hope. We need a bit of joy.



Photo: Four Counties Fuels



Toddbrook the full story

David Fletcher examines two reports on the reservoir failure.

Photo: David Brocklehurst/ Balmforth Report

Toddbrook Reservoir Independent Review Report, by Professor David Balmforth, 10th February 2020

assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/872769/toddbrook-reservoir-independent-review-reporta.pdf

CRT Report on the Nature and Root Cause of the Toddbrook Reservoir Auxiliary Spillway Failure on 1st August 2019, by Dr Andrew Hughes of Dams & Reservoirs Ltd.

canalrivertrust.org.uk/refresh/media/thumbnail/41505-report-on-toddbrook-reservoir-by-dy-andrew-hughes.pdf

CRT has published the long-awaited reports on the 2019 events at the Toddbrook reservoir in Derbyshire. There are two reports: first an 89-page one for DEFRA and a 77-page one commissioned by the Trust.

The second includes some response to the findings of the first report. The reports are of a very high standard and are generally very readable. In January, the Trust announced the commencement of temporary works on the spillway and the reservoir inlet and bypass channels, and we reported on the status of the dam in the February NABO News.

What is in the reports?

Both reports cover the history of the dam, details of the construction and the critical modifications made around 1970 to add the auxiliary spillways.

The design was completed in-house by BW. It incorporated a concrete slab through the crest of the embankment and a steep concrete asymmetric chute on the downstream slope to join the overflow channel, which runs across the toe of the dam from left to right, looking down. There were other changes to the crest of the dam made more recently. The two reports have a different emphasis on the root causes of the failure, but both have extensive discussion and criticism of the design, which is identified as one of the root causes. The reports are supported by investigations completed by the Trust since last year.

Both reports cover the events of July and I don't make any attempt to critique this. They consider the legal framework of the Reservoir Act, and the roles of the independent Inspecting Engineer and the Trust's Supervising Engineer. Both

have important tasks under the Act. The DEFRA report makes many recommendations regarding these roles, basically tightening up the inspection process and ensuring that owners make available all the details of the structure, and undertake maintenance in a timely fashion. The Trust report covers the extensive history of the inspections and the identified symptoms of weakness. Some of this makes disappointing reading. It is clear there had been unexplained leakage for some time, including leakage under the crest. At the inspection in 2018 the likely causes of the leakage were identified, but not acted on with the urgency that was needed. So it is clear that one of the root causes is why the distress symptoms were not acted on, and this is the subject of both reports, but with different emphasis. The Trust's report also considered the water inlets and by-wash to the reservoir. It is clear that the water flow could have been better managed, with equipment to divert more water away from the reservoir in flood conditions.

What is not in the reports

There are three things that are not in the reports: first, there is no criticism of the basic design of the dam using a clay core.

The DEFRA report says: 'This type of construction was used for most dams constructed in Britain until the late 1950s'. There is considerable discussion on the modes of failure in the DEFRA report, and the importance of instrumentation, leakage and settlement monitoring. I hope we can conclude that the basic dam structure is fit for purpose, and that the repairs can focus on the spillway and the inlet.

Secondly, there is no mention of the need for additional draw-down valves (the plug hole) or upgrade

A summary of the events of last July taken from the Trust's website:

Following intense heavy rainfall at the end of July 2019, several concrete panels on the Toddbrook dam spillway collapsed. Around 1,500 residents of Whaley Bridge were evacuated from their homes for up to six nights as a safety precaution. Trust staff and volunteers worked around the clock with the local emergency services, including Derbyshire Fire & Rescue, Derbyshire Police and the Environment Agency, to stabilise the dam wall. Over a billion litres of water were pumped from the reservoir during this emergency phase and water levels continue to remain nearly empty while the dam is repaired. This is likely to take several years.

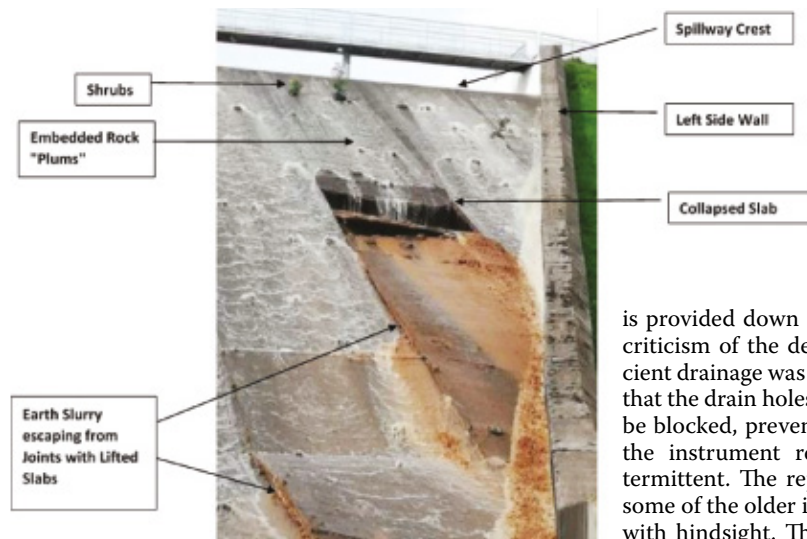
of the design, which is not current best practice. There are draw-down valves, but they were not large enough for the emergency, and this is why the Trust had to bring in (and still maintain) all the pumps. I think this is an important feature that gives better emergency control and will give confidence to the town of Whaley Bridge that all is in place to give them a safe environment in the future.

Thirdly, there is no suggestion that the emergency river outlet to the Goyt is limiting on capacity. If this was the case, there would be a significant issue.

Root causes of the failure

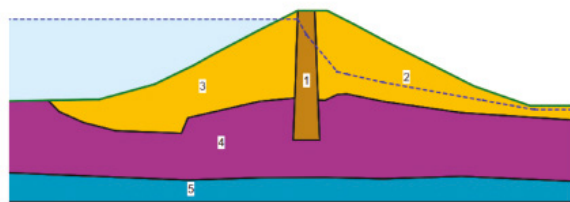
There are two design faults identified and then there are the soft issues of the owner's responsibility.

The crest of the dam was concreted over in 1970 as part of the spillway design by BW. The reports agree that this was placed on top of the dam's fill material, without an up and down barrier seal into the waterproof clay core (a vertical damp-course). The reports agree that this is not a good design. The Trust staff knew that water was passing through the dam and



is provided down the dam. There is criticism of the design, that insufficient drainage was included, but also that the drain holes were reported to be blocked, preventing leak-off, and the instrument readings were intermittent. The reports re-interpret some of the older inspection reports with hindsight. They speculate that the structure had been showing signs of stress, cracking, movement and leakage; symptoms that fit the diagnosis of the poor design, leading to water getting under the crest and slabs. The water under the slabs led to wash-out of the fill material and therefore they were not fully supported. There is evidence of settlement and cracking. The asymmetric design of the spillway on the left side was vulnerable because it provided a short leak-path out to the side of the spillway and therefore less resistance to the under-slab flow. The Trust's report says that the lack of the barrier seal at the crest of the dam was a significant cause of the failure.

The second fault was in the design of the spillway slabs, simple six-inch thick slabs with basic reinforcement—not much different from a front driveway—but only partly sealed against leakage at the joints and only partly keyed into each other. The movement from lack of support gave rise to opening of joints, which in turn led to vegetation growth. There are many



Source: MML

- Material 1 – Puddle Clay Core
- Material 2 – Downstream Shoulder Fill
- Material 3 – Upstream Shoulder Fill
- Material 4 – Glacial Till
- Material 5 – Bedrock

The initial slab collapse and section through the dam
Source: Balmfirth Report

leaking out on the spillway in various places. The reports indicate that absence of the barrier and the source of leakage were correctly identified by the Inspecting Engineer in 2018, but neither the Engineers nor the Trust reacted to the urgent significance of it. As a consequence of this water continued to get under the slab when the dam was full and pass over the dam into the fill material under the spillway slabs. The report says that instruments are provided to check for the pressure of water in the downstream side due to leakage, and some pressure-relief drainage

comments over the years of the need for vegetation clearing and sealing of the joints. Both reports raise the likelihood that water running over the spillway was injected into these cracks causing wash-out and failure. The DEFRA report cites this as an immediate cause of the failure. The Trust report is less certain, saying that the other factors were likely to be the immediate cause. Both agree that the design was poor, and vulnerable because of the water soaking through the crest of the dam and the lack of drainage.

Both reports comment on the roles of the Inspecting Engineer and the Supervising Engineer. The DEFRA report examines the sequence of events and identifies a number of improvements to the inspection process to lock in learning from the incident. They are critical of the Supervising Engineer for not being more forcible within the Trust in describing the urgency of repairs and suggesting that, at the individual's level, had not felt able to insist the work was prioritised.

The Trust's report focuses on the actions of the Inspection Engineer and implies that the Trust was not well advised in the inspections. I suspect the truth lies in the middle of this. The Inspecting Engineer should be able to rely upon the dam owner to know of the design of the structure, control any changes, be on top of any signs of distress, and operate the dam within the design intention. The Supervising Engineer must have a grip on these things, and have access to senior Trust managers so that the right priority is given to operating decisions, technical support and necessary repairs.

The Trust's response

The Trust announced at the end of 2019 that it would be installing a protective waterproof wall all along

the spillway crest, which will reach down into the dam's clay core, like a vertical damp-course.

The spillway crest will be increased in height by just over one metre at either end and concrete waterproof barriers will be installed on the spillway slope to channel any overflowing water into the central undamaged section, which will be lined for extra protection. It is quite clear why this is being done; addressing the poor design by sealing the crest to prevent the below-surface seepage, and then straightening the overflow down the dam and protecting the slabs of the slope.

At the inspection in 2018, the likely causes of the leakage were identified, but not acted on with the urgency that was needed

After the emergency in August 2019, the masonry weir at the inlet channel was raised with the installation of mesh baskets filled with sandbags. In 2020, these will be replaced by a new structure, to provide control over water flows. So this gives the Trust greater control over the flow into the dam, particularly in flood conditions. As part of the release of the reports, the Trust has made statements that are summarised as follows:

The reports identify that serious hidden design flaws, inherent in the concrete auxiliary spillway from the time of its installation in 1970, caused its partial collapse on 1 August 2019 following several days of heavy rainfall.

The events last summer were



The Final Stage of Collapse of Panels. Note the undermining of the left-hand chute wall
Photo: Balmforth Report

unexpected. At no point in the Toddbrook spillway's 50-year history were design flaws identified; successive inspections by Inspection Engineers did not raise any questions about its design until the most recent independent inspection report. This was received by the Trust only three months prior to the incident and did not identify an immediate threat to safety, or direct that any urgent precautionary measures be taken.

The Trust acknowledges that maintenance of the spillway in some periods of the last 50 years—including pre-2012 under British Waterways—could have been more stringent; although both reports conclude that the design flaws mean that it is very likely that the spillway would have failed in an extreme weather event regardless.

Since the incident last August, the Trust has implemented measures to enhance reservoir inspection and maintenance and will now be fully reviewing both reports and acting on their findings to ensure the ongoing safe stewardship of the reservoirs in its care. CRT is;

- *Reviewing the design features of all Trust-operated reservoirs and, as a precaution, managing water levels to remove any risk, pending the completion of these reviews;*
- *Strengthening its reservoir team*

with an experienced reservoir engineer recruited to oversee the Trust's reservoir management;

- *Enhancing reservoir surveillance and vegetation management;*
- *Establishing a major investment programme to reduce any risks identified and ensure the highest levels of public safety; the Trust has set aside an additional £30m for reservoir works over the next three years, on top of its existing annual £25 million major works programme.*

My view

Reading the reports has been a difficult exercise, like watching an episode of a detective story knowing that the outcome will not be good.

With hindsight, it is possible to see the clues that led to the final event. Accidents are always the end result of a sequence of missed opportunities to intervene, and then the inevitable event. This is no exception.

In this case, the flawed design was the start. Subsequent movement in levels that saturated the fill material under the crest for long periods, set in motion the long-term wash-out and movement of the spillway slabs. The reports indicate that failure was inevitable. The involvement of consultants working on the spillway walls did not recognise the problems. There were long-term symptoms of water bleeding and spraying out of the slabs, and cracking of crest slabs. The cracks in the slabs gave rise to vegetation and maintenance was sporadic. Drains were not cleared and instrumentation did not work all the time. Formal inspections were carried out, but in some cases, the design of the dam was not available and not asked for. At the final inspection in 2018, the penny dropped and at last the problem was correctly identified. But

there was no urgency, and simple precautions, like lowering the water level so that the spillway could dry out and be studied, were not taken. Inexplicably, the dam was downgraded from condition C to D but without urgent action. An intervention at any one of these many points could have prevented disaster.

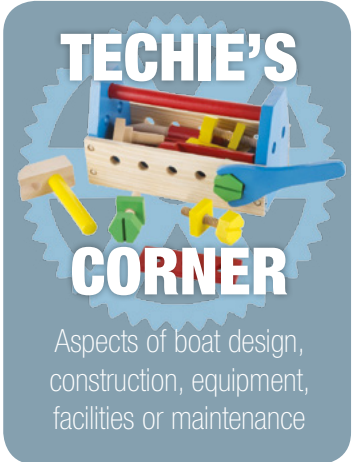
So, for me, the root cause is nothing to do with trees in cracks and sealing of slabs. It is to do with the long-term failure of the Trust's engineers to understand the structure and react to, and act on, the symptoms of distress. At the 2018 inspection, with the engineer's report, at last the diagnosis was in their hands. It should have been a 'eureka' moment. The external report may not have raised urgency, but that is no excuse in my mind. The Trust, as the asset owner, should have recognised the risk and taken action immediately when the condition downgrade took place. I would expect that downgrades of high risk assets would attract some senior attention, and not just be lost in the day-to-day workload. The Trust may well have been poorly supported over the years, but that is not the point. As a sophisticated and experienced owner and operator of infrastructure, it is their duty to manage these things and the UK expects no less. The failure to act in a timely way has resulted in cost and reputational damage, threatened the town and the future of the local canal. The ongoing costs are very large and will impact all the maintenance programmes for the whole canal system. The immediate impact is that they must convince the population of Whaley Bridge that they can repair and operate the dam safely for the future. And then do the same with the Regulator.

The concept that the Trust ignores problems until they fail is not

new to any of us. The reality is that it is not economic for all infrastructure to be built to the latest standard and maintained to as-new condition. The trick of long-term ownership is to get the maximum safe life of every asset and provide a mix of routine, breakdown, replacement, and upgrade repairs. This is all a matter of judgement of experienced people, so inevitably there are going to be some failures, and so we should have some sympathy. But when there is a long trail of symptoms of distress in a high-risk asset and nothing is done, it is reasonable to ask: 'What is going on?' The owner cannot hide behind the regulator and say: 'You never told me!' In my view, the Trust has to maintain the core expertise to own and operate the assets, and that is a cost that must be paid one way or another.

The actions announced so far by the Trust address these staffing shortcomings and I welcome them. Now they have to listen to the unwelcome news that will always come when assets are so old. It should also be a warning to DEFRA, that it may appear very clever to cut back again and again on funding, but these actions have predictable consequences. Good maintenance has a cost that does not go away with a political gesture. The impending transfer of the EA waters to the Trust is held up, mainly over the cost and liability of the river weirs and structures. Who can blame the Trust for pushing back on this poisoned chalice that DEFRA would impose on it, without any mutual understanding of the issues and cost of management? Wellbeing has its place, but give me a break.

I wish the Trust well in its plans to get the paperwork in place to get permission to rebuild the dam, so that we can have the Peak Forest back in a good place.



Aspects of boat design, construction, equipment, facilities or maintenance

Are lithium batteries right for your boat?

Tony Brooks examines the pros and cons



Tony Brooks has offered to answer any technical enquiries that members may have. Please send your question(s) to Tony via nabonews@nabo.org.uk and I will forward them to him. Note: Tony may use the questions and his answers without further permission to advise others.

The second option is far cheaper but you need to really understand what you are dealing with and have a good understanding of electronics and electrics so that you can build or modify the control system.

The cells in lithium batteries can get out of balance, so that some are better charged than others. The problem is that this can lead to overcharging individual cells and that means a very swift cell failure. There are ready built modules that will balance cells automatically, but it seems that if you run the batteries between 20% and 80% the unbalance is minimal. However, it is vital that all charging stops at a pre-set voltage to prevent swift cell damage. Unfortunately, simply disconnecting the bank from a typical alternator is likely to wreck the alternator

Over the last year or so, the use of lithium iron phosphate (LiFePo4) domestic batteries on boats has been generating a lot of interest and a few early adopters have been using them in the inland world.

There are two approaches: one is to buy a ready-made package from the likes of Victron that will probably cost well into four figures, while the other is to buy second-hand, mainly ex-vehicle batteries, and fit a DIY control system.

electronics, so other methods need examining. One way is to doctor the alternator to allow external control of the rotor current and the other common way is to keep the engine starter lead-acid battery in parallel with the lithium bank so the lead-acid battery is always connected to the alternator.

Lithium batteries will also take the maximum charging current that the alternator can produce as long as it's running, so it's best to monitor the alternator and battery temperature, so you can stop charging for a while if things get too hot. How you achieve the cut-off for excess temperature or fully charged is the problem and there are a number of approaches. I would suggest that you monitor the lithium battery discussions on the Canalworld.net forum. One member there has just completed a series of articles in the Canal Boat magazine, so get hold of the December 19 to February 20 issues and study those articles. I do not think home-brew Lithium battery systems are at an advanced enough stage or well enough understood to encourage all and sundry to install them. If I did that, I am sure that at present there would be many cases of boaters ruining thousand pound plus battery banks, instead of a few hundred pound ones, but in a few years' time I suspect they will become commonplace.



Photo: BSLBatt

Rewind

Issue No 2, 2005

Howard Anguish explores NABO News from 15 years ago.

In his column, NABO Chairman, Stuart Sampson, writes a thought provoking analysis of NABO and its public profile, actual and perceived. Attempting to persuade members to help Council raise its profile, he addresses a number of issues—including “What’s in it for me?” “Has NABO lost its direction?” “Is NABO now in bed with BW?” “Does NABO actually achieve anything?” I am sure many members nowadays occasionally ask the same questions, and for those who would like to compare then and now, may I suggest having a read of the full article. It can be found on the NABO website under the ‘Back Issues’ section, 2005 issue 2 (<https://nabo.org.uk/index.php/reference/nn-back-issues-2>).

A BW press release announced that the **British Waterway Pub Partnership** with Scottish and Newcastle Pub Enterprises, will have the ambitious aim of developing pub businesses at over one hundred sites across the canal network. Some very well-known canal-side pubs were included in the list of sites, with great things expected from the joint enterprise. A tongue-in-cheek suggestion declared that, if we all drank in these establishments, it would be a much more enjoyable way to finance British Waterways, and a discount on a pint or a meal could be one way to reward loyal waterway users. Unfortunately, as many longstanding members will remember, this initiative was not a resounding success and was wound up a few years later!

Where am I? addressed the issue of being able to know where you

are when reporting a crime or an emergency. Because GPS was not as sophisticated as it is today, the article gave a two page teach-in on how to find an Ordinance Survey grid reference. It suggested that the process is not as convoluted as it seemed, but ends with the sage advice “If you can’t grasp how to do it from the article, get a Scout or Guide to teach you!”

Fly on the Wall, reporting on a recent Council meeting, noted the appointment of a Head of Boating Development in the person of Sally Ash; many members will remember that NABO had a long relationship with Sally when representing members, which could, at times, lead to lively differences of opinion!

NABO Treasurer, Stephen Peters, referred to the comparisons between steering a boat and driving a car. He pointed out that it is often stated that novices think steering a boat is just like steering a car, until someone reminds them that a boat has no brakes! He summarises “I believe boat-handling gives a person an excellent grounding (pun not intended!) for controlling a vehicle on the highway.

It teaches you to anticipate the actions of others, to travel at a speed conducive to stopping without colliding, and to be able to judge a tight situation. If you can moor a boat you should be able to park a car without difficulty. Do fellow members agree with my hypothesis?” *Stephen Peters (Advanced Motorist)*



NABO News back issues are available online at: nabo.org.uk/index.php/reference/nn-back-issues-2

Letters to the Editor

Opinions expressed here are independent of NABO policy and statements made have not been verified as true

Feeling relegated

I fully concur with Mark Tizard's comments in the February issue on changes to the waterways. I am beginning to think I may have to seek enjoyment elsewhere after almost a lifetime, hiring, family boating and recently share-boating around the system. After recently receiving an inheritance, the plan was to buy my own boat and cruise my retirement with my wife. However I am getting the same feelings as Mark and wonder if it would be worth it—and not just in monetary terms.

Boaters seem to be being marginalised and under-prioritised. I live near Norbury Junction,

where my boating experience began in 1963 (I am now 65). I have witnessed all the changes during that time, but I now feel that the system is slowly being run down. The incidence of orange plastic fencing and red tape around items of the canal infrastructure being cordoned off is increasing. I remember lock gates getting a lick of paint during most winters but I now see money spent on a new livery instead, so that we have a mixture of blue and white and black and white signage, which frankly looks tatty. When the kids were younger, 'spot the dredger' was a favourite game for a chocolate prize, but it frequently went unclaimed.

I am fed up of the corporate 'bull', concentration on the 'honey spot' areas, poets, wellbeing advisors, cyclists, walkers, and all the other interest groups who come before boaters. The channel and the offside profile is slowly closing up, making what the canals were actually built for increasingly difficult.

I know change has to happen and we need the above groups, and the system has to be marketed for income purposes, but the purpose for which canals were built—trade that required boats, yes boats, and boats that move—has been relegated. In football terms, it feels as though we are at the bottom of Division 2, about to drop out of the league, and believe me for someone who has supported the Wolves for the same amount of time that I have been a boater, I know just what that feels like!

Colin Graham
Near the Shroppie, Mid-Staffs.

Discretionary provision of boater facilities by CRT

I have had discussions with CRT over the state of the facilities at Hawkesbury Junction over the last six

I name this boat ...

If you have spotted a boat name that made you smile, please let me have a photo to use in future issues. Here's one I spotted last year.



months. After being told that dirty Elsan points, non-handwashing facilities, broken handles on water points and water point locks missing would be repaired, and were not (until many emails and photos later), I said to them that if things are not sorted, I will deduct an amount from my licence fee next year for each time I use the facilities and things are not right. Their reply was quite staggering: I was informed that I could not do that as the licence fee does not pay for the provision of any services on the waterways; it only entitles me to put my boat on the water. I was also told that provision of services was purely discretionary and, if CRT decides not to provide a facility, they could remove it. They also told me that they can charge for the facilities should they so deem at any time. I think we are all under the impression that the licence fee pays for these facilities, so I challenged the statement and the area manager, Tom Freeland, referred my questions further up the tree of management to answer. After waiting about six weeks, I had a reply from Brian Casey, Head of Estates, who confirmed to me that under the 1962 Transportation Act, they can effectively do what they want; it's up to CRT. He did add a caveat that they wouldn't do it without consulting boaters, but I think that is little comfort as we are seeing the closure of facilities and non-replacement thereof.

So I'm writing in the hope that we can look at bringing about a coordinated information campaign to boaters so that they become aware of this situation, that they comprehend the real intentions of CRT and we can mount a campaign to change this. The more people that are aware, the greater chance we have of forcing CRT to change this approach and change the charity objects to ensure that water and sanitation facilities are part of being able to navigate the waterways—which they absolutely have to be. The more I investigate the situation, the more I am gravely concerned for the state of, and access to, the waterways for us ordinary boaters, especially liveaboard boaters such as ourselves. I feel that the following points should be openly discussed and challenged with CRT:

1 How can you apply the 1962 Transport Act to today's situation, given this Act was the first stage of changes from nationalised waterways, rail, roads and ports to state-owned

corporations and was designed to facilitate the operating rules between the new organisations, such as British Waterways and British Rail, only not the canal and river networks of today as they didn't exist?

- 2 The use of a statutory instrument to change a 57 year-old act is not in accordance with its purpose, particularly as the act is wholly inappropriate for today's waterways.
- 3 How can we have a private limited company, 'CRT', which has seven directors listed who are also trustees of the Charitable Trust? Is this not a conflict of interest? Do they get paid for being a private limited company director? The 'powers' given to them under the articles of Association of this company are quoted in the correspondence I have so it is very relevant.
- 4 Who actually owns the assets of our waterways? We know it's the people, but I think the way this is set up, and the terms and conditions for boat licences, paints a very different picture. Surely this should be clarified and challenged otherwise they can and are doing as they wish?
- 5 When looking at the trustees and board of directors, it is very obvious they have a big association with large corporations, so is this set up to ensure the sell-off of the nation's assets to those corporations?
- 6 CRT has been appointed as the custodian of the waterways, but surely the sell-off of the Marina Company, managed by CRT, as a going concern and then buying a warehouse to replace income shows their intent is very different?
- 7 Has anyone already investigated the trustees/directors concerned to see if any conflict of interest has taken place?

I feel there is a very real and dangerous situation unfolding before our eyes. Unless we, the people, especially us fee-paying boaters who enter into these ludicrous contracts with CRT, speak out and rein them, in we will be subject to even greater tyranny, control and costs on the waterways as the assets are sold off. Further, as a matter of urgency, I feel CRT needs to be reminded that they DO NOT own the waterways, but are paid to maintain them.

David Phillips CLC
Boat 'Smine'

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