1. Introduction: The Inland Waterways Association

1.1 The Inland Waterways Association (IWA) is the membership charity that works to protect and restore the country's 6,500 miles of canals and navigable rivers. IWA is a national organisation with a network of volunteers and branches who deploy their expertise and knowledge to work constructively with navigation authorities, local and national government and other organisations. The Association also provides practical and technical support to restoration projects through its Restoration Hub.

1.2 The benefits of inland waterways are well documented in terms of the value that they bring to the nation’s improved health and well-being through opportunities for holidays, exercise and recreation, and the financial benefits to local economies through tourism, employment and regeneration. It is with this in mind that IWA submits for the attention of the House of Commons Public Bill Committee comments on the following parts of the Environment Bill:

- Part 1 – Environmental Governance
- Part 4 – Air Quality And Environmental Recall
- Part 5 – Water
- Part 6 – Nature And Biodiversity

2. PART 1 - ENVIRONMENTAL GOVERNANCE, CHAPTER 3

INTERPRETATION OF PART 1 - 41 - Meaning of “natural environment”

2.1 Introduction: IWA’s Heritage Advisory Panel was formed in 2018 to advise all parts of the Association on heritage matters and in advancing the case of heritage in all areas of waterways. Heritage is part of IWA’s key objective of Protecting the Waterways.

2.2 IWA supports the Heritage Alliance position on the exclusion of heritage from the definition of ‘environment’ in this Bill. IWA is concerned that this exclusion means that monitoring and reporting under this Bill and future Environmental Improvement Plans would not be required to cover historic features of the UK’s landscape. It is impossible to separate the historic and natural world, particularly in the context of the inland waterways. Excluding heritage features is to the detriment

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of both elements of the environment. This is also a concern in relation to the funding of heritage assets.

2.3 As a charity, IWA works to protect and restore the country’s 6,500 miles of canal and navigable rivers. Every one of those miles is not only a haven for wildlife and the natural environment, but a valuable heritage asset, many of which are under threat. It is simply not possible to separate the natural and historic environment of the inland waterways network.

2.4 The current 25-Year Environment Plan’s Goal Six is “Enhanced Beauty, Heritage and Engagement with the Natural Environment”. The Agriculture Bill similarly approaches the funding of all parts of the environment – natural and historic – on an equal footing. IWA would like to see the Environment Bill do the same, and follow the lead of the 25-YEP, to take a holistic approach to environment, including heritage on a similar basis

3. PART 4 - AIR QUALITY AND ENVIRONMENTAL RECALL

AIR QUALITY - 69 - Local air quality management framework

3.1 Introduction: IWA Sustainable Propulsion Group. Recognising the Government’s strategy to reduce emissions from diesel and petrol engines as part of reaching zero CO$_2$ emissions by 2050$^2$, in 2019 IWA formed its Sustainable Propulsion Group, a small group of volunteers with qualifications and experience in engineering, chemistry and technical knowledge of boats. The Group has produced a paper which is attached as an appendix.

AIR QUALITY - 70 - Smoke control areas: amendments of the Clean Air Act 1993

3.2 Section 70 c) of the Bill relates to “applying smoke control orders to vessels in England”. Emissions from boats on the inland waterways is relatively small compared to total use and emissions from other sources countrywide, but cannot be ignored if the UK is to reach zero CO$_2$ emissions by 2050. As an example, it is estimated that the operation of vessels on the tidal Thames accounts for 1% of emissions in London$^3$, where there are greater numbers of high speed and commercial craft compared to most inland waterways. This percentage will increase as emissions from road vehicles decreases, and this pattern will be replicated across the UK’s inland waterways. Contributory sources include wood-burning and solid fuel stoves and boat engines used for propulsion and electricity generation.

3.3 IWA supports the widespread provision of shore power mains connection charging sites ideally no more than 5 hours cruising apart, or more frequently in urban areas, so that boaters can use electricity to charge their batteries instead of

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running their engines, and so that, on boats with suitable 240v electric wiring systems, electric heaters can be used instead of relying on solid fuel stoves for heating. This will also encourage a move towards electric propulsion.

**AIR QUALITY - 71 - Environmental recall of motor vehicles etc**

3.4 The Bill will allow the Secretary of State to make provision for, about or connected with the recall of relevant products that do not meet relevant environmental standards. Section 71 d) refers to “an engine that is, or forms part of, machinery that is transportable (including by way of self-propulsion)” and we take this to include engines in boats on the inland waterways. We are aware of other expectations that the maritime sector, including inland waterways, will transition away from fossil fuels, as outlined in the Department of Transport’s Maritime 2050 Strategy⁴ and the Government’s Clean Air Strategy⁵ which outlines specific measures to tackle air pollutant emissions from the UK’s maritime and inland waterways sectors, with a long-term transition to low and eventually zero emissions.

3.5 There are estimated to be 80,000 powered craft⁶ on the inland waterways of England, Scotland and Wales, with the majority of these having hydrocarbon engines. These are mainly leisure boats with relatively modern diesel engines but there are a significant number of boats equipped with older, more traditional, diesel engines and a valuable cohort of historic ex-working craft, often with their original engines. IWA would not wish to lose the sight and sound of the preserved historic boats, as these are an important part of the inland waterways heritage. The majority of these boats are registered with National Historic Ships UK⁷.

3.6 Research shows that the greatest ecological and environmental damage is in the manufacture, rather than in a lifetime of running, hydrocarbon engines⁸. As both boats and engines can have lives of over 50 years and conversion to alternative drive systems is difficult, a sizeable proportion of the existing fleet is likely to remain diesel-powered until well after 2050. There is therefore no benefit to the environment in seeing otherwise sound vessels scrapped prematurely or for owners to be forced into expensive conversions. Therefore, a way needs to be found to significantly reduce the environmental impact of the existing diesel engines.

3.7 IWA’s Sustainable Propulsion Group has identified a number of potential solutions that should be followed up in order to ensure that boats used on the inland

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⁷ National Historic Ships UK Register. Available online: [https://www.nationalhistoricships.org.ukregisters](https://www.nationalhistoricships.org.uk/registers)

waterways do not get left behind in technological developments in order that the waterways can fully contribute to the UK meeting the Government’s stated aim of zero CO\(_2\) emissions by 2050.

3.8 The paper attached at Appendix A recommends that the following actions should be taken by Government to ensure that the inland waterways continue to be sustainable for future generations:

- **Investment in infrastructure** by installing 300 shore power mains connection charging sites across the connected inland waterways network – this will reduce the emissions from stoves for heating and engines run for charging batteries, as well as enabling a move towards more boats with electric propulsion.

- **Investment in a national dredging programme** across the inland waterways to make propulsion more efficient. This will also have additional environmental benefits on water quality and increasing capacity for flood waters. Schemes such as the Glasgow Smart Canal Project\(^9\), which aims to manage flood risk and move water resources during projected hotter and drier summers, will be more effective if dredging to original channel profile is carried out.

- **Research and investment in the production, use and distribution of biofuels** for use on the inland waterways.

- **Investment in research into hydrogen production and distribution**, Hydrogen and Solid Oxide fuel cells, and the use of supercapacitors, in order to develop and trial their use on the inland waterways.

4. **PART 5 - WATER**

4.1 **Introduction: IWA Restoration Hub.** Hundreds of miles of the UK’s canals and river navigations have been saved from dereliction since IWA was founded in 1946. Many more miles are gradually being restored thanks to the work of volunteers and the hundreds of trust and societies spread all over the country. IWA’s Restoration Hub champions restoration and provides access for restoration groups to the collective knowledge and expertise of our volunteers and staff. Waterways are an incredibly valuable asset and research has shown that the restoration of waterways can bring economic, social and environment benefits across the United Kingdom\(^10\).

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4.2 In addressing elements of the government’s stewardship of water in the environment through this Bill, IWA is concerned that some of the proposed changes may adversely impact the progress on waterway restoration projects across the country.

**PLANS AND PROPOSALS - 75 - Water resources management plans, drought plans and joint proposals**

4.3 IWA has concerns about the impact of the Bill on navigation authorities and restoration societies working to bring canals and formerly navigable rivers back into full use as navigations. The increasingly complex application processes and the associated costs of licence and permit fees charged to navigation authorities and waterway restoration organisations are putting a financial burden on these organisations, for what is often a bureaucratic exercise. IWA asks government to consider exemption or a reduction in costs or other support to assist voluntary groups, and in particular waterway restoration promoters, where the application is ultimately for public benefit.

4.4 The ultimate aim of waterway restoration societies is to restore a waterway back to navigation for the benefit of all, including the environment. The Environment Agency’s (and other Defra agencies’) insistence on full cost recovery for staff time in attending meetings with such restoration organisations is financially prohibitive and is preventing progress being made on some projects. IWA therefore suggests that not-for-profit schemes, and particularly those that are partnered by such agencies, should be exempt from this charge.

4.5 In amending the current statutory water resources planning process to ensure there is more effective collaboration between water companies and other sectors to manage supply and demand, deliver resilience against droughts and facilitate environmental improvement through a better understanding of environmental need, we would ask Government to ensure that navigation authorities and waterway restoration organisations are fully included in any such discussions.

**ABSTRACTION - 80 - Water abstraction: no compensation for certain licence modifications**

4.6 In taking steps to minimise the damage that water abstraction may have on the environment, by enabling the revocation or variation of permanent abstraction licences, IWA is concerned about any adverse impact on statutory navigations as well as any waterways which are subject to restoration proposals. Some navigation authorities are being asked to obtain abstraction licences even where water is returned to the same river system very close by and this would seem to be a valueless exercise in bureaucracy.

5. **PART 6 - NATURE AND BIODIVERSITY**

**BIODIVERSITY GAIN IN PLANNING - 90 - Biodiversity gain as condition of planning permission**
5.1 IWA’s view is that Biodiversity Net Gain is an opportunity to demonstrate the valuable role that waterway restoration plays in the enhancement of habitats and increased biodiversity of flora and fauna across the country. Waterways are considered green corridors that can reconnect disparate habitats and have a vital role in ensuring biodiversity net gain on a landscape level.

5.2 IWA’s High Level Panel (HLP) for Waterway Restoration fully supports the implementation of Mandatory Biodiversity Net Gain across all local authorities and the Good Practice Principles set within CIEEM’s Guidance11.

5.3 IWA’s HLP seeks to propose an addition to the Environment Bill to afford a grant relief scheme or discount to charitable organisations, not-for-profits and community groups that in ‘principle’ demonstrate considerable biodiversity net gain in local authorities. The grant relief scheme would help support organisations without ‘in house’ ecologists to commission baseline surveys and produce specific Biodiversity Net Gain project plans for entire lengths of a canal infrastructure project. The surveys would be reported back to local authorities in relation to planning and implementation of a Nature Recovery Network.

5.4 The draft Bill suggests that the ‘pre-development biodiversity value’ is based on the state of the site on a ‘relevant date’ [Schedule 14, draft schedule 7A(5-7)]. The latter will be a date between the date at which the draft schedule is implemented and the date planning permission is granted, subject to agreement. The concern is where the BNG works are done prior to the draft schedule being implemented, the draft legislation does not allow this work to be taken into account when considering future planning applications and thus arguably does not encourage any BNG works to be undertaken prior to Royal Assent. IWA notes that the draft legislation does specifically reference that where any works taking place after 30th January 2020 (but before a planning application is considered) result in a biodiversity loss, the loss shall be disregarded when determining the pre-development biodiversity value (i.e. the pre-development value will be that of the 30th January 2020). This is obviously prudent, as it prevents the potential for unscrupulous developers to rush to desecrate sites prior to Royal Assent. It is therefore felt that the draft legislation adequately discourages damages to the environment prior to Royal Assent, but also that it should go further to actively encourage BNG schemes to be progressed earlier where possible. The HLP would like to see an amendment to [Schedule 14, draft schedule 7A(5-7)] offering incentives such as biodiversity credits for developers who are voluntarily incorporating biodiversity net gain prior to assent.

**Biodiversity credits.**

5.5 Canal restorations are in a unique position to offer sites to local authorities to receive Biodiversity Credits and where onsite mitigation cannot be completed. IWA supports proposals for developers to have the ability to purchase Biodiversity Credit where onsite enhancements cannot be adequately made. IWA would like to see a formal process where landowners/land managers can propose sites to be included within the local authorities' & Secretary of State’s call for sites to receive biodiversity credits.

5.6 Unlike commercial entities canals are restored primarily through volunteers and charitable third parties with restricted funding through memberships or grant funding and the timescales to complete a project can take many years. IWA suggests that measures are put in place for charitable organisations to receive discounted biodiversity credits, where on site mitigations cannot be achieved, but the development supports aims that regenerate the local community through social inclusion and economic opportunities.

LOCAL NATURE RECOVERY STRATEGIES - 95 - Local nature recovery strategies for England

5.7. Assurance of incorporating Canals, Navigable Waterways and Canal Restoration within the Nature Recovery Network at both local and national level. Mainland Britain enjoys 4,700 miles of navigable inland waterways and 1,800 of either unnavigable or derelict waterways as calculated in research by IWA. A significant opportunity presents itself to fully integrate proposals within the Nature Recovery Network strategy to enhance and restore habitats located on or nearby waterways and improve the ecological connectivity between them. Stated within the Notices of Amendments, pg 36 line 146 [19/06/2020] The Secretary of State must publish guidelines that set out a process for review and approval of Local Nature Recovery Strategies by Natural England to confirm the priorities and proposals identified in the Local Nature Recovery Strategy would contribute adequately to the delivery of a national Nature Recovery. IWA supports work undertaken to link up local Nature Recovery Networks across boundaries using both the existing and currently under restoration waterways networks.

Attachment

APPENDIX A – IWA’S VISION FOR SUSTAINABLE BOATING

12 The Inland Waterways Association, IWA Waterway Directory. Available to download from: https://www.waterways.org.uk/waterways/iwa_inland_waterways_directory