

IWA Response to Grand Union Canal Transfer Scheme Consultation

The Inland Waterways Association (IWA) is the membership charity that works to protect and restore the country's 7000 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.

We thank the Grand Union Canal Transfer Scheme for the opportunity to respond to the survey. IWA supports in principle the concept of water transfer schemes if they facilitate improved navigation in areas which are currently subject to a water shortage. The present consultation does not provide any of the detail required in order to assess heritage impacts or the effects of engineering modifications. The next stage of consultation needs to closely define the extent and costs of all these interventions, well in advance of any Development Control Order (DCO) application, so that IWA and others can provide detailed advice and take an informed position on this proposal. At this stage we therefore wish to make the following initial points on potential benefits and impacts, highlight issues of concern and comment on potential mitigation.

IWA welcomes the early consultation on the Grand Union Canal Transfer scheme and would like to be included in future consultation exercises as the scheme develops, in the hope that any concerns can be resolved before the (DCO) application is made.

Once the DCO application has been submitted, IWA will decide whether to submit a 'relevant representation' to be registered as an 'interested party' and take part in the Examination of the DCO application.

While IWA has no specific remit re wider water resources planning, we understand the need for scheme and see how this could benefit canal users in several ways:

- by providing an additional source of income for CRT that could be spent on canal maintenance;
- as a means of overcoming water shortages during droughts that have in the past led to lock use restrictions and closures;
- maintenance of a deeper canal channel, where this is necessary to facilitate the water transfer without generating excessive current speeds.

Registered Office: Unit 16B, Chiltern Court, Asheridge Road, Chesham, HP5 2PX

Tel: 01494 783453 Web: www.waterways.org.uk

The Inland Waterways Association is a non-profit distributing company limited by guarantee.

Registered in England no. 612245. Registered as a charity no. 212342



- maintaining water levels in Daventry and Drayton Reservoirs to enable these to be used more effectively to maintain water levels and sustain navigation.

IWA is therefore supportive of the scheme in principle, provided it can be implemented without detriment to canal users and the waterway. However, we are aware of problems for navigation resulting from other water transfer schemes using canals (e.g. siltation at Gloucester Docks and on the Gloucester & Sharpness Canal, and the current speed through tunnels and bridges on the 'Llangollen Canal') and we do have concerns about disruption during construction and protection of heritage assets, as well as concerns about operational aspects such as operating rules during drought periods, current speeds in the canal and flooding.

We wish to seek reassurance that, in addition to potential positive effects identified above, the following issues will all be included in the environmental impact assessment (EIA) scoping report as potentially significant effects of the scheme and will be fully assessed during the EIA process. Where potential adverse effects on the canal and its users are identified, we wish to see appropriate mitigation measures incorporated into the scheme to avoid these adverse effects and, as representatives of users and a source of considerable expertise regarding inland waterways, we would be very pleased to assist the promoters in development of such mitigation measures.

Issues of concern

Design

We welcome the statements in the Consultation Document that new buildings will be designed to take account of heritage considerations, such as listed buildings. Design should also take account of effects on waterway users. We ask that full consideration be given to the following.

- In addition to listed buildings and other listed structures, much of the canal route lies within conservation areas (including long stretches where the canal is the principal feature of interest). The consistency of the proposals with Conservation Area Action Plans should be fully assessed.
- In particular, if channel cross-section needs to be increased through a bridge, the heritage values of the bridge should be taken into account. In some cases it may be necessary to provide additional capacity via a buried pipeline or culvert to avoid adverse effects on the heritage structure. We will be looking for reassurance that installation of pumped rising mains and new or augmented bypass pipes/channels (by-washes) will be designed to avoid adverse effects on the heritage value and setting of locks.
- Design should take account of the needs of waterway users. For example, the location and orientation of outlets from pumped rising mains and from by-washes can be important in terms of the effects of cross-currents on navigation and the development of scours below locks.

- Installation of new overhead electricity supply lines for pumping stations may have a detrimental effect on the canal landscape and we would be interested in commenting on any such proposals when details are known.

Construction phase

The construction phase will continue over several years and will include channel augmentation, bypass pipelines, pumping stations, pumping mains, bank raising, discharge structures, abstraction points, overflow weirs, etc). We are concerned that the following aspects should be considered fully.

- We want to see every effort made to minimise restrictions on access for navigational and towpath users (stoppages) during construction works, as well as appropriate consideration of temporary effects on moorings.
- The construction phase also offers opportunities to use water freight to deliver and remove materials, IWA advocates the use of waterborne freight where possible, for projects like this, to minimise disruption, noise and pollution to local communities and reduce harmful emissions.

Operational aspects

We understand that to achieve flow along the canal (particularly where flow is required in the opposite direction to the current flow regime), water levels may need to be raised to secure the necessary water surface slope, potentially requiring bank raising, alteration of spillway levels and dredging. Realising benefits to canal users will also depend on the way the scheme is operated. The quality of the water entering the canal system is also a topic of interest. We would wish to see a full assessment of the following aspects.

Currents

Detailed assessment should be undertaken of the effects of the currents that will be generated in the canal, especially through the fixed cross-sections of Braunston Tunnel and (especially) Blisworth Tunnel, taking account of the blockage factor of the largest vessels that can be accommodated by the waterway. This is likely to require detailed hydraulic modelling using computational fluid dynamics.

Drought Conditions

We welcome the potential for elimination of canal closures during droughts in future along the transfer route but want assurance that such benefits to canal users will actually be realised by the operating rules. In particular, during transfers the rules should accommodate the fact that some of the water pumped up lock flights or individual locks will be returned back down the locks during lock operation. We are particularly concerned that, if operation is entrusted to a third-party operator, as put forward as a possibility in the Consultation Document, duties of this operator to maintain navigation should be made absolutely clear.

Raised Water and Bank Levels

Where achieving the required water transfer flows will involve water levels being raised above current normal (weir crest) levels, or lowered below existing levels, we wish to see a full assessment of the effects on:

- o flooding risk;
- o headroom under bridges and in tunnels;
- o navigable depth;
- o boat moorings.

This should include assessment of effects on bank freeboard and channel depth throughout the affected pound and on branch canals at the same level. There should be separate assessment of effects on headroom at every bridge and tunnel. Any reduction in draught or airdraught of vessels able to navigate the affected pound or branches would be completely unacceptable..

Water Quality

We appreciate that nutrient stripping is in place at Minworth Wastewater Recycling Centre using the Anammox process but note that here is no specific mention of nutrient removal in the further treatment to be provided by the additional Advance Water Treatment Plant (AWTP). We have concerns that if the input of water to the canal at Atherstone contains elevated levels of nutrients, particularly nitrogen and phosphorus compounds, this will encourage weed growth, which could interfere with navigation, and/or encourage blooms of blue-green algae (Cyanobacteria), which can produce toxins. We seek reassurance that the environmental studies to be carried out will include an assessment of the effects of nutrients in the water input to the canal system at Atherstone on plant growth in the canal system.

Potential mitigation measures

Where adverse effects of the scheme on canal users or the canal infrastructure and heritage assets are identified, we would like to see, as early as possible, details of measures proposed that will be put in place to mitigate such adverse effects. IWA would be pleased to assist in developing mitigation measures.

- We envisage that mitigation measures for adverse impacts during construction will be set out in a Construction environmental Management Plan (CEMP) and would like the opportunity to comment on this as it is developed.
- In terms of effects of water currents on navigation, mitigation may be incorporated into design of the new water transfer infrastructure, as indicated above, and may also include measures such as dredging to increase channel cross-section. This would be a welcome benefit of the scheme.

- If water quality issues are identified, these should be fed back into the design of the AWTP.

Sue O'Hare

Chair, IWA Navigation Committee October 2024

sue.ohare@waterways.org.uk