

WUSIG Meeting 16 November 2011

Dredging Strategy Update Paper

Since the last meeting a number of issues regarding dredging approach and strategy have been progressed.

1. Head of Asset Management has been tasked with writing a comprehensive dredging strategy document to inform BW staff, Directors, Trustees and other interested parties. This strategy document will include a review of underlying data, survey based prioritisation of dredging, dredging methods, constraints and costs. It will set out a clear process for decision making. This document is in the process of being drafted and is 75% complete, awaiting further information as below. Target date for completion is December 2011
2. At the last WUSIG meeting it was recommended that BW should apply a rigorous and consistent approach to deciding on appropriate MOC dimensions used in the calculation of passing/failing trigger lengths. It was suggested that cill depth and twice lock width should be used. HoAM asked WUSIG members to help in providing information on specific locks etc where they believed a constraining depth existed. No information has been forthcoming to date. HoAM is currently investigating whether any useful cill depth and lock width data may be held by BW's two workshops. If this data is available it is likely that BW will recommend MOC width based on twice constraining lock width + small allowance for passing boats, and MOC depth based on constraining cill depth + small allowance for squat. This work is ongoing and awaits the outcome of trawling through the workshop records. Target date for completion end November 2011 although dependant on the nature of the records this may take longer.
3. BW's contractor, Land and Water, has been engaged over the last 3 months to analyse BW's survey and customer complaint records to identify lengths of canal where more planned spot dredging may benefit boat passage and reduce complaints. Target date for receipt of this analysis is within the next 2 weeks. Following this work BW then need to look at the cost v benefit of each type of dredging to ascertain affordable and sustainable solutions.
4. Currently BW recognises three generic types of dredging.
 - Main-line dredging - can be thought of as planned preventative maintenance work that re-establishes the canal profile to one that should allow unimpeded boat movement for a period of say 25 years without further dredging
 - Spot dredging – reactive work that is done in canals when local obstructions or shoals develop that locally impede boat movements. It is usually carried out a bridge and lock approaches, or inlet locations to deal with a local sediment build up. This may deal with a specific customer difficulty but does not provide a long term solution and may need to be repeated regularly
 - River dredging – a mixture of reactive and planned work designed to re-establish a safe navigable channel, depending on the dynamics of the river. Usually carried out following significant sediment redistribution after flood events but also recognised as a cyclical requirement in some rivers. River dredging often involves the redistribution of sediment and its dispersion downstream within the river rather than wholesale removal as is the case for canals
5. Following L&W work a fourth type may be recognised – Linear Spot Dredging. This will be a cyclical exercise carried out on some canals to carry out spot dredging continuously along the channel, to skim off all high spots and ensure that boat navigation is possible but without providing the depth reservoir required to accommodate future siltation.
6. It was suggested at the last WUSIG that BW should provide better quality plan based data on Waterscape to allow boaters to judge navigations where they may have difficulty. Discussions with BW GIS staff suggest that improvements are possible although the criteria and colour schemes to be used in any traffic light system still need to be determined.

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31/10/2011