

Riverside Tree & Scrub Management
Report by Environment & Design Supervisor

Summary:	Management of riverside trees and scrub is required to maintain navigation safety and wind quality whilst retaining environmental features and interests. A five year plan, prioritising the location of riverside management has been produced, incorporating the permissions required, consultation and agreed methodology.
Recommendation:	That the report be noted.

1 Background

- 1.1 The river corridors of the Broads contain a variety of habitats, with trees and scrub occupying a significant proportion, particularly in the upper reaches. This wooded environment provides valuable habitat for birds, fish, bats and otter; forms an important landscape resource; and contributes to ecosystem services in the form of carbon storage. However, encroachment by trees and scrub over and into the water causes safety issues for navigation through the narrowing of the navigation channel and obstruction to sight lines, particularly on river bends. Dense growth of trees and scrub also has the effect of reducing the quality and strength of wind available for sailing vessels.
- 1.2 Some management of riverside trees and scrub is required in order to maintain navigation safety and wind quality, however, the needs of navigation need to be balanced with the other values and interests as noted above. This balance can be achieved through effective prioritisation, consultation and sensitive working practices. It is important to note that tree management in this context refers to a reduction in density of woody species and lowering average height over the medium term, and not the removal of all such growth.

2 Legal Framework

- 2.1 Much of the Broads area is designated for its nature conservation interest to National and European level. As such, any works within these protected areas requires assent from Natural England before work can commence. Consultation is required with the Environment Agency as riverbank tree management falls within the scope of the Water Framework Directive (WFD). An Environmental Permit is also a legal requirement for the use of herbicides near waterbodies, which includes the treatment of cut tree stumps. In addition, the Forestry Commission must be consulted on large scale felling of trees through the felling licence process, although the Broads Authority is exempt where works are required to maintain navigation safety.

- 2.2 The management of riverside trees and scrub is the responsibility of the landowner or tenant. However, as the Broads Authority is responsible for maintaining safe and navigable waterways, the condition of trees along the margins of the rivers and broads is monitored by the Ranger Team. Where remedial work is required, landowners are advised and are expected to make safe any significant hazards to navigation.

3 Prioritising Management

- 3.1 In 2015, an approach to categorising and prioritising riverside tree and scrub management was produced by the Broads Authority. Each river valley was surveyed by a Ranger and Environment Officer to determine the types of habitat present and the work required to make improvements to navigation safety and wind availability. For each stretch of the river a priority class was assigned to reflect when the work should be undertaken. Notes were also taken regarding ecological features such as trees with bat potential and other points of conservation interest.
- 3.2 This survey information was recorded electronically and prioritised maps produced for each river valley. Permissions from statutory bodies and landowners were then obtained for works to proceed during the winter months.
- 3.3 This initial prioritisation work enabled 4100m of riverside trees to be managed during the winter of 2016/17, utilising Broads Authority staff, volunteers and contractors.

4. Additional Prioritisation

- 4.1. To improve efficiency and streamline the consenting process, agreement was reached with Natural England for the Broads Authority to request assent for a five year work period, starting in winter 2017/18. In order to do this, maps delineating the areas to be managed within the next five years were required.
- 4.2 During January 2017, Rangers and Environment Officers worked together to fine tune the prioritisation process with additional criteria added to improve the robustness of the process. The list of parameters utilised in the prioritisation process includes:
- sailing intensity
 - general boat usage
 - presence of moorings
 - position of river stretch (bends or straight)
 - density of riverside growth
 - width of channel lost to tree encroachment

5. Results & Methodology

- 5.1 The prioritisation has been used to produce maps showing those areas that require management within the next 5 years (see Figure 1). Year 1 (2017/18) priorities have been confirmed pending landowner, Natural England and Environment Agency agreement. However, it should be noted that years 2-5 (2018/19-2021/22) are subject to final operational work planning and budget availability in addition to obtaining further landowner permissions.

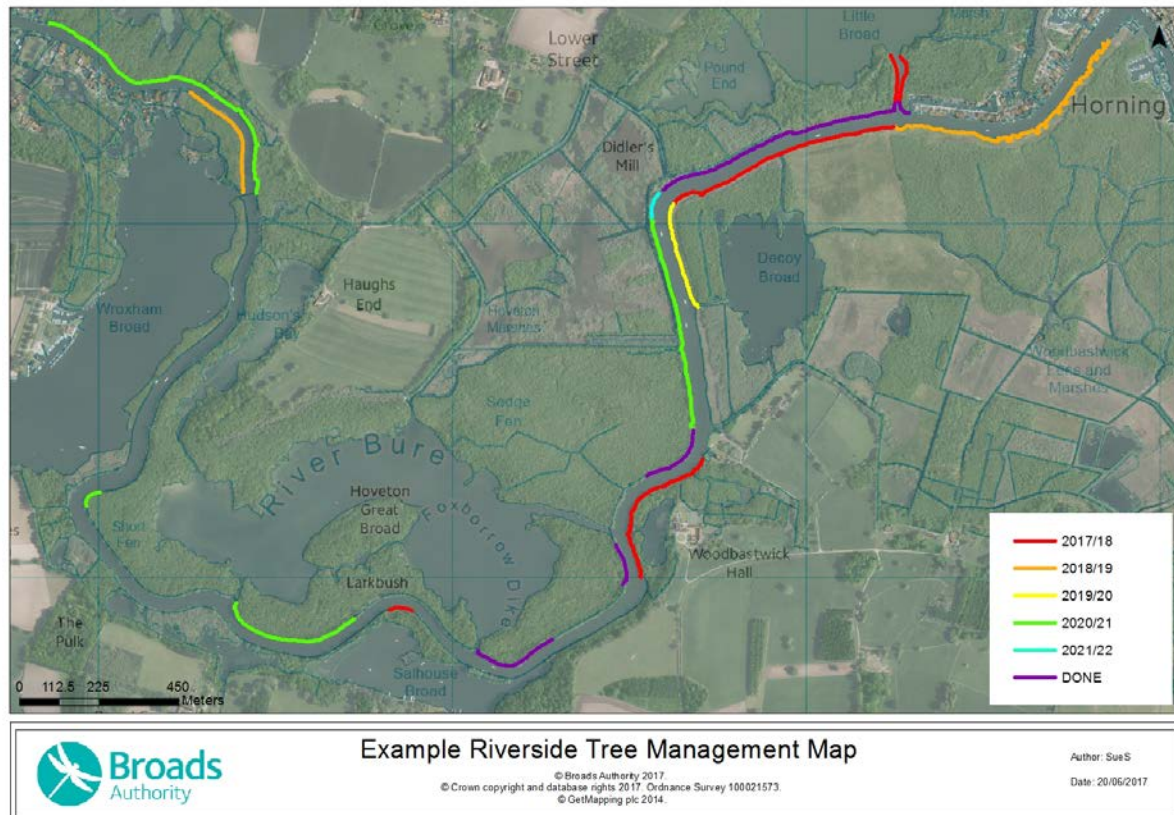


Figure 1 – Example 5 year tree riverside management plan

- 5.2 Part of the consultation and permissions process has included detailed discussion with Natural England and the Environment Agency regarding the works specification and practical methodology. The following points summarise the permitted approach:
- Trees and scrub will be managed in a zone to a maximum width of 3m from the river edge (*agreed through consultation with the Forestry Commission*)
 - Within managed zones, occasional trees and scrub that overhang the river will be retained for the benefit of birds and spawning and overwintering fish; the retained amount should total 20% of the linear distance of the managed stretch.
 - Some mature trees are to be retained (particularly where there are no significant safety hazards and contain deadwood and features of use to invertebrates, bats and fungi)
 - The occasional young or semi-mature alder and/or oak are to be retained, in the spaces between other retained mature/veteran specimens, to provide replacement specimens for the future.

- Within the zone 1m landward of the bank edge, trees with a 15cm diameter or greater, a maximum of 50% of the cut stumps can be treated with herbicide. Of particular importance, and not to be treated, are those stumps with roots coming out from the bank which offer spawning potential and refuge areas for fish.
- Within the remaining 2m strip (1m to 3m back from the river edge), all cut stumps can be treated with herbicide, but the occasional mature tree stump should not be treated, or young 5 to 10 year old trees should not be felled. This is to provide future specimen trees to replace existing mature trees.

It should be noted that each section of riverbank is assessed annually and further specific actions applied depending on the nature of the habitat present.

6. Consultation and Permissions

- 6.1 To consider the potential impacts of works within a site that has designated features of European importance, the Broads Authority is required to produce a Habitat Risk Assessment (HRA) Screening document. This describes the features for which the site is designated and considers whether the proposed works are likely to have a significant effect upon those features. If this exercise concludes that a significant effect is likely, an Appropriate Assessment is then required.
- 6.2 Consent is also required from the Environment Agency in the form of a Water Framework Directive (WFD) Assessment and formal application is required for permission to use herbicide near water (Aqherb01).
- 6.3 To date, an HRA has been produced and submitted to Natural England with the Authority concluding that the works proposed through the five year plan are not likely to have a significant effect on the European interest features. This conclusion is based upon the scale of the works and specification and methodologies for working, as described in section 4. The WFD Assessment and Aqherb01 permissions are in the process of submission at the time of writing this report.
- 6.4 Once assent from Natural England has been gained, individual landowners will be contacted to request permission for the Broads Authority to undertake the work on their land. A formal agreement will be drawn up between both parties detailing the works, specific methodology and expected timescale.
- 6.5 Consultation will also be required with Broads Authority planning officers where trees fall within planning Conservation Areas and/or have Tree Preservation Orders (TPO).

7. Next Steps

- 7.1 While the consultation and permissions process is underway, work proposed for the coming winter will be assigned between Broads Authority staff, volunteers and contractors.

- 7.2 Assent from Natural England, if awarded, will cover the proposed five-year work programme, whereas Aqherb01 licences are applied for on an annual basis.
- 7.3 For each consecutive year, final decisions will be made over the summer as to the exact stretches that will be managed the following winter and how they are best managed in terms of resource. As part of this process, all areas of completed management will be recorded and any stretches that do not get managed within the proposed year will be re-programmed.
- 7.4 It is anticipated that a further re-prioritisation exercise will take place during 2020/21 to plan the next five year work programme commencing in 2022/23.

Background papers:	Riverside Tree and Scrub Management in the Broads 2015-2025
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Broads Plan Objectives:	C.4.2
Appendices:	None