



Environment  
Agency

# Mill Leese Flood Storage Area Vegetation Management Plan

*Version 3, 14<sup>th</sup> June 2021.*

*Simon Beal*

*Rother and Romney Asset Performance Team.*

**Site Location:** Saltwood, Hythe, Kent CT21 4QU TR1604235986

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## Summary

### ***PSRA and operator safety***

Dangerous trees throughout the embankment asset will be managed in the interests of both operator and public safety in accordance with a tree PSRA assessment that will be undertaken every 3.5 years (as a medium usage zone).

### ***Crest***

The crest of the embankment will be managed as a clear area, with only low growing non-woody vegetation permitted. New saplings will be removed.

### ***Below the Probable Maximum Flood (PMF) line (both upstream and downstream aspects of the embankment)***

Saplings will be removed. Mature trees that are sickly or threatening to fall/drop limbs upon the badger fence will be felled/lopped following advice and guidance from a suitably qualified bat ecologist. Fallen timber will be removed from site. Trees that have been felled will not be allowed to re-grow (coppice regrowth will be removed annually), excluding mature hazel trees, which will be managed as coppiced trees. Where trees have blown over, we shall back-fill the hole left by the raised root ball with the support of an ecological assessment.

### ***Above the Probable Maximum Flood (PMF) line (both upstream and downstream aspects of the embankment, but not including the crest)***

Saplings will be allowed to mature, as they contribute to the future viability of the legally protected habitat for bats. Dangerous trees will be managed following advice and guidance from a suitably qualified bat ecologist. Fallen timber will be left, providing it does not represent a health and safety hazard, as it provides valuable habitat for insects upon which bats feed. Trees that are felled will be allowed to regrow and be managed by coppicing on a 10 yearly cycle to maintain healthy stable trees.

### ***In-channel vegetation***

Weed in the Mill Leese Stream, 50m upstream of the trash screen, will be cut annually.

Implementation of this plan will require the assent of our FBG Team. Folkestone and Hythe District Council may need to be consulted, as the site is within an Area of Outstanding Natural Beauty. Works will be delivered under our statutory powers following a Notice of Entry. We currently have no land or access rights, so solely rely upon our powers of entry.

### ***Review Period***

This plan will be reviewed by 15<sup>th</sup> June 2026.

## **Introduction**

This plan covers the period to March 2026. Mill Leese FSA was handed from Folkestone and Hythe District Council (nee Shepway) to the Environment Agency on 1<sup>st</sup> April 2006 under the Critical Ordinary Watercourses scheme. The asset relies upon an abandoned railway embankment as the reservoir embankment. This embankment is heavily wooded with mature trees. Badgers were resettled locally when the FSA was constructed, then excluded by a badger proof fence. The asset is within an Area of Outstanding Natural Beauty. Currently, the EA do not have any land rights, so rely upon good will and our powers of entry when managing the site.

(4)

### **Works delivered within the 2020/21 financial year**

1. Most trees on the crest of the embankment with a trunk diameter less than 100mm were cut to the ground. Shrubs or other woody growth on the crest was largely removed. Low-growing, non-woody plants were encouraged on the crest and embankment generally.
2. Glendale were instructed to deliver the first tranche of tree works on the embankment. These works included the removal of fallen branches & debris from the upstream facing slope, below the Probable Maximum Flood (PMF) line, plus works on individual trees (see *Mill Leese Embankment Tree PSRA, proposed works and ecological assessment summary 2020* alongside plans in the appendices). However, due to landowner resistance and bats, the scope of works was severely limited.
3. Our Field Team cut the in-channel vegetation 50m upstream of the trash screen and desilted both upstream of, and behind the trash screen.
4. A suitably qualified badger ecologist continued to inspect the embankment periodically for evidence of badgers re-entering the embankment enclosure (none have done so to date).
5. Rabbit control (night time shooting) within the embankment enclosure was undertaken.

## **Works programmed for the 2021/22 financial year**

1. Maintain the crest as an area clear of woody growth and debris.
2. Instruct contractors to back-fill root ball cavities on the embankment. Works to be delivered between May and September, but no later than 31<sup>st</sup> October to avoid dormouse and reptile hibernation. Project will also include filling in rabbit holes with granular material.
3. We shall appoint a contractor to complete those elements of the 2020/21 works that Glendale were not able to deliver within the previous financial year. This will include;
  - Concluding the PSRA works.
  - Removing woody debris up to the PMF line.
  - Managing any remaining trees that are threatening to fall upon the badger fence.
  - Cut to the ground any saplings with a trunk diameter less than 100mm from the zone below the PMF line, but excluding mature hazel trees, which will be managed as coppiced trees.
  - Complete the works to remove woody growth and debris from the crest.

Delivery of these works depend upon either landowner cooperation or our Estates Team having secured land rights.

4. Our Field Team will cut the in-channel vegetation 50m upstream of the trash screen.
5. Our Field Team will desilt the channel upstream of the trash screen if required.
6. A suitably qualified badger ecologist will inspect the embankment periodically for evidence of badgers re-entering the embankment enclosure.
7. A pest controller will survey for signs of rabbit activity within the embankment enclosure and manage any such incursions.

(6)

## **Works within the 2022/23 – 2025/26 financial years**

1. Our Field Team will manage the crest once a year to maintain it as an area clear of woody growth and debris.
2. Manage trees in the interest of operator and public safety following advice and guidance from a suitably qualified bat ecologist.
3. Proactively manage the hazard of trees/branches falling upon the badger fence.
4. Fell diseased trees up to the PMF line, following advice and guidance from a suitably qualified bat ecologist.
5. Remove arisings and fallen woody debris from the embankment that lies below the exceedance line.
6. Back-fill new root ball cavities on the embankment up to the PMF line. Works to be delivered between May and September, but no later than 31st October to avoid dormouse and reptile hibernation.
7. Cut to the ground and saplings establishing upon the embankment, up to the PMF line, but excluding mature hazel trees, which will be managed as coppiced trees.
8. Cut back any growth from the stumps of felled trees to combat coppice regrowth.
9. Our Field Team will cut the in-channel vegetation 50m upstream of the trash screen annually.
10. Our Field Team will desilt the channel upstream of the trash screen annually, if required.
11. A tree PSRA assessment will be undertaken in January 2023.
12. A suitably qualified badger ecologist will inspect the embankment periodically for evidence of badgers re-entering the embankment enclosure.
13. A pest controller will survey for signs of rabbit activity within the embankment enclosure and manage any such incursions.

## **Conclusion**

We plan to divide the management of the embankment into three zones;

1. Below the PMF line, on all aspects of the embankment
2. Above the PMF line, on all aspects of the embankment (not including the crest).
3. The crest.

We note the requirements of the section 12 and 10 reports. We believe that the Matter of Maintenance contained within the Section 10 report of April 2020, section 13.4, is addressed by this plan up to the PMF flood level, which will be suitably maintained for reservoir safety.

Above the PMF line trees will be managed as appropriate for safety, but also so as to maintain the nationally important bat habitat. Recent monitoring of bat activity, in support of the works undertaken in the winter of 2020/21, have revealed the presence of numerous bats of various species using the embankment as a foraging and navigational resource.

The Crest will be managed in line with the Matter of Maintenance recommendations.

## **Recommendations**

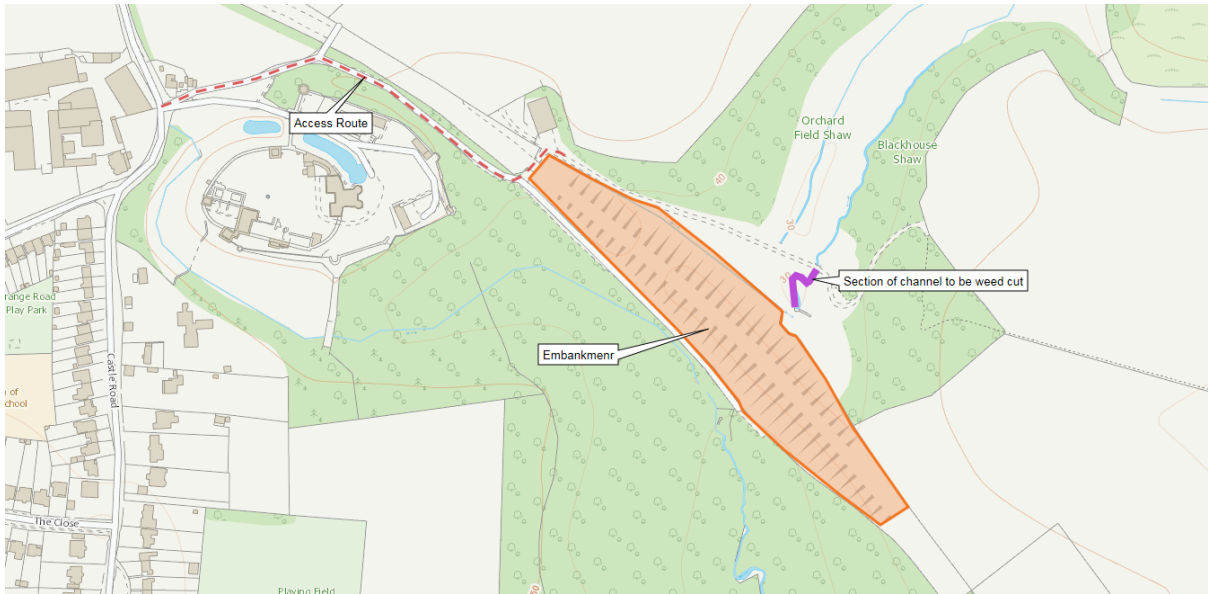
It would aid efficiency if we were to secure land use rights, to supplement our powers of entry.

## **Review**

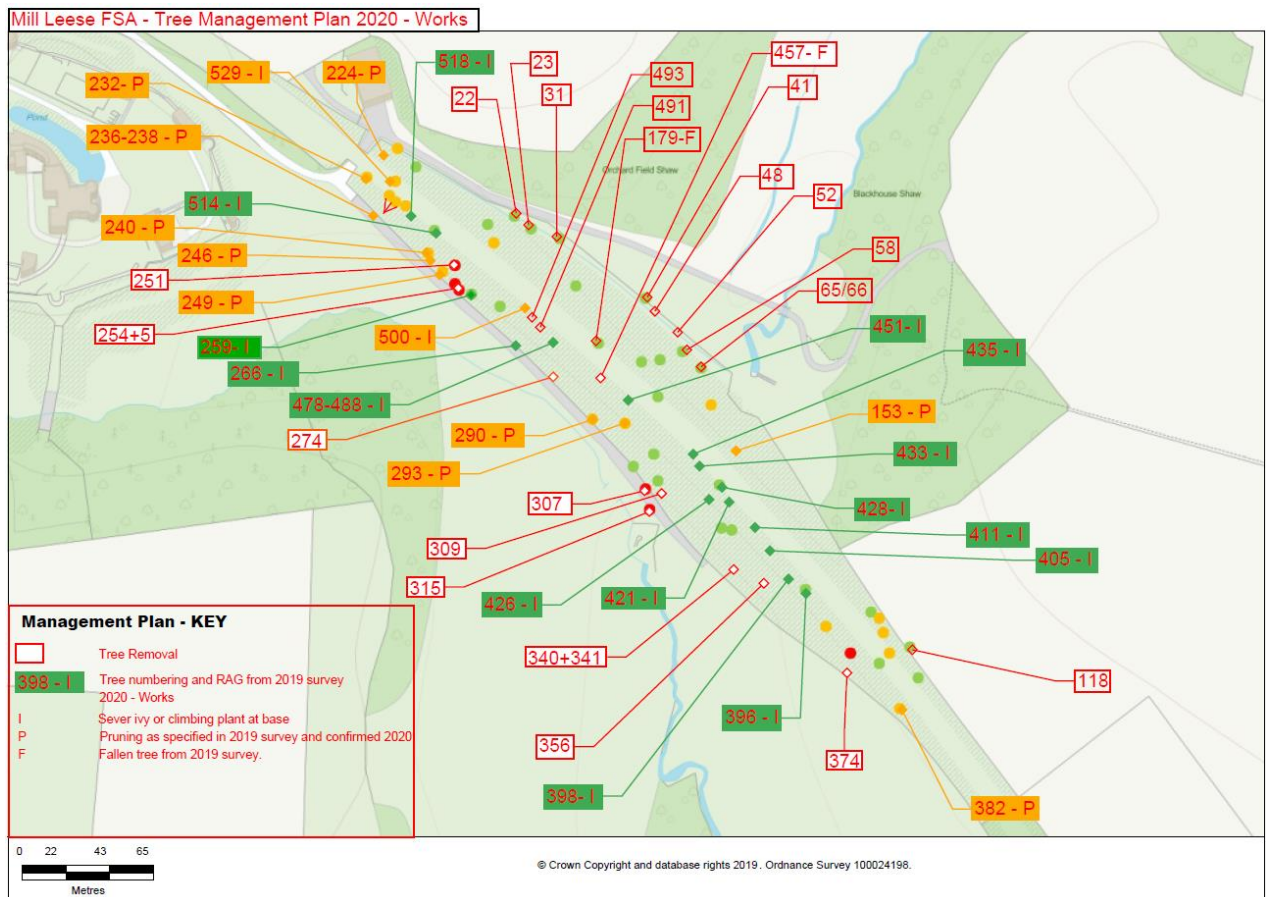
This plan will be reviewed by 15th June 2026. The review will be conducted by the Rother and Romney Asset Performance Team. Consultees will include:

- Fisheries, Biodiversity and Geomorphology Team
- Supervising Engineer
- Landowner(s)
- Folkestone and Hythe District Council

# Appendices



Appendix 1: Plan of the Mill Leese FSA Embankment



Appendix 2: Plan of tree works proposed within the 2020/21 – 21/22 financial years



**Appendix 3: Comments by our Ecologist, Lesley Mason, Environment Agency, FBG Team 17<sup>th</sup> February 2021**

*The bat survey report is really interesting and definitely confirms the importance of the habitats on the embankment in the context of the castle and surrounding landscape.*

*In brief summary:*

*The bat activity recorded on the embankment was above average showing the importance of the site, this was both in October at the end of the main active season for bats and during December the winter hibernation season for bats. To summarise there is a very high diversity of bats using the embankment, indeed it is likely that 11 bat species are present and this is actually all the bat species that could realistically be expected to be there as the absent species are either not commonly found in Kent or don't use this type of habitat.*

*The embankment and the vegetation present provides an important foraging and commuting corridor for the local bat population and provides a crucial link for confirmed roosts at Saltwood Castle and the wider landscape.*

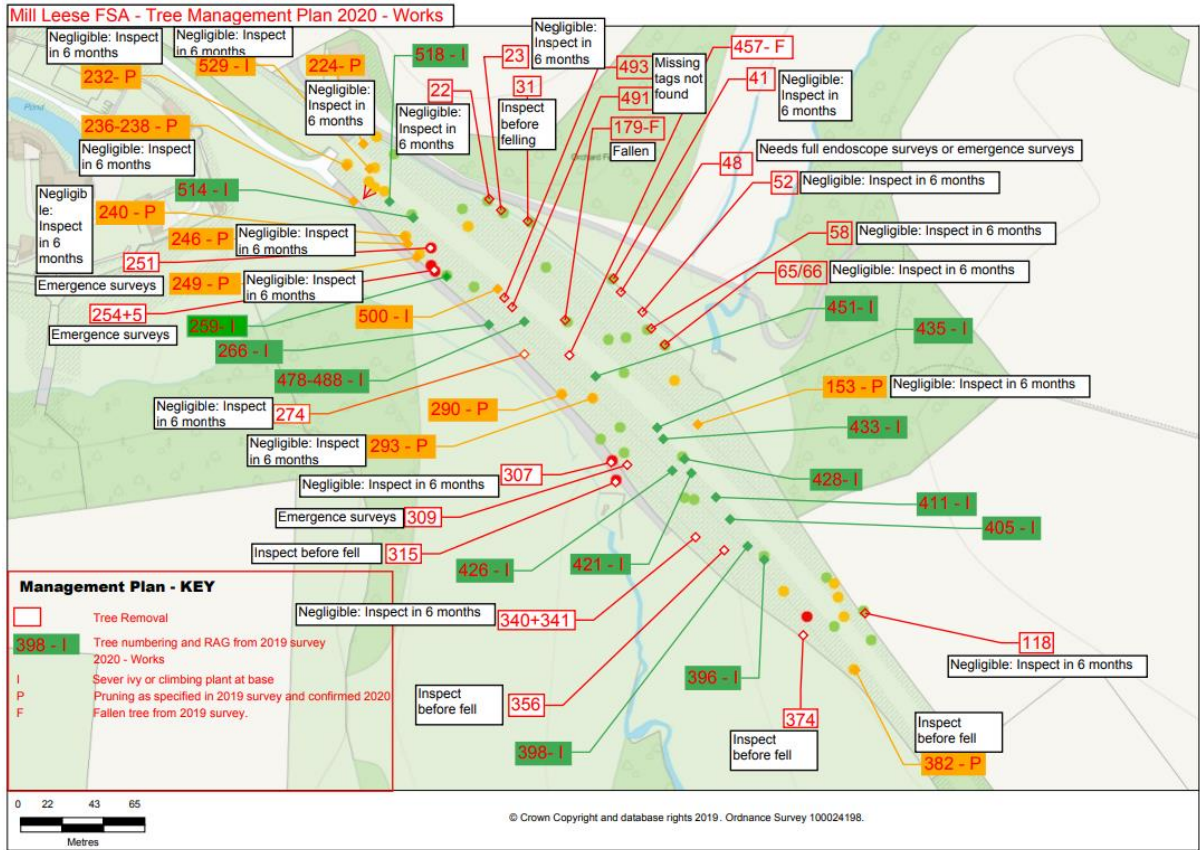
*The mature trees and other vegetation on the embankment are important to hibernating bats since significant activity was recorded even during December for Noctule bats that typically favour trees for winter hibernation roosts.*

*Section 4.14 of the report: "Any works that impact the embankment vegetation and wider area are likely to have significant detrimental impact to roosting, foraging, commuting and hibernating bats and should be kept to a minimum".*

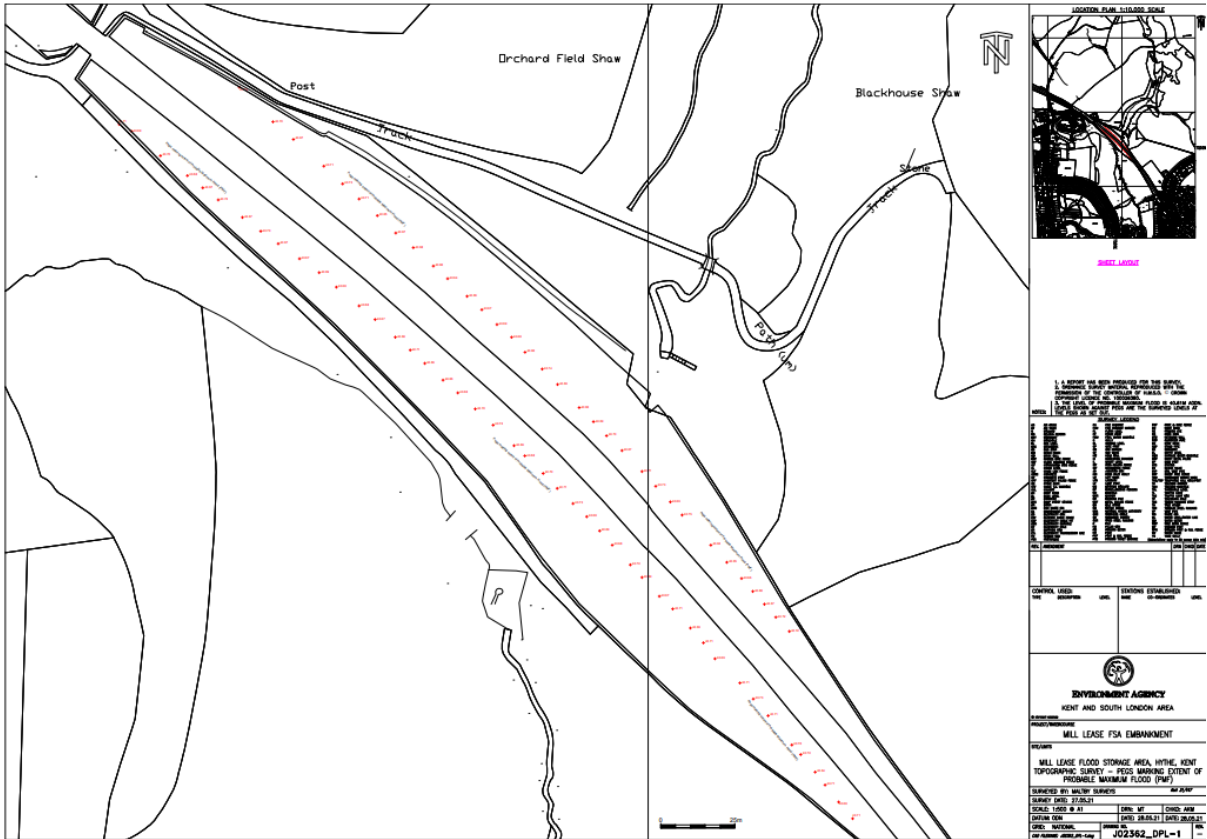
*The bat survey data gives us the evidence to develop a pragmatic approach to tree and vegetation management on the embankment. This evidence should demonstrate to the inspector the very significant importance of the site for the local bat population and why the trees and vegetation cannot legally be removed and replaced by grassland.*

*Legally: The Habitat Regulations state that it is unlawful to disturb bats, disturbance in this context includes bat in all roosts (summer, winter hibernation & maternity roosts), flight lines and foraging areas. In addition, in England under the Wildlife and Countryside Act it is an offence to intentionally or recklessly disturb a bat whilst it is occupying a place of shelter or protection, (usually a roost).*

*High risk activities are felling, removal or lopping of woodland, mature trees, mature ivy and dead trees , particularly within 200m of water bodies and sites known to be used by bats*



Appendix 4: Plan of tree works proposed within the 2020/21 – 21/22 financial years with notes from bat ecologist



Appendix 5: Topographic Survey - Pegs Marking Extent of Probable Maximum Flood (PMF)

## Related Documents

Operational instruction 362\_09 The safe management of trees

Section 10 and 12 reports: [N:\KSL\\_Reservoirs\SE145 Mill Leese FSR\Reports and Statements](#)

Mill Leese Embankment Tree PSRA, proposed works and ecological assessment summary 2020 (*PDF*).

Bat Tree and Activity Survey Report. Corylus, 3<sup>rd</sup> February 2021.