

Biodiversity Loss in the Chilterns AONB part 1 – Summary

This report studies the HS2 biodiversity calculation for Community Forum area 9, between Frith Hill and Leather Lane. The area includes the Chiltern Tunnel North portal, which is the subject of a case study in section 3.

CFA9 Biodiversity

The HS2 biodiversity metric is explained in appx 1. HS2 claim that the initial biodiversity (381 units) will *increase* to 415 units after construction (by 9%). Around half of the original area is preserved, and one third is newly created habitat (**Table 1**) The remainder is labelled as pre-existing habitat types, but will clearly have to be recreated.

The calculated biodiversity has been reduced by two factors – time to completion, and difficulty of reconstruction. This calculation implies that after successful completion (10 years for most new habitat) the biodiversity will be 688 units – 80% higher than the pre-construction value (**section 2.2**). This might be considered to be unlikely.

Hedges

Around 1/3rd of hedgerows in CFA9 will be lost, by length and by Biodiversity. This requires all post construction hedges to achieve maximum habitat condition, while only 20% of preconstruction hedges do so. How this will come about is not explained.

North Portal

The North Portal case study looks at the area between Frith Hill and footpath GMI/12 (which connected Potter Row to the Great Missenden roundabout). 1/3rd of the 36 ha will be replaced by new habitat, leading to an increase in biodiversity from 99 to 168 units – since the new habitat is assigned to be of high distinctiveness and good condition. This assessment appears to neglect the reduction in connectivity due to security fencing, and disturbance caused by the operation of the railway.

Recent schedule 17 applications have included planting plans for the area – for information. These list the species to be planted, but not their relative proportions, so it is unclear to what extent the site will recreate a typical Chilterns wooded area. Artists impressions, and the state of advanced planting (off Bowood Lane for example) suggest considerable optimism in the biodiversity assessments.

Peripheral habitats

Areas just outside the act limits (such as Jenkins Wood) were excluded from the biodiversity calculations, although they are well within the noise

contours. No account has been taken of the reduced connectivity between habitats divided by the line.

Hedges

The HS2 assessment suggested that half the north portal hedges would be retained, but $\frac{1}{4}$ of these retained hedges have already been destroyed. In many cases this was inevitable. A detailed study of one (470m) hedge found an 80% reduction in biodiversity, as compared with a 40% loss predicted by HS2 (**section 3.4.1**).

Trees

Trees were not recorded by HS2, but were assessed according to Natural England Biodiversity Metric 4, using the society's photographic records and Google Earth data. Trees contributed an additional 37 biodiversity units (37% of the area based biodiversity), 13 units of which have been lost. This includes two of the three large trees in the north portal area.

Summary

(**Section 3.6 p36**). The HS2 estimated final biodiversity assumes that habitats will be recreated or restored to the highest possible standards – higher than was assessed pre-construction. Many factors which suggest this is unlikely have been ignored. The actual biodiversity will only be known some 10 years after construction has been completed, but the present condition of recently planted areas suggests that far better care is required if they are to even reach an adequate standard.

