

ANCIENT WOODLAND LOSS

All Scheme Options would result in the permanent loss of Ancient Woodland comprising both Ancient Semi-Natural Woodland and Plantation on an Ancient Woodland Site. These habitat losses mainly occur within the Binsted Wood Complex Local Wildlife Site and the Rewell Wood Complex Local Wildlife Site.

Ancient Woodland figures were reviewed and revised during PCF Stage 2. Some aspects of earlier calculations previously overestimated the potential Ancient Woodland losses in PCF Stage 1 assessments and were corrected during PCF Stage 2. The new estimated areas of Ancient Woodland loss associated with each Scheme Option are presented in Table 1¹. The Table shows the approximate area (hectares) of Ancient Woodland loss for each Scheme Option footprint and a 15 metre buffer from the extent of each Scheme Option footprint as updated during PCF Stage 2:

Table 1 Likely loss of ancient woodland associated with each Scheme Option

SCHEME OPTION	APPROXIMATE AREA (HECTARES) OF ANCIENT WOODLAND WITHIN SCHEME OPTION FOOTPRINT*	APPROXIMATE AREA (HECTARES) OF ANCIENT WOODLAND WITHIN THE SCHEME OPTION FOOTPRINT PLUS 15 M BUFFER
1	1.02	2.96
3	7.67	12.15
5A	4.05	6.06

*Option design as at public consultation (August 2017).

To quantify Ancient Woodland loss, the Scheme Option footprint was buffered by 15 metres and a polygon incorporating each Scheme Option footprint plus a 15 metre buffer zone was overlaid on the Natural England Ancient Woodland Inventory data set. The resulting Ancient Woodland loss estimate is thus considered to provide a realistic estimate of the area of direct habitat loss which may be required to construct the Scheme Option (i.e. larger than the operational footprint). It is noted that this approach may underestimate indirect impacts (e.g. hydrological, air quality impacts), however, it provides a consistent basis for Scheme Option differentiation. Indirect impacts will be more fully assessed at PCF Stage 3 when a preferred route option is selected.

The PCF Stage 2 Scheme Option designs are not the final designs and are based on a number of assumptions. The design footprint will continue to change as new data is collected, and the design is refined to incorporate environmental impact mitigation measures and other design objectives. As such, the area of Ancient Woodland loss is not final and will change as the design process continues. Ancient Woodland losses will continue to be assessed and refined through the detailed design process, and the areas are likely to change during PCF Stage 3.

¹ Permanent habitat loss estimate produced by applying a 15 metres buffer zone around Scheme Option footprint to include both the operational footprint of the Scheme Options and land likely to be required for construction only.

The conservation status of Ancient Woodland is dependent on maintaining, amongst other things, its extent, species composition, connectivity to similar habitat and the range of different woodland types it supports. Such a large area of Ancient Woodland, as present in the Desk Study Area, is uncommon in England; thus maintenance of the size and extent of such Ancient Woodland forms part of the conservation objectives for this habitat. As Ancient Woodland is irreplaceable, it cannot be directly compensated. Each of the Scheme Options would likely result in a major adverse significant effect at a national level on this habitat type. Option 3 would generate the highest magnitude effect, followed by Option 5A and Option 1 the lowest magnitude effect. The revision of the Ancient Woodland figures during PCF Stage 2 does not impact the magnitude effect of each Scheme Option.