Background Paper 1 - How has a tariff been calculated?

The proposed cost for the Council to deliver a single biodiversity unit has been calculated to be £25,000. This has been prepared by considering the following hypothetical scenarios for three different sorts of habitat creation project that could take place in order to deliver units. The habitats chosen are considered the most likely habitats to be lost as a result of development, and hence the most likely to require compensation.

Grassland Creation Project

A hypothetical project based on the creation of 5 ha of other neutral or other acid grassland created on agricultural land. This would aim to produce a habitat in moderate condition and would result in the delivery of on average 5 units of biodiversity per hectare or 25 units for the whole project.

Woodland Creation Project

A hypothetical project based on the creation of 5 ha other broadleaved woodland on agricultural land. This would aim for moderate condition habitat after 30 years and delivering 3 units per hectare or 15 units for the project.

Scrub Creation Project

A hypothetical project to create 5 ha of mixed scrub habitat on agricultural land. This would be managed to achieve good condition, with a diverse age structure of scrub plants and open glades valuable for invertebrate species. This would deliver approximately 35 biodiversity units.

General Project Costs

For all three types of habitat creation project the costings have all included the following factors:

- Land acquisition costs To secure land on which to undertake the necessary habitat creation works. This is based on average land cost prices to buy farmland in England.
- Project development/feasibility This is based on staff time to find suitable sites, develop projects, design schemes, undertake due diligence, secure landowner agreement/acquire sites, contract management, commission feasibility studies etc.
- Monitoring and Project Management As part of a Biodiversity Net Gain agreement monitoring of habitat creation is required for 30 years. This would involve site visits potentially in years 1,2,3,5,10,15,20,25 and 30, mapping habitats using UK Habs classification and condition assessments against the Defra Metric. Report writing and review of management practices. The costs here include staff time to commission and manage contracts necessary for the delivery and monitoring of the project.
- **Project Insurance/Contingency** Due to the potential for unforeseen circumstances when creating habitats it is necessary to include a contingency fund in order to be able to rectify problems that may occur. This has been calculated as 10% of habitat creation, management and land purchase costs.

Habitat Creation and Management Costs

In addition to the above, the costs associated with habitat creation and 30 years of management have been estimated for each of the proposed habitat creation projects. The types of habitat creation methods and management practices for which estimates of costs have been included are set out below.

Grassland Creation and Management

Installing fencing - In order to be able to graze a site, there is a need to install fencing and provide stock handling facilities and gate access.

Site preparation and sowing – Site preparation prior to seeding requires vegetation removal and seed bed preparation prior to seeds being sown and rolled to ensure contact with the ground surface.

Seed Purchase – The purchase of suitable wildflower seed for a seeding rate of 40kg/ha.

Establishment Management – Four establishment management cuts during the first year based on the cutting and removing arising's.

Re-seeding or Green Hay Treatments – In years 4 and 10 in order to try and increase species diversity within grassland swards, once the initial establishment phase is completed, sites may be oversown with seed or green hay be collected and distributed.

General repairs – To include the costs of general maintenance of fencing for 30 years.

Staff Costs - To cover stock management with daily visits for animal welfare purposes and weed management (Years 2-5 Annually, Years 6-30 every 2 years)

Woodland Creation and Management

Habitat Creation and establishment management – This would include ground preparation, tree stock acquisition and planting, watering and replacement of failures.

Enabling Infrastructure – Infrastructure can often be required in order to allow woodland creation projects to go ahead. For example fencing to restrict access from adjacent sites that may cause damage, or the need for improved vehicular access to allow management to take place. This has therefore been factored into cost estimates.

Thinning – Costs to undertake woodland thinning around year 15.

Glade Creation – Costs associated with creation of rides, glades and coppiced ride edges though the woodland to introduce structure and allow for natural regeneration opportunities in years 25 and 30.

General Repairs - To include the costs of general maintenance of site infrastructure for 30 years.

Scrub Creation and Management

Site preparation - In order to prevent weeds taking over during the initial establishment of the site it may be necessary to sow a grass mix and get this established first. This would involve vegetation removal of leftover crops, seed bed preparation and rolling of seeds to ensure contact with the ground surface.

Seed purchase - The purchase of suitable grassland seed mix for a seeding rate of 40kg/ha.

Establishment Management - Four establishment management cuts during the first year based on the cutting and removing arising's.

Scrub Purchase and Planting – Supply and planting of scrub whips in a range of native species, including rabbit protection.

Enabling Infrastructure – Infrastructure can be required in order to allow habitat creation projects to go ahead. For example fencing to restrict access from adjacent sites that may cause damage, or the need for improved vehicular access to allow management to take place. This has therefore been factored into cost estimates.

Habitat Management - Rotational clearance/coppicing of scrub habitat in order to create a varied age structure. Approximately 1/15th of that site cleared every 2 years starting in year 4 subject to establishment growth. Also, an annual cut and remove for grassy glades and clearings would be required.

General Repairs - To include the costs of general maintenance of site infrastructure for 30 years.

How the costs are apportioned?

The majority of the proposed unit costs within the tariff come from the estimated costs associated with land acquisition, habitat creation and habitat management for the minimum 30 year period. As stated above a small insurance/contingency is also included which equates to 10% of the habitat creation, management and land purchase costs. Finally between 10-17% of the costs are associated with project development, management and monitoring for BNG reporting purposes.

What if Units can be delivered for less than the proposed Biodiversity Offsetting Contribution?

It is considered that the proposed Biodiversity Offsetting Contribution should be sufficient to cover the costs associated with delivering biodiversity units on behalf of developers. If a situation occurred where a project was able to deliver units for a lower cost, then it is proposed that all excess contributions would be used to deliver additional biodiversity units. The planning policy requirement is for developers to deliver a *minimum* 10% net gain in biodiversity. If greater percentages were achieved through payment of the offsetting contribution fee then this would still be in line with the policy requirement. Developers will be required to demonstrate how they are delivering the required minimum 10% net gain but they can choose to develop a scheme themselves or engage with private offset providers instead of paying the fee.