Securing biodiversity: the delivery framework for priority habitats and species in England. Update Note 2

A communication note by the Biodiversity Integration Leaders (BILs): David Appleton, Helen Moggridge and Tilly Tilbrook, on behalf of the England Biodiversity Group (EBG).

1 Introduction

1.1 The purpose of this Update Note is to build on the information provided in Update Note 1 from December 2009, and to provide a package of information to support a series of regional workshops, running throughout March 2010.

1.2 This note aims to provide greater clarity on the role of Integrated Biodiversity Delivery Areas (IBDAs) in the context of the Securing Biodiversity delivery framework. It has been produced in response to feedback from Local and Regional BAP Partnerships, Regional Biodiversity Coordinators, Chairs of Biodiversity Integration Groups (BIGs) and Taxon group leaders.

2 What are IBDAs for?

Implementing the England Biodiversity Delivery Framework

2.1 Securing Biodiversity provides a framework for enhancing the recovery of priority habitats and species, to ensure we meet our BAP targets. The framework places greater emphasis on delivering biodiversity through landscape scale, habitat-based work and this is the principal aim of IBDAs, which will make a major contribution to this. This will involve restoring and creating habitats and improving the quality of current BAP habitat, within and outside designated sites, to better meet the needs of species.

2.2 IBDAs are not intended to divert funding from other important biodiversity work; rather, they will add to and complement habitat improvements and species recovery work in other areas, including through other landscape-scale delivery initiatives. For example, habitat-based work will not be sufficient to recover all priority species. Many of these have particular management or research requirements, or are so restricted that their recovery needs to be carefully managed. Such requirements will be delivered through the targeted species recovery programme.

The landscape-scale approach and IBDAs

2.3 In addition to improving management of existing priority habitats, the framework aims to drive achievement of BAP habitat expansion and restoration targets. Delivery of these target types has been one of the areas where the BAP process has made least progress. Where and how these targets are delivered matter; in particular, it is increasingly accepted that there are significant benefits in taking a landscape-scale approach to restoring biodiversity.

2.4 The landscape-scale approach involves linking and buffering existing sites through targeted, large scale restoration of habitats, often including multiple habitat types and structural variability. This helps us conserve biodiversity: species are more likely to survive in the long term on larger, more varied and better connected sites; and this facilitates dispersal through

the landscape, helping species adapt their distribution to climate and other environmental change. A landscape-scale approach can produce healthy habitats in mosaics or catchment units, which will deliver both ecosystem services and habitats for priority species.

2.5 IBDAs are an important delivery mechanism for our biodiversity targets. Agreeing them requires the expertise and experience of all the components of the Securing Biodiversity framework: regional and local partnerships, biodiversity integration groups (BIGs), and targeted species recovery. IBDAs will be areas where biodiversity gains will be delivered through:

- Achieving better condition of existing BAP habitats and wider linking habitats, so they can better support the full range of BAP species present.
- Achieving better quality habitat restoration and expansion, by incorporating the needs of the full range of BAP species present in, or likely to colonise, an area from the start.
- Targeting restoration and expansion to create the best habitat networks possible, in order to maximise resilience to our changing climate.
- Working across the full range of habitats present, to maximise the benefits to the many species that are dependent on habitat mosaics or edges;
- IBDAs will also be carefully monitored to assess the outcomes of this approach for biodiversity and ecosystem services and to learn lessons for biodiversity delivery elsewhere.

2.6 By improving biodiversity at a landscape scale, for a range of different habitats and species, IBDAs, alongside other landscape-scale initiatives, will make an important contribution towards the development of English landscapes, with thriving biodiversity and in which species have the greatest chance of adapting to, and persisting through, a time of rapidly changing climatic conditions.

2.7 It is expected that each IBDA will constitute one or more landscape scale projects, covering in excess of 10,000ha. The objectives of each IBDA project, its contribution to the 2015 target and implementation will be developed collaboratively between national, regional and local delivery partners. An overview of this information will form an important part of an England Integrated Biodiversity Delivery Plan to be produced in 2010.

2.8 Many organisations have adopted a landscape-scale approach already. IBDAs are intended as areas where several organisations and partnerships – including national, regional and local – agree to collaborate to achieve significant biodiversity gains by working to achieve shared, ambitious objectives across large landscapes. They are not intended to detract from other landscape-scale initiatives elsewhere.

3 Working towards IBDAs: regional data

3.1 Each regional biodiversity partnership has produced a biodiversity opportunity map (these are called by different names in some regions) these often include existing and potential landscape-scale initiatives. This information has been used to develop a delivery programme which the regions are all now actively engaged in delivering.

This information will be used as the basis for developing a regional and national consensus view of where the initial pilot IBDAs should be located. These locations will be discussed and agreed in the regional workshops in March - further details are given in section 8.

4 Working towards IBDAs: summary of approach used by BIGs

4.1 Ahead of the workshops, each BIG was asked to submit a list of priority areas, based on National Character Areas (NCAs), which were national priorities for biodiversity interest or action for the habitats and species associated with that group. The following is a brief description of the rationale and methodology used by each BIG:

Upland BIG

4.2 A distinctive feature of upland habitats is that the key habitats are large and widespread across the English uplands – blanket bog; upland heath and acid grassland. Therefore the group considered that improving the condition of these habitats is the priority, with habitat creation a secondary priority. The selection process considered the following data sets: Blanket Bog, Upland Heathland, Upland Calcareous Grassland, Limestone Pavement, Upland Hay Meadows, Upland Bird Distribution, Important Plant Areas.

4.3 The group considered the distribution of habitats within each NCA and then considered the 2015 habitat targets requirements for each habitat summing the distribution areas until the target was achieved. This exercise was then discussed within the group and some substitution occurred to ensure that the NCA selection included the largest areas of existing habitat within the Upland BAP habitats.

4.4 Due to the lack of distribution data for the 3 new priority habitats (Inland Rock Outcrop and Scree Habitat, Mountain Heath and Willow Scrub, Upland Flushes, Fens and Swamps) and their existence as part of the Upland habitat mosaic ,the group felt that their requirements could also be met from within the same selected NCAs.

4.5 The priority NCAs chosen by the Upland BIG are shown in Figure 1.

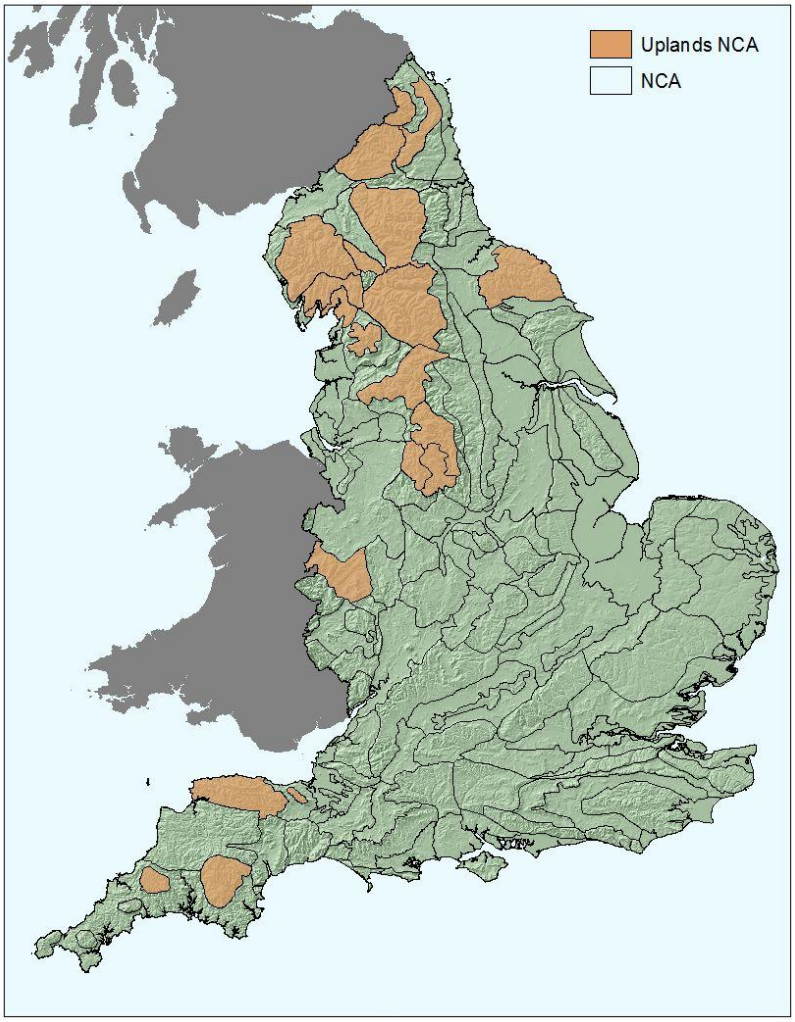

Figure 1: Priority NCAs selected by the Upland BIG

Rivers BIG

4.6 Whole river SSSIs and their hydrological catchments were mapped (where data were available) with NCA boundaries. Any NCAs which coincided with the catchments were highlighted as a priority: if a catchment covered ≥20% of an NCA, the NCA was recorded as a priority.

4.7 A map of NBN records (from 1998) of all BAP species associated with rivers and restricted to water and wetland habitats was used to cross-check the relevance of these catchments to BAP species delivery .

4.8 This map was presented to the Rivers BIG and the following amendments were made:

- The River Wye was removed, as the majority of the catchment is in Wales and could not be managed under the England biodiversity framework.
- The following group of Cotswolds rivers were included: Ampney Brook, River Coln, River Leach, upper River Windrush (including tributaries Sherbourne Brook, River Eye and River Dickler), as they represent key examples of oolitic limestone rivers and have high biodiversity value.
- The Low Weald NCA (south east) was included as it has a wealth of headwaters at various levels of biodiversity value and anthropogenic impact.

4.9 The priority NCAs chosen by the BIG are shown in Figure 2.

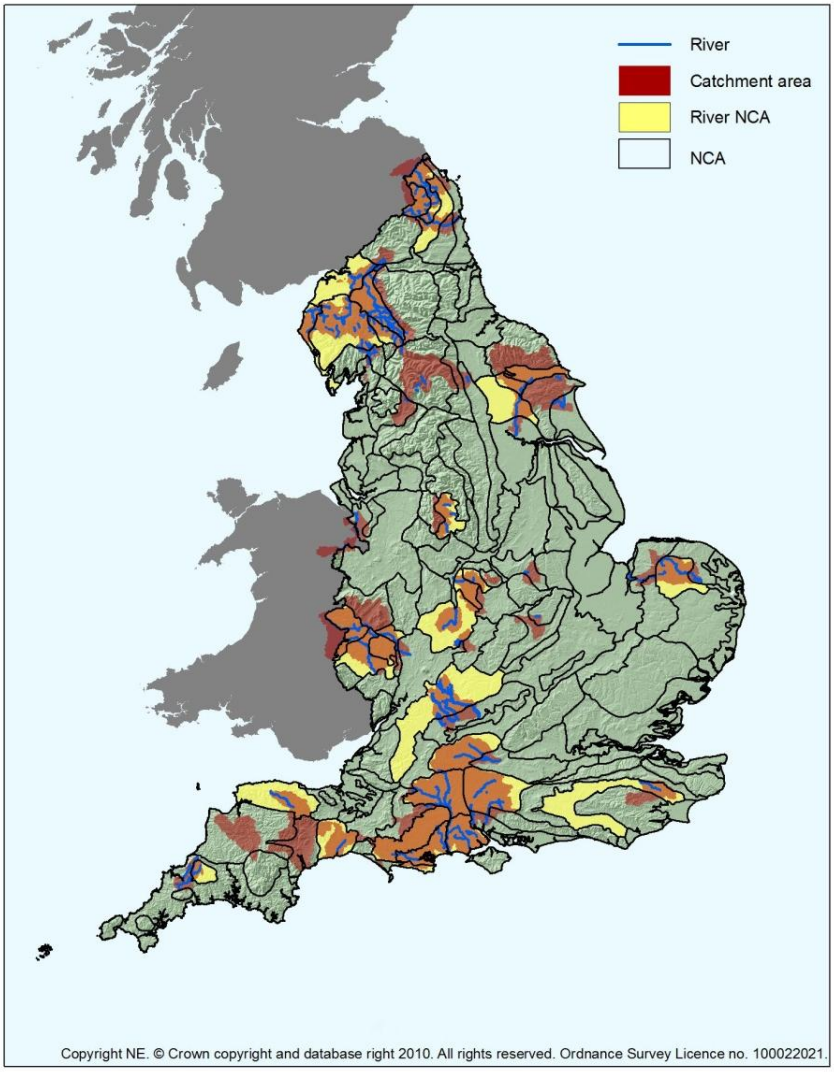

Figure 2: Priority NCAs, and the corresponding rivers and catchments, selected by the Rivers BIG

Wetlands BIG

4.10 An analysis by English Nature (Gardiner, 1996) assessed each Natural Area on its value for freshwater habitats. Areas were ranked as Outstanding, High, Medium or Low, based largely on existing wetland interest within designated sites. This analysis was used as a baseline for identifying priority areas.

4.11 All NAs ranked Outstanding or High were initially considered. NAs classed as Upland were removed from the list, as were those NAs where the terrestrial wetland interest was considered to be low.

4.12 This initial assessment was then checked against the Wetland Vision maps of wetland extent and potential, to ensure that those NAs with significant potential for wetland restoration were included. Natural Areas were ranked again based on this data.

4.13 The Natural Areas ranked Outstanding and High were then mapped across to their corresponding National Character Areas. In many cases this was a straightforward process –

many Wetland Vision areas of high wetland potential coincide well with National Character Areas at this coarse level of discrimination. However, for some areas this did not satisfactorily describe the areas of interest. Key examples of this were south coast river valleys (supporting significant existing interest with much potential for wetland restoration), which cut through several NCAs that otherwise have little wetland interest, and the Norfolk Valley Fens SAC, a group of internationally important small fen sites that are dispersed across five large NCAs of which two do not otherwise have strong existing wetland interest or potential. In these cases river floodplains have been represented instead of the NCA.

4.14 The NCAs identified as important for wetland habitats were compared with available maps of priority species, to identify areas of coincidence. The list of species associated with wetlands was taken from Webb et al. (2010). The following maps were considered:

- Important NCAs for wetland birds identified by the EBS Bird Group.
- Hotspots for aquatic plant species (associated with all water and wetland habitats), based on NBN and BSBI records, courtesy of Plantlife.
- Hotspots for invertebrates associated with wetlands. Data on invertebrates associated with wetlands and restricted to water and wetland habitats, available on the NBN gateway from 1998 was used.
- Important NCAs for stoneworts (compiled for HLS targeting).
- Important NCAs for mammals associated with wetlands (output from the mammal taxonomic group and water vole information supplied by TWT).
- Important NCAs for breeding waders (compiled for HLS targeting).

4.15 Invertebrate records from recent Buglife ditch surveys (courtesy of Martin Drake) were also referred to.

4.16 In general, there was very good correspondence between habitat and species maps. Where major discrepancies between the maps were identified, the ranking was adjusted accordingly.

4.17 As indicated above, some floodplain wetlands were identified as being important but the relevant NCAs were not included due to a cap on the number of NCAs each BIG could submit. These areas were added to the map as indicative floodplains, to ensure that they would be considered when IBDAs were being selected.

4.18 The priority NCAs and important floodplain wetland identified by the Wetlands BIG is shown in Figure 3.

4.19 References:

- Gardiner, A. (1996). Freshwater wetlands in England. English Nature Research Report No. 204: Peterborough.

- Webb, J.R., Drewitt, A.L., & Measures, G.H. (2010) A future for species: Integrating UK BAP species into habitat action plans. Part 1 report. Natural England Research Report NERR024, Peterborough http://naturalengland.etraderstores.com/NaturalEnglandShop/NERR024

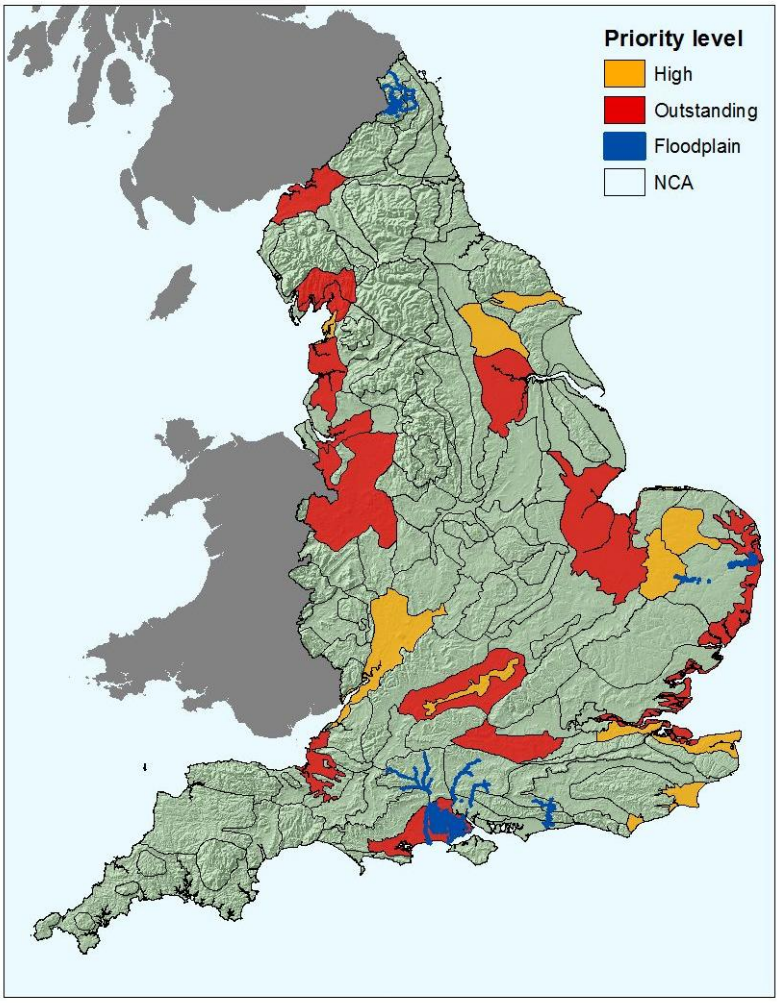

Figure 3: Priority NCAs and floodplain wetlands identified by the Wetlands BIG.

Lakes and Ponds BIG

4.20 The Lakes Habitat Action Plan steering group had previously undertaken an analysis of all UK lakes. Where the ecological quality of the lake is known, lakes are graded from 1 (relatively unimpacted) to 3 (little is known about them, with a possibly of little ecological significance). For this analysis, lakes with an allocation of 1 and 2 were used as 'priority lakes'.

4.21 The Ponds Habitat Action Plan steering group had previously identified priority ponds, called 'flagship ponds'. These were mapped with priority lakes, to identify key NCAs for lake and pond biodiversity.

4.22 These important habitat areas were compared with maps of priority species, to identify areas of coincidence. Maps of all species associated (but not necessarily restricted to) lakes and ponds, with a localised and restricted distribution were considered, using records from the

NBN gateway. Maps of important stonewort areas (complied for HLS targeting) was also referred to.

4.23 A map of 34 priority NCAs was created using this method. To reduce the number of priority NCAs to 20, only those NCAs which coincided with priority NCAs identified by the rivers and/or wetlands BIGs were selected as priorities.

4.24 Certain key areas were excluded from this process and were subsequently added, based on their biodiversity interest: Thames Valley, Low Weald, Roman lochs, Cheshire Ridge, Hensbarrow, Carnmenellis and The Lizard. The final NCAs chosen by the BIG are shown in Figure 4.

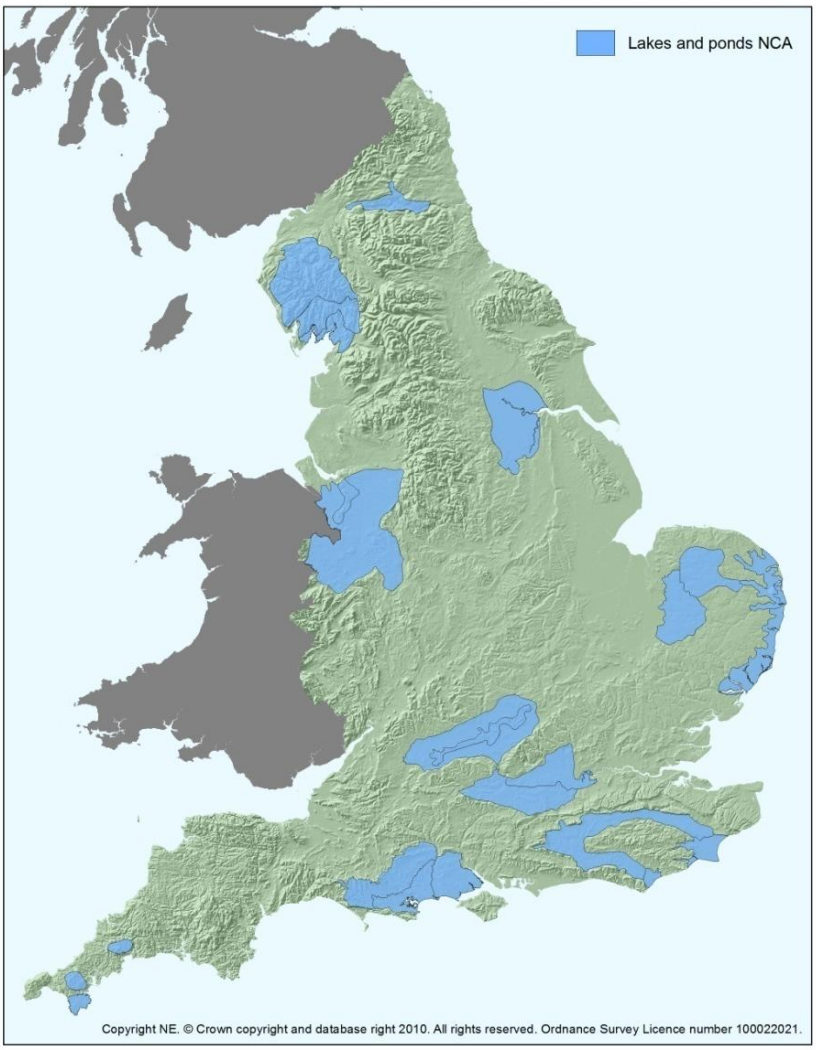

Figure 4: Priority NCAs identified by the Lakes and Ponds BIG

Coastal BIG

4.25 The Coastal BIG would ideally have liked to submit all the coastal NCAs as priorities, as they felt that they could all actively contribute to the delivery of the BAP habitat and species targets in many more locations. The group considers that any project on NCAs with a coastal boundary, even if coastal habitats are not the focus, need to be reviewed against principles for coastal change and be in accordance with long-term SMP policies for the

frontage. Therefore the list of IBDAs should not be seen as exclusive and the Coastal BIG group will discuss opportunities for the Coastal Zone of any IBDAs selected at the coast.

4.26 The Coastal group has a wide range of expertise cutting across the main coastal habitats as well as knowledge on national delivery / planning processes such as Shoreline Management Planning. The Coastal NCA submission has been prepared by the Habitat Leads for the 4 main coastal habitats. This selection has been based on information within Natural Area Profiles, completed Shoreline Management Plans and Coastal Habitat inventories such as for sand dunes and soft cliffs. This core data has then been considered by the habitat leads in light of the maintenance, restoration and expansion targets and substitutions made to the NCA list.

4.27 The priority NCAs chosen by the Coastal BIG are shown in Figure 5.

4.28 The group consider that there is a larger range of potential delivery mechanisms in the Coastal zone through shoreline management planning etc, and therefore discussion between projects and Coastal BIG is encouraged.

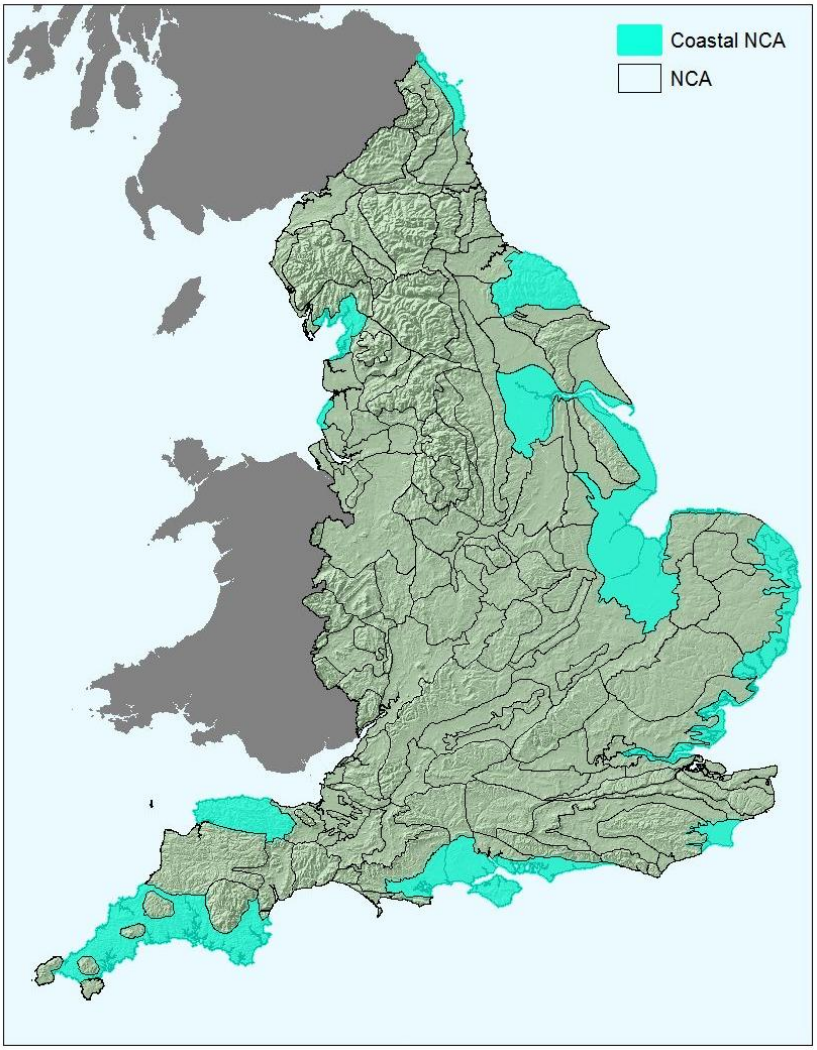

Figure 5: Priority NCAs chosen by the Coastal BIG.

Woodland BIG

4.29 The woodland BIG used a variety of datasets to come up with three priority NCA maps, one for maintenance of the habitat, one for expansion of the habitat and one for restoration of the habitat. Each map was created using a scoring system which is outlined below:

4.30 *Maintenance*: Scoring was based on the percentage and total amount of ancient semi-natural woodland or broadleaved woodland and species/features priorities. Those graded 0 appear to have little tree/woodland interest; those scoring 3 appear to be the most important areas for woodland action in terms of having a high concentration or extent of priority woodland plus evidence of key species interest. Intermediate scores are where there is less concentration of important woodland, although there might still be important individual sites or clusters where action is needed/desirable, or areas might be important for just one particular interest.

4.31 *Restoration:* The scoring was based on the extent and percentage of replanted ancient woodland sites. In the top 16 NCAs six are the same as those identified as priorities for maintenance and enhancement. The top 16 occupy about 5% of the total land-surface but contain nearly 20% of the PAWS resource.

4.32 *Expansion:* There is less consensus on criteria for identifying priorities for woodland creation for biodiversity purposes from a national perspective. What follows is therefore based on a personal approach by Keith Kirby. There are three different roles that new woodland can play in enhancing biodiversity:

- Providing edge protection to existing sites (a particular priority for small woods in intensively farmed landscapes)
- Increasing the immediate habitat available for woodland/woodland edge species
- Creating links/stepping stones to facilitate the movement of species through the countryside in areas of intermediate woodland cover (in high cover areas there will probably be already good permeability; in very low cover areas trying to improve connectivity between the scattered woods that exist may not be very cost effective).
    - Through building on networks;
    - Through creating stepping stone patches through currently habitat-poor areas.

4.33 This approach was discussed in a recent conference paper. Keith has not been able to convert this to a formal analysis at NCA level, but used it to characterise creation priority using extent of NCA, percentage woodland cover, proportion of small ancient woods, and a very subjective assessment of likely agricultural intensity.

4.34 The scores for each NCA under the expansion and maintenance categories was then taken and added together to give the top 20 NCAs for woodland. These are shown in Figure 6.

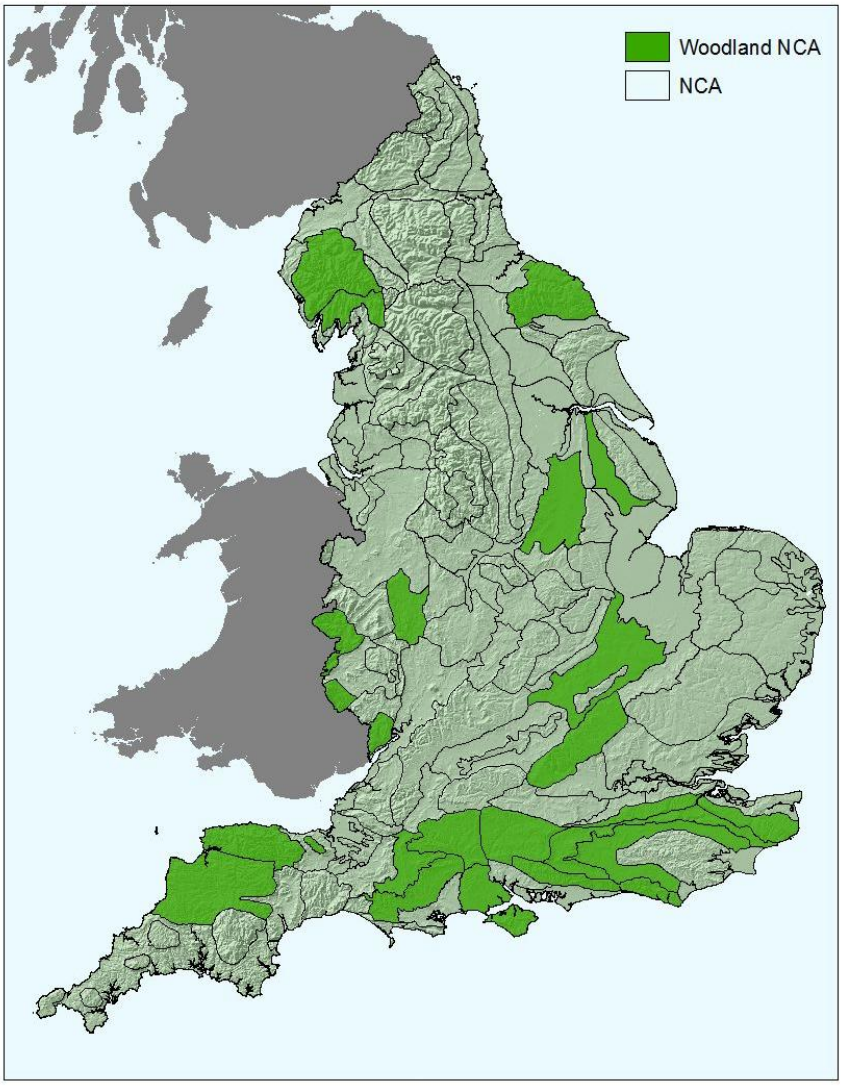

Figure 6: Priority NCAs chosen by the Woodland BIG.

Marine BIG

4.35 The Marine BIG is still being developed and the Marine specialists consider that the important aspect of IBDA is the links between terrestrial projects and the marine environment and opportunities for linkage should be considered. Data that should be considered for this are proposed and existing marine SACs and emerging MCZ information, shown in Figure 7.

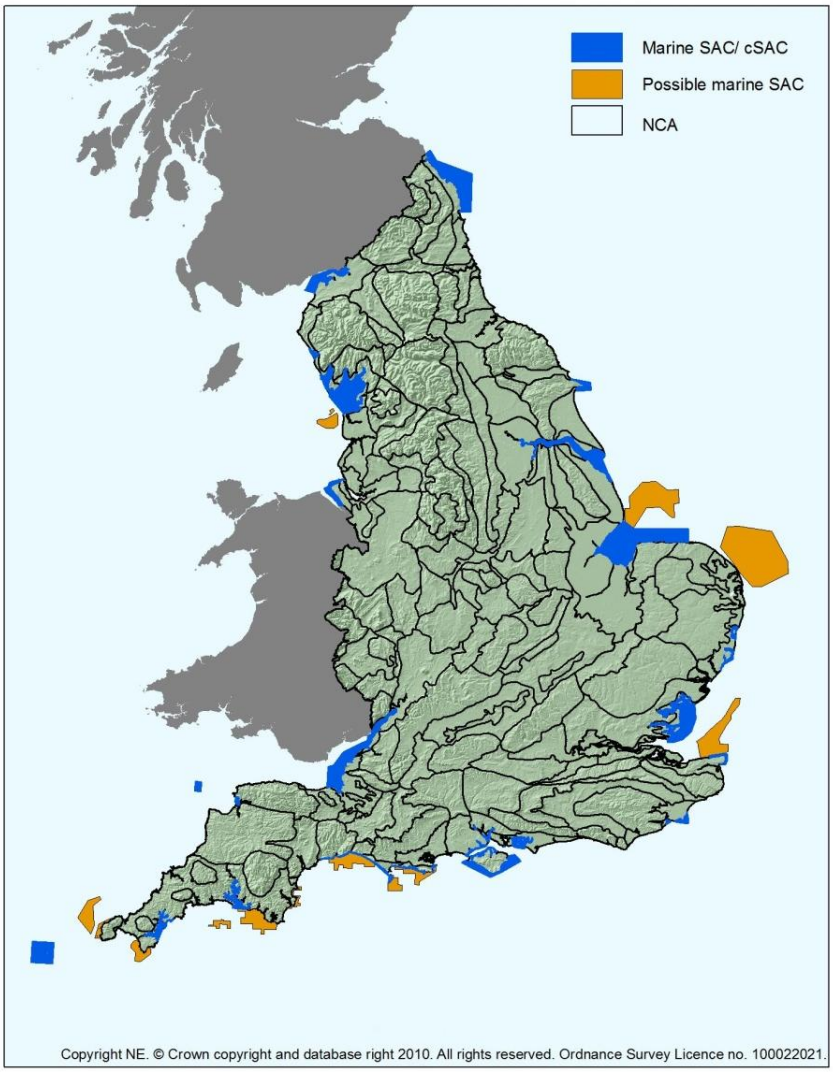

Figure 7: Priority areas selected by the Marine BIG

Lowland Farmland BIG

4.36 NCAS were ranked against each of the four lowland grassland BAP Habitat inventories and the Lowland Heathland and the top 20 were given a score from 20 down. NCAs that are predominantly upland were excluded. NCAs were then given a weighted score to reflect the number of inventories in which they fall within the top 20. The English Nature Research reports R170 *Lowland Heathland in England: A Natural Areas Approach* and R171 *Lowland Grassland in Natural Area: National Assessment of Significance* were used to ensure NCAs of greatest significance for these habitats were considered. The long list of NCAs identified from grassland and heathland datasets were also assessed against data used to identify important hedgerow areas for species and Plantlife's Important Plant Areas. The final list represents a selection that are judged significant against two or more of the datasets, and attempt to cover the range of habitats considered as well as providing opportunities in each region. The process has benefitted from the insight of NE habitat specialists and that of partner organisations represented on the Lowland Farmland BIG.

4.37 The selected NCAs are shown in Figure 8:

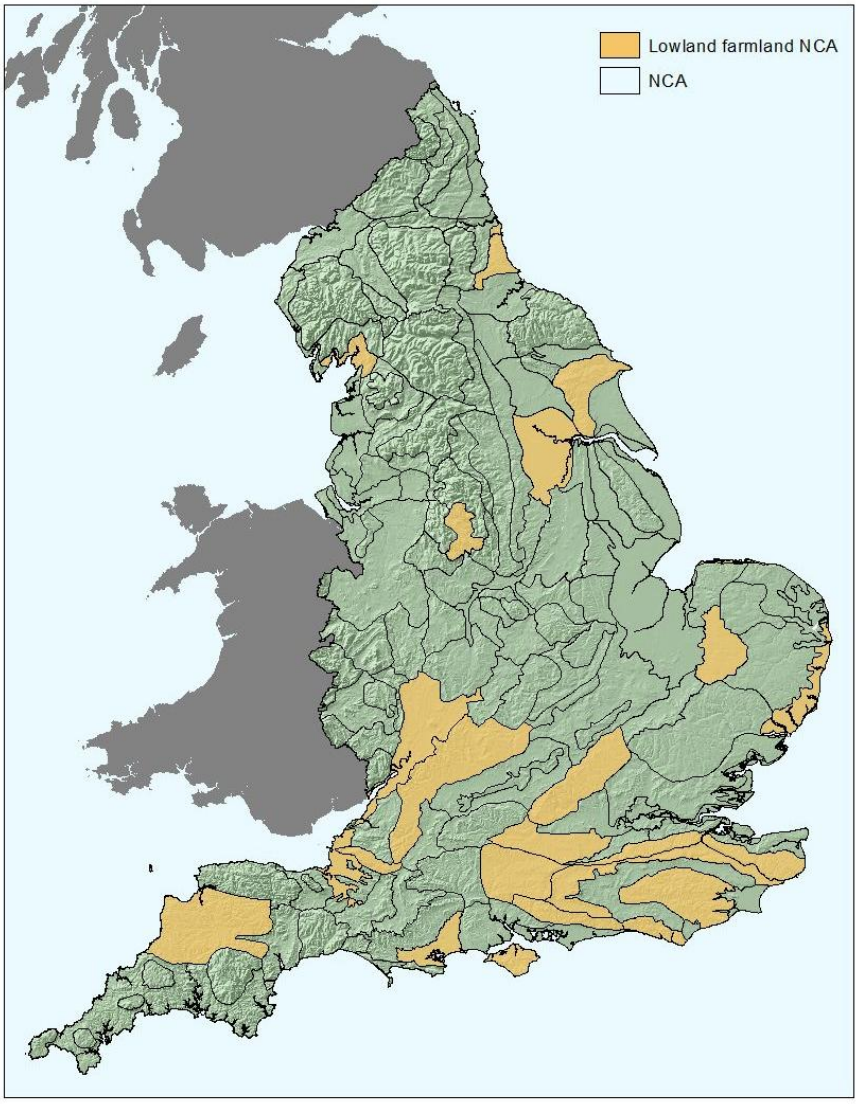

Figure 8: Priority NCAs selected by the Lowland Farmland BIG.

Urban BIG

4.38 The Urban BIG is still in the early stages of development, however it is felt that two principles will hold true for the IBDA selection process:

- The priority areas for urban biodiversity are likely to coincide with major conurbations, and the top 20 NCAs will probably reflect those with the biggest population centres; and
- Given the size of the IBDAs and the requirement for all IBDAs to cover a range of different habitat types, it is inconceivable that an IBDA with no urban land at all would be developed through this process. Therefore there will be space within each IBDA to focus on urban biodiversity targets.

4.39 A main priority, which will run concurrently with the on-going IBDA selection process will be to convene the urban BIG and determine how they wish to feed into the selection, objective setting and creation of the IBDAs.

BIG Coincidence Map

4.40 Figure 9 shows the coincidence of NCA selection by the BIGs. These are combined here for information and interest only. There is no intention that these areas should constrain the

selection of IBDAs and there will be good reasons why IBDAs should be located in areas that do not appear as ‘hotspots’ on the NCA map.

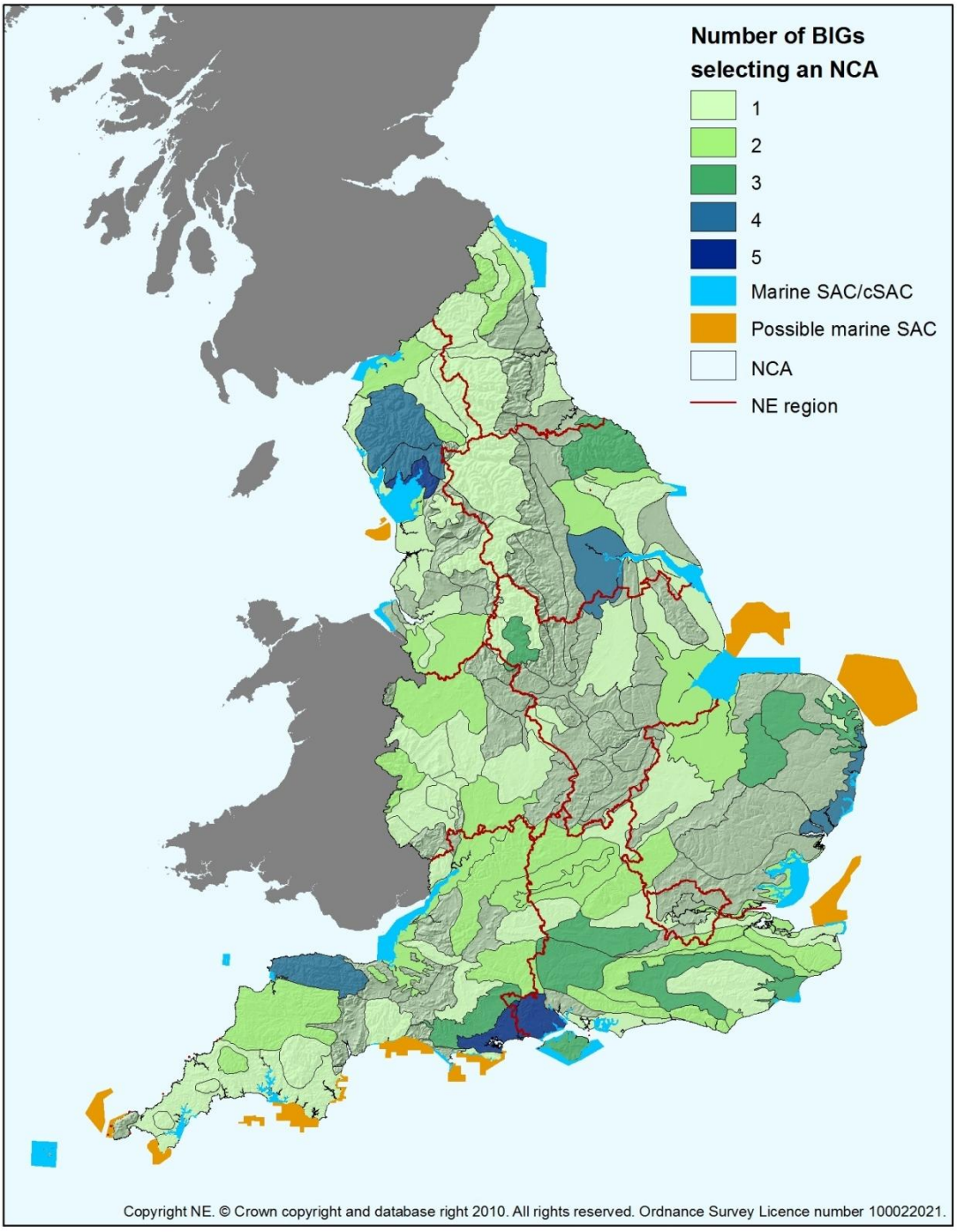

Figure 9: Map of NCAs showing the coincidence of selection by eight BIGs.

5 How IBDAs will work in practice

5.1 Each IBDA will have its own clearly defined set of objectives, which will conform to the following principles:

- ✓ They will provide clear benefits for biodiversity
- ✓ They will have a defined contribution to the 2015 targets
- ✓ They will put a framework in place for management of the IBDA project which allows success to be monitored using SMART targets
- ✓ They will allow for delivery on the ground using the most suitable methods, which will include existing projects, agri-environment schemes and bids for new funding from various sources.
- ✓ They will be partnership projects
- ✓ They will incorporate careful monitoring to measure benefits for biodiversity and for ecosystem service delivery.

5.2 The vision for IBDAs is to provide a clearly defined landscape-scale project, between approximately 10,000 and 25,000 ha, which will be an exemplar of management for biodiversity. Each IBDA will be a stand-alone project, which will allow existing and new projects to be managed in an over-arching fashion, ensuring efficient and effective integrated working towards the IBDA objectives.

5.3 Existing projects in IBDAs will form an integral part of the delivery of the IBDA objectives and contribute to the associated 2015 targets. Different organisations are likely to be working towards different IBDA objectives within each IBDA, but with an awareness of the other work bring carried out.

5.4 Figure 10 shows a ***hypothetical*** example an IBDA. In this example (and note that this is for illustrative purposes only), the IBDA builds upon and enhances existing projects in the area and also takes account of priority areas identified by BIGs and the region, based on priority habitat (BAP grassland and coastal cliffs) and priority species.

5.5 It is important to note that no IBDA boundaries have yet been determined. These will be discussed at the regional workshops and agreed between national BIGs and the regional delivery partners.

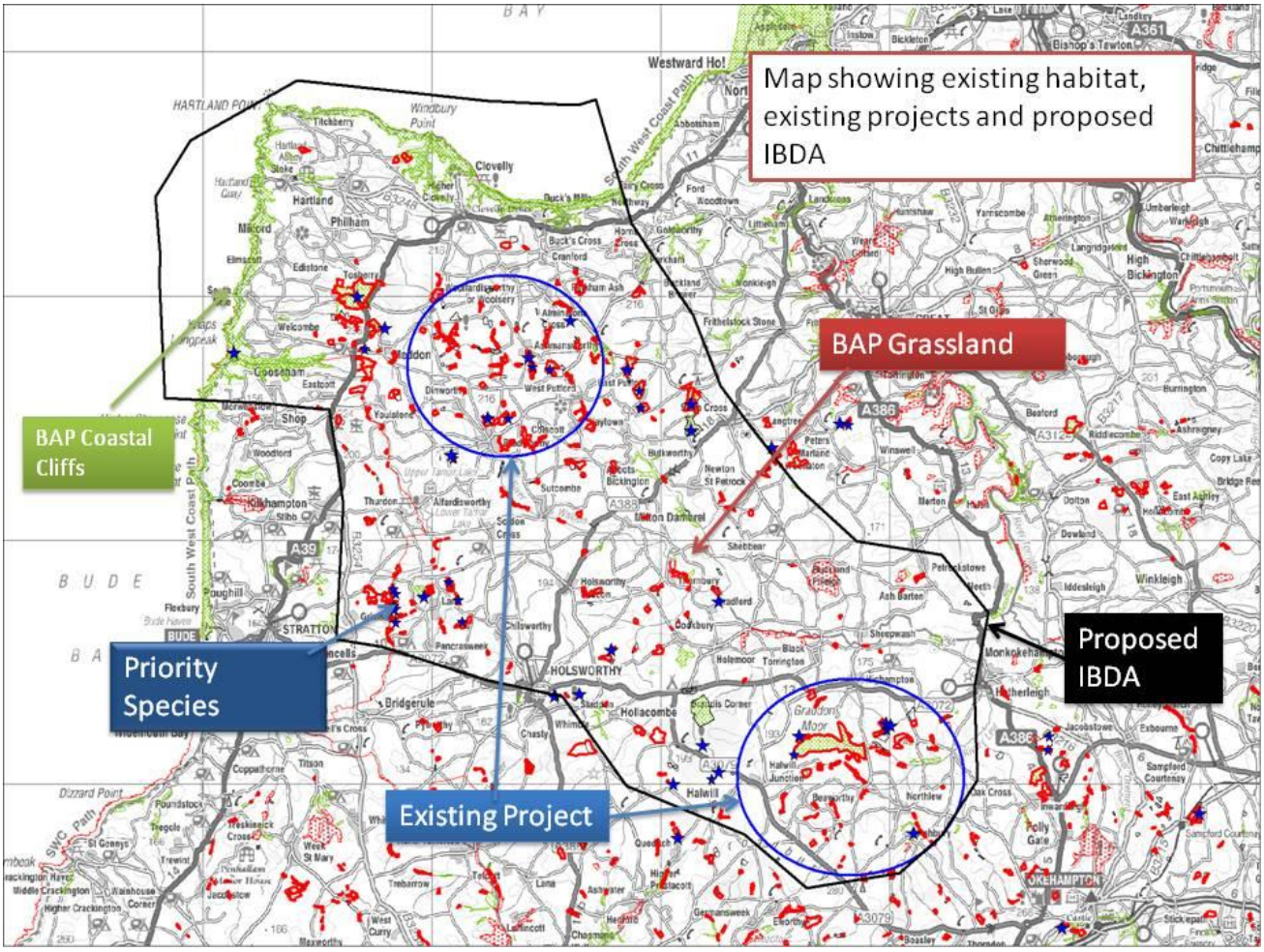

Figure 10: HYPOTHETICAL example of an IBDA project boundary, illustrating how existing projects and biodiversity interest will be incorporated.

6 Funding for biodiversity delivery

6.1 To meet our collective 2015 targets as a sector, we will need to focus resources on the most important activities within each of the areas of work outlined above. The IBDA initiative has the potential to increase the total resource available for biodiversity through:

- Better focusing existing schemes on biodiversity priorities, e.g. agri-environment Higher Level Schemes.
- Increasing the total amount of external funding, by presenting attractive and well-supported funding opportunities
- Helping to raise the profile of biodiversity.
- Developing new income streams, e.g. through the ecosystem services delivered by high quality landscapes.

6.2 In addition, a limited amount of additional funding will be available from Natural England, in the 2010/11 financial year, specifically to support the development of IBDAs.

7 IBDAs and the wider context

7.1 As stated earlier, IBDAs are just one element in the approach that we need to meet our 2015 biodiversity species and habitat targets. They will deliver biodiversity *alongside* other components of the framework: Targeted Species Recovery, Regional and Local Delivery, Biodiversity Integration Groups and Policy Environment (through EBS Sectoral Workstreams). They will also complement and enhance existing landscape-scale approaches.

8 Regional IBDA workshops

8.1 The purpose of the workshops is to discuss and agree the location of the main areas for an initial suite of integrated biodiversity delivery areas, IBDAs. These areas will:

- be at least 10 000ha, but probably less than 25 000 ha except where there is sound ecological advice for larger areas ;
- normally incorporate a range of different priority habitats and species;
- improve connectivity between priority habitats; and,
- integrate species needs into habitat-based work.

8.2 A full agenda will be circulated ahead of each workshop, but in essence they will adopt the following approach:

- Firstly, regional and national perspectives will be presented and explained.
    - Working from regional opportunity maps and taking account of landscape-scale delivery projects already underway, a suite of potential large landscape-scale project areas will be identified within the region (some regions have already identified these areas). Regional delegates will take the lead in explaining to the workshop the process followed to identify priorities.
    - The national Character Area-level assessments that have been carried out by the BIGs (see section 4) will also be presented. As part of this process, representatives from taxon groups and BIGs will explain to the workshop why certain areas within the region may be considered of national significance for delivering the targets for particular habitats or species.
- These two levels of information will then be brought together to agree areas that represent a priority for national and regional delivery (IBDAs). Boundaries of the IBDAs will then be refined and priorities for BAP delivery within them agreed.

8.3 Ahead of the workshops, it is important that local and regional biodiversity partnerships have considered where large landscape-scale (i.e. >10 000ha) conservation opportunities exist within the region and to identify which, if any, existing projects would benefit the most from incorporation into an IBDA. This may already exist through teh work that has been carried out in the development of the regional delivery plans.

Attendees

8.4 The attendance at the workshop should be sufficient to ensure a local and regional consensus on the location of IBDAs. It is likely to include the following groups:

- Regional BAP Steering Groups / Partnerships
- LBAP Coordinators
- Natural England LBAP responsible officers
- NGO and VCO delivery organisations
- BIG chairs or representatives from main priority habitats in regions
- Taxonomic group representatives
- Statutory agencies

Outputs

8.5 The key output from the workshops will be an agreed set of areas in which the England biodiversity partnership and other organisations can collectively integrate our efforts to deliver a significant change in delivery towards our 2015 targets. The IBDAs agreed at the workshops will be presented to the England Biodiversity Group for sign off.

Arrangements

8.6 The following table shows the confirmed dates and organisers contact details:

Region	**Date**	**Location**	**Lead Biodiversity Integration Leader**	**Regional Biodiversity Contact**
SW	29-Mar	Riverside Centre, Exeter	David Appleton	Naomi Brookes
SE	26-Mar	Innovation Centre, Reading	Helen Moggridge	Tom Butterworth
London	11-Mar	NE Office, London	Helen Moggridge	Nick White
EoE	30-Mar	Eastbrook (NE Offices), Cambridge	Helen Moggridge	Catherine Weightman
EM	15-Mar	Nottingham, location tbc	Tilly Tilbrook	Warren Priest
WM	25-Mar	Paradise Circus, Birmingham	Tilly Tilbrook	Jeff Edwards
Y&H	10-Mar	Merchant Taylors Hall, York	David Appleton	Paul Evans
NE	23-Mar	NE Office, Newcastle	Tilly Tilbrook	Nick Brodin
NW	25-Mar	Wigan Investment Centre, Wigan	David Appleton	Amanda Wright

8.7 If you have any questions regarding the workshops please contact the relevant BILs or RBC via e-mail at: Firstname.surname@naturalengland.org.uk

8.8 If you would like to input into the IBDA selection but are unable to attend the workshop in the appropriate region, please send your suggestions to the relevant biodiversity integration leader ahead of the workshop in that region.