

**DRAFT AIRPORTS NATIONAL POLICY STATEMENT
CONSULTATION RESPONSE BY FORCE**

1. Introduction

This document has been prepared by Friends of the River Crane Environment (FORCE) in response to the Draft Airports National Policy Statement and associated consultation process.

FORCE is a community and environmental charity with a specific interest in Heathrow and the third runway development proposals due to their potential impacts upon the Crane valley. This response has not followed the structure put forward in the consultation response form as this did not allow the full expressions of our interests, concerns and mitigation opportunities with respect to the Third Runway. However, this response does reference the consultation document and the questions raised in the response form where relevant.

2. Friends of the River Crane Environment

Friends of the River Crane Environment (FORCE) is a community and environmental charity, formed in 2003, with Objects to protect and enhance the community and environmental value of the River Crane catchment. FORCE is entirely run by volunteers and has around 500 members. It operates by engaging with all other interested parties to protect and enhance the open spaces of the River Crane catchment for the benefit of local communities and wildlife. More information on the activities of FORCE can be found at www.force.org.uk

One of FORCE's key activities is to engage with landowners and potential developers along the Crane valley, as well as with planning proposals from government authorities and others, to ensure that the interests of the open spaces within the Crane valley are protected and enhanced. FORCE is not against development per se but engages with the planning process to ensure that any development also enhances both the community AND environmental value of the Crane valley. Where this is not the case FORCE will oppose the development proposals as presented and will often put forward amended or alternative options that would meet the basic requirements of enhancing the community and environmental value of the Crane valley. This approach has been taken in this submission.

FORCE's interests are confined to the environmental and community value of the Crane Valley catchment. FORCE has no opinion on the need for additional airport capacity and how best to address it, as raised in Questions 1 and 2 of the consultation response paper.

3. The Crane valley

The Crane Valley catchment covers 117sq km of west London and includes:

- Most if not all of Heathrow Airport's existing site area

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- The River Crane as well as the Upper Duke of Northumberland's River, Longford River and Lower Duke of Northumberland's River – the latter three all being man made channels built in the 16th and 17th centuries
- Parts of five west London boroughs – Harrow, Hillingdon, Ealing, Hounslow and Richmond
- A population of around 500,000 people within five minutes' walk of the river corridors

The River Crane (known as the Yeading Brook in its upper reaches) is around 35km in length and is a linear green corridor containing and linking around 1500 hectares of open spaces. The corridor has long been recognised as a major wildlife and community asset for west London and is known as the West London Green Chain, one of the major wildlife corridors for London. The corridor itself and many of the associated open spaces are designated as National and Local Nature Reserves, Metropolitan and Borough Sites of Importance for Nature Conservation. The London LOOP makes use of the corridor and it is largely available for walking and cycling as a linear green transport corridor.

The upper and Lower Duke's and Longford rivers are important environmental and green transport assets in their own right and help to link the Crane corridor to the corridors of the River Thames, River Colne and River Brent, creating a network of interlinked green spaces across west London. The Crane valley catchment and its relationship with other local river corridors is shown on Figure 1 below

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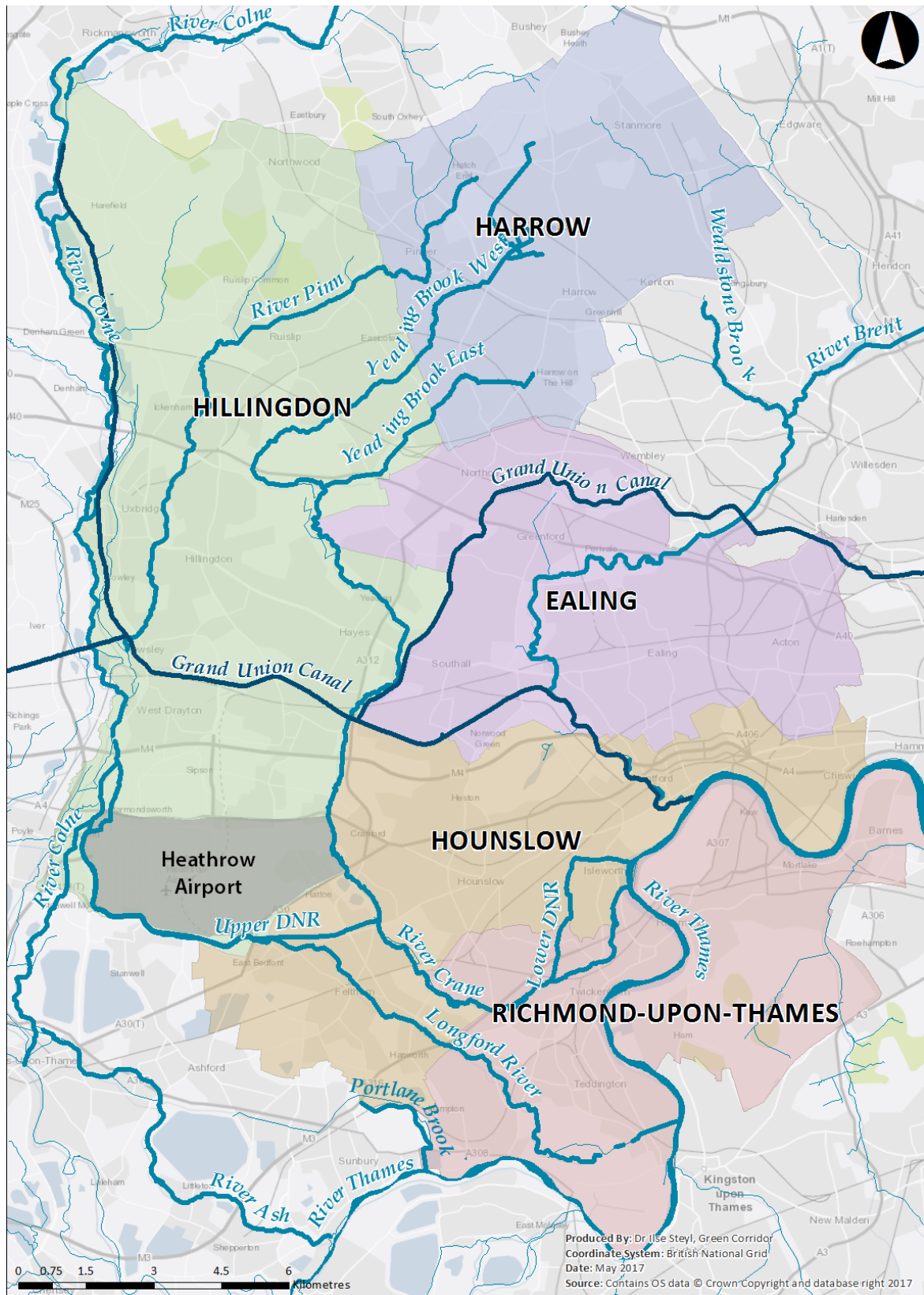


Figure 1: The River Crane catchment, incorporating River Crane, upper and lower Duke's Rivers and Longford River – and their relationship to the River Colne, River Brent and River Thames

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The Crane Valley Partnership (CVP) represents the interests of the open spaces within the Crane valley catchment. It has around 30 members including all five representative boroughs, the Environment Agency, Heathrow Airport Ltd (HAL), Thames Water, GLA, London Wildlife Trust and FORCE. More information on CVP can be found at www.cranevalley.org.uk

There has been a major growth in interest and investment in the open spaces and corridors of the Crane valley over the last ten years, in large part due to projects and initiatives led by CVP and its partners to improve the environmental and community value of the open spaces and their connectivity. These projects are being delivered by partnerships of local authorities, regulators, private operators (including HAL) and the third sector, many of them engaging large numbers of volunteers.

As a result many more local people use and appreciate these local spaces, and their environmental condition has largely improved. Nevertheless there remain many problems to be resolved and the pressures of development and urbanisation, of which the third runway proposals are a significant part, are relentless.

CVP has embraced the catchment based approach (CaBA) as promoted by DEFRA and the Environment Agency. A Crane Valley catchment plan, produced in 2013 as part of the CaBA, sets out the main objectives for the water environment. Around the same time CVP worked together with the Crane Valley Partnership and the GLA to produce Area 10 of the All London Green Grid. This document set out priorities for developing the green infrastructure networks along the green corridors of the two valleys. These two documents have between them acted as a template for much of the activity over the last few years, with a cumulative investment of several £million in environmental and green transport improvements, either implemented or proposed, and in line with these plans.

The focus for CVP and FORCE has been to develop environmental improvements to these linked green spaces by the engagement of the communities local to them. Projects are designed to improve social cohesion, education, training, employment and health outcomes through the better use of local green spaces by all sectors of the community – with volunteers helping to deliver all aspects of these programmes.

4. The Existing Relationship between the Crane Valley and Heathrow

The existing airport and its associated infrastructure sit entirely or very largely within the Crane catchment. The airport owns and operates a considerable amount of open space within the catchment, including land on either side of the Upper Duke's River and Longford River and a large area of open space on the west bank of the middle reaches of the River Crane in Hounslow. HAL is a member of CVP and also contributes to its annual operating costs.

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One third of the run-off from Heathrow flows into the River Crane at Donkey Wood via the Eastern Balancing Reservoir. There is a beneficial impact for the most part from this run-off, although there are significant negative impacts during cold weather periods caused by excessive glycol de-iceant entering the river and causing high BOD and algal blooms. A category 2 pollution event in January 2017 swathed around 5km of the river in sewage fungus for several weeks with the impact continuing in the Donkey Wood area (immediately downstream of the balancing reservoir) until May 2017. This is believed to have been (though not yet confirmed by the EA) largely a result of outflows of glycol rich water from Heathrow. There is also an ongoing risk of major negative impact related to any pollution incident at the airport.

HAL is developing improved storage and treatment systems at the eastern balancing reservoir to better protect the river (with an investment of £17m). This may also allow improved opportunities to enhance occasional low flow problems in the river in co-ordination with the EA and CVP.

The river corridor provides some of the few places of tranquillity in this urban part of west London. Aircraft overfly the corridor at low altitude and cause considerable noise and air quality impacts to these tranquil areas. A further indirect impact of the overflying is the restrictions imposed on the development of open water habitat due to concerns about bird strike.

Historic development at Heathrow Airport had caused the culverting of the Longford and upper Duke's rivers beneath the site. The Terminal Five scheme brought these two rivers out of culvert and put them around the airport perimeter, albeit netted off to deter birds and in a concrete trapezoidal channel.

5. Impacts of The 3rd Runway Proposals

This section only considers those potential impacts of the third runway that effect the value of the Crane corridor and associated river corridors of interest to FORCE. Other impacts on the communities of the area around Heathrow are outside the remit of FORCE.

There are three aspects to the impacts:

- Direct impacts of the third runway on the catchment
- Indirect impacts of developments associated with the Third Runway
- Impacts upon the neighbouring Colne catchment

Assessments – as per Question 3 of the consultation - are needed to consider each of the impacts highlighted under each category below.

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The proposed culverting of the Longford and Upper Duke of Northumberland's Rivers as they cross beneath the runway is a major direct impact of the proposals. These two rivers are both high value environmental corridors for the migration of birds, fish, mammals and flora within an otherwise largely urban and impermeable environment. The culverting of a river has a fundamental detrimental impact upon its value over the reach being culverted and, dependent upon the length of the culverted section, upon its value as a conduit for wildlife movement. It is for this reason that river culverting, of the length proposed under this scheme, is almost unheard of in the last 50 years in the UK and that many rivers that had been culverted in previous eras are now being taken out of culvert. This proposal is therefore a major detrimental environmental impact of the scheme.

The value of the Longford River corridor as a conduit for wildlife is not well known to FORCE. However, there is strong circumstantial evidence of the value of the Upper Duke's River derived from the 2011 Crane pollution event. This event wiped out all the fish life in the middle and lower Crane following the release of a large amount of raw sewage. In the year following the event a number of large fish were spotted in the lower Crane – including pike and large perch. The upper Crane is too small to harbour large fish and a series of weirs stops any recruitment of fish from the Thames – therefore the most likely explanation is that these fish were entering the Crane from the Colne and via the upper Duke's River. Further evidence from the Citizen Crane project shows the high quality water, and relatively healthy invertebrate counts from the Upper Duke's River, supporting the idea that this conduit acts to replenish the Crane with aquatic life.

The culverting of the Upper Duke's River would have a major detrimental impact upon the recruitment of fish and other aquatic life into the River Crane, as the culverts would act as a barrier to migration. Given the barriers to movement at the base of the Longford then there are likely to be similar impacts on the lower reaches of this river, including upon Bushy Park and Hampton Court, caused by a culvert acting as a barrier to migration.

The new runway would also act as a physical barrier to the movement of people along these corridors. The corridors are not well used for walking and cycling at present due to their unfriendly design and management. However, there is great potential to enhance their use – as explained below – and this potential would be lost with the imposition of culverts.

Both rivers are features of considerable historical importance, the Upper Duke's being constructed in the 1500's and the Longford on the 1600's, and culverting may well lose features of historical importance and interest. One such feature is the bridge over the Upper Duke's River in Harmondsworth, believed to be of considerable age and shown in Figure 2 below.



Figure 2: bridge over the Upper Duke's River in Harmondsworth

The overflying of an increased part of the Crane corridor is a further direct impact of the third runway proposal. As noted above the corridor is recognised by many local people as a place of relative tranquillity, of particular importance in an urban setting for physical and mental well being. The proposal will result in a larger part of the corridor being overflowed for longer, as an inevitable result of greatly increased aircraft movements and the location of the corridor, close by and orthogonal to the direction of the new runway.

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There may be further negative impacts on the opportunities for environmental improvement over a larger part of the river corridor as result of bird strike concerns following from the widening of the flight corridor. Given that the improvement of the river corridor by the provision of improved marginal wetland and open water habitat is a major opportunity for the Crane then this impact could also be considerable.

The provision of a third runway will result in further inevitable development pressures upon the remaining open spaces in the surrounding area. This impact could be very severe on the integrity of the open spaces along the Crane, Longford and upper Duke's Corridors. The projections coming from HAL indicate major infrastructure developments with new industries to create large numbers of new jobs, hotels, new transport infrastructure and housing all projected to increase considerably. When combined with proposals to relax green belt and Metropolitan Open Land (MOL) protections being put forward by local authorities, then the consequences could be even more severe.

The potential of this has been witnessed to some degree already with the proposals emerging from the Feltham Masterplan and the Hounslow West Area Plan. Both areas are well to the south of the proposed runway but are being developed to some degree in line with the future growth projections resulting from third runway development. In both cases large areas of open space are being identified for development, notwithstanding long sacrosanct protections of green belt and MOL status. Such development would reduce considerably the integrity of the green corridor network and the value of the open spaces available to the communities of west London.

It is also noted that the area around Heathrow has been earmarked as an area of opportunity for development growth by the GLA – and this will inevitably lead to much increased pressure on the green infrastructure of the area.

The Third Runway will directly overprint the Cone valley, putting around 300 to 400 hectares of the Colne Valley Regional Park directly beneath the runway along with the high quality chalk fed Rivers Colne and Wraysbury. Other parts of the Colne Valley will be greatly affected by increased noise as well as associated development pressures. These impacts are not within the direct remit of FORCE. However, the Colne is our neighbouring catchment to the west and the two catchments have been twinned as part of the GLA's All London Green Grid process.

These impacts are a fundamental concern for the Colne River, severing the lower catchment and the River Thames from the upper catchment and the Chiltern Hills. FORCE is concerned for the fate of this neighbouring catchment and objects in solidarity to these existential impacts. FORCE is in regular liaison with the Colne Valley Regional Park and supports their objections to the scheme and their proposals for mitigation, including a green infrastructure masterplan for the entire area being affected (see also the proposal set out below).

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FORCE has tried to engage with HAL over the last couple of years regarding the concerns set out above. However, to date there has been no substantial response and there is nothing seen to date in the development proposals that addresses these fundamental issues.

For these reasons FORCE is opposed to the Third Runway development as it is currently proposed

6. Mitigation Opportunities related to 3rd Runway

The direct and indirect impacts of the Third Runway development upon the environmental and community value of the River Crane, Upper Duke's and Longford rivers and their associated green corridors are potentially major. It is important that mitigation opportunities are identified and implemented at an early stage in this process to allow them to be factored into the wider planning for HAL and other interested parties. This section of the response identifies options that meet FORCE's requirement to provide both environmental AND community benefits as part of any development. These options address questions 4 and 5 of the response paper

The mitigation options identified below are considered in three categories:

- Environmental benefits to the river corridors and associated open spaces
- Green access routes - better utilising the green corridor network to link communities with each other and Heathrow
- Sustainable long term management of the open space network with consequent benefits to the environment; social cohesion and community value; health; education and training; and employment

Environmental concerns are fundamental to the viability of the third runway proposals. As well as the impacts identified above there are the broader impacts on human health and community value caused by noise and air quality from both increased flight numbers and associated infrastructure growth. There are though also opportunities to enhance the local environment that are in the gift of the Heathrow authorities as part of any development and these include:

- **Widening the open corridor along the Heathrow boundary for public access.** The available corridor along the eastern boundary of the Heathrow site is very narrow and difficult to navigate, particularly during high river flows. Moving the boundary back to the west would help to open up this part of the corridor to the benefit of local people and (with appropriate management) wildlife
- **Better use of the Heathrow run-off to benefit river flows in the middle and lower Crane.** At present around one third of the run-off from the airport goes into the Crane and for the most part this benefits the river. The Crane is

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subject to very low flows in the lower reaches through Twickenham and St Margarets and would benefit greatly from increased inputs, particularly during these low flow periods. Options include – increasing the proportion of the run-off from the existing airport; transferring run-off from new hard standing areas created as part of a third runway; and better using the storage within the system to support low flow periods. This would need to be combined with improved treatment systems as proposed for the eastern balancing reservoir.

- **Mitigate the impact of culverting the Longford and Duke’s River through appropriate design.** Options may include the design profile of the culvert, incorporation of light portals and minimising the length in culvert
- **Engaging with river and open space improvement schemes in the surrounding river corridors.** For example, there is scope to remove the Longford River from its culvert through Hanworth Park in Feltham

Transport issues are also a key aspect of the project viability and the provision of green transport options need to be a key aspect of the scheme. At present it is both difficult and dangerous to try and access the airport by foot or by bicycle. The routes are poorly signposted, are not continuous and have major interactions with fast moving traffic.

There is though a major green network local to Heathrow provided by the river network and its associated open spaces. This network has improved considerably in quality and permeability over the last five to ten years. However it remains incomplete and unsatisfactory as a viable walking and cycling network.

There is scope for major investment in this network to:

- **Provide a green transport alternative for workers and some passengers wishing to access Heathrow**
- **Provide a major enhanced asset for all the communities in the vicinity of Heathrow** to access their local open spaces and use these to go further afield, linking communities and open spaces together across the region
- For this to be designed in such a way that **the environmental value of these corridors is also protected and enhanced**, allowing local communities to move around through a high quality environment, benefiting their physical and mental well being

The network is illustrated in Figure 1 and includes the corridors of the River Crane, Longford, Upper Duke’s and Lower Duke’s Rivers; and providing green and off road linkages to the River Colne, River Thames, River Brent and Grand Union Canal corridors. Between them these corridors link most of the communities adversely impacted by Heathrow – and linking these communities to their own spaces as well as iconic open spaces such as the River Thames; Bushy Park and Hampton Court; Black Park and Colne Valley Regional Park; Hounslow Heath; Kew Gardens and the Chiltern Hills.

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There are a number of breaks in the network at present caused by road crossings and areas where the green space is poorly managed and pathways in poor condition or inadequately designed. It would therefore require a level of investment to overcome these issues – but a level of investment of small order compared to the overall transport budget for the project and with major new benefits for all the local communities surrounding the scheme.

The management of the green corridors and open spaces of the Crane Valley has been developing over the last five years. There is a greatly enhanced emphasis on partnership working through the CVP – both to access new funding streams and to implement collaborative projects. There is also a new enthusiasm for engaging the third sector with the delivery of projects. These include both the use of volunteers to implement improvement works as well as the engagement of a wide range of third sector organisations to enhance community access and appreciation of the open spaces through sport and leisure activities, walks and talks, community education and citizen science programmes for example.

This approach is greatly enhancing public engagement with these open spaces, with public use going up by orders of magnitude in those areas improved; reduced anti-social behaviour and increased pro-social behaviour. The approach is deemed to be more sustainable and, through engaging the local community, provides associated benefits to health and well-being, community cohesion, education and training, and local employment.

FORCE strongly supports this approach and considers that delivering mitigation programmes by this means would greatly enhance the public engagement with these open spaces and the overall development process.

Further benefits of developing enhanced green corridors through the areas directly impacted by Heathrow are:

- Carbon offsetting of development – through enhanced green travel and carbon sequestration in improved green spaces
- Provision of specifically designated quiet areas for each community through the protection and improvement of the green infrastructure network
- Improved green spaces will benefit air quality throughout the region – through absorption of pollution
- Buffering the impacts of climate change – through countering the urban heat island effect; enhancing flood protection through improved marginal river storage and buffering; etc

These and other benefits need to be properly evaluated and optimised through an initial masterplan (as discussed below).

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7. Delivery mechanisms

The focus of the Third Runway scheme to date has been on the impacts on noise, air quality, carbon emissions and other aspects where there is very little scope for local community engagement other than outright protest. By contrast the impact upon the open space and river environments, whilst also profound, has been relatively little considered, and this is strongly reflected in the NPS.

In contrast to the air quality and noise impacts these river and open space impacts can potentially be mitigated, with early engagement and investment, along with longer term care and consideration. More especially these mitigations may also support the green travel agenda and provide a substantial positive legacy for the local communities throughout the impacted area via a new and enhanced network of green corridors and linked open spaces.

The first requirement is a wide ranging masterplan for the whole area covered by Figure 1. This plan would identify all the key impacts of the scheme proposals in broad terms and then focus on potential improvements to the environmental and community value of this green infrastructure network, building on the works already completed by the catchment partnerships in the catchment plans and All London Green Grid.

All the key interested parties need to be engaged in developing and critiquing this plan through some form of environmental forum that is not engaged on the noise and air quality issues.

These responses speak to Question 6 of the consultation response document.

These proposals require further development and discussion with key interested parties. FORCE is interested and willing to be fully engaged in these discussions as a community representative organisation and on behalf of the local environment. FORCE would welcome discussion and engagement from all other parties with an interest in enhancing the community and environmental value of these vital green corridors.