On the right lines?
Vegetation Management on London’s Railway Embankments
January 2012
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Greater London Authority
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One of the London’s less well known but significant ecological assets, line-side vegetation, occupies large swathes of London’s 740km of railway tracks. Not only can it provide privacy and enhance the attractiveness of neighbourhoods, it also shields residents from disturbance and dust generated by passing trains. Moreover, London’s biodiversity benefit from the habitats and wildlife corridors that line-side vegetation provides across the length and breadth of the capital. It is a vital green asset for Londoners.

London Underground’s trackside land alone amounts to 10 per cent of all green spaces in the capital and provides a home to wildlife such as kestrels, orange-tip butterflies, great spotted woodpeckers and bats.

Effectively managing trackside land is vital to ensure the safety of travellers and the rail workforce but a number of letters to individual Assembly Members have highlighted that line-side management can sometimes be controversial and I wanted to look at the policies and procedures that Network Rail and Transport for London have in place to manage this asset.

To find out more, we obtained the views of Londoners, the boroughs, the rail operators and a number of other organisations – we invited written comments through our webpage, local press, emails and letters and visited two railway embankments to see the results of typical management works.

I am clear that there are processes in place for communicating with line-side residents but I want to press for a more tailored approach so that local residents are accurately informed as to the nature of the works, how long they will take and how the wildlife is going to be effectively protected. Many residents living alongside railway lines are passionate about the trees and wildlife at the bottom of their gardens and I would like to see line-side managers make common cause with residents to treat these green spaces more as assets and not as a maintenance liability. Fully considering the environmental value of sites before works are carried out and involving relevant partners such as London Biodiversity Partnership in long term plans are an important step towards achieving this.
I would like to thank all those who contributed to this investigation – their input has been extremely valuable in producing this report.

Darren Johnson AM, Deputy Chair Environment Committee

January 2012
Railway land is a major natural resource for London. Its environmental importance has been recognised in legislation: local authorities have granted protection to over 1,000 hectares of line-side land in London that have been identified as Sites of Importance for Nature Conservation (SINCs).

This report presents the findings of a review of line-side land management in London. It identifies the extent of public concern and considers the adequacy of existing guidance on vegetation management. It also makes a number of recommendations to help the rail operators improve their performance in these areas.

In London, line-side land is managed predominantly by Network Rail and Transport for London. They manage the land and maintain vegetation through pruning or felling trees, reducing or clearing vegetation, and stabilising embankments, usually on safety grounds. There is also a need to control invasive species such as Japanese knotweed.

Both Transport for London and Network Rail receive complaints and enquiries about the way they manage line-side land. The Committee has received correspondence on these issues from a number of residents living near tracks in different parts of London, as well as from local civic societies and environmental groups. Their concerns relate mainly to the spread of invasive species, the excessive removal of vegetation, the way in which notification of works and communication is carried out by the rail operators, and the potential disturbance of wildlife. In particular, residents consider that cutting back or removing trees and other vegetation can have a number of negative impacts.

Network Rail and Transport for London recognise that managing line-side vegetation need not compromise its biodiversity interest or amenity value. Both rail operators have guidance and policies to encourage biodiversity, but it has been questioned whether best practice is being implemented consistently across the network. An external review of existing guidance and policies, commissioned on behalf of the Committee, concluded that the practical challenge will be to deliver to the standards and ambitions expressed in the guidance, within the constraints of key priorities such as cost control and trackside safety.

Greenspace Information for Greater London (GiGL), the capital’s environmental records centre hosted by London Wildlife Trust, collates, manages and makes available detailed information on London’s wildlife, parks, nature reserves, gardens and other open spaces. Network Rail does not currently make use of GiGL’s data and uses other sources to inform management works. The Committee found that GiGL’s additional local biodiversity and habitat information could have been helpful in certain cases where issues arose.
Local people living near rail tracks have contacted the Committee about the level of information and communication provided by line operators in advance of works. Both Network Rail and Transport for London seek to give at least one month’s advance warning of proposed work, but apply two weeks as minimum. However, they don’t monitor complaints specifically relating to prior notification of works. Both Transport for London and Network Rail see notification as the first stage of communicating work proposals. They see scope for consultation with residents at a second stage only if they receive responses or if issues are raised.

The standardised written engagement processes with local communities should be improved. It should give more detail and a clearer rationale to help the general public better understand and accept the operators’ proposals of line-side work.

Several residents and boroughs have reported concern about the level of communication and information offered by the helplines run by Transport for London and Network Rail. Managing line-side land is usually beyond the scope of local authority guidelines or strategies; as a result, boroughs often refer residents with enquiries or complaints to these helplines, pass on residents’ enquiries, or use the helplines themselves to seek information.

One way to improve communication between Network Rail and local residents may be to exploit structures already in place to protect biodiversity in the London boroughs. A number of London boroughs, as well as the London Wildlife Trust, argue that Network Rail would benefit from joining the London Biodiversity Partnership (LBP).
1 Introduction

1.1 London has over 740 kilometres of surface railway lines. The land surrounding these lines is managed predominantly by Transport for London and Network Rail.

1.2 Railway land is a major natural resource for London: line-side land includes grassland, scrub, woodland and ruderal vegetation. As well as providing vital urban greening and screening for residents near railways, much of this land provides wildlife habitat and corridors, as well as being significant areas of urban biodiversity.

1.3 The environmental importance of line-side land has been recognised in Mayoral strategy. Local authorities have granted protection to a number of line-side tracts in London because of their biodiversity value within their planning documents.

1.4 Over 1,000 hectares of line-side land in London have been identified as Sites of Importance for Nature Conservation (SINCs) – more than 40 such sites in total. In addition, railways are adjacent to a large number of SINCs, and provide extensions and connections across these which can benefit the ecology and movement of a wide range of species. The management of railway line-sides can influence adjacent sites.

1.5 This report presents the findings of a review of the management of line-side land in London and makes recommendations to the two bodies responsible for the land in London: Transport for London and Network Rail.

1.6 To inform the review, we obtained views from London boroughs and the rail operators. A meeting was held with the London Wildlife Trust and Greenspace Information for Greater London (GiGL) to seek their views. The Assembly Member leading this review and other Committee Members visited two sites to see the results of typical management works, to get a better sense of the scale and tasks involved, and to discuss key issues with expert staff from both Transport for London and Network Rail.

1.7 In this report, we identify the extent of public concern about the management of line-side land and consider the adequacy of existing guidance on vegetation management. We raise a number of recommendations to help the rail operators respond to the concerns raised, and to improve their performance in these areas.
Structure of the report

- Section 2 of this report sets out the need for and benefits of management works carried out on line-side land.
- Section 3 expands on the scale of such management works, and how they affect biodiversity and local residents, highlighting specific areas of concern.
- Section 4 examines the standards and good practice guidance that rail operators follow regarding line-side management and identifies potential gaps.
- Section 5 sets out how rail operators communicate and consult with stakeholders and specialist organisations on proposed management works and major line-side projects, and considers how this process could be improved.

The surface rail network in London

While Transport for London is part of the GLA group and reports to the Mayor, Network Rail is a private company limited by guarantee, operating as a commercial business. It is directly accountable to its members⁴ and, like Transport for London, is regulated by the Office of Rail Regulation.

About 55 per cent of London Underground track network are above-ground (about 230 km). London Underground owns about 4,000 hectares of land, which amounts to about 10 per cent of all green spaces in London⁵ (or 28 times the size of Hyde Park)⁶. This land is primarily made up of track and depot line-side vegetation and excludes buildings and other uses.

In addition, Transport for London also provides railway services through Rail for London Ltd and London Rail⁷ (574.88 hectares), which includes:
- London Overground (38.7 hectares);
- Docklands Light Railway (507 hectares); and
- Tramlink (29.18 hectares).

However, these are total figures, not just vegetated land. Currently, there are no plans to subdivide this information into greenspace and other uses.⁸ The remainder of the track network in London is under the control of Network Rail.
2 Why management works need to be carried out on line-side land

2.1 Railway embankments need to be carefully managed. Railways must operate efficiently and safely; at the same time, vegetation and the species living in line-side habitats also need protection because of their environmental and amenity value.

2.2 In London, line-side land is managed by Network Rail and Transport for London. They manage the vegetation on line sides in three main ways: tree maintenance, vegetation maintenance (both of which may include tree felling, vegetation clearance, coppicing, pollarding or height reduction) and embankment earthworks such as stabilisation.

2.3 Trees are only felled if absolutely necessary, when:
- they are at risk of failure and toppling onto the track, line-side services or adjoining properties;
- they obscure signals or other line-side signs;
- they are identified as affecting ground movement, resulting in excessive track deformation;
- they are located on embankments or cuttings that require stabilisation - either as part of the stabilisation works or where they act as a physical barrier to the works;
- they contribute to a build-up of leaves on lines, which affects train safety and performance especially when reducing and increasing speed near stations (see Info Box below).  

“Leaves on the line”

**Slippery rail** is a condition of railways caused by fallen moist leaves that lie on and cling to the top surface of the rails of railway tracks. The condition results in significant loss of friction between train wheels and rails, and in extreme cases can render the track temporarily unusable. In Britain, the situation is colloquially referred to as **“leaves on the line”**.  

Network Rail explain: “Autumn and falling leaves are a challenge for railways the world over. We’re working closely with the train operators to mitigate autumn’s effects as far as possible and keep passengers moving.” There are six species of trees which cause particular problems; all are deciduous and broad-leaved, and all thrive by the railway: ash, sycamore, poplar, lime, sweet chestnut, and horse chestnut.  

Network Rail and London Underground combat autumnal leaves by cleaning the rails manually or by machine, and applying an adhesion improver, such as sandite, to aid grip; but they may also cut down line-side tree. The Royal Forestry Society advises that over-zealous or inappropriate
clearance of trackside scrubs and trees can destabilise embankments and cause landslips.\(^{13}\)

2.4 Vegetation is managed for operational and environmental reasons. Shrubs, small trees and hedges may need to be removed to keep cable runs functional and accessible, or to keep operation pathways and fencing clear. Periodic clearance can benefit plant and animal life\(^{14}\).

2.5 There is also a need to control invasive and foreign species such as Japanese knotweed\(^{15}\), which can negatively affect both railway land and neighbouring sites (also see Info Box in section 3 of this report).

2.6 Engineering work is sometimes necessary to stabilise embankments. Such work will often involve the complete removal of vegetation and can affect local wildlife.

2.7 The London Wildlife Trust states that:

"We recognise and understand the needs of Transport for London and Network Rail to operate a safe and efficient railway network for the benefit of the TOCs [Train Operating Companies], the travelling public and businesses. We believe that this can be balanced with a sensitive approach to line-side management that can help meet the needs of wildlife, and help the railways meet their responsibilities to protecting the ecological assets they own and manage."\(^{16}\)
3 The scale and impact of line-side management: public concerns

3.1 Both Transport for London and Network Rail receive a variety of complaints and enquiries about vegetation. Most of the calls received in recent years ask to maintain or sometimes remove line-side vegetation (usually trees or shrubs) on line-side land that is considered overgrown or felt to present a risk to people or property. A smaller proportion (around 15% for London Underground enquiries since 2005) are objections to, or concerns about, proposed works or works that have already taken place.  

3.2 A number of residents living near tracks in different parts of London as well as local civic societies and environmental groups (15 in total) have written to the Committee to express concerns about the way line-side vegetation is managed. They are concerned principally about the scale of vegetation management works, adverse impacts on their properties and the potential threats to local wildlife habitats that may result. In addition, some of those stakeholders feel that the line operators provide insufficient or poor information in advance of management works.  

Examples

3.3 The following examples received by the committee illustrate these concerns.

Invasive species

3.4 Several stakeholders reported to the Committee that significant populations of Japanese knotweed, eg along the District line near Wimbledon and on the national rail network in South and Southeast London, are not being treated effectively.

3.5 One local resident is “very concerned that Japanese knotweed is taking hold at the rear of my property. Network Rail needs to prioritise eradication”. Officers supporting the Assembly Member leading this review have also received concerned phone calls about this issue.
Japanese knotweed

Japanese knotweed is a highly invasive, non-native plant found in the UK. It has the potential to damage buildings, structures and over-power native species, eventually eradicating them from their own environment. To eradicate the plant all above-ground portions of the plant need to be controlled repeatedly for several years in order to weaken and kill the entire patch.\(^{21}\)

The **Wildlife and Countryside Act 1981** states that it is an offence to "plant or otherwise cause to grow in the wild" any plant listed in Schedule nine, Part II of the Act. This lists over 30 plants including Japanese knotweed, giant hogweed and parrot's feather.

It is down to landowners to control these plants, but they do not have to remove them. However, causing the plants to spread by removing or disposing of them incorrectly is illegal.

Japanese knotweed is also classed as 'controlled waste' and as such must be disposed of safely at a licensed landfill site according to the **Environmental Protection Act (Duty of Care) Regulations 1991**.

**Removal and replanting of vegetation**

3.6 Several residents have reported the excessive removal of line-side vegetation and loss of trees across London.\(^{22}\) For example, a significant number of trees have been cut down along the District line near Southfields. Correspondents were particularly alarmed that very mature, established willows, beeches and poplars are affected and that no significant replanting is envisaged.\(^{23}\) Tree felling has also taken place along the Northern line in the London Borough of Barnet, to enable a new signalling system. A local resident perceived the works as: "the wholesale destruction of the local environment and the creation of a polluted wasteland"\(^{24}\).

3.7 A number of occasions were reported to the Committee were some form of replanting of more suitable species was promised but this was not, or only partially, implemented.\(^{25}\)

**Notification of works and communication with rail operators**

3.8 Residents received written notification of planned vegetation management along the Northern line between Mill Hill and Finchley Central; however, extensive felling of trees and clearance of shrubs took place on the embankment, which the residents felt was not explained sufficiently in the written notification. Furthermore, initial contact with the Network Rail helpline was unsatisfactory as no further information could be provided.\(^{26}\)
3.9 A local resident told the Committee that she felt a major cutback of vegetation on the Liverpool Street to Cheshunt line a few years ago was very drastic, although there has now been some regrowth; she also found it hard to contact Network Rail about embankment issues.27

3.10 One response suggested that major vegetation managing projects should be more widely advertised, for example with signs being displayed on highways in the vicinity asking local people “Does this affect you?” 28

Disturbance of wildlife

3.11 Some residents and members of environmental groups have raised concerns about the disturbance of wildlife habitats caused by vegetation management. A former member of railway staff in London highlights the wealth of wildlife documented on line-side land ranging from birds to deer29.

3.12 A local environmentalist mentions a number of incidents she witnessed, for example the replacement of line-side fencing during the bird breeding season on a London Common and the destruction of a bat roost in a railway tunnel in Feltham.30

3.13 With more and more development happening in London31, the wildlife corridors and habitats provided by railway embankments become increasingly important32. The loss of foraging areas for bees has also been mentioned as a potential impact of vegetation works33.

Other issues

3.14 Written evidence collected by the Committee highlights a number of further issues associated with line-side vegetation and its management34:

- littering and lack of rubbish removal;
- light pollution, especially near depots; and
- failure to deal with dead or dangerous trees.

Possible impact of works

3.15 While Transport for London and Network Rail also receive requests to remove vegetation, other residents35 have told the Committee that cutting back or removing trees and other vegetation can create, among other things:

- increased dust and noise pollution from trains;
- an impact on privacy, outlook and property value;
- a loss of green space;
• an impact on wildlife, both flora and fauna; and
• more variable ground water levels, which were stabilised by the trees.

3.17 Network Rail and Transport for London recognise that managing line-side vegetation need not compromise its biodiversity interest or amenity value. In order to mitigate possible impacts on surrounding areas, the management process includes risk assessments to consider local wildlife. These assessments include site surveys and assessing habitat data available for the area. This is set out in the rail companies’ internal policies and standards, details of which are discussed in the next chapter.
4 Standards and good practice for vegetation management

4.1 A number of standards and manuals of good practice exist for vegetation management on Transport for London and Network Rail land. Furthermore, Transport for London uses habitat data provided by Greenspace Information for Greater London (GiGL), alongside its own survey data, to assist in designing environmental strategies, planning line-side maintenance works and replanting schemes.

Standards and Policies

4.2 Both Network Rail and Transport for London produce and follow a number of standards, policies and manuals, ranging from wider strategies and objectives to measurable actions and checklists for staff. The aim of the standards is to encourage biodiversity and create or maintain ‘green corridors’, whilst ensuring that plants – and large trees in particular – do not become a hazard to the safe operation of the railway.

4.3 Network Rail has a written policy designed to protect the environment. This policy is a requirement of its licence conditions as agreed with the Office of Rail Regulation, although Network Rail’s tree and vegetation management programme is an operational matter in which Ministers have no power to intervene.

4.4 As Chair of Transport for London, the Mayor has ultimate responsibility for the management of Transport for London’s line-sides. Of particular importance are the policies and procedures for identifying Sites of Importance for Nature Conservation (SINC) set out in the Mayor’s Biodiversity Strategy. This Strategy provides the framework that has resulted in 75 railway line-side sites being SINCs or component parts of SINCs. Transport for London has a written policy which sets its health, safety and environment objectives.

4.5 While most of the Transport for London documents relate to London Underground, London Rail tend to apply the standards and policies provided by Network Rail. Details of these documents are included at Appendix 1.
4.6 London Underground’s key policies include their Biodiversity Action Plan (BAP)\(^\text{36}\) and the Landscaping and Vegetation Standard. Network Rail (and therefore London Rail) follow their Company Standard for vegetation and also have a BAP which is currently being reviewed by Network Rail.

**Monitoring and implementation**

4.7 Network Rail states that complaints about vegetation management occur primarily when processes have not been followed; they are then managed in line with internal processes for managing performance. Network Rail monitors the routes on performance in this area and the Office of Rail Regulation monitors Network Rail on their overall performance and delivery.\(^\text{37}\)

4.8 The implementation of Transport for London’s standards and policies is monitored through an independent, internal, risk-based audit regime. Where an audit shows, or evidence exists, that they are not complying with standards, improvement programmes will be implemented to ensure compliance.\(^\text{38}\)

4.9 The London Wildlife Trust supports the adoption of biodiversity action plans and other standards on line-side vegetation management but questions “whether this is being effectively adopted and how both Transport for London and Network Rail implement best practice across the network, to allay fears of ecological damage”.\(^\text{39}\)

4.10 A desktop review of the set of guidance available was carried out by an external consultant, Mark Turner of Future Soundings, commissioned on behalf of the Committee.\(^\text{40}\) Mark is an independent sustainability specialist with experience in setting strategic environmental sustainability, biodiversity and habitat management objectives within a practical setting.

4.11 The review concluded that:

> “Both Network Rail and Transport for London have in place systems and processes that should ensure appropriate and legally compliant treatment of trackside vegetation management offering benefits and enhanced quality of life to London’s residents.”
The approaches are somewhat different in tone and presentation, reflecting the priorities and possibly culture of the two organizations. Network Rail’s documentation is more process heavy, whereas Transport of London adopts a more communicative approach.

However in both cases the practical challenge will be to deliver to the standards and ambitions expressed in the guidance, whilst constrained in terms of key priorities such as cost control and trackside safety. Supply chains are critical delivery partners here, and the remit, practical instructions and budgets provided to them will have a role in determining successful outcomes.”

(see Appendix 2 for details of the assessment).

4.12 The assessment also found that the rail operators could benefit from future dialogue and collaboration with the Highways Agency (assuming this does not already occur), which shares many of the challenges, risks and opportunities Network Rail and Transport for London face.

Greenspace Information for Greater London (GiGL)

4.13 Greenspace Information for Greater London was launched in April 2006 as the capital’s environmental records centre and is hosted by London Wildlife Trust. GiGL collates, manages and makes available detailed information on London’s wildlife, parks, nature reserves, gardens and other open spaces.

4.14 Habitat data provided by GiGL can help organisations to design environmental strategies and planning maintenance works on line-side land. Transport for London currently use GiGL data to help them meet legal requirements for ensuring appropriate protection or management of species, and to comply with the Mayor’s Biodiversity Strategy. Whilst London Underground make use of GiGL’s recently published habitat suitability maps as a way of guiding replanting schemes to increase the connectivity of rare habitats across London. They consider using this information highly valuable and more cost-effective than carrying out ecological surveys to identify areas to priorities habitat enhancement works.41

4.15 Network Rail does not currently make use of the data gathered and distributed from GiGL. It states: “Site surveys are carried
out before the start of any works. Steps are in place if activity of interest is found to be present. Whilst accurate additional information on any site is always welcome, the principle objective of Network Rail is to deliver and maintain a safe national rail network. Some boroughs report that Network Rail is not always aware of local designations or biodiversity plans. While responding to the need for safety, the value of biodiversity and wildlife should always be taken into consideration.

4.16 The review found that GiGL’s biodiversity information could have been helpful in cases like the major vegetation clearance at Drayton Park station in the London Borough of Islington. The work was carried out without recognising the site’s SINC status, leading to significant public concern and a dispute with the local authority.

4.17 Other stakeholders (London Borough of Wandsworth, Natural England and the London Wildlife Trust) also suggest that Network Rail needs to be more aware of these issues and could become so by, for example, accessing GiGL’s data.

**Recommendation 1**

As part of its current review of strategic vegetation management, Network Rail should follow Transport for London’s lead and make use of Greenspace Information for Greater London to plan maintenance works line-side ahead of any on-site surveys.
5 Communication and consultation regarding vegetation management

5.1 As has been touched upon in Section 3, residents living near rail tracks in different parts of London have contacted the Committee about the level of information and communication provided by line operators in advance of works. Some London boroughs (Lewisham, Islington and Wandsworth) have also highlighted the need for Transport for London and Network Rail to commit to more direct communication with boroughs and local property owners. Network Rail managers themselves, during a site visit with the Committee to Grange Park, acknowledged a need to review their procedures to improve how they communicate with stakeholders when they have to undertake safety critical work.

How the rail operators engage with local communities

5.2 Network Rail wants to be seen as a good neighbour. The organisation accepts that there are always lessons that can be learnt to improve engagement with communities when vegetation or trees need to be cleared. Given the need for an engineering solution, there is no statutory duty to formally consult. Network Rail seeks to give a one-month advance warning of proposed work but two weeks as minimum. It also takes account of planning constraints and liaises with borough officers.

5.3 Transport for London also seeks good relationships with its neighbours. For example, London Underground seeks to give as much notice as possible in advance of planned works, with two weeks as a minimum. Stakeholders, including residents, Borough Tree Officers and, where appropriate Members of Parliament, Assembly Members and ward councillors, are informed of the proposals. However, London Underground notes that works can start without prior notification, where work is required at short notice for emergency reasons and in order to maintain the safe operation of the railway.

5.4 Neither Transport for London nor Network Rail monitor complaints specifically relating to prior notification of works. Network Rail has confirmed that it “pre-notifies 20,000 properties nationwide every month in line with their standards” whilst London Underground sends around 300,000 notifications about all types of work each year. Transport for
London states that due to the very few complaints about a lack of notification received about proposed work, including vegetation management, it believes that “a performance metric would not add value to the business”.

5.5 Network Rail does not usually use station notice boards to inform the wider public as stations are often owned, not by Network Rail, but by the train operators. However, Network Rail could consider the possibility of using notice boards in order to reach a larger numbers of residents in a particular area.

5.6 Both Transport for London and Network Rail see notification as the first stage of communicating work proposals. They see scope for consultation with local residents at a second stage only if they receive responses or if issues are raised. Both organisations believe that real consultation is often not possible or practical because of engineering constraints; they consider it important to manage expectations. For example, residents should not be given the wrong impression about the options for screening and replanting after works have been completed, although they can sometimes be given some choice of suitable species (described as a “constrained consultation element”).

Case study 1: North Harrow

At North Harrow station it is possible to view part of the embankment stabilisation project undertaken between Pinner and North Harrow stations on the Metropolitan line between November 2009 and June 2010.

The project scope involved the design and construction of works to stabilise the embankment because it failed a structural assessment. The works included stabilising the shoulder of the embankment, increasing the size of the cess, and creating a dedicated walkway along the stabilised length of the embankment.

The embankment vegetation comprised broad-leaved woodland as well as areas of scrub and grass; this provided the residents with a privacy screen. The site includes part of the Yeading Brook Site of Importance for Nature Conservation (SINC) and required extensive vegetation removal to deliver the project scope. Vegetation clearance occurred in the spring, before the bird nesting season, to prepare the area for the engineering works.

Ecology consultants were commissioned to undertake an ecology survey before the works began and to provide reinstatement advice based on the London Underground Biodiversity Action Plan and the Mayor’s Biodiversity Strategy.
Residents were informed about the proposed work by letter. Following a number of complaints from residents, an informal meeting was held with some residents and London Underground’s Community Relations Manager to discuss the need for the works and how concerns could be addressed. The second stage of the works was also announced by letter - this time it included an invitation to a public meeting where residents could meet the project team and voice any further concerns and contribute to the planting scheme designs where practicable.

5.7 The general public are usually not involved in any long-term strategies, or in the definition of objectives for certain areas or lines. The rail operators feel that informing residents of the possibility of maintenance works on a nearby site, when the details and timeframe are not yet confirmed, would cause unnecessary concern.\(^5^0\)

5.8 The written engagement processes with local communities is standardised. Letters usually lack detail of the need for, or scale of, proposed works. A notification letter from Network Rail, for example, advising of vegetation works, may state merely that either vegetation or trees will be cut back or removed to improve safety and reduce leaves on the line. Residents often feel insufficiently informed. The London Wildlife Trust is often contacted by concerned members of the public about the felling of trees, usually when works have started.

**Case study 2: Grange Park**

At **Grange Park station** in the London Borough of Enfield vegetation clearance was undertaken to facilitate an embankment stabilisation scheme.

Grange Park is on the ‘Hertford Loop’ along the First Capital Connect (Great Northern) Line. The use of a range of materials to build the embankment in the 1900s and an embankment fire in the 1970s affected the ground and therefore the stability of the overhead power-line stanchions.

In order to rebuild and stabilise the embankment, it was not possible to keep the vegetation on the embankment. The slope had to be re-graded including stone build-up to stop slippage.

In written communication with residents the terminology used did not prepare residents satisfactorily for the extent of works and there was widespread resentment about this. Subsequently, a public meeting was held on the issue which 400-500 residents attended.

Finally, Network Rail agreed a process of replanting, and in 2010 the embankment topsoil was restored and reseeded with a grass and wildflower mix. In partnership with the local authority, some trees were made
available for planting and a project to replant bulbs is underway with a local school at one end of the embankment.

5.9 The general public could better understand and accept proposals of line-side work if the operators gave more detail and a clearer rationale. Such notification might be similar to notifications for planning applications, where a short but specific description of the proposal is given with the opportunity to review further details online.

**Recommendation 2:**
Network Rail and Transport for London should immediately use more specific and informative language when notifying stakeholders about vegetation management. They should move away from standardised template letters and use a wider range of templates to be more explicit about the type of management works announced. Letters should also provide weblinks where people can find more detailed information about line-side works.

**The role of boroughs**
5.10 The management of line-side land is, by and large, beyond the scope of any local authority guidelines or strategies. The land is usually part of Network Rail’s or Transport for London’s operational land and not owned by the boroughs.

5.11 As a result, when boroughs receive enquiries or complaints from local residents relating to railway embankments, they will usually offer the resident the relevant contact details, either for Transport for London or for Network Rail (both of which operate a helpline). Some boroughs may themselves seek information from the rail operators on behalf of the residents, or forward information from residents to the operators.

5.12 Several residents and boroughs have reported concern about the performance of these helplines. They have not always been able to provide details on individual proposals, which is what residents are looking for.51

5.13 The London Borough of Wandsworth has noticed improvements in the commitment from Network Rail and subcontractors to informing and consulting local residents and authorities, but say that such improvements are patchy.
5.14 One way to improve communication between Network Rail and local residents may be to exploit structures already in place to protect biodiversity in the London boroughs. Some boroughs publish Biodiversity Action Plans and Biodiversity Partnership Documents, with the objective to ‘protect and manage appropriately the railway corridors for biodiversity’. Boroughs seek to achieve this objective in a number of ways: they might seek to establish working links with rail operators; and they might set up or secure nature conservation areas.

5.15 A number of London boroughs (Lewisham, Islington and Wandsworth), as well as the London Wildlife Trust, argue that Network Rail would benefit from joining the London Biodiversity Partnership (LBP). Transport for London is already a member. It works with borough tree and biodiversity officers and is also involved in the London Borough Biodiversity Forum. Such cooperation has been beneficial to ensure specific habitats are dealt with appropriately. Liaising with these partners would help Network Rail to improve working relationships with boroughs, would create space for discussions about long-term planning and maintenance, and would provide the opportunity to reach line-side neighbours proactively.

Recommendation 3
Network Rail should join the London Biodiversity Partnership (LBP), attend meetings or provide written input where necessary. A greater exchange with LBP members, particularly boroughs, would help achieve common biodiversity objectives and inform vegetation management strategies.
Appendix 5 – Standards and policies

Transport for London (London Underground and London Rail)

**Transport for London’s Health Safety and Environmental Policy** contains a provision to realise environmental benefits, in addition to pollution prevention, with a focus on managing emissions and mitigating the effects of, and adapting to climate change, and to actively support the Mayor in delivering the environmental strategies on air quality, ambient noise, biodiversity, energy and municipal waste.

**London Underground’s Biodiversity Action Plan (BAP)** seeks to ensure compliance with legislation, the objectives of the Mayor’s Biodiversity Strategy, the aims of the Mayor’s Urban Greening programme, and LU’s biodiversity objectives. The BAP contains a set of action plans for habitats and protected species on LU’s network, using specific measurable actions they will undertake, with their partners, to manage biodiversity on their property.

**London Underground’s Environmental Strategy** focuses on the impact of LU’s activities on the environment and sets out priorities for the next five years. It establishes the foundations which will allow LU to understand, manage and minimise its environmental impacts as well as govern day-today activities.

**London Underground’s Landscaping and Vegetation Standard** defines the requirements for landscaping and vegetation control in the off-track area and the requirements for the management of these areas. It includes details on safety design, site assessments and engineering.

**Network Rail**

**Network Rail’s Company Standard for Vegetation** briefly sets out that line-side vegetation will have to undergo inspection, maintenance and management regimes derived from risk assessments based upon railway and vegetation characteristics. This is to reduce the risk posed by vegetation to the safety and performance of the operational railway, together with the risk posed to third parties.

**Network Rail’s Biodiversity Action Plan (BAP)** provides information on working practices and contacts in relation to both vegetation and wildlife on or near to Network Rail land (protected and otherwise). This information should be taken into account during all operational work, including emergency and unplanned activities.
Appendix 6 – Future Soundings: Review and Appraisal of Trackside Vegetation Management Guidance Documentation Provided by Network Rail and Transport for London

Mark Turner of Future Soundings is an independent sustainability specialist with over 17 years experience in setting strategic environmental sustainability, biodiversity and habitat management objectives within a practical setting.

His experience includes:

- Head of Sustainability at a leading national Construction PLC, ensuring appropriate training and site practice for biodiversity, habitat protection and enhancement was delivered across a huge range of construction and infrastructure projects.

- Champion for Environmental Sustainability “Cross Cutting Theme” within Merseyside’s £2.6Billion ERDF Objective One Economic Development Programme.

- Developing an Environment Economy Working Group, promoting the role of Green Infrastructure in establishing a thriving economy, healthy workforce and neighbourhoods.

1. Scope:

The scope of this appraisal paper is to:

- Assess whether the guidance provided to London Assembly for appraisal of trackside vegetation management policy and techniques is complete and identify what is missing.

- Assess whether it is of acceptable quality and detail compared to other such guidance for vegetation management in comparable sectors.

- Assess whether it is up to date and delivering best practice.

The comments given therefore do not seek to repeat what is in the guidance, but instead offers an opinion as to the style, authoritativeness, legislative compliance, and reach of the material. The possibility exists to further examine some of the opportunities identified in future if desired.
2. Is the Guidance comprehensive?

Both sets of guidance offer an exhaustive appraisal of the opportunities, risks and challenges. Each contains methodologies for dealing with the above in a manner compliant with current legislation.

There are some differences in the tone and presentation of the two sets of guidance which perhaps are reflective of the role and priorities of the two organisations involved, and demonstrated well in the tone and layout of their respective Biodiversity Action Plans.

In summary, Network Rail’s documentation is understandably on the whole more focused towards generic but regionally adaptable process, procedure and risk management, whereas Transport for London/London Underground has a more developed sense of place, communicative power, and focus on potential improvements and benefits for stakeholders in the London area.

3. Is the guidance of acceptable quality and detail compared to other sectors?

To ensure this section of the brief was most relevant to the London Assembly, sectors were chosen that face comparable challenges and opportunities to Network Rail and Transport for London. This aspect of the review therefore encompassed two inter-related elements:

- Reviewing the relevant published policy and procedures of a comparable organisation to Network Rail and Transport for London within a related sector. The most comparable sector to Rail is Highways, within which the largest delivery agent in the UK is the Highways Agency.

Similarities of challenges faced and approach taken are well demonstrated by the documentation available via the Highways Agency’s website. They publish a fairly comprehensive summary of their approach to sustainable development considerations as part of their Sustainable Development Vision and Action Plan, including their sustainable development policy and ambitions in construction and maintenance of roads. See the link below for their Biodiversity Action Plan. Though published nearly a decade ago, this document is very accessible, and is supported by an overarching strategy with KPIs [Key Performance Indicators](http://www.highways.gov.uk/aboutus/1150.aspx)

N.B. There may be benefit in future dialogue and collaboration with the Highways Agency (assuming this does not already occur), which shares
many of the challenges, risks and opportunities faced by Network Rail and Transport for London.

- Reviewing the policy and procedures of building construction and maintenance clients and contractors in a comparable and relevant area of operation to Rail, namely Construction Infrastructure.

Within this review, focus was given to training and guidance materials developed and used by a leading Construction and Infrastructure contractor active in Rail related work, but also delivering Highways construction and maintenance and a wide range of other projects in restricted sites. Examples of the latter are Nuclear, Aerospace, and Utilities. The information viewed included training materials used by this organization to train and inform staff and sub-contractors. This material was found to be similarly comprehensive, authoritative and detailed to the standards provided for this review. It was also evident that the customers and contractor, at least in terms of what is written, are striving to meet common objectives in standards of vegetation management. This is encouraging and very positive.

4. Does the guidance reflect best practice?

The guidance reflects best practice in terms of the corporate objectives of the two organisations concerned. If delivered in compliance with this guidance there seems little doubt that London’s residents would experience improved conditions and quality of life.

Key aspects of this improved experience and probably the most significant and emotive issues for residents are the visual value of trackside vegetation and its role as a habitat for wildlife. There are however other aspects to consider. Two are listed below:

- The health promoting aspect of encouraging and managing appropriate vegetation.
  Appropriately managed urban green space will contribute to air quality improvement, contributing to direct and indirect health and financial benefits. Though residents cannot physically use the trackside environment, they interact with it day to day, and it contributes to improving London’s air quality. Studies have also shown that in hospital and palliative care environments, wellbeing is encouraged by the presence and sensitive management of adjacent green space.

- The role of trackside vegetation and habitat management as a component of wider “Green Infrastructure”. This concept offers an alternative view of the management and development of green space, developing a strategic approach to ensure that all potential
benefits are captured and enhanced. Rail infrastructure operators can play a highly positive role in such developments.

The role of Green Infrastructure is particularly significant in London, where urban green space is at a premium. A paper (East London Green Grid Primer – GLA 2006) examined this concept, laying out an enhanced vision describing how the area could be developed for collective benefit.

(http://legacy.london.gov.uk/mayor/auu/docs/elgg-all.rtf)

A detailed strategic examination of the opportunities for Green Infrastructure and methodologies for implementation has also been published this year in the North West;
http://www.greeninfrastructurenw.co.uk/climatechange/
There may be benefit in consulting with the authors of this and related work to assess further opportunities within the London area, developing an inclusive theme for Green Infrastructure within which trackside vegetation and habitat management can play a highly positive role.

The link below shows endorsement for the principles and process of Green Infrastructure by the Royal Institute of Chartered Surveyors:

5. Conclusions

Both Network Rail and Transport for London have in place systems and processes that should ensure appropriate and legally compliant treatment of trackside vegetation management offering benefits and enhanced quality of life to London’s residents.

The approaches are somewhat different in tone and presentation, reflecting the priorities and possibly culture of the two organizations. Network Rail’s documentation is more process heavy, whereas Transport for London adopts a more communicative approach.

However in both cases the practical challenge will be to deliver to the standards and ambitions expressed in the guidance, whilst constrained in terms of key priorities such as cost control and trackside safety. Supply chains are critical delivery partners here, and the remit, practical instructions and budgets provided to them will have a role in determining successful outcomes.

Opportunities exist to engage Network Rail and Transport for London in analysis and development of their contribution to enhanced Green Infrastructure and health improvement for London. Though adoptive roles as environmental guardians or public health improvement agencies might
receive reluctant acceptance, both organisations have significant contributions to make.
Appendix 3 – Recommendations

Recommendation 1
As part of its current review of strategic vegetation management, Network Rail should follow Transport for London’s lead and make use of Greenspace Information for Greater London to plan maintenance works line-side ahead of any on-site surveys.

Recommendation 2:
Network Rail and Transport for London should immediately use more specific and informative language when notifying stakeholders about vegetation management. They should move away from standardised template letters and use a wider range of templates to be more explicit about the type of management works announced. Letters should also provide weblinks where people can find more detailed information about line-side works.

Recommendation 3
Network Rail should join the London Biodiversity Partnership (LBP), attend meetings or provide written input where necessary. A greater exchange with LBP members, particularly boroughs, would help achieve common biodiversity objectives and inform vegetation management strategies.
Appendix 4 – Orders and translations

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Endnotes

1 London Biodiversity Partnership (2000): The London Biodiversity Audit. Volume 1 of the London Biodiversity Action Plan; A ruderal species is a plant species that is first to colonise disturbed lands, for example after construction works. Ruderal species typically dominate the disturbed area for a few years, gradually losing the competition to other native species but under some circumstances, may become permanently established (http://en.wikipedia.org/wiki/Ruderal_species)


3 Written evidence submitted by the London Wildlife Trust

4 Network Rail has two general classes of membership: Public Members are drawn from the public. Industry Members are made up of certain rail industry companies (principally the passenger and freight train operating companies and some rail contractor companies). In addition the Department for Transport (DfT) is a Member of Network Rail.


6 Information from GiGL (email to officers/written response from Transport for London/London Underground)

7 Rail for London Limited is a wholly owned subsidiary of Transport Trading Limited. London Rail is the TfL Directorate responsible for overseeing major new rail projects, managing the London Rail concession and managing the operation of Docklands Light Railway and Tramlink. It is also responsible for London Overground Rail Operations Ltd.

8 Email to officers/written response from Transport for London/London Underground

9 The Mayor’s answer to Mayoral Question number 0967/2009 (asked by Darren Johnson AM), Meeting date 21 May 2009 (http://www.london.gov.uk/mqt/public/question.do?id=25789)


11 Deciduous is typically used in reference to trees or shrubs that lose their leaves seasonally

12 Network Rail: http://www.networkrailmediacentre.co.uk/content/detail.aspx?releaseid=2377&newsareaid=2&searchcategoryid=2

13 Royal Forestry Society: http://www.rfs.org.uk/leaves-line

14 Periodic clearance is akin to woodland management; it increases light levels to the ground which benefits herbaceous flora and associated wildlife (written response from LB Croydon)

15 See information box on page 27 of this report

16 Written evidence submitted by the London Wildlife Trust

17 Discussions between officers and representatives of Network Rail and Transport for London during site visits; written evidence submitted by Network Rail and Transport for London

18 Written representations by members of the public, Ref LV006, LV010, LV029; London Borough of Islington, London Borough of Bromley
London today holds a population of 7.8 million, which is set to grow further. While policies have been put in place to protect wildlife from development or pollution, in London nature still faces immense pressures from the demands of society. (http://www.wildlondon.org.uk/into-the-21st-century) The UK Government has policies to complement development, through the planning system, as demands for domestic and commercial growth continue to place increasing pressure on land use. (http://www.forestry.gov.uk/fr/urgc-7EFHE6)
46 Emails to officers from Network Rail

47 Emails to officers from Transport for London/London Underground

48 Discussions between officers and representatives of Network Rail and Transport for London during site visits; written evidence submitted by Network Rail and Transport for London

49 A ‘cess’ is an area available next to the track for a walkway or refuge for staff working on the track.

50 Discussions between officers and representatives of Network Rail and Transport for London during site visits

51 Written representations by members of the public, Ref DJ3274, LV006; Written evidence submitted by the London Borough of Islington
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