

12. IMPLEMENTATION, MANAGEMENT AND FUNDING

INTRODUCTION

- 12.1. This section sets out proposed mechanisms for implementing the Green Arc, recommends a management structure, and outlines the capital and revenue costs of the Green Arc. It also sets out an indicative programme and identifies potential sources of funding.

IMPLEMENTATION MECHANISMS

- 12.2. The following implementation mechanisms should be employed to deliver the Green Arc Vision and objectives:

Land acquisitions and land management

- 12.3. The Green Arc will have two principal mechanisms for creating the new, more accessible landscape described in the vision. These are:

- Land acquisition by public and voluntary sector agencies
- Land management agreements with private landowners.

Land acquisitions

- 12.4. As noted in section 2 of this report, publicly owned Green Belt land is often maintained to higher standards and experiences fewer of the problems normally associated with the Green Belt such as fragmentation and degradation of landscape. It is recommended that a strategic approach is adopted to purchasing land within the Green Arc area to provide a greater degree of influence over its management. This would include targeted purchasing of land in close proximity to and between existing initiatives. Land purchase is a feature of Thames Chase Community Forest, where the Forestry Commission acquired 360 hectares of land and has undertaken improvements such as planting, access paths, car parks, signage and seating. Similarly the Corporation of London have a proven track record of land purchase, for example adding an additional 750 ha of Green Belt ‘buffer land’ around the Forest.
- 12.5. Several partners within the Green Arc are currently considering land acquisitions in four important areas:
- the Green Belt between Theydon Bois and Debden
 - Park Farm: a 53 ha site effectively forming an eastern extension to Hainault Forest. This site is owned by Essex County Council and is being considered by the Woodland Trust.

- Areas of countryside close to Epping Forest to both the south and south-west of Harlow using funding from the ODPM Greenspaces Fund and others forming potential links with both Harlow and the Lee Valley'
- 12.6. A number of these sites are important strategic sites, which perform key roles in Priority Opportunity Areas (see Geographical Structure for the Project Plan below).

Prescriptions for land management

- 12.7. It has been assumed that to ensure the long-term future of the Green Arc that land acquisitions will be key. However, it may be necessary to acquire land with tenancies, in which case it would be possible to negotiate environmental agreements with tenants. Broadly speaking two types of land management regimes are envisaged:
- ***Traditional farmed landscapes.*** These would be important hedged and wooded landscapes where the Green Arc would seek to retain the landscape character. There would be a move away from intensive arable farming towards extensive permanent pasture. This landscape could also accommodate low-input organic farming initiatives. Access, whilst planned and encouraged, would need to take account of the farming practices. New woods and hedges could be planted.
 - ***Extensive naturalistic landscapes.*** These would, by their nature, be large areas of relatively unmanaged areas where natural processes of colonization and low intensity grazing would be encouraged. These broadly unenclosed areas would have a low input regime. These areas could accommodate open access. However in reality access could be managed and restricted to key strategic paths. Naturally regenerating woodlands would be encouraged.

Private sector funding

- 12.8. There is potential to attract private sector investment within the Green Arc. This might include the establishment of an endowment scheme by local businesses or attracting inward investment in the area. Such private sector funding would be used to secure the protection and management of Green Belt land. Experience could be taken from existing examples e.g. the endowment schemes to protect open space established by London First and in Milton Keynes.

Creative use of the planning system

- 12.9. Although improved land management and environmental enhancement cannot be achieved through the planning system alone, it provides an important mechanism to influence the location and form of future development. This is especially true given the planning reforms due to come into force in 2004 are intended to achieve a more streamlined system resulting in better quality development.

- 12.10. Probably the most widely known planning tool to influence the scale and form of development is the Section 106 agreement. Planning authorities can enter into such agreements with developers to achieve local benefits in return for the granting of planning permission. There is potential for Local Authorities to use these powers more widely to work towards the Green Arc Vision.
- 12.11. Other, more creative tools exist such as Concept Statements, developed recently by the Countryside Agency. Their purpose is to provide an expression of the kind of place a new development should provide, based on views of the local community, and published at an early stage in the planning process i.e. with the publication of the Local Development Document. This results in a greater degree of influence in the type and form of site-based development. A number of examples of varying scale exist, such as South Hams District Council.

Use of other statutory duties and responsibilities

- 12.12. The Green Arc initiative represents a coming together of a number of Government Agencies, each with specific responsibilities, statutory or otherwise. For example, there is potential for a more proactive use of these responsibilities for the benefit of the Green Arc. For example, English Nature's duties in relation to SSSIs and NNRs, Forestry Commission approval of woodland planting schemes.

Influencing regional and local policy

- 12.13. Regional and local policy has a fundamental bearing on physical change in the Green Arc. It will therefore be important to establish the Green Arc vision and objectives within strategies and statements, the most influential of which will be the Regional Spatial Strategy for the East of England (to replace current Regional Planning Guidance). This sets the planning context at regional level and the policy framework for Local Development Documents to follow.
- 12.14. The East of England Regional Assembly has submitted a 'qualified submission' or 'banked' version of RPG14 to Government. There will be an opportunity to promote the Green Arc vision and objectives through the Government Consultation to take place from early October 2004 and the Public Examination is due to be held in Mid 2005. The published version (expected early in 2006) will take the form of the new Regional Spatial Strategy.

MANAGEMENT STRUCTURE

Green Arc Partnership

- 12.15. A Green Arc Partnership should be established, as an informal partnership of the principal organisations, including those already on the Steering Group:
- Lee Valley Regional Park
 - Corporation of London

- Thames Chase
- Woodland Trust
- Countryside Agency
- Forestry Commission
- Greater London Authority
- English Nature
- Essex County Council
- Hertfordshire County Council.

12.16. Additional partners might include the following:

- London Development Agency
- East of England Development Agency
- National Trust
- British Airports Authority

Role of Partnership members

12.17. Members of the Partnership will have a number of tasks and responsibilities, including:

- Putting in place a Steering Group to guide the project.
- Reviewing the composition of the Partnership and the wider network of organisations, agencies and associations that may be involved in implementation.
- Ensuring that the role and objectives of the Partnership are understood and publicised within organisations represented on the Partnership.
- Overseeing the development of the Project Plan (see below) to agree flagship projects and the priority of other projects.
- Reviewing the Project Plan.
- Defining sub-groups for each topic area to guide the formulation and implementation of detailed projects.
- Monitoring progress at regular intervals and the strategy as a whole on a five yearly basis.
- Managing the Project Director (see below).

Identification of a wider network of key stakeholders

12.18. The establishment of effective networks to work with the Green Arc Partnership will be a key component of success. Constant and effective links to central, regional and local government as well as implementation bodies, will increase the sphere of influence of the Green Arc and help to bring about change. Organisations could include:

- Local authorities in the Green Arc area
- Royal Parks Agency
- Groundwork
- Principal land owners.

Identifying a Champion Organisation

12.19. A Champion Organisation should be identified with the remit of 'selling' the vision and objectives of the initiative. This would help to improve upstream (e.g. political) and downstream (e.g. implementation bodies) networks and thereby enhance the Green Arc's sphere of influence and funding potential. It is recommended that the Countryside Agency should take on this role, given the organisation's wide and inclusive remit.

Appointing a Project Director

- 12.20. The success of the Partnership will depend to a large extent on the appointment and retention of a suitably qualified and experienced Project Director. Ideally this person would be employed via one of the Partnership organisations.
- 12.21. The Project Director will be responsible for developing the Project Plan (see below), and overseeing project implementation in consultation with the Partnership and wider network. A further priority action in the first three years will be to integrate the Green Arc Vision into the Regional Spatial Strategy and other relevant regional policy documents. The Project Director would also be involved in the coordination of funding bids.
- 12.22. The Project Director will require skills in negotiation, liaison, coordination, facilitation and community outreach. S/he will need to be able to provide on-the-ground support for projects and schemes with practical advice about funding and implementation. Given the geographic extent of the Green Arc, it is vital that the Project Director is able to maintain a strategic perspective and role, and avoid being drawn into the detail of individual local projects.

Appointing Project Officers

12.23. In the longer term (in the next 3 years), it is envisaged that the Project Director could appoint a limited number of project officers to work in particular sub-areas of the Green Arc or as specialists on particular projects.

PROJECT PLAN

- 12.24. A Project Plan should be produced as a first priority. This would provide the overall working strategy for Partnership, showing what is already happening in the Green Arc area, where the gaps are and setting targets for activity. It would also provide a point of source for identifying and appraising projects. The project plan would cover a suitable time period (e.g. three years) and be reviewed on an annual basis. The Plan would be developed by the Project Director with a clear steer from the Partnership.
- 12.25. Development of the Project plan should commence with a consultation workshop with the Partnership and wider network to identify possible projects, to develop criteria against which projects should be appraised and to start to prioritise projects.
- 12.26. The Project Plan could include the following:
- Themes for action reflecting Strategic Objectives e.g. access, recreation and tourism, landscape, nature conservation, heritage and culture, etc.
 - Flagship projects, which will be essential for raising the profile of the Green Arc.
 - 'Easy-win' projects, which will ensure the Green Arc has a positive and visible impact in the short term.
 - A long list of potential projects, which could be structured geographically by 'Management Block' or by 'Priority Opportunity Areas' (see below).

GEOGRAPHICAL STRUCTURE FOR THE PROJECT PLAN

- 12.27. The Steering Group have worked up two possible frameworks for geographically structuring the management of the Green Arc. The GLA has developed a series of emerging 'Management Blocks' and a sub-group of the steering group has identified a range of potential 'Priority Opportunity Areas'. Both are outlined below.

Emerging management blocks

- 12.28. In order to consider how the Green Arc area would operate in terms of management 'areas' or 'units', the GLA has gone some way to defining a series of management blocks within the Green Arc, which break the area down into a series of 'chases'. The aim is for these sub areas to provide an organisational device for further work, funding bids and general communication and marketing.

Priority Opportunity Areas

- 12.29. The Green Arc Steering Group has also gone some way to considering potential areas of opportunity within the Green Arc area. A range of Priority Opportunity Areas have been identified with the aim of creating connectivity between existing initiatives, including the Lee Valley Regional Park, Epping

Forest, Hainault Forest and Thames Chase, and connecting these to the west, to the Broxbourne Woods. It is also the aim of the Green Arc to increase the connection to Harlow, and to the North of Harlow. Criteria for considering Priority Opportunity Areas have been identified as follows:

- Areas which provide or enhance ecological and habitat links between existing areas of importance
- Areas which prevent the coalescence of urban areas
- Areas which enlarge existing areas and create large scale areas
- Areas which can provide physical links through which people can travel
- Areas that are close to centres of population
- Areas that are provided for with public access links
- Areas of important landscape character, which can be conserved or enhanced
- Key linkage areas that are threatened by a third party, thus losing a potential opportunity.

12.30. Six Priority Opportunity Areas have been identified, discussed below, including specific project ideas.

Stansted, Harlow and the M11 Corridor

12.31. This area represents part of the Office of the Deputy Prime Minister (ODPM) Sustainable Communities Plan Growth Area, the M11 Corridor. A significant amount of funding is being made available for the creation of greenspace alongside the new housing developments. These new greenspace sites will require clear definition and vision in order to benefit from their financial investment. The Green Arc Vision and Strategic Objectives are a method to achieve this focused approach ensuring that the new spaces are linked with the Green Arc partner sites and policies. This area is likely to be developed in the near future and therefore Green Arc partners see this Northern section as a Priority Opportunity Area.

Broxbourne Woods to Lee Valley Regional Park

12.32. It would be extremely difficult to connect Broxbourne Woods and surroundings with the Lee Valley Regional Park due to the almost solid block of urban development dividing the two areas, which includes Brimsdown, Cheshunt, Broxbourne and Hoddesdon. However, two key opportunity areas have been identified and key landowners and the relevant water company will need to be contacted:

- The New River Link at Broxbourne
- Land north of Hoddesdon at St Margaret's.

- 12.33. There are also opportunities to improve linkages between the woods themselves at Broxbourne.

Lee Valley Regional Park to Epping Forest

- 12.34. Two key areas have been identified here, which would allow physical and environmental linkages to be made between the Lee Valley Regional Park and Epping Forest and to the major population centres including Harlow:
- ***North of Waltham Abbey.*** There is a large swathe of countryside, which includes potential land acquisitions in the Galley Hill Wood area and to the south of Harlow. Nearby is a large area of the Lee Valley farm estate. It would be possible to make some linkages quickly in this part of Green Arc. It would further require linkages or acquisitions around Warlies Park to link up with Copped Hall, which is a 700-acre Corporation of London estate. Copped Hall has links to Epping Forest, including the Bell Green Tunnel. The area to the south of Harlow is likely to be under increasing pressure from possible Harlow expansion. The ODPM Greenspaces Funding Bid identifies land acquisition in this area to develop physical links both within the Green Arc and to connect with the people of Harlow.
 - ***South of Waltham Abbey.*** At this point Epping Forest overlooks the Lea Valley, and sites south of Waltham Abbey could provide a link between the two. The re-development of an ordnance site in Enfield could provide access infrastructure. Potentially a small number of land acquisitions could link the two initiatives.

Epping Forest north through Roydon

- 12.35. The area from Epping Forest north to Roydon is likely to be under increasing pressure from possible westward Harlow expansion. It will be important to retain ecological and physical links north to the Stort Valley. The ODPM Green spaces Fund has awarded £1 million to fund a range of greenspace projects in and around Harlow, including land acquisition (e.g. land at Galley Hill wood and near Parndon wood, as described above), upgrading of rights of way through this area and funding of consultancy work to prepare a green infrastructure for the rural-urban fringe of Harlow.

Epping Forest to Hainault Forest

- 12.36. The key barrier for linkages between Epping Forest and Hainault Forest is the M11. The Corporation of London owns a site north of Theydon Bois and they have identified Green Belt land to the south between Theydon and Debden as an important Green Arc corridor. The latter land acquisition, if successful, would take Corporation ownership south west of the M11 to the River Roding. It is recommended that improved access to the River Roding should be investigated as a potential element of the Green Arc. The Environment Agency should be approached as they have land acquisition powers in river corridors to create flood storage areas. This is a consideration in the Cobbins Brook, further north and immediate involvement of the Agency would be beneficial.

12.37. A key link from the Roding Valley to Hainault Forest could be created through the Lambourne Estate. Essex County Council owns a number of the woods here and footpaths and bridleways have maintained access between them.

Hainault Forest to Thames Chase

12.38. There are two potential linkages between Hainault Forest and Thames Chase.

- ***The Dagenham Corridor.*** This is the most westerly point of Thames Chase and is a thin strip of land separating Romford from Dagenham. The London Boroughs of Havering and Barking and Dagenham own about 80 – 90% of the Corridor. New acquisition or access agreements would be needed on the agricultural land around Whalebone Lane North. Acquisition of Park Farm is a critical part of making this connection. A current gravel extraction at Warren Farm may also offer opportunities. The southern end of the corridor could link to the River Thames via the redevelopment of Fords at Dagenham. This area is part of Thames Gateway “London Riverside area”.
- ***The Havering Ridge.*** This wooded ridge geologically and ecologically links Epping Forest to the Thorndon Woods at Brentwood. The wooded ridge dominates the high land north of Romford. The area contains four substantial Country Parks. Three are owned by the London Borough of Havering (Havering Country Park (approx 68 ha), Bedford park (approx 87 ha) and Dagenham Park (47 ha)). The fourth Country Park is Weald Country Park, which is over 200 hectares and owned by Essex County Council. The local authorities have already made substantial links between these sites. There are further opportunities to make linkages south to Thames Chase partners, including Essex County Council and Brentwood Borough Council in the Thorndon area and the Forestry Commission south of Harold Wood.

12.39. A substantial number of sites have already been created in Thames Chase and it is intended that Thames Chase will be further linked to the south to Rainham, Aveley and Wennington Marshes and to the east to the Green Grid projects in Thames Gateway South Essex.

PROGRAMME

12.40. The figure below presents the elements of the management structure that need to be put in place over time to make the initiative as effective as possible.

	SHORT TERM 1-3 years	MEDIUM TERM 4-8 years	LONG TERM 9-40 years +
Time period			
Milestone			
Key Features			
Vision/Identity	<ul style="list-style-type: none"> • Clear identity with improved recognition 	<ul style="list-style-type: none"> • Strong identity well recognised • Review of vision and strategic direction 	<ul style="list-style-type: none"> • Vision being actively delivered and realised • Review of vision and strategic direction
Funding	<ul style="list-style-type: none"> • Start-up funding obtained • Successful bids on project basis 	<ul style="list-style-type: none"> • Medium term funding secured for administration • More established funding mechanisms for achieving physical change 	<ul style="list-style-type: none"> • Self-sustaining funding streams through revenue generation and member/outside contributions • In-house and outside expertise in obtaining competitive funds • Green Arc objectives built into competitive fund targeting mechanisms
Management Structure	<ul style="list-style-type: none"> • 'Champion' organisation • Partnership with established responsibilities • Project Director employed 	<ul style="list-style-type: none"> • 'Champion' organisation • Partnership with established responsibilities • Project Director with established responsibilities • Four Project Officers employed • Action still driven primarily from 'ground level' 	<ul style="list-style-type: none"> • 'Champion' organisation • Partnership with established responsibilities • Project Director and Officers with established responsibilities • Action still driven primarily from 'ground level'
Networks/Influence	<ul style="list-style-type: none"> • Wider network established • Well-networked upstream and downstream • Well-linked to Communities Plan 	<ul style="list-style-type: none"> • Established associated network of organisations • Political backing • Increased ownership of initiatives 	<ul style="list-style-type: none"> • Established associated network of organisations • Integral part of Communities Plan • Working closely with ODFM and other Government Dept/agencies
Project Plan	<ul style="list-style-type: none"> • Prepare Project Plan 	<ul style="list-style-type: none"> • Review Project Plan 	<ul style="list-style-type: none"> • Continue to regularly review Project Plan
Action	<ul style="list-style-type: none"> • Initiating and overseeing projects • Greater co-ordination of existing initiatives • Concept established in Regional Spatial Strategy 	<ul style="list-style-type: none"> • A number of established initiatives with visible signs of success 	<ul style="list-style-type: none"> • Benefits being realised through physical change e.g. improved access.

INDICATIVE COSTS

- 12.41. The Green Arc steering group, drawing on partner's experience in terms of funding environmental initiatives, have generated some estimates of capital and revenue costs of establishing the Green Arc.

Capital Costs

- 12.42. Forestry Commission acquisition costs in Thames Chase provide a relatively accurate guide for the Green Arc. The costs also include considerable infrastructure including paths, car parks, seating, sculptures, tree planting (60%), new meadows (40%), new ponds and new signage systems. In addition there has been a substantial outlay for marketing new sites in Thames Chase. The average cost of the green space creation has been approximately £12,000 per hectare. However the lower intensity regimes recommended for large areas of the Green Arc suggest a lower figure of around £10,000 per hectare.
- 12.43. The current area of the Green Arc is 135,600 hectares. If 10% of the area was required, 13,600 ha would therefore be required at a cost of £136 million. This of course would be spread over a long timescale. The Thames Chase Plan is programmed over **40 years**. If this timescale were adopted it would equate to **£3.4 million per annum**.
- 12.44. Acquisitions could be spread amongst existing partners; however most are limited to their forest, regional park or borough boundaries. The Forestry Commission and Woodland Trust, as national partners, could therefore have an important role in acquiring land that is geographically difficult for other partners.

Revenue costs of estate management

- 12.45. The land management regimes advocated for the Green Arc are fundamentally low input. Extensive land management regimes, such as those practiced by Forestry Commission and Epping Forest attract costs of approximately £1,000 per hectare, which include ranger services, community workers and moderate landscape management. The low-key landscape management of the Woodland Trust costs approximately £500 to £900 per hectare. The Woodland Trust figures offer a better model for the Green Arc management regimes. At **£500 per hectare** the cost of running the new estate is £6.8 million per annum, when all land over 40 year programming period has been purchased (i.e. costs of management will increase year on year as area under management increases). If this were spread across the existing 10 to 15 partners this would equate to £453,000 to £680,000.

Revenue costs of management structure

- 12.46. Based on the management structure outlined above, the revenue costs of the management structure would be as follows:
- Project Director's salary of £40 k per annum, commencing in year one.
 - Project Officers' salaries of £25 k per annum for four Officers, commencing in year three.

Total costs

12.47. **Table 12.1** provides indicative capital and revenue costs for the Green Arc over a 40-year programme period. Costs are broken down into three timescales (short, medium and long term) and indicate costs for that period (rather than cumulative costs across the programme period). Total capital costs over the 40-year period are **£136 million**. Total revenue costs of salaries and land management are **£145.8 million** over the 40-year period. Total costs over the time period are therefore **£281.8 million**.

Table 12.1: Green Arc costs

Time period	Short term (years 1-3)	Medium term (years 4-8)	Long term (years 9-40)	Over 40 year programme
Capital cost per year (£million) for land acquisition	3,400,000	3,400,000	3,400,000	3,400,000
Capital cost (£million) in each time period for land acquisition	10,200,000	17,000,000	108,800,000	136,000,000
Cumulative area of estate at end of time period (ha)	1,020	2,720	13,600	13,600
Estate management cost (£500/ha) in each time period	1,020,000	5,100,000	133,280,000	139,400,000
Project director costs in time period (£40k pa + 20% overhead costs)	144,000	240,000	1,536,000	1,920,000
Project officers in time period (x4 at £25k pa + 20% overhead costs)	-	600,000	3,840,000	4,440,000
Total revenue costs in time period	1,164,000	5,940,000	138,656,000	145,760,000
Average revenue cost in time period	388,000	1,188,000	4,333,000	3,644,000
TOTAL IN TIME PERIOD	11,364,000	22,940,000	247,456,000	281,760,000

FUNDING

12.48. The Government's Sustainable Communities Plan (February 2003) presented several areas for major housing development, including the London-Stansted-Cambridge-Peterborough Growth Area and Thames Gateway Growth Area. The former falls partially within the Green Arc area, whilst the latter abuts the southern edge of the Green Arc. The Government has provided a commitment for new development to improve quality of life in all locations, which includes objectives for enhancing the environment and creating opportunities for public enjoyment of open space. There is a major opportunity within the Communities Plan for the Green Arc to attract sustained funding for environmentally based initiatives.

- 12.49. Sustainable Communities: Building for the Future sets out how the Government will invest £22 billion over 2002/03 to 2005/6 to improve housing and communities. The Sustainable Communities funding allocates specific funds to each of the growth areas (£446 million to the Thames Gateway and £164 million to all other areas over the period 2003/4 to 2005/6). The Thames Gateway has already allocated £15 million to environmental projects, although there is likely to be some potential for further projects; overall approximately 75% of the £446 million has been allocated to projects³³. It is also important that projects fall within the Thames Gateway area – which due to the boundary of the Green Arc may possibly preclude this source of funding. In the London-Stansted-Cambridge growth area all funds have now been allocated³⁴, but this does not preclude further funding being made available in future spending reviews.
- 12.50. The Sustainable Communities Plan also allocated £201 million to improve parks and public spaces over three years. This includes £40m to assist in the environmental charity Groundwork's work with local authorities and communities to deliver environmental regeneration. Funds are paid directly to Groundwork, and Groundwork delivers initiatives through working with a range of partners. Other funding sources from the £201 million are already allocated and are more appropriate for smaller scale local neighbourhood initiatives, such as the Liveability Fund.
- 12.51. As noted above the ODPM Green spaces Fund has awarded £1 million to fund a range of greenspace projects in and around Harlow, including land acquisition.
- 12.52. In addition to funding through the Sustainable Communities Plan, a wide range of funding sources exists with the potential to support project-based activity in the Green Arc. **Appendix 4** provides a list of the most relevant funds and the type of projects that can be supported

³³ Pers comm. Susan Koconowski ODPM (Thames Gateway)

³⁴ Pers comm. Sally Randall ODPM (All other growth areas)