



Hampstead Heath, Highgate Wood and Queen's Park Committee

Date: MONDAY, 23 SEPTEMBER 2013

Time: 1.45pm

Venue: COMMITTEE ROOM - 2ND FLOOR WEST WING, GUILDHALL

Members: Jeremy Simons (Chairman)
Virginia Rounding (Deputy Chairman)
Deputy Michael Welbank
Deputy John Barker
Dennis Cotgrove
Karina Dostalova
Revd Dr Martin Dudley
Clare James
Professor John Lumley
Barbara Newman
Deputy John Owen-Ward
Tom Sleigh
Alderman Robert Hall (Ex-Officio Member)
Alderman Ian Luder (Ex-Officio Member)
Councillor Melvin Cohen
Martyn Foster
Councillor Sally Gimson
Tony Ghilchik
Charlotte Kemp
Maija Roberts

Enquiries: Alistair MacLellan
alistair.maclellan@cityoflondon.gov.uk

Lunch will be served in the Guildhall Club at 1pm

John Barradell
Town Clerk and Chief Executive

AGENDA

Part 1 - Public Agenda

1. **APOLOGIES**
2. **MEMBERS DECLARATIONS UNDER THE CODE OF CONDUCT IN RESPECT OF ITEMS ON THIS AGENDA**
3. **APPOINTMENT TO KEATS HOUSE CONSULTATIVE COMMITTEE**
To agree the appointment of a member of the Hampstead Heath, Highgate Wood and Queen's Park Committee to the Keats House Consultative Committee for the year 2013/14.

For Decision
4. **MINUTES**
To agree the public minutes and summary of the meeting held on 22 July 2013 (copy attached).

For Decision
(Pages 1 - 10)

 - a) Amendment to the Minutes of the Meeting dated 9 May 2013 (Pages 11 - 12)
To agree the amendment of Item 8 of the public minutes of the meeting dated 9 May 2013 (copy attached).

Hampstead Heath

5. **SUPERINTENDENT'S UPDATE**
Superintendent of Hampstead Heath to be heard on Hampstead Heath matters.

For Information
6. **HAMPSTEAD HEATH TRUSTEES' ANNUAL REPORT AND FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2013**
Report of the Chamberlain (copy attached).

For Information
(Pages 13 - 48)
7. **PROGRESS REPORT ON CONSTRUCTION OF A STUMPERY IN THE WOODLAND WALK WAY - GOLDERS HILL PARK**
Report of the Superintendent of Hampstead Heath (copy attached).

For Information
(Pages 49 - 62)

8. **HAMPSTEAD HEATH'S HEDGES AND THEIR MANAGEMENT**
Report of the Superintendent of Hampstead Heath (copy attached).

For Decision
(Pages 63 - 88)

9. **UPDATE ON THE HAMPSTEAD HEATH PONDS PROJECT**
Report of the Superintendent of Hampstead Heath (copy attached).

For Decision
(Pages 89 - 94)

- a) Hampstead Heath Ponds Project - Quantitative Risk Assessment (Pages 95 - 128)

Hampstead Heath Ponds Project Quantitative Risk Assessment – Interim Report with accompanying Position Paper (copies attached).

10. **REPORT ON MAINTENANCE WORKS AND FUTURE PROPOSALS AT THE HILL GARDEN & PERGOLA**
Report of the Superintendent of Hampstead Heath (copy attached).

For Decision
(Pages 129 - 140)

11. **REVIEW OF AFFORDABLE ART FAIR ON HAMPSTEAD HEATH IN JUNE 2013 AND PROPOSALS FOR 2014 AND BEYOND**
Report of the Superintendent of Hampstead Heath (copy attached).

For Decision
(Pages 141 - 154)

12. **GREEN FLAG AWARDS 2013**
Report of the Director of Open Spaces (copy attached).

For Decision
(Pages 155 - 160)

Highgate Wood & Queen's Park

13. **SUPERINTENDENT'S UPDATE**
Superintendent of Hampstead Heath to be heard on Highgate Wood and Queen's Park matters.

For Information

14. **HIGHGATE WOOD AND QUEEN'S PARK KILBURN TRUSTEES' ANNUAL REPORT AND FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2013**

Report of the Chamberlain (copy attached).

For Information
(Pages 161 - 188)

15. **QUESTIONS ON MATTERS RELATING TO THE WORK OF THE COMMITTEE**

16. **ANY OTHER BUSINESS THAT THE CHAIRMAN CONSIDERS URGENT**

Part 2 - Non-Public Agenda

17. **EXCLUSION OF THE PUBLIC**

MOTION: That under Section 100A(4) of the Local Government Act 1972, the public be excluded from the meeting for the following items of business on the grounds that they involve the likely disclosure of exempt information as defined in Part I of Schedule 12A of the Local Government Act.

For Decision

18. **NON-PUBLIC MINUTES**

To agree the non-public minutes of the meeting held on 22 July 2013 (copy attached).

For Decision
(Pages 189 - 190)

19. **FINANCIAL ARRANGEMENTS UNDERPINNING AFFORDABLE ART FAIR AND PROPOSED GROW LONDON EVENTS 2014-16**

Report of the Superintendent of Hampstead Heath (copy attached).

For Decision
(Pages 191 - 200)

20. **DECISIONS TAKEN UNDER URGENCY OR DELEGATED AUTHORITY**

A report of the Town Clerk (copy attached).

For Information
(Pages 201 - 204)

21. **QUESTIONS ON MATTERS RELATING TO THE WORK OF THE COMMITTEE**

22. **ANY OTHER BUSINESS THAT THE CHAIRMAN CONSIDERS URGENT AND WHICH THE COMMITTEE AGREE SHOULD BE CONSIDERED WHILST THE PUBLIC ARE EXCLUDED**

HAMPSTEAD HEATH, HIGHGATE WOOD AND QUEEN'S PARK COMMITTEE
Monday, 22 July 2013

Minutes of the meeting of the Hampstead Heath, Highgate Wood and Queen's Park Committee held at Committee Room - 2nd Floor West Wing, Guildhall on Monday, 22 July 2013 at 11.30 am

Present

Members:

Jeremy Simons (Chairman)
Virginia Rounding (Deputy Chairman)
Deputy Michael Welbank
Karina Dostalova
Revd Dr Martin Dudley
Professor John Lumley
Barbara Newman
Alderman Robert Hall (Ex-Officio Member)
Alderman Ian Luder (Ex-Officio Member)
Martyn Foster
Tony Ghilchik
Maija Roberts

Officers:

Alistair MacLellan	- Town Clerk's Department
Esther Sumner	- Town Clerk's Department
Edward Wood	- Comptroller and City Solicitor's Department
Alison Elam	- Chamberlain's Department
Sue Ireland	- Director of Open Spaces
Simon Lee	- Superintendent of Hampstead Heath
Richard Gentry	- Superintendent of Hampstead Heath Constabulary and Queen's Park Manager

1. APOLOGIES

Apologies were received from Deputy John Barker, Clare James, Deputy John Owen-Ward, Tom Sleigh, Councillor Melvin Cohen and Councillor Sally Gimson.

2. MEMBERS DECLARATIONS UNDER THE CODE OF CONDUCT IN RESPECT OF ITEMS ON THIS AGENDA

There were no declarations.

3. MINUTES

3.1 **Public Minutes and Non-Public Summary of the Meeting Dated 9 May 2013**

The public minutes of the meeting held 9 May 2013 were agreed with the exception of the fifth paragraph of Item 8. The minutes will be tabled at the 23 September 2013 meeting of the Committee for final agreement.

Matters Arising

Oak Processionary Moth (OPM)

The Director of Open Spaces updated the Committee on recent funding of £1.5million from Department for Environment, Food and Rural Affairs (DEFRA) and £500,000 from the Forestry Commission had been made available for the treatment of OPM across London. She reported that spraying had been completed and that she was attending a meeting to discuss OPM later that week. She reported that no trace of OPM had been detected thus far across the North London Open Spaces or across wider City of London sites.

2013/14 Committee Vacancies

The following Members were appointed to vacancies in the following bodies:

Highgate Wood Joint Consultative Committee

Deputy Michael Welbank

Queen's Park Joint Consultative Group

Karina Dostalova

3.2 **Minutes of the Hampstead Heath Consultative Committee Meeting Dated 8 July 2013**

The minutes of the Hampstead Heath Consultative Committee meeting dated 8 July 2013 were noted, subject to amendments to item 4.1, page 11, second paragraph, ninth line 'take place.'; eleventh line, delete 'would'; item 4.2, page 12, fourth line amend to 'Trees'.

NOTED

3.3 **Minutes of the Queen's Park Joint Consultative Group Meeting held on 12 June 2013**

The minutes of the Queen's Park Joint Consultative Group meeting held on 12 June 2013 were noted.

NOTED

Part A – Hampstead Heath

4. SUPERINTENDENT'S UPDATE

Summer Weather

The weekend of 20/21 July had proved the busiest thus far this year. The recent spell of warm weather had seen a significant increase in visitors and income compared to the same period last year: between April and July 2012 there had been 20,000 'swims' at the Lido and £76,000 of income. During the same period this year there had been 40,000 'swims' and £159,000 of income. The hot period of weather had led to operational pressures, with the need to deal with 12 tonnes of rubbish over busy weekends; the stationing of Constabulary within the Lido; the installation of a knife arch, and random bag searching. The Superintendent noted that overall his staff had had positive feedback from the public about the measures to promote customer welfare at the Lido.

In response to a question from a Member, the Superintendent confirmed that staff were issued with extra water, energy snacks, sun cream and hats during the hot weather. Furthermore he reported that he would be giving consideration to issuing a lighter, summer top in future given that the current polo-shirts were not suitable for long periods of warm weather.

In response to a question from a Member on the impact of increased visitor numbers and the amount of litter left on the Heath, the Superintendent confirmed that some complaints regarding litter had been received but that given staff resources he was satisfied that litter management over the weekend had been satisfactory, noting the helpful comments by the Chairman in his regular Ham & High column and the fact that there were over 60 rubbish bins on the Heath, and to increase their number would begin to impact on the natural character of the Heath.

In response to a question from a Member, the Superintendent confirmed that fire remained a hazard during hot weather given the risk from BBQs and discarded cigarettes. Nevertheless a zero tolerance approach to BBQs had proved successful, with only one minor fire on West Heath that was dealt with promptly by the London Fire Brigade.

The Chairman expressed thanks on behalf of the Committee to the Superintendent and his staff for their hard work and commitment during the recent spell of hot weather, noting that many of them had been on duty every weekend for the last month.

Garden House

The Superintendent informed the Committee that he had appointed a planning consultant to assist in placing an objection against the proposed Garden House application at the current Planning Inspectorate inquiry, noting the policy of replacement developments not being allowed to be materially larger than their current footprint. In response to a question from a Member the Superintendent confirmed that the footprint of the proposed planning application was in the region of three or four times larger than at present. Furthermore in response to

a question from the Chairman the Superintendent reported that he had appointed a consultant given that much of his own time was being given to the Hampstead Heath Ponds Project, and that the consultancy costs were being met out of his local budget.

Sports

The Superintendent noted that Richard Sumray was the new Chairman of the Hampstead Sports Advisory Forum. He updated the Committee on recent events, including the recent Highgate Harriers inaugural 'Night of 10,000m Personal Bests', and the Tug of War Championships. He reported that the Duoathlon was forthcoming in September and thus far the event had received over 200 applications.

Stumpery – Golders Hill Park

Following a recent staff visit to Highgrove, the Superintendent noted that staff had been inspired to convert part of the park into a stumpery, which he believed to be the first of its kind in a public park for a century. Its installation has been conducted in partnership with the former Head Gardener at Highgrove and has allowed a formerly under-used area of the park to be opened up and turned into a uniquely attractive habitat.

National Grid Works

Fencing on both the Heath Extension and Parliament Hill had come down, and where fencing is required elsewhere this has been installed as sensitively as possible.

Dogs

The Superintendent noted that he was currently consulting local groups on the outdoor provision for dogs at Parliament Hill Café to ensure the area was welcoming for all users of the Heath, and that a report would come before the Committee in the Autumn.

5. REVENUE OUTTURN 2012/13 - HAMPSTEAD HEATH, HIGHGATE WOOD AND QUEEN'S PARK

The Group Accountant introduced the Revenue Outturn 2012/13 Report for Hampstead Heath, Highgate Wood and Queen's Park, noting the underspend in the Additional Works Programme (AWP) and the worse-than-budgeted position of £39,000. She acknowledged concerns voiced by Members over the lack of detail around the AWP underspend and confirmed that Open Spaces, Chamberlain's and City Surveyor's staff would be working together to produce additional detail in future outturn reports.

The Superintendent similarly acknowledged the underspend in the AWP and noted that his team enjoyed a good working relationship with the City Surveyor's Project Team. He stated that the underspend was partly the result of internal staff restructuring and the fact that some projects were delayed because of requirements to assist his Division with projects including the RSPB and east Heath car park works and others were subject to public consultation, thus delaying the allocation of APW funds.

The Committee thanked the officers present from the City Surveyor's and Chamberlain's Departments for the provision of additional information on the AWP subsequent to the publication of the Committee report, and noted that the new format for future outturn reports would be agreed in due course.

RECEIVED

6. UPDATE ON THE HAMPSTEAD HEATH PONDS PROJECT

The Superintendent introduced the update report on the Hampstead Heath Ponds Project, noting that the project was now subject to a wider and longer period of consultation, including stakeholder workshops. Arising from these would be an Options Paper for consideration by the Committee in November 2013. Subject to the decision of the Committee, the preferred option would then be subject to public consultation between November 2013-February 2014. The Superintendent concluded his introduction by remarking on some current topics:

- He drew attention to the Ponds Project Communications Plan, noting that the project had been 'branded'.
- The procurement process for the project had been restarted and included four bidders.
- Efforts were underway to arrange a meeting between the City of London and the Heath and Hampstead Society, with their respective legal advisers, to discuss the concerns of the Society over the legal issues surrounding the project.
- The extended consultation period had concomitant additional costs that would require delegated authority within the next few weeks.
- The Ponds Project was a once-in-a-generation opportunity to mitigate a strategic risk by way of a bold solution, provided the natural aspects of the Heath lay at the heart of the Project.

The Committee then discussed the update report and the following observations were made:

- The Chairman agreed that the Ponds Project was a unique opportunity: it could be considered against the backdrop of the Heath as an evolving open space and it was probably appropriate for the more interventionist measures to take place in areas that were already more formal, such as the Boating Pond.
- In response to a question from a Member, the representative from the Comptroller & City Solicitor's Department explained that any application for a Judicial Review would require permission from the Court to proceed. If this were refused, the matter should be dealt with relatively swiftly. If it were granted, and the matter went to a full hearing, this

would delay the Ponds Project by a period of months. In response to a further question about why the City had not shared the advice it had received from counsel, he replied that he felt that the City's general position on the legal issues was clear. What had been resisted was the release of detailed written advice regarding individual arguments, such as the interpretation of particular cases. It was not normal practice to share this information with a potential litigant. He added that it was important to remember that a previous meeting had been held with the Heath & Hampstead Society in chambers to discuss the legal arguments – the outcome of that meeting had been that the City and the Society would have to agree to disagree. From the City's perspective, nothing had changed since that previous meeting – however the Comptroller was happy to attend the further planned meeting with the Society.

- A Member registered his thanks to both the Superintendent, his team, and the Chairman for their progress on the Ponds Project thus far, noting that progress was arguably impeded by the threat of a Judicial Review. He stated that he agreed with a creative interventionist approach as outlined by the Superintendent but cautioned that the period for consultation must not under any circumstances be reduced.
- A Member noted that City of London Members and staff must be included in the Ponds Project Communications Plan to allow them to act as advocates should the opportunity arise. Further to this comment the Chairman and Deputy Chairman agreed that an all-Member visit to the Heath would be appropriate at some point in Autumn 2013.

RESOLVED, that Members:

- Adopt the revised programme;
- endorse the Communications and Engagement Strategy, subject to comments made by Members; and
- delegate authority to the Town Clerk in consultation with the Chairman and Deputy Chairman to approve budget adjustments to fund additional professional fees, that are currently being evaluated, to cover the expanded consultation, extended programme and other additional works to meet the revised schedule of appointment, that will fall within the agreed budget envelope of £15.2m (+/- 20%).

7. MANAGEMENT WORK PLAN FOR THE SANDY HEATH RIDE

The Superintendent introduced the Management Work Plan for the Sandy Heath Ride, noting that it formed part of a process of continual intervention to promote the natural aspect of the Heath. A Member commented that it would be useful in future for such reports to include a definition of terms such as 'Ride' in this context.

RESOLVED, that Members:

- Approve the detailed management work plan for the Sandy Heath Ride.

8. **PROGRESS REPORT ON THE ENHANCEMENT OF THE LANDSCAPING WORKS TO THE BULL PATH AND SURROUNDING AREA AT PARLIAMENT HILL FIELDS**

The Superintendent introduced the progress report on the enhancement landscaping works to the Bull Path and surrounding areas at Parliament Hill Fields, noting that the enhancement works were an attempt to extend the natural aspect of the Heath down onto the Bull Path so that visitors could experience the Heath immediately upon entry.

RESOLVED, that Members:

- Note the successful implementation of the landscape enhancement scheme; and
- approve the future works for 2013/14 as set out in the report.

9. **PROGRESS REPORT ON SUSTAINABLE PLANTING IN THE WALLED GARDEN - GOLDERS HILL PARK**

The Superintendent introduced the report on sustainable planting, noting that it was inspired by the need to identify £55,000 of savings. Staff had been tasked to replace expensive seasonal bedding and had been inspired in large part by the American Ambassador's Residence in Regent's Park to adopt sustainable planting. The new approach reduced bedding costs, staff time, water usage and promoted a more diverse habitat, as well as being aesthetically pleasing.

RECEIVED

10. **UPDATE ON RECENT SPORTS ACTIVITIES**

The Superintendent introduced the update on recent sports activities on the Heath, noting that Richard Sumray was the new Chairman of the Sports Advisory Forum. He concluded his introduction by summarising both recent forthcoming high-profile events. In response to questions from Members he confirmed that harrowing was carried out on areas of the Heath subject to intensive use by large scale events to promote regeneration.

RESOLVED, that Members:

- Note the success of the various sport events held over the last few months; and
- approve the use of 'pop up' flood lights on a one year trial basis to help accommodate winter training sessions and improve turf management within the Parliament Hill area of the Heath.

Part B – Highgate Wood and Queen’s Park

11. SUPERINTENDENT'S UPDATE

The Superintendent provided an update on current issues affecting Highgate Wood, primarily the forthcoming installation of photovoltaic cells on the roof of the Machine Shed that will enable staff to meet their electricity needs.

The Queen’s Park Manager then provided an update on recent issues in Queen’s Park, noting:

- The Park had seen 1.2 million visits between May 2012 and April 2013.
- The Hampstead Heath Tree Team were undertaking weekly inspections and had identified a number of Plane trees with Massaria, but that no Ash Dieback had been detected. The potential for volunteers to assist with inspections was being explored.
- The annual Queen’s Park Day was forthcoming on 15 September and would attract an estimated 15,000 visitors.
- There would be a series of Open Cinema events in the Park during August and September, run by a local independent cinema. Details were advertised on the City of London website.

The Committee then addressed some remarks to the Superintendent and Queen’s Park Manager:

- In response to a comment from the Deputy Chairman, the Superintendent noted that he has asked the Conservation and Trees Manager to prepare a report on the impact of pest inspections on the time and resources of the Tree Team.
- In response to a question from a Member the Superintendent confirmed that branch failure was a risk in areas of North London Open Spaces heavily used by the public.

12. QUEEN'S PARK DRAFT CONSERVATION MANAGEMENT PLAN

The Queen’s Park Manager introduced the draft Queen’s Park Conservation Management Plan noting that it had been drafted in conjunction with focus groups held in November and December 2012, and following meetings with staff from Queen’s Park and the wider North London Open Spaces Team. He noted that it was proposed to consult on the draft plan within the Park itself during the busy summer period. The Committee then put forward some comments:

- A Member requested that the Contents page of the draft plan include page numbers.

- A Member said that the history of the Park should reflect the fact the John Lyons catering empire had been established through sales within Queen's Park.
- In response to a question from a Member, the Director of Open Spaces opined that the Park already enjoyed protected status through its foundation legislation, and so an application to English Heritage for a listed status was not a high priority.
- In response to a request from a Member the Superintendent confirmed that consultation would be undertaken during the Summer and into November, but that this may be extended until January 2014.

RESOLVED, that Members:

- Endorse the draft Conservation Management Plan and the proposals for wider public consultation.

13. QUESTIONS ON MATTERS RELATING TO THE WORK OF THE COMMITTEE

There were no questions.

14. ANY OTHER BUSINESS THAT THE CHAIRMAN CONSIDERS URGENT

There was no other business.

15. EXCLUSION OF THE PUBLIC

RESOLVED: That under Section 100A(4) of the Local Government Act 1972, the public be excluded from the meeting for the following items of business on the grounds that they involve the likely disclosure of exempt information as defined in Part I of Schedule 12A of the Local Government Act as follows:-

Item No.

Paragraphs in Schedule 12A

16-20

3

16. NON-PUBLIC MINUTES

The Committee approved the non-public minutes of the meeting held on Thursday 9 May as an accurate record.

17. DECISIONS TAKEN UNDER DELEGATED AUTHORITY OR URGENCY POWERS

The Committee received a report of the Town Clerk.

18. NEW LETTING - 1ST FLOOR HEATHFIELD HOUSE, 430 ARCHWAY ROAD, N6

The Committee approved a report of the City Surveyor.

19. QUESTIONS ON MATTERS RELATING TO THE WORK OF THE COMMITTEE

There were no questions.

20. ANY OTHER BUSINESS THAT THE CHAIRMAN CONSIDERS URGENT AND WHICH THE COMMITTEE AGREE SHOULD BE CONSIDERED WHILST THE PUBLIC ARE EXCLUDED

There was no other business.

The meeting ended at 12.50 pm

Chairman

Contact Officer: Alistair MacLellan
alistair.maclellan@cityoflondon.gov.uk

DRAFT

HAMPSTEAD HEATH PONDS PROJECT - ASSESSMENT OF THE DESIGN FLOOD

The Committee considered a report of the Superintendent of Hampstead Heath setting out the results on the first major task undertaken by the Design Team in relation to the Hampstead Heath Ponds Project.

The Superintendent outlined the issues arising from the Flood and Water Management Act 2010 (FWA) and the effect these would have on the City of London Corporation. He advised that it is likely that the Department for the Environment, Food and Rural Affairs (DEFRA) will issue guidelines in response to the FWA that apply the highest category of risk to potential dam failures that endanger one human life. This means that the Hampstead Ponds are now a Corporate 'Red Risk' for which the City of London Corporation, as the landowner, is responsible. Assessments have revealed that the Hampstead & Highgate Pond Chains do not have sufficient capacity to deal with extraordinary or sustained storm events. The most recent hydrology study by Atkins of the Ponds has established that the risk of dam failure is 30-50% less than previously estimated by Haycock, but that dam failure in the event of extraordinary or sustained storm events remains a significant risk nonetheless. This risk needs to be addressed to match industry best practice and to fulfil the Corporation's legal obligations.

In response to a question from a Member, the Superintendent confirmed that the fundamental item of legislation affecting the Heath was the Hampstead Heath Act 1871, and that we must be mindful of its influence when responding to contemporary legislation.

The representative of the Heath and Hampstead Society stated that the Society had some concerns over how work on the dams would affect and impact upon the character of the Heath.

The representative of the Heath & Hampstead Society stated that the Society had reservations about the approach the City was taking to meet the requirements of legislation protecting the character of the Heath and reservoirs legislation. He said the Society reserved the right to challenge the final design on judicial review grounds; he hoped this could be avoided.

The Superintendent reminded the Committee that the City of London Corporation had to proceed with due diligence to ensure the risk posed by the dams was managed appropriately, and that in turn he was aware that the Heath and Hampstead Society had expressed some concern at what they felt to be the relatively short duration of the next stage of the Ponds Project, the Options Appraisal.

The Chairman stated that a longer consultation process was planned and that would involve the independent Landscape Architect Peter Wilder. The Superintendent advised that Mr Wilder sits outside of the Ponds Project Design Team to act in a 'critical friend' capacity.

In response to a question from a Member, the City Surveyor confirmed that the City of London Corporation was liable for both additional flood water and for the deliberate or accidental release of water from the Ponds. He also confirmed that current assessments take into account the incidence of longer, wetter summers, and that the Corporation's Emergency Plans cater for deliberate damage.

RESOLVED: That Members receive the Design Flood Assessment report and endorse it as the basis for the continuation of the Hampstead Heath Ponds Project and development of the preferred design options that will be subject to wide public consultation later in the year.

Agenda Item 6

Committee(s):	Date(s):
Hampstead Heath, Highgate Wood and Queen's Park	23 September 2013
Subject: Hampstead Heath Trustees' Annual Report and Financial Statements for the Year Ended 31 March 2013	Public
Report of: The Chamberlain	For Information
Summary	
<p>The Trustee's Annual Report and Financial Statements for the Year Ended 31 March 2013 for Hampstead Heath are presented in the format required by the Charity Commission.</p>	
Recommendation(s)	
<ul style="list-style-type: none">• It is recommended that the Trustee's Annual Report and Financial Statements be noted.	

Main Report

1. The Trustee's Annual Report and Financial Statements, in the format that is required by the Charity Commission, are presented for information. The draft accounts were circulated to your Chairman and Deputy Chairman. Subsequently the accounts have been signed on behalf of the Trust by the Chairman and Deputy Chairman of the Finance Committee and have been audited.
2. Following the review of the charities for which the City is responsible a report to your Committee on 24th May 2010 detailed key reports that should be presented to your Committee in future. The Trustees Annual Report and Financial Statements was one of these reports. Information from these statements will form the Annual return to the Charity Commission.
3. The consolidated report covers both the operations of Hampstead Heath and the Hampstead Heath Trust Fund which manages the investment of the £15m that was originally transferred from the

London residuary Body to help defray the management and maintenance costs of the Heath. Much of the information contained within the Annual Report and Financial Statements has already been presented to your Committee via budget and outturn reports.

Alison Elam

Group Accountant, Chamberlain's Department

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HAMPSTEAD HEATH
REPORT AND CONSOLIDATED FINANCIAL STATEMENTS
FOR THE YEAR ENDED 31 MARCH 2013

Charity Number: 803392

HAMPSTEAD HEATH

Trustee's Annual Report and Financial Statements for the year ended 31 March 2013

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HAMPSTEAD HEATH

Trustee's report for the year ended 31 March 2013

1. Reference and Administration Details

Charity Name:	Hampstead Heath
Registered Charity Number:	803392
Principal Address:	Guildhall, London EC2P 2EJ
Trustee:	The Mayor, Commonalty and Citizens of the City of London
Chief Executive:	The Town Clerk of the City of London Corporation
Treasurer:	The Chamberlain of London
Solicitor:	The Comptroller and City Solicitor
Banker:	Lloyds TSB Bank plc City Office, PO Box 72 Bailey Drive Gillingham, Kent ME8 OLS
Auditor:	Deloitte LLP Chartered Accountants and Statutory Auditor 2 New Street Square London EC4A 3BZ

2. Structure, Governance and Management

The governing document

The governing documents are the Hampstead Heath Act 1871 and the London Government Reorganisation (Hampstead Heath) Order 1989. The charity is constituted as a charitable trust.

Trustee Selection methods

The Mayor, Commonalty and Citizens of London, known as the City of London Corporation, is the trustee of Hampstead Heath. Elected Aldermen and Members of the City of London Corporation are appointed to the committee, together with six non City of London Corporation Members, one after consultation with the London Borough of Barnet, one after consultation with the London Borough of Camden, one after the consultation with the owners of the Kenwood lands and three after consultation with bodies representing local, archaeological, environmental or sporting interests, governing Hampstead Heath by the Court of Common Council of the City of London Corporation. The Finance Committee of the City of London Corporation administers the Trust on behalf of the Trustee.

Policies and procedures for the induction and training of trustee

The City of London Corporation makes available to its Members, seminars and briefings on various aspects of the City's activities, including those concerning Hampstead Heath, as it considers necessary to enable the Members to efficiently carry out their duties.

HAMPSTEAD HEATH

Trustee's report for the year ended 31 March 2013

2. Structure, Governance and Management (continued)

Organisational structure and decision making process

The committees governing the charity's activities are noted above. The committees are ultimately responsible to the Court of Common Council of the City of London. The decision making processes of the Court of Common Council are set out in the Standing Orders and Financial Regulations governing all the Court of Common Council's activities. The Standing Orders and Financial Regulations are available from the Town Clerk at the registered address.

Details of related parties and wider networks

Details of any related party transactions are disclosed in Note 17 of the Notes to the Financial Statements.

Risk identification

The Trustee is committed to a programme of risk management as an element of its strategy to preserve the charity's assets, enhance productivity for service users and members of the public and protect the employees.

In order to embed sound practice a Risk Management Group has been established in the City of London Corporation to ensure that risk management policies are applied, that there is an ongoing review of risk management activity and that appropriate advice and support is provided to Members and officers.

The City of London Corporation has approved a strategic risk register for all of its activities. This register helps to formalise existing processes and procedures and enables the City of London Corporation to further embed risk management throughout the organisation.

A key risk register has been prepared for this charity and has been reviewed by the committee acting on behalf of the Trustee. It identifies the potential impact of key risks and the measures which are in place to mitigate such risks.

3. Objectives and Activities for the Public Benefit

The Trustee has due regard to the Charity Commission's public benefit guidance when setting objectives and planning activities.

The object of the charity is the preservation of Hampstead Heath for the recreation and enjoyment of the public.

This charity is operated as part of the City of London's City's Cash. The City of London is committed to funding the ongoing net operational costs of the charity in accordance with the purpose.

The Hampstead Heath Trust Fund is a subsidiary controlled by this charity. That charity was established by the London Residuary body with an endowment of £15m. Its purpose was to contribute towards the running costs of the Heath. Separate accounts are prepared for the subsidiary, which are consolidated with these accounts.

HAMPSTEAD HEATH

Trustee's report for the year ended 31 March 2013

4. Achievements and Performance

Key targets for 2012/13 and review of achievement

The key targets for 2012/13 together with their outcomes were:

- ***Achieve budget reductions in accordance with July 2011 Management Committee approval and update Members on progress.***

The number of cricket squares on the Heath Extension were rationalised resulting in a reduction in staffing levels within Sports and Recreation Keeping Team, in Golders Hill Park. The spring and summer seasonal bedding displays within the walled garden were changed to sustainable plantings resulting in a reduction in the number of gardening staff. The Divisional Management Team was restructured with one senior post deleted and replaced by an Assistant Manager. The management of the bowling green was transferred to the Parliament Hill Bowling Club (see below).
- ***City Bridge Trust - continue to implement projects and services to promote education and biodiversity that supports communities across Greater London.***

Considerable work has been undertaken with the support of our Heath Hands volunteers to create a new outdoor education resource adjacent to Kenwood Depot. Work has continued in the Education team with outreach, along with work on the body of the Heath to develop meadows and encourage biodiversity.
- ***Continue to support the Flood Management and Water Quality project; key stages to success include appointment of a Design team, Detailed Design and successful public consultation and engagement, procurement and implementation.***

A Water Management Stakeholder Group was established in July 2012 and acts as a body of people (thirteen interest/community groups) with knowledge and interest in Hampstead Heath to provide views and advice to the Hampstead Heath Consultative Committee in relation to the project. A multi-disciplined Design Team has been appointed to progress the development of design options and subsequent detailed proposals to enable submission of a planning application. A Strategic Landscape Architect independent of the Design Team has been appointed to champion the landscape and ensure that the impact of works on the Hampstead and Highgate valley of ponds is protected.
- ***Liaise with City Surveyor to implement the agreed programme for additional works for Hampstead Heath.***

Significant works have been undertaken at the Grade II* Hill Garden Pergola to undertake restoration of the wooden Pergola structure. Further works to repair the boundary wall to the Hill Garden have commenced in February. A detailed survey of all Heath paths has been undertaken so that priorities for repairs can be determined and included in the 20 year plan.
- ***Develop and implement Local Improvement Plan arising from the Sustainability Audit for Hampstead Heath. Undertake audit at Highgate Wood and Queen's Park to review progress with implementation of their improvement plan.***

One of the major undertakings during 2012 was to investigate alternate ways of managing the disposal waste generated by the public. We have now entered into a contract with the City of London's term contractor to strive to achieve zero landfill. Staff are now using a pool of bicycles for patrolling and light duties, saving vehicle use and fuel at various locations across the site. New electric vehicles are being used by zoo and Ranger teams.

HAMPSTEAD HEATH

Trustee's report for the year ended 31 March 2013

4. Achievements and Performance (continued)

- ***Deliver the Festival of Sport and Well Being as the Heath's contribution to the 2012 celebrations and promote the Get Out, Join in theme for other Open Space activities.***
131 events were held in 2012 across Hampstead Heath to celebrate the Olympic and Paralympic Games, these events were all promoted under the banner of the Green to Gold campaign. Some notable events included the English National Cross Country Championships, 'Give it A Go' Legacy Event, organised in partnership with Camden Council and a visit by Sacrilege an artistic installation by Jeremy Deller comprising a large, interactive, bouncy replica of Stonehenge which proved extremely popular and attracted 4,500 participants.
- ***Celebration of welcoming the World, as part of the City of London Festival, at Parliament Hill in July 2012. Diamond Jubilee Celebrations at Golders Hill Park, in partnership with the London Borough of Barnet, Affordable Art Fair and other third party events, including fairs, circus and Race for Life.***
The City of London festival welcomed John Etheridge and John Williams playing on the Parliament Hill bandstand. The Diamond Jubilee event held in partnership with the London Borough of Barnet and London Jewish Cultural Centre attracted significant crowds to Golders Hill Park. Our second Affordable Art Fair saw increased attendance and sales for the exhibitors.
- ***Achieve budget reductions by developing new management arrangements for Parliament Hill Bowling Green. Develop a Management Plan, implement and monitor new management arrangements.***
Major reduction in budgets for 2012/13 were achieved by changing the Parliament Hill Bowling Green from direct service provision by City of London Corporation staff, to a new model of management where the premises, were transferred, by way of a lease to the Parliament Hill Bowling Club as tenant, supported by the Hampstead Heath Croquet Club. These changes resulted in the loss of the Groundsman post based in Parliament Hill.
- ***Implement, subject to planning approval, extension of car park and South End Green area enhancements.***
Detailed designs for the landscape enhancements were approved by the Heath's two statutory Committees and Camden Council approved a planning application in the early autumn of 2012. Following procurement works commenced on site in February 2013.
- ***Review the options for the management of the car parks to develop a plan which will provide a framework for future improvements and legislative compliance.***
As a result of the Protection of Freedoms Act 2012 an alternative enforcement method, to ensure payment for parking within the Heath car parks was introduced across all the Heath car parks. This also included the appointment of an enforcement body to support a new in-house team undertake enforcement action, where appropriate.
- ***Develop a Policing Plan, including a Purpose, Vision and strategic themes, following review, consultation for presentation to committee.***
A detailed analysis of the work of the Heath constabulary over the past three years was undertaken and a draft Hampstead Heath Performance Plan has been produced that will now be submitted to a meeting of the Heath's statutory Committees in the spring and early summer of 2013.

All of the above achievements enhanced the Open Space for the benefit of the public.

HAMPSTEAD HEATH

Trustee's report for the year ended 31 March 2013

5. Financial Review

Review of financial position

Investment income of £1,146,583 (2011/12 £1,154,016) was earned during the year. Other income received included £483,064 from donations and other external contributions (2011/12 £492,615), £1,049,453 from sales, fees and charges (2011/12 £846,552) and £186,390 from rents (2011/12 £164,362). The contribution towards the running costs of the charity amounted to £5,570,726 (2011/12 £5,952,338). This net cost was met by the City of London Corporation's City's Cash. An annual sum of £5,000 was transferred from the restricted fund for maintenance of land transferred to the Heath, from the Athlone House development agreement. The restricted fund is now £20,000 at the end of the year.

The Barratt Bequest Trust Fund (Charity number 1064114) ceased to exist on 23 December 2011 and the Trust's assets and liabilities were transferred to Hampstead Heath (£570,769) in the prior year.

Additions to land and capital expenditure on buildings are included in the financial statements as fixed assets at historic cost, less provision for depreciation and any impairment, where this cost can be reliably measured. The impact on the financial statements is that the charity's balance sheet reflects its ownership of these fixed asset additions net of depreciation, represented by a designated income fund.

Reserves Policy

The contribution towards the running costs of Hampstead Heath is determined in accordance with a formula set out in the governing document. Reserves therefore represent the accumulated net income that cannot be distributed under the existing governance arrangements. However the higher level of reserves provides the potential for increased annual contributions in future years (calculated in accordance with the formula).

Investment Policy

The investment policy is driven by the concept of total return over the long term. The purpose of this policy is to provide for real increases in annual expenditure whilst preserving the capital base of the Trust in real terms.

The increase in the market value of the investments held in the Charities Pool reflects the general recovery in the UK and overseas stock markets, together with some relative outperformance achieved by the Fund Manager which was mainly due to favourable asset allocation within the portfolio. The investments are managed by Artemis Investment Management Limited and in the year ended 31 December 2012 achieved a total return of 13.3%, which was a relative outperformance of 1.4% compared to its benchmark, the WM Unconstrained Charity Universe.

The increase in the market value of the investments held in the Charities Pool reflects the general recovery in the UK and overseas stock markets, together with some relative outperformance achieved by the Fund Manager which was mainly due to favourable asset allocation within the portfolio.

HAMPSTEAD HEATH

Trustee's report for the year ended 31 March 2013

5. Financial Review (continued)

Spending Policy

The reserves policy of the Trust is that the original endowment of £15 million (now worth £26.5m) should produce income to cover a proportion of the running costs of Hampstead Heath. The maximum contribution (£1,216,000) is based on the contribution for 2011/12 (£1,188,000) multiplied by the change in the Average Earnings Index between April 2011 and April 2012 (1.024) and is subject to a triennial review. A contribution was also made of £18,829 in 2012/13 representing the income arising from the former T.J. Barratt Trust which was transferred to the Hampstead Heath Trust in November 2011. The market value of the capital endowment of the T.J. Barratt Trust increased to £289,426 in 2012/13 (2011/12: £253,398).

Should the actual income added to the surpluses from previous years in a specific year be less than the maximum contribution as per the Transfer Order, then the lower sum is attributed, unless the Finance Committee decides that an allocation from the capital reserves of the Trust Fund is desirable. This is within the terms of the Transfer Order. The maximum permissible contribution was met and allocated towards the running costs in 2012/13.

Going Concern

The Trustee considers the Trust Fund to be a going concern. Please see Note 1 (b) to the Financial Statements.

6. Plans for Future Periods

The plans for 2013/14 are:

- Achieve budget reductions for 2013/14 in accordance with July 2011 Management Committee approval and update Members on progress.
- Continue to implement projects and services to promote education and biodiversity that supports communities across Greater London. Develop proposals for potential future funding opportunities.
- Continue to support the Water Management Project; key stages to success include development of the design options, detailed design and successful public consultation and engagement, procurement and implementation.
- Liaise with City Surveyor to implement the agreed programme for additional works for Hampstead Heath.
- Irish Celebration as part of the City of London Festival, at Parliament Hill in June 2013, along with the Legacy and Heritage Festivals. Affordable Art Fair and other third party events, including Race for Life, the London Jewish Literary Festival at Golders Hill Park.
- East Heath Car Park – Implementation of the car park and South End Green landscape improvements and enhancements.
- Investigate, develop and manage the use of social/new media communication mediums, such as Facebook for North London Open Spaces (NLOS), to engage with a range of customers.
- Work with Heath Hands to further develop their role, empowering them to take ownership of projects, such as Whitestone Gardens. Develop in partnership a broader range of volunteering opportunities, such as the RSPB/HLF “Wild about the Heath” project.
- Develop the tree risk management system in line with best practice and continue to monitor tree health to manage risks, for example Messaria on London Planes.
- Develop a strategy for the Play, Education and Engagement services to maximise use of resources and delivery of the highest possible standards of environmental education and play.

HAMPSTEAD HEATH

Trustee's report for the year ended 31 March 2013

7. The Financial Statements

The Financial statements are prepared on a consolidated basis for Hampstead Heath and the Trust Fund. Separate financial statements are prepared for the Hampstead Heath Trust Fund which is a subsidiary of Hampstead Heath.

The financial statements consist of the following and include comparative figures for the previous year.

- **Consolidated Statement of Financial Activities** showing all resources available and all expenditure incurred and reconciling all changes in the funds of the charity and its subsidiary charity.
- **Consolidated Balance Sheet** setting out the assets and liabilities of the charity and its subsidiary charity.
- **Balance Sheet** setting out the assets and liabilities of Hampstead Heath charity only.
- **Consolidated Cash Flow Statement** showing the cash inflows and outflows of the charity and its subsidiary charity for the year.
- **Notes to the Financial Statements** describing the accounting policies adopted and explaining information contained in the financial statements.

The financial statements have been prepared in accordance with statutory requirements and the Statement of Recommended Practice *Accounting and Reporting by Charities (Revised 2005)*.

8. Statement of Trustee's Responsibilities

The trustee is responsible for preparing the Trustee's Report and the financial statements in accordance with applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

The law applicable to charities in England & Wales requires the trustee to prepare financial statements for each financial year which give a true and fair view of the state of affairs of the charity and of the incoming resources and application of resources of the charity for that period. In preparing these financial statements, the trustee is required to:

- select suitable accounting policies and then apply them consistently;
- observe the methods and principles in the Charities SORP;
- make judgments and estimates that are reasonable and prudent;
- state whether applicable accounting standards have been followed; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the charity will continue in business.

The trustee is responsible for keeping proper accounting records that disclose with reasonable accuracy at any time the financial position of the charity and enables the trustee to ensure that the financial statements comply with the Charities Act 2011, the Charity (Accounts and Reports) Regulations 2008 and the provisions of the charity's governing documents. The trustee is also responsible for safeguarding the assets of the charity and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

HAMPSTEAD HEATH
Trustee's report for the year ended 31 March 2013

9. Adopted and signed for and on behalf of the Trustee.

R.A.H. Chadwick
Chairman of Finance Committee
Guildhall, London

Raymond Michael Catt
Deputy Chairman of
Finance Committee
Guildhall, London

INDEPENDENT AUDITOR'S REPORT TO THE TRUSTEE OF HAMPSTEAD HEATH

We have audited the financial statements of Hampstead Heath for the year ended 31 March 2013 which comprise the Consolidated Statement of Financial Activities, the Consolidated Balance Sheet, the Hampstead Heath Balance Sheet and the Consolidated Cash Flow Statement and the related Notes 1 to 18. The financial reporting framework that has been applied in their preparation is applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

This report is made solely to the charity's trustee in accordance with section 144 of the Charities Act 2011 and regulations made under section 154 of that Act. Our audit work has been undertaken so that we might state to the charity's trustee those matters we are required to state to it in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the charity and the charity's trustee as a body, for our audit work, for this report, or for the opinions we have formed.

Respective responsibilities of trustee and auditor

As explained more fully in the Trustee's Responsibilities Statement, the trustee is responsible for the preparation of the financial statements which give a true and fair view.

We have been appointed as auditor under section 144 of the Charities Act 2011 and report in accordance with regulations made under section 154 of that Act. Our responsibility is to audit and express an opinion on the financial statements in accordance with applicable law and International Standards on Auditing (UK and Ireland). Those standards require us to comply with the Auditing Practices Board's Ethical Standards for Auditors.

Scope of the audit of the financial statements

An audit involves obtaining evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of: whether the accounting policies are appropriate to the group's and charity's circumstances and have been consistently applied and adequately disclosed; the reasonableness of significant accounting estimates made by the trustee; and the overall presentation of the financial statements. In addition, we read all the financial and non-financial information in the annual report to identify material inconsistencies with the audited financial statements. If we become aware of any apparent material misstatements or inconsistencies we consider the implications for our report.

Opinion on financial statements

In our opinion the financial statements:

- give a true and fair view of the state of the group's and the charity's affairs as at 31 March 2013, and of the group's incoming resources and application of resources, for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; and
- have been prepared in accordance with the requirements of the Charities Act 2011.

**INDEPENDENT AUDITOR'S REPORT TO THE TRUSTEE OF HAMPSTEAD HEATH
(CONTINUED)**

Matters on which we are required to report by exception

We have nothing to report in respect of the following matters where the Charities Act 2011 requires us to report to you if, in our opinion:

- the information given in the Trustee's Annual Report is inconsistent in any material respect with the financial statements; or
- sufficient accounting records have not been kept; or
- the financial statements are not in agreement with the accounting records and returns; or
- we have not received all the information and explanations we require for our audit.

Deloitte LLP

Chartered Accountants and Statutory Auditor
London, UK

Deloitte LLP is eligible to act as an auditor in terms of section 1212 of the Companies Act 2006 and consequently to act as the auditor of a registered charity

HAMPSTEAD HEATH

Consolidated Statement of Financial Activities for the year ended 31 March 2013

	Notes	Unrestricted Funds		Restricted Fund	Endowment Fund	2012/13	2011/12
		General Fund	Designated Fund				
		£	£				
Incoming resources							
Incoming resources from generated funds							
Investment Income		1,146,583	-	-	-	1,146,583	1,154,016
Voluntary Income		3,139	-	479,925	-	483,064	492,615
Grant from City of London Corporation		5,355,452	215,274	-	-	5,570,726	5,952,338
Incoming resources from charitable activities		<u>1,235,843</u>	<u>-</u>	<u>-</u>	<u>-</u>	1,235,843	1,010,914
Total incoming resources	4	<u>7,741,017</u>	<u>215,274</u>	<u>479,925</u>	<u>-</u>	8,436,216	<u>8,609,883</u>
Resources expended							
Costs of generating funds							
Managed investment							
Expenses	5	150,146	-	-	-	150,146	147,266
Performance measurement service	5	4,594	-	-	-	4,594	4,595
Interest Payable		2,496	-	-	-	2,496	3,002
Charitable activities	5	7,471,574	87,929	516,593	-	8,076,096	8,305,641
Governance costs	5,6	<u>376,518</u>	<u>-</u>	<u>-</u>	<u>-</u>	376,518	<u>338,776</u>
Total resources expended		<u>8,005,328</u>	<u>87,929</u>	<u>516,593</u>	<u>-</u>	8,609,850	<u>8,799,280</u>
Net (outgoing)/ incoming resources		<u>(264,311)</u>	<u>127,345</u>	<u>(36,668)</u>	<u>-</u>	(173,634)	<u>(189,397)</u>
Net movement in funds before other recognised gains		<u>(264,311)</u>	<u>127,345</u>	<u>(36,668)</u>	<u>-</u>	(173,634)	<u>(189,397)</u>
Other recognised gains							
Funds from Charity Transfer							
		-	-	-	-	-	570,769
Net gain on investment assets	10	<u>22,795</u>	<u>-</u>	<u>-</u>	<u>3,424,475</u>	3,447,270	<u>812,188</u>
Net movement in funds		<u>(241,516)</u>	<u>127,345</u>	<u>(36,668)</u>	<u>3,424,475</u>	3,273,636	<u>1,193,560</u>
Reconciliation of funds							
Total funds brought forward	14	305,918	904,321	56,668	23,418,441	24,685,348	23,491,788
Total funds carried forward	14	<u>64,402</u>	<u>1,031,666</u>	<u>20,000</u>	<u>26,842,916</u>	27,958,984	<u>24,685,348</u>

There are no recognised gains or losses other than as shown in the statement of financial activities above.

All incoming resources and resources expended derive from continuing activities.

HAMPSTEAD HEATH

Consolidated Balance Sheet as at 31 March 2013

	Notes	2013	2012
		£	£
Fixed Assets			
Tangible Fixed Assets	9	1,031,666	904,321
Fixed Asset Investments	10	28,076,857	22,970,843
		<u>29,108,523</u>	<u>23,875,164</u>
Current Assets			
Debtors	11	268,745	234,488
Investments	10	74,517	1,756,196
Cash at bank and in hand		585,530	920,425
		<u>928,792</u>	<u>2,911,109</u>
Creditors: amounts falling due within one year	12	<u>(2,078,331)</u>	<u>(2,100,925)</u>
Net Current (Liabilities) Assets		<u>(1,149,539)</u>	<u>810,184</u>
Total Assets Less Current Liabilities		<u>27,958,984</u>	<u>24,685,348</u>
The funds of the charity:			
<i>Unrestricted Funds</i>			
General Fund	13 & 14	64,402	305,918
Designated Fund	13 & 14	1,031,666	904,321
<i>Restricted Funds</i>			
<i>Endowment Funds</i>	13 & 14	20,000	56,668
Total charity funds		<u>26,842,916</u>	<u>23,418,441</u>
		<u>27,958,984</u>	<u>24,685,348</u>

Approved and signed for and on behalf of the Trustee.

The notes at pages 17 to 33 form part of these accounts.

Chris Bilsland
Chamberlain of London

HAMPSTEAD HEATH
Balance Sheet as at 31 March 2013

	Notes	2013	2012
		£	£
Fixed Assets			
Tangible Fixed Assets	9	<u>1,031,666</u>	<u>904,321</u>
Current Assets			
Debtors	11	114,039	74,100
Cash at bank and in hand		<u>585,530</u>	<u>920,425</u>
		699,569	994,525
Creditors: Amounts falling due within one year	12	(679,569)	(937,857)
Net Current Assets		<u>20,000</u>	<u>56,668</u>
Total Assets less Current Liabilities		<u>1,051,666</u>	<u>960,989</u>
The funds of the charity			
<i>Unrestricted Funds</i>			
Designated Fund	13 & 14	1,031,666	904,321
<i>Restricted Funds</i>	13 & 14	<u>20,000</u>	<u>56,668</u>
Total charity funds		<u>1,051,666</u>	<u>960,989</u>

Approved and signed for an on behalf of the Trustee

Chris Bilisland
Chamberlain of London

HAMPSTEAD HEATH

Consolidated Cash Flow Statement for the year ended 31 March 2013

	Notes	2012/13	2011/12
		£	£
Net cash outflow from operating activities	1	(3,179,216)	(356,819)
Returns on investments and servicing of finance	2	1,146,583	1,154,016
Capital expenditure		(215,274)	(95,470)
Net cash (outflow)inflow before management of liquid resources		(2,247,907)	701,727
Management of liquid resources	3	1,681,679	(388,656)
(Decrease)/increase in cash in the year		(566,228)	313,071

Notes to the Cash Flow Statement

Note 1: Reconciliation of net outgoing resources to net cash outflow from operating activities

	£	£
Net (outgoing)incoming resources before other recognised gains	(173,634)	381,372
Depreciation	87,929	118,218
Investment income	(1,146,583)	(1,154,016)
Decrease in debtors	4,156	75,046
(Decrease)/increase in creditors	(1,949,225)	222,233
(Increase)/decrease in provisions	(1,859)	328
Net cash outflow from operating activities	(3,179,216)	(356,819)

Note 2: Returns on investments and servicing of finance

Investment income received	1,146,583	1,154,016
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Note 3: Management of liquid resources

Decrease/(increase) in short term investments	1,681,679	(388,656)
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HAMPSTEAD HEATH

Consolidated Cash Flow Statement for the year ended 31 March 2013 (continued)

	1 April 2012	Cash Flow	31 March 2013
	£	£	£
Note 4: Analysis of changes in net funds			
Cash at bank and in hand	920,425	(334,895)	585,530
Bank overdraft	(1,126,117)	(231,333)	(1,357,450)
Short term investments	1,756,196	(1,681,679)	74,517
Change in net funds	1,550,504	(2,247,907)	(697,403)

	2012/13	2011/12
	£	£
Note 5: Reconciliation of net cash flow to movement in net funds		
(Decrease)/increase in cash in the year	(334,895)	332,408
Increase in Bank overdraft	(231,333)	(19,337)
Short term investments	(1,681,679)	604,562
Change in net funds	(2,247,907)	917,633
Net funds balance brought forward	1,550,504	632,871
Net funds balance carried forward	(697,403)	1,550,504

HAMPSTEAD HEATH

Notes to the financial Statements for the year ended 31 March 2013

1. Accounting Policies

The following accounting policies have been applied consistently in dealing with items which are considered material in relation to the charity's financial statements.

(a) Basis of preparation

These are the Consolidated Financial Statements for the Hampstead Heath Group comprising Hampstead Heath and Hampstead Heath Trust. Separate statements are also produced for the Hampstead Heath Trust which is a subsidiary of Hampstead Heath.

The financial statements have been prepared in accordance with the Charities Act 2011 and Statement of Recommended Practice *Accounting and Reporting by Charities (Revised 2005)* and under the historical cost accounting rules (except for investments recorded at valuation), and in accordance with applicable United Kingdom accounting standards.

(b) Going Concern

The governing documents place an obligation on the City of London Corporation to preserve the open space for the benefit of the public. The City of London Corporation is committed to fulfilling this obligation which is reflected through its proactive management of, and ongoing funding for, the services and activities required. The funding is provided from the City of London Corporation's City's Cash which annually receives considerable income from its managed funds and property investments. Each year a medium term financial forecast is updated from City's Cash. The latest forecast to the period 2016/17 anticipates that adequate funding will be available to enable the Trust to continue to fulfil its obligations. On this basis the Trustee consider the Trust to be a going concern for the foreseeable future, therefore has prepared the financial statements on the going concern basis.

(c) Fixed assets

Heritage Land and Associated Buildings

Hampstead Heath comprises 275 hectares (680 acres) of land located in the London Boroughs of Camden and Barnet, together with associated buildings. The objectives of the charity are the preservation of the Heath at Hampstead for the recreation and enjoyment of the public. Hampstead Heath is considered to be inalienable (i.e. may not be disposed of without specific statutory powers).

Land and associated buildings acquired prior to 1 April 2009 are considered to be heritage assets. In respect of the original land and buildings, cost or valuation are not included in these accounts as reliable cost information is not available and a significant cost would be involved in the reconstruction of past accounting records, or in the valuation, which would be onerous compared to the benefit to the users of these accounts.

Additions to the original land and capital expenditure on buildings are included as fixed assets at historic cost, less provision for depreciation and any impairment, where this cost can be reliably measured.

HAMPSTEAD HEATH

Notes to the financial Statements for the year ended 31 March 2013

1. Accounting Policies (continued)

(c) Fixed assets (continued)

Tangible Fixed Assets

These are included at historic cost less depreciation on a straight line basis to write off their costs over their estimated useful lives and less any provision for impairment. Land is not depreciated and other fixed assets are depreciated from the year following that of their acquisition. Typical asset lives are as follows:

	Years
Operational buildings	30 to 50
Landscaping/Conservation	up to 50
Improvements and refurbishments to buildings	up to 30
Equipment	5 to 10
Infrastructure	15

(d) Incoming resources

Recognition of incoming resources

All incoming resources are included in the Statement of Financial Activities gross without deduction of expenses in the financial year in which they are due.

Voluntary income

Voluntary income comprises a transfer from the Barratt Bequest Fund, public donations and government grants.

Volunteers

No amounts are included in the Statement of Financial Activities for services donated by volunteers, as this cannot be accurately quantified.

Grants received

Grants are included in the Statement of Financial Activities in the financial year in which they are receivable.

Contribution from City's Cash

The City of London Corporation's City's Cash meets the deficit on running expenses of the charity and also provides grant funding for certain capital works.

Rental income

Rental income is included in the Charity's incoming resources for the year and amounts due but not received at the year-end are included in debtors.

(e) Resources expended

Allocation of costs between different activities

The City of London Corporation charges staff costs to the charitable activity and governance costs on a time spent basis. Associated office accommodation is charged out proportionately to the square footage used. All other costs are charged directly to the charitable activity.

HAMPSTEAD HEATH

Notes to the Financial Statements for the year ended 31 March 2013

1. Accounting Policies (continued)

(f) Pension costs

The City of London's Pension Scheme is a funded defined benefits scheme. City of London Corporation staff are eligible for membership of the pension scheme and may be employed in relation to the activities of any of the City Corporation's three main funds, or any combination of them (i.e. City Fund, City's Cash and Bridge House Estates).

(g) Investments

Investments are managed similarly to those pooled from other small City of London charities. Underlying Listed Company investments are valued at The Stock Exchange Trading System price at 31 March 2013. Other investments are valued annually at the mid price of the market at the close of business on 31 March of that year. Gains and losses for the year on investments held as fixed assets are included in the Statement of Financial Activities.

The unrealised gains on investments at the balance sheet date are included in the Trust's funds.

The net gains on investments shown in the Statement of Financial Activities represent the difference in the market value of investments between 1 April 2012 and 31 March 2013.

(h) Foreign Currencies

Transactions in foreign currencies are recorded using the rate of exchange ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are translated using the rate of exchange ruling at the balance sheet date and the gains or losses on translation are included in the capital fund. There were no gains or losses on foreign currency transactions in the year.

(i) Fund Accounting

The charity has three funds – an unrestricted income fund which comprises a general fund representing the net income of the Trust distributed annually towards the running costs of the Heath and a designated fund consisting of fixed assets at historic cost less accumulated depreciation; a restricted income fund in respect of Athlone House (see Note 18) and a permanent endowment fund which represents the original endowment invested shown at current market value.

(j) Governance costs

The nature of costs allocated to Governance are detailed in Note 5.

2. Tax Status of the Charity

Hampstead Heath is a registered charity and as such its income and gains are exempt from income tax to the extent that they are applied to its charitable objectives.

HAMPSTEAD HEATH

Notes to the Financial Statements for the year ended 31 March 2013

3. Indemnity Insurance

The City of London Corporation takes out indemnity insurance in respect of all of its activities. The charity does not contribute to the cost of that insurance.

4. Incoming Resources

Incoming resources are comprised as follows:

	Unrestricted Funds		Restricted Funds		2012/13 £	2011/12 £
	Unrestricted Fund £	Designated Fund £	Restricted Fund £	Endowment Fund £		
Incoming resources from generated funds						
Investment Income	1,146,583	-	-	-	1,146,583	1,154,016
Voluntary Income	3,139	-	479,925	-	483,064	492,615
Grant from City of London Corporation	5,355,452	215,274	-	-	5,570,726	5,952,338
	6,505,174	215,274	479,925	-	7,200,373	7,598,969
Incoming resources from charitable activities						
Fees and charges	1,017,355	-	-	-	1,017,355	809,591
Sales	32,098	-	-	-	32,098	36,961
Rental income	186,390	-	-	-	186,390	164,362
	1,235,843	-	-	-	1,235,843	1,010,914
Total incoming resources	7,741,017	215,274	479,925	-	8,436,216	8,609,883

Investment Income

Incoming resources from generated funds consist of investment income and interest received on average cash balances for the year. Income for the year amounted to £1,146,583 (2011/12 £1,154,016).

HAMPSTEAD HEATH

Notes to the Financial Statements for the year ended 31 March 2013

4. Incoming Resources (continued)

Voluntary Income

The voluntary income relates to donations and sponsorship income of £3,139 (2011/12 £12,690) and grant funding from the City Bridge Trust of £479,925 (2011/12 £479,925) to provide educational and biodiversity projects that support communities across Greater London.

Deficit funding Contribution from City's Cash

The City of London Corporation's City's Cash meets the deficit on running expenses of the charity.

Charges for the use of facilities

Fees and charges are made to the public for the use of facilities, admissions and services.

5. Resources Expended

Resources expended are analysed between activities undertaken directly and support costs as follows:

	Activities undertaken directly £	Support costs £	2012/13 £	2011/12 £
Charitable activities	7,575,896	657,436	8,233,332	8,460,504
Governance costs	-	376,518	376,518	338,776
Total resources expended	7,575,896	1,033,954	8,609,850	8,799,280

No resources are expended by third parties to undertake charitable work on behalf of the charity.

Charitable activities

Expenditure on charitable activities includes labour, premises costs, equipment, materials and other supplies and services incurred as the running costs of Hampstead Heath.

Costs of generating funds

Consists of Fund managers fees of £150,146 (2011/12 £147,266), performance measurement fees of £4,594 (2011/12 £4,595) and interest payable of £2,496 (2011/12 £3,002).

Governance costs

General

Governance costs relate to the general running of the charity, rather than specific activities within the charity, including strategic planning and costs associated with trustee meetings. These costs are initially borne by the City of London Corporation and then charged to individual charities on the basis of time spent, as part of support costs, where appropriate.

HAMPSTEAD HEATH

Notes to the Financial Statements for the year ended 31 March 2013

5. Resources Expended (continued)

Auditor's remuneration and fees for external financial services

The City of London's external auditor audits this charity as one of the numerous charities administered by the City of London Corporation. The City of London Corporation does not attempt to apportion the audit fee between all the different charities but prefers to treat it as part of the cost to its private funds. No other external financial services were provided for the charity during the year or in the previous year.

Trustee's expenses

Members of the City of London Corporation are unpaid and do not receive allowances in respect of City of London Corporation activities in the city. However, Members may claim travelling expenses in respect of activities outside the city and receive allowances in accordance with a scale when attending a conference or activity on behalf of the City of London Corporation. No expenses were incurred in the year (2011/12 £nil).

6. Support Costs

The cost of administration which includes the salaries and associated costs of officers of the City of London Corporation, together with premises and office expenses, is allocated by the City of London Corporation to the activities under its control, including this charity, on the basis of employee time spent on the respective services. These expenses include the cost of administrative and technical staff and external consultants who work on a number of the City of London Corporation's activities. Support costs allocated by the City of London Corporation to the charitable activity are derived as follows:

	Charitable Activities £	Governance £	2012/13 £	2011/12 £
Department				
Chamberlain	-	95,946	95,946	108,609
Comptroller & City Solicitor	-	51,886	51,886	47,060
Open Spaces Directorate	245,432	-	245,432	248,369
Town Clerk	-	122,293	122,293	128,438
City Surveyor	228,041	87,717	315,758	277,462
Information Systems	93,588	-	93,588	70,540
Other governance and support costs	90,375	18,676	109,051	131,633
Total support costs	657,436	376,518	1,033,954	1,012,111

HAMPSTEAD HEATH

Notes to the Financial Statements for the year ended 31 March 2013

6. Support Costs (continued)

The main support services provided by the City of London Corporation are:

Chamberlain	Accounting services, insurance, cashiers, revenue collection, payments, financial systems and internal audit.
Comptroller and City Solicitor	Property, litigation, contracts, public law and administration of commercial rents and City of London Corporation records.
Open Spaces Directorate	Expenditure incurred by the Directorate, which is recharged to all Open Spaces Committees under the control of the Director of Open Spaces. The apportionments are calculated on the basis of budget resources available to each open space Charity.
Town Clerk	Committee administration, management services, personnel services, public relations, printing and stationery, emergency planning, records office.
City Surveyor	Work undertaken on the management of the Estate properties, surveying services and advice, supervising and administering repairs and maintenance.
Information Systems	The support and operation of the City of London Corporation's central and corporate systems on the basis of usage of the systems; the provision of "desktop" and network support services and small IS development projects that might be required by the charity.
Other support and governance costs	Contribution towards various costs including publishing the annual report and financial statements, central training, the dental service, occupational health, union costs and the environmental and sustainability section.

HAMPSTEAD HEATH

Notes to the Financial Statements for the year ended 31 March 2013

7. Staff Numbers and Costs

The full time equivalent number of staff employed by the City of London Corporation charged to Hampstead Heath in 2012/13 is 120 (2011/12 117) at a cost of £4,776,536 (2011/12 £4,609,253). The table below sets out the employment costs and the number of full time equivalent staff charged directly to the charity.

	No of employees	Gross Pay £	Employers' National Insurance £	Employers' Pension Contribution £	Total £
2012/13 Charitable activities	119	3,935,845	317,571	523,120	4,776,536
2011/12 Charitable activities	117	3,810,556	301,780	496,917	4,609,253

No employees earned more than £60,000 during the year (2011/12 nil).

8. Heritage Assets

Since 1880 the primary purpose of the Charity has been the preservation of Hampstead Heath for the recreation and enjoyment of the public. As set out in accounting policy 1(c), the original heritage land and buildings are not recognised in the Financial Statements.

Policies for the preservation and management of Hampstead Heath are contained in the Hampstead Heath Management Plan 2011. Records of heritage assets owned and maintained by Hampstead Heath are held by the Director of Open Spaces.

Additions made to heritage land or buildings, where relevant information is available, are included at historic cost less accumulated depreciation in accordance with Note 1 (c).

HAMPSTEAD HEATH

Notes to the Financial Statements for the year ended 31 March 2013

9. Tangible Fixed Assets

At 31 March 2013 the net book value of tangible fixed assets relating to direct charitable purposes amounts to £1,031,666 (31 March 2012: £904,321) as set out below. All tangible fixed assets are held by Hampstead Heath.

	Land and Buildings £	Infrastructure £	Infrastructure (WIP) £	Equipment £	Total £
<u>Cost</u>					
At 1 April 2012	169,101	743,984	324,928	197,810	1,435,823
Additions	-	-	215,274	-	215,274
At 31 March 2013	169,101	743,984	540,202	197,810	1,651,097
<u>Accumulated depreciation</u>					
At 1 April 2012	40,672	424,743	-	66,087	531,502
Charge for year	6,759	67,998	-	13,172	87,929
At 31 March 2013	47,431	492,741	-	79,259	619,431
<u>Net book values</u>					
At 31 March 2013	121,670	251,243	540,202	118,551	1,031,666
At 31 March 2012	128,429	319,241	324,928	131,723	904,321

HAMPSTEAD HEATH

Notes to the Financial Statements for the year ended 31 March 2013

10. Investments

The investments are held in the City of London Corporation Charities Pool as a registered UK charity with the Charities Commission (charity number 1021138) and are used internally by the City of London Corporation as a Unit trust. The value and cost of investments held in the consolidated balance sheet comprise:

	Endowment Fund	
	2012/13 £	2011/12 £
Market Value at 1 April	22,970,843	23,026,772
Add: Additions to investments at cost	7,684,584	6,828,659
Less: Disposals at market value	(6,025,840)	(7,696,776)
Add: Net Gain on Revaluation	3,447,270	812,188
Market Value at 31 March	28,076,857	22,970,843
Cash held by Fund Managers	74,517	1,756,196
Total investments at 31 March	28,151,374	24,727,039
Cost at 31 March	25,315,264	22,883,379

The increase in the market value of the investments held reflects the general recovery in the UK and overseas stock markets together with some fund manager outperformance.

Total investments as at 31 March are analysed between long term and short term investments as follows:

	2013 £	2012 £
Long term	28,076,857	22,970,843
Short term	74,517	1,756,196
Total	28,151,374	24,727,039

HAMPSTEAD HEATH

Notes to the Financial Statements for the year ended 31 March 2013

10. Investments (continued)

The Geographical Spread of Investments at 31 March 2013

	2013 £	2012 £
Fixed Interest Securities - UK	1,748,500	1,732,269
Unit Trusts - UK	297,274	274,951
Equities -UK	21,555,502	17,870,460
-European	3,336,041	2,533,976
-United States	1,117,353	507,198
-Pacific Basin	22,187	51,989
	26,031,083	20,963,623
Cash held by Fund Managers	74,517	1,756,196
Market Value 31 March	28,151,374	24,727,039

11. Debtors

Debtors consist of amounts owing to the charity due within one year.

Hampstead Heath Consolidated

	2013 £	2012 £
Rental Debtors	25,447	5,016
Other Debtors	161,525	139,753
Payments in Advance	37,126	50,204
Recoverable VAT	44,647	39,515
Total	268,745	234,488

Hampstead Heath

	2013 £	2012 £
Rental Debtors	25,447	5,016
Other Debtors	6,819	(20,635)
Payments in Advance	37,126	50,204
Recoverable VAT	44,647	39,515
Total	114,039	74,100

HAMPSTEAD HEATH

Notes to the Financial Statements for the year ended 31 March 2013

12. Creditors

Creditors consist of amounts due within one year.

Hampstead Heath Consolidated

	2013 £	2012 £
Bank Overdraft	1,357,451	1,126,118
Trade Creditors	83,621	40,356
Accruals	533,821	776,177
Other Creditors	103,438	158,274
Total	2,078,331	2,100,925

Hampstead Heath

	2013 £	2012 £
Trade Creditors	83,621	40,356
Accruals	502,620	761,975
Other Creditors	28,390	86,663
Other Deposits	33,737	34,431
Receipts In Advance	31,201	14,432
Total	679,569	937,857

HAMPSTEAD HEATH

Notes to the Financial Statements for the year ended 31 March 2013

13. Analysis of Consolidated Net Assets by Fund at 31 March 2013

	Unrestricted Funds		Restricted Fund	Endowment Fund	2013	2012
	General Fund	Designated Fund				
	£	£	£	£	£	£
Fixed Assets						
Tangible Fixed Assets	-	1,031,666	-	-	1,031,666	904,321
Investments	-	-	-	28,076,857	28,076,857	22,970,843
Total Fixed Assets	-	1,031,666	-	28,076,857	29,108,523	23,875,164
Current Assets	908,792	-	20,000	-	928,792	2,296,966
Current Liabilities	(844,390)	-	-	(1,233,941)	(2,078,331)	(1,486,782)
Total Net Assets	64,402	1,031,666	20,000	26,842,916	27,958,984	24,685,348

Capital Fund – Permanent Endowment

This represents the investment of the endowment of £15 million received from the London Residual Body.

Hampstead Heath Analysis of Net Assets by Fund at 31 March 2013

	Unrestricted Funds		Restricted Fund	2013	2012
	General Fund	Designated Fund			
	£	£	£	£	£
Fixed Assets					
Tangible Fixed Assets	-	1,031,666	-	1,031,666	904,321
Total Fixed Assets	-	-	-	1,031,666	904,321
Current Assets	679,569	-	20,000	699,569	968,399
Current Liabilities	(679,569)	-	-	(679,569)	(911,731)
Total Net Assets	-	1,031,666	20,000	1,051,666	960,989

HAMPSTEAD HEATH

Notes to the Financial Statements for the year ended 31 March 2013

14. Consolidated Movement of Funds during the year to 31 March 2013

	Balance at 1 April 2012	Net (outgoing)/ incoming resources	Revaluation of Investments	Balance at 31 March 2013
	£	£	£	£
Unrestricted Funds				
General Fund	305,918	(264,311)	22,795	64,402
<i>Designated Funds</i>				
Tangible Fixed Assets	904,321	127,345	-	1,031,666
Restricted Fund (Note 18)	56,668	(36,668)	-	20,000
Permanent Endowment (Note 13)	23,418,441	-	3,424,475	26,842,916
Total Funds	24,685,348	(173,634)	3,447,270	27,958,984

HAMPSTEAD HEATH

Notes to the Financial Statements for the year ended 31 March 2013

Hampstead Heath Movement of Funds during the year to 31 March 2013

	Balance at 1 April 2012	Net incoming /(outgoing) resources	Transfers /Adjustments	Balance at 31 March 2013
	£	£	£	£
Unrestricted Funds				
General Fund	-	(5,000)	5,000	-
Designated Funds				
Tangible Fixed Assets	904,321	127,345	-	1,031,666
Restricted Funds (Note 18)	56,668	(31,668)	(5,000)	20,000
Total Funds	960,989	90,677	-	1,051,666

Designated funds

Designated funds consist of fixed assets at historic cost less accumulated depreciation in accordance with Note 1 (c).

15. Pensions

The triennial valuation undertaken as at 31 March 2010 revealed a reduced funding level of 86% (from 87% in 2007). Following this valuation, the contribution rates to be applied for 2011/12, 2012/13 and 2013/14 are 17.5%.

In 2012/13, the total employer's contributions to the pension fund for staff employed on City's Cash activities were £6.1m amounting to 17.5% of pensionable pay. The figures for 2011/12 were £6.0m and 17.5% of pensionable pay.

Although the Pension Fund is a defined benefit scheme, for the purpose of FRS 17 City's Cash is unable to identify its share of the underlying assets and liabilities. Consequently the pension arrangements are treated as a defined contributions scheme in the City's Cash and these accounts. The deficit of the scheme calculated in accordance with FRS 17 by independent consulting actuaries at 31 March 2013 is £342m (2011/12 £351m).

HAMPSTEAD HEATH

Notes to the Financial Statements for the year ended 31 March 2013

16. Contingent Liabilities

No disclosable contingent liabilities have been identified.

17. Related Party Transactions

The following disclosures are made in recognition of the principles underlying Financial Reporting Standard 8 concerning related party transactions. The City of London Corporation as well as being the Trustee also provides management, surveying and administrative services for the charity. The costs incurred by the City of London Corporation in providing these services are charged to the charity. The City of London Corporation also provides banking services, allocating all transactions to the charity at cost and crediting or charging interest at a commercial rate. The cost of these services is set out in the Statement of Financial Activities under "Resources expended" and an explanation of these services is set out in Note 6 for support costs of £1,033,954. The City of London Corporation's City's Cash meets the deficit on running expenses of the charity. This amounted to £5,570,726 as shown in Note 4 to the financial statements.

The City of London Corporation is also the Trustee of a number of other charitable Trusts. These Trusts do not undertake transactions with Hampstead Heath, with the exception of the Hampstead Heath Trust and the City Bridge Trust (charity number 1035628). Hampstead Heath benefits from the income from the Hampstead Heath Trust (charity 803392-1). By virtue of the London Government Reorganisation (Hampstead Heath) Order 1989, the City of London Corporation acquired responsibility for the management of Hampstead Heath with effect from 31 March 1989. At the same time the London Residuary Body transferred £15 million to the City of London Corporation for the establishment of the Hampstead Heath Trust Fund, the purpose of which is to meet a proportion of the maintenance cost of the Heath. Contributions are assessed on a triennial basis and increased annually in accordance with the average earnings index. This income is shown as income in the statement of financial activities. A full list of other charitable trusts of which the City of London Corporation is trustee is available on application to the Chamberlain of the City of London.

Members of the City of London Corporation responsible for managing the Trust are required to comply with the Relevant Authority (model code of conduct) Order 2001 issued under the Local Government Act 2000 and the City of London Corporation's guidelines which require that:

- Members sign a declaration agreeing to abide by the City of London Corporation's code of conduct;
- a register of interests is maintained;
- pecuniary and non-pecuniary interests are declared during meetings; and
- Members do not participate in decisions where they have an interest.

There are corresponding arrangements for staff to recognise interests and avoid possible conflicts of those interests. In this way, as a matter of policy and procedure, the City Corporation ensures that Members and officers do not exercise control over decisions in which they have an interest. There are no material transactions with organisations related by virtue of Members and officers interests which require separate reporting. Transactions are undertaken by the Trust on a normal commercial basis.

HAMPSTEAD HEATH

Notes to the Financial Statements for the year ended 31 March 2013

18. Restricted Fund

The sum of £50,000 was received in 2006/07 from a property company for the ongoing maintenance of one hectare of land transferred to the Heath as part of an agreement for the development of Athlone House, Highgate Lane, N6. The receipt is being applied in equal instalments over ten years towards the maintenance costs of the transferred land. This balance of £20,000 is held as cash.

Agenda Item 7

Committee(s):	Date(s):	Item no.
Hampstead Heath, Highgate Wood and Queen's Park Committee	23 rd September 2013	
Subject: Progress Report on construction of a stumpery in the woodland walk way - Golders Hill Park	Public	
Report of: Superintendent of Hampstead Heath	For Information	
<u>Summary</u>		
<p>This report informs members on the construction of stumpery in the woodland walk way in Garden in Golders Hill Park.</p>		
Recommendation		
<p>That the Committee notes :</p>		
<ul style="list-style-type: none">• the successful construction of the stumpery as an important new feature in Golders Hill Park.• acknowledges the close working relationships developed between Open Spaces Department staff and inspirations and knowledge gained from a visit to Highgrove House, Gloucestershire.		

Main Report

Background

1. Over the past five years Golders Hill Park has become a hub for environmental education with the construction of RSPB classroom and pond dipping platform, conversion of a disused glasshouse into a butterfly house, installation of demonstration beds for vegetable & fruit growing and the creation of an insect hotel and adjacent wild flower meadow.
2. Two members of staff from Golders Hill Park wanted to add to the environmental learning experience and they initially proposed the concept of building a stumpery. The idea was supported by the Superintendent and agreed by your Committee as part of the 2013 annual works programme.
3. The area identified was an underused parcel of land in the fenced-off woodland walk leading from the hump bridge at the Lily Pond down into the main north / south pathway. The area was thick scrub with non - flowering rhododendrons and self-seeded tree saplings – map 1 and appendix three (photographs 1 and 2).

Map 1: Golders Hill Park



A Stumpery

4. Stumperies were a popular feature of a nineteenth century garden and can be described as structure similar to a rockery but instead of using rocks and alpine plants, dead tree stumps and woodland plants are utilised, particularly ferns. Ferns were fashionable and hundreds of new species were introduced into Britain from around the world during this time. Stumperies have been described by commentators as a:

“grotesque form of Victorian folly’, a product of the Romantic imagination and it's obsession with the unadorned beauty of nature, and in particular ferns”.

5. The first stumpery was built in 1856 at Biddulph Grange which is now a National Trust property in Staffordshire. The largest and perhaps the most famous modern stumpery is that at Highgrove House, Gloucestershire and the home of His Royal Highness The Prince of Wales.
6. A stumpery generally works on three congruent levels as an aesthetic structure, a wildlife haven and horticultural landscape - photograph 1



An aesthetic structure

7. Any tree species can be used to construction a stumpery however, the most attractive and durable woods are *Quercus robur* (Common Oak), *Castanea sativa* (Sweet Chestnut) and *Taxus baccata* (Common Yew). The root plates of these three tree species rot down to a hard skeletal core, which retain the outlines of the main root systems which makes them ideal in terms of visual impact, durability and longevity.
8. The success to building a stumpery is in the attempt to strike a precarious balance between maximising the aesthetic appeal of the wood structure and creating the illusion that it could of conceivably have occurred naturally or in a natural setting.

A wildlife haven

9. Regardless of the level of desiccation, tree stumps provide an ideal environment for mosses, lichens, fungi and woodland plants to establish and flourish. Partially buried stumps enrich the surrounding soil and provide an excellent habitat for a wide variety of invertebrates, including wood boring beetles, hoverflies, bees and woodlice. Invertebrates in turn attract a variety of birds, particularly ground feeders such as dunnocks, wrens and song thrushes. Small mammals also like to burrow down into the dark and fertile soil around the stumps.

A horticultural landscape

10. The twisted bowls and hollows in the stumps make ideal planting pockets for ferns and other woodland plants such as *Hepatica nobilis* (Common hepatica) and *Convallaria majalis* (Conval lily) and *Trillium flexipes* (Nodding wakerobin). The grain and colour of the wood beautifully highlight the differing shapes, shades and shadows of plants.

Current Position

Highgrove House

11. In September 2012 two members of staff visited Highgrove House and were given a private tour of the stumpery by the Senior Gardener who was in charge of the stumpery at Highgrove House - appendix one. A friendship was formed and the Senior Gardener kindly offered his services free of charge in the construction stage of the stumpery at Golders Hill Park.
12. The Senior Gardener with ten years knowledge and experience of constructing and working within the stumpery has proven an invaluable expertise resource which has given confidence and motivation and knowledge transfer to Golders Hill Park staff.

Epping Forest

13. The majority of stumps were gathered from buffer land adjoining Epping Forest. The stumps had been laying in-situ for decades and the environmental impact of removing them was negligible particularly as all had lost most of their soft wood and pulp which is a vital food source and habitat for insects. The Head of Conservation at Epping Forest was briefed and supported the project.
14. Approximately twenty stumps were removed from Epping Forest and given the current national concerns on tree heath the Tree Management Officer at Hampstead Heath gave bio-security clearance before the stumps were transported to Golders Hill Park.

Clearing the site & Construction

15. Work on clearing the site began in December 2012. Works included removal of the thick non - flowering rhododendrons, self-seeded tree saplings and clearing the stream. Judicious pruning works were undertaken to existing trees to enhance light levels in order to allow for a wider variety of plants to establish both in and around the stumps.
16. In July 2013, for one week, the Senior Gardener from Highgrove House working alongside key staff members from Golders Hill Park constructed the stumpery. In order to re-landscape and create mounds which the stumps were built into, twenty tonnes of re-cycled soil was introduced into the area. A telescopic front loader with pallet fork attached and other heavy plant was used to transport and embed the stumps - appendix three, photographs 3 and 4.
17. Interpretation boards were installed at both ends of the woodland walk-way which were approved by the communications office at Highgrove House - appendix two. During the construction phase the woodland walk-way was closed off for one week.
18. Forty meters of poor condition chestnut pale fencing was replaced by a dead hedge at the back of the stumpery which will provide an additional habitat for wildlife including invertebrates, amphibians and small mammals, as well as a perching spot for small birds. It was cheap and allowed the re-use of natural material and it created an effective and impenetrable barrier to ensure protection of the stumpery.

19. The finished stumpery resembles a structure which is pre-historical and fossil like in appearance - appendix three, photographs 5 and 6. Verbal feedback to staff has been very positive and welcoming. An article on the construction was published in 1st August Ham & High 2013.

Future Planned Works

20. Once the stumps have settled into the surrounding ground, the bowls and hollows will be packed with soil to provide planting spaces for a variety of native ferns and woodland plants *Hepatica nobilis* (Common hepatica), *Convallaria majalis* (Conval lily), *Trillium flexipes* (Nodding wakerobin) etc. A few interlopers such as *Acer species* (Acer) and *Dicksonia antarctica* (Tree Fern) will be planted to add form and drama.
21. Bog and marginal plants such as *Calla palustris* (Bog Arum), *Iris pseudacorus* (Yellow Iris) and *Lysichiton americanus* (Skunk Cabbage) will be planted to line the damp sides of the gully which runs through the Stumpery area. This will provide a variety of foliage and form which will fully compliment the structure of the stumpery. Bee friendly plants such as *Digitalis purpurea* (Common Foxglove) and *Pulmonaria officinalis* (Common lungwort) will be planted along the dead hedge line at the back of the stumpery.
22. Creating the remaining twenty meters of dead hedge and removal of chestnut fencing at the back of the stumpery during winter 2013.
23. A wood chip walk-way will be incorporated into the design to allow schools groups and supervised tours to gain closer observation and a submersible pump will be installed to create a slow moving stream through the stumpery.
24. An experiment with the use of Tufa Rock, an extremely porous volcanic rock which is ideal for growing small plants and mosses will be looked at. The use of this material was very popular in the late Victorian era and would add a differing and complementary structure to the stumpery and intensify the mysterious and arresting ambience of the Woodland Walk area.
25. Shade and moisture levels in the immediate environ will be managed to encourage the stumpery to become a haven for fungi, lichens and mosses to establish and spread. An overall review of the design and acquire new stumps and extend north.

Corporate & Strategic Implications

26. The stumpery supports several of the City Together Strategy - The heart of World Class City 2008-2014 themes, including: ... *supports our communities ... protects, promotes and enhances our environment ... is vibrant and culturally rich.*
27. The project shares the Open Spaces Department Business Plan 2013-2016 aims & objectives for environment and people: - *"Deliver sustainable working practice to promote the variety of life and protect the Open Spaces for future generations"* and *"Manage, develop and empower a capable and motivated work force to achieve high standards of safety and performance"*.
28. The stumpery also supports the Essential Action in the Hampstead Heath Management Plan Part 1 – Towards a Plan for the Heath 2007-2017, NL9: -

“Retain dead and dying wood wherever possible to encourage invertebrates, fungi and birds.” NL10: “Use interpretation boards to explain and make available the Heath’s landscape and wildlife resources to a wide and diverse audience”.

Implications

29. The costs associated with the construction of the stumpery have been met from the Superintendents local risk budget. The costs have been kept to a minimum as the material was sourced from our other open spaces and in-house staff were able to undertake the creation of the main feature.
30. There are no legal, property implications or human resource implications

Conclusion

31. The stumpery will serve as an arresting visual feature in its own right, as well as being a haven for insects, amphibians, small mammals and bird species and provide planting spaces for shade woodland plants.
32. The stumpery can be used as a convenient interactive resource in which school groups can explore issues and acquire knowledge and skills in ecology, conservation and wildlife in a novel and innovative manner.
33. The project has given a unique opportunity to encourage close working relationships and knowledge transfer from teams across Hampstead Heath and Epping Forest, including sports & recreation keepers, gardeners and trees & conservation. It has also enabled Golders Hill Park to develop a relationship with the Gardens department at Highgrove House.
34. It is acknowledged that Golders Hill Park is a popular community facility, used by local residents and the construction of a stumpery will be a welcome additional attraction.

Appendices

- Appendix 1 - Highgrove letter
- Appendix 2 - Interpretation board
- Appendix 3 - Photographs

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Appendix 3 – Photographs

Photograph 1: Stumpery site before works – rhododendrons scrub



Photograph 2: Stumpery site before works – the stream



Photograph 3: Construction - Prepare ground to place a stump



Photograph 4: Construction - creating a soil mound



Photograph 5: Completed stumpery infrastructure showing stream



Photograph 6: Completed stumpery infrastructure showing dead hedge and outline of chip barked path






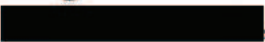
HIGHGROVE HOUSE
DOUGHTON
TETBURY
GLOUCESTERSHIRE GL8 8TN


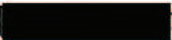
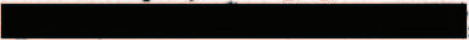

From: The Head Gardener to TRH The Prince of Wales
and The Duchess of Cornwall.

CORPORATION OF LONDON		
HAMPSTEAD HEATH DIVISION		
DATE	11 JUN 2012	REC'D
ACK'D		

8th June 2012

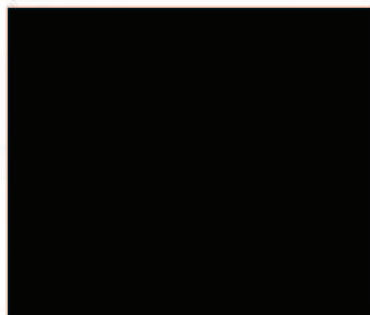
Dear 

Thank you for your letter dated 9th May regarding your proposal to install a stumpery on Hampstead Heath. If this comes to fruition, I know that HRH would be delighted to have Highgrove and the initial designers of the Stumpery, 
, noted as conceptual inspiration for your design.

I would be most happy to host  and  for a mutually convenient visit to see the stumpery at Highgrove and I would be grateful if you could contact my secretary , or  to organise this.

Once again, thank you for your letter and may I wish you every success in your plan.

With kind regards,



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The Golders Hill Park Stumpery

A Stumpery is being created as a habitat for wildlife and as an interesting aesthetic feature in Golders Hill Park.



It will be planted with native ferns and woodland plants and will provide nesting and feeding sites for insects and birds. Conditions should be just right for mosses, lichens and fungi to grow and to create hiding places for small mammals such as hedgehogs.

Stumperies were first made popular in Victorian gardens and have once again become fashionable. Our initial plan for a stumpery was further inspired by a staff visit to Highgrove, where HRH the Prince of Wales has created his own stumpery.

We are collecting contorted root bowls from dead oaks, sweet chestnuts and yews, generally choosing those that cannot stay in situ and would otherwise go to waste.

The dead hedge at the back of the area and other enhancements will provide complementary habitat that will make this corner of Golders Hill Park a haven for wildlife.

We hope that the Stumpery will be completed by May 2014.

Contact Details – Golders Hill Park

Tel: 020 7332 35111

www.cityoflondon.gov.uk/goldershillpark



Stumpery at Royal Horticultural Society Garden Wisley (RHS)

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Agenda Item 8

Committee(s):	Date(s):
Hampstead Heath, Highgate Wood and Queen's Park management Committee	23 rd September 2013
Subject: Hampstead Heath's Hedges and their Management	Public
Report of: Superintendent, Hampstead Heath	For Decision
Summary <p>This report presents the results of a survey of Hampstead Heath's hedgerows which was undertaken in 2012. It covered linear woody features which might be managed by traditional hedgerow techniques. These were found to total seven kilometres in length.</p> <p>The data from the survey was used to produce a ten-year management programme, through which all hedges would receive appropriate management to protect and promote the biodiversity and landscape importance of the features.</p> Recommendation(s) <p>Members are asked to note the report and approve the overall management programme, subject to the views of the Hampstead Heath Consultative Committee having been received.</p>	

Main Report

Background

1. Hampstead Heath possesses a fine resource of hedges, many of ancient origin. Although their management has been on-going over many years, it has been planned on a somewhat localised basis. An overall assessment of hedges and their condition and a long-term programme of management was lacking.

Current Position

2. A survey of hedges on Hampstead Heath was carried out in 2012.
3. A decision was required as to what to include in the survey. The term 'hedge' has been used on the Heath to include features which normally would not merit this appellation. It was decided to include all features which might be managed by traditional hedge management techniques, such as coppicing and laying. Examples are the so-called Hedges 2 and 3 on Parliament Hill, which today are more akin to linear woodland rather than hedges. Former

hedges which are now no more than treelines were excluded, as were formal and amenity hedges.

4. The length of such features was found to total seven kilometres. However, only 1.9 kilometres could be called real hedges, arbitrarily taken as containing a relatively dense shrub layer less than 5m wide. Most of these were planted in the last 30 years or so. Elements of most of the many hedges present in the 19th century have survived, but often as lines of trees with little or no shrub layer beneath them.
5. Many of the hedges are very important for maintaining the biodiversity of the Heath. Birds are favoured by a dense shrub layer, as well as bordering habitat such as brambles, which provides additional habitat and valuable protection from dogs. Veteran trees are vital features for invertebrates, of which the Heath harbours some rare species. Most of the Heath's wild service trees grow in old hedgerows.
6. Hedgerows benefit from management. If they are not managed, they lose their character, expanding laterally and often growing into tall, leggy structures with a poor shrub layer. Once this has happened it is difficult to restore them to their original form, but they still require management to retain and enhance their wildlife and landscape values.
7. Such management often entails laying: part cutting shrubs and bending them over so that they re-sprout. This promotes low-growing dense woody growth. Ideally the whole width of the hedge is cut, but if it is very wide and tall, it may only be appropriate to cut part of the width. For example, Hedge 1 has recently been laid in its entirety, whereas Hedge 3 was considered too much of a major visual landmark to cut right through, and only the southern side was laid.
8. Laying should be repeated periodically. 'Gapping up' with new plants may be required if there are insufficient shrubs.
9. Some 320 metres of hedge have been managed in the past two years. About 50 metres of new hedges were planted.
10. Greater detail of the survey and its analysis of the data are presented in Appendix 1.

Proposals

11. A 10-year programme of hedge management is proposed, as detailed in Appendix 1, under which all hedges covered in the survey would have received management by 2022. Work planned for autumn/winter 2013/4 includes laying the western half of a hedge near the north-west corner of the Extension, the other half of which was cut in spring 2013; and laying and gapping up the northern third of the hedge between Preachers Hill and East Heath Road, the rest of which would be managed in subsequent years.

Corporate & Strategic Implications

12. The City has a legal duty under the Hampstead Heath Act 1871 to maintain the natural aspect of the Heath.

13. All hedgerow management proposed will be undertaken using the Heath local risk budgets. There is a reputational risk in not pro-actively managing the natural aspect of the Heath. Left unchecked the mosaic of diverse habitats for which the Heath is renowned would be lost to secondary woodland cover.
14. This project also supports the City Bridge Trust work relating to the survey and management of the Heath's hedges.
15. The proposals link to the theme in the Community Strategy to protect, promote and enhance our environment.
16. They also link to the Open Spaces Department Plan through the Strategic Aim to 'adopt sustainable working practices, promote the variety of life (biodiversity) and protect our Open Spaces for the enjoyment of future generations', and the Improvement Objective to 'ensure that measures to promote sustainability and biodiversity are embedded in the Department's work'.

Conclusion

17. A survey of the Heath's hedges was undertaken in 2012, and the data obtained were used to draw up an overall management schedule for them. Under this plan, all hedges would have received appropriate management by 2022. The work has already begun, with the next tranche of tasks scheduled for autumn 2013.

Appendices

- Appendix 1 – Hampstead Heath's Hedges and the Management

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Appendix 1

Hampstead Heath's Hedges and their Management

July 2013

Contents

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Introduction

1. Hedges are wonderful visual features, attractive in their own right and dividing up the landscape. They and their associated habitats are of prime importance to the biodiversity of the Heath for both flora and fauna.
2. The former agricultural areas of the Heath – Parliament Hill Fields, Kenwood and the Extension – would once have been criss-crossed with stock-proof hedges. Many of those present in the mid-19th century remain today, but not in their original form. Only the hedgerow trees remain from some, while others have expanded laterally into wide bands of trees and shrubs. Of only a few can no trace now be found.
3. In recent years many hedges on the Heath have been managed by laying, coppicing, topping and gapping up. New hedges have also been planted, some where former hedges grew, others in entirely new places.
4. A survey was carried out in 2012 to investigate the current resource of the hedges on Hampstead Heath and to produce a plan for future management.

The survey

5. What can today be termed a hedge is a good question in the context of the Heath. What we call a hedge, such as Hedge 3 on Parliament Hill, is often more like a corridor of woodland than a classic hedge characterised by dense shrubs

and a few metres wide and high. Recently planted hedges are the exceptions, being easily recognised as such.

6. Linear barriers of shrubs or of trees with shrubs beneath were included in the survey if they were less than about 20m wide. Major hedges marked on 19th century maps which now lie adjacent to woodland were also covered if at least shrubby vestiges of the hedge could still be discerned. All these are termed hedges for the purpose of this report.
7. Lines of trees adjacent to ponds, such as those to the west of Stock and the Mixed Bathing ponds, were excluded, as were lines of trees without any hedge shrubs below them. Regularly-clipped amenity hedges, such as those around the tennis courts at Parliament Hill, were also omitted.
8. Information recorded included a brief description of each hedge, length, an estimate of average height, width and density of the shrub canopy when in full leaf, ground flora, shrub and tree species, bordering habitat, and evidence of planting and management. An assessment was made of each hedge's biodiversity, landscape and historical interest, as well as future management which might advantageously be undertaken. Photographs were taken.
9. The survey was too extensive to be carried out in entirety at the optimal time of year. Most field work was carried out between May and September 2012, although due to unforeseen circumstances a few areas could not be surveyed until winter.
10. A total of 7.0km of hedges were surveyed, as shown in figure 1.

What constitutes a true hedge?

11. What is a real, true hedge? The original main purpose of a hedge was usually to confine stock, and a true hedge could be defined as one which is, or could be made (e.g. by laying), into a dense, relatively narrow, largely continuous barrier not more than say two to three metres high, with or without an overstorey of trees. 'Relatively narrow' is a matter of judgement, but being generous is here taken as up to about five metres wide.
12. Hedge shrubs have to receive enough light to thrive; hedges where the shrubs are heavily shaded by trees do not do well, and gapping up with additional stock is rarely very successful unless more light is provided by felling or raising the crowns of trees, which is often undesirable for other reasons. Lines of many large, shading trees are therefore not here considered true hedges unless they have dense shrubs beneath the canopy.
13. Figure 2 shows the locations of hedges where most of the length currently fulfils these criteria for 'true hedges'. They total 1.9km in length. Those shown in blue are planted since the late 1940s, most of them in the last 30 years. Only those shown in yellow, totalling 502 metres, may contain some component from the 19th century or earlier, though all of these include much recently planted or naturally colonised material.
14. 1.7km of hedges were recorded as having a shrub layer more than an estimated five metres wide. Most of these emanate from the 19th century or earlier. Although no longer retaining a true hedge-like character, these belts of trees and

shrubs make fine visual features and are of great significance for biodiversity, especially if the understory is dense, providing for example excellent feeding, roosting and nesting places for birds.

15. Many other hedges contain so many trees that they could not be managed effectively as true hedges without cutting down some of these.

What has become of our old hedges?

16. Figure 3 displays the locations of probable field boundaries shown on maps of the 1860s. Most of these would, at that date, presumably have comprised hedgerows, although boundaries with Kenwood or other external properties or roads or tracks might have been fences or railings.
17. Many old trees in the boundaries of the 1860s are present to this day. Figure 4 is a map of the trees identified as veteran in the Veteran Tree Survey carried out by Heath Hands; most are along old hedge lines. There are fine examples of these on the Extension and within what is now woodland on South Meadow, for example.
18. Contrasting with trees, far fewer shrubs remaining from the old field boundaries have survived..
19. Some boundaries may not have been in a functional, stock-proof state in 1866. An example is shown below, depicting the state of a hedge, probably Hedge 2 or Hedge 3, in 1894.



*Photo of either
Hedge 2 or 3 in 1894*

20. Figure 5 shows those hedges containing significant remnants from the 1860s or before, in the form of old trees and/or shrubs. Two examples of hedges containing obviously old shrubs are the Saxon Boundary, where ancient hawthorns survive (see photo below), and the western end of Hedge 2, containing large old hazel and hawthorn stools.



Old hawthorns along the Saxon Boundary

Planting and new hedges

21. About 2.3km of hedgerow have been planted, replanted or significantly gapped up with native species over the past 25 years or so, as shown in figure 6. Of these, entirely new hedges total just over a kilometre long.

Hedges and biodiversity

22. Hedges and their associated habitats are of great value for fauna, notably for birds, invertebrates, mammals and bats for feeding, breeding and shelter and, in the case of bats, for route-finding across open country. For many groups of animals, including birds, the Heath's hedges and hedgerow trees are at least as rich, if not richer, than its woodlands. By contrast, although the Heath's hedges are important for tree and shrub species, the ground flora is disappointingly poor.

23. An ideal hedge for biodiversity should:

- Possess a dense shrub layer which starts at ground level. Quite a few of the Heath's hedges are bushy, for example many of those on the Extension, and management such as laying or coppicing aims to preserve and increase this further. As the Heath's woodlands tend to be poorly structured, with little beneath the trees, hedges contain a significant proportion of the Heath's shrubs apart from holly, which is abundant in woodland. Some hedges, notably on the Extension, are too heavily shaded to allow a thriving shrub layer to be created.
- Be formed from a variety of shrub species. Some species are particularly associated with hedges, such as hawthorn, hazel, buckthorn, spindle and, perhaps to a lesser degree, wych elm and Midland hawthorn. Our old hedges have lost many of their rarer shrub species, though Midland hawthorn and wych elm still survive from former times in some places. A wide range of shrubs has been included in many of our more recently planted hedgerows and for gapping up existing ones.
- Contain hedgerow trees of a range of species and ages, including veteran. Many of the Heath's hedges contain wonderful old trees, though in quite a few cases, notably on the Extension, these are so numerous that the hedge below has suffered. In addition, if there are too many mature trees this inhibits the younger trees which will in time replace them. As with shrubs, some tree species are particularly linked to hedgerows. On the Heath these are wild service, wych elm and crab apple, which are all relatively uncommon in England, and field maple, a more common species. Figure 7 displays a map of hedges containing wild service, wych elm or crab apple.
- Be bordered by adjoining habitat such as brambles, thistles and long grass, as well as ditches. Many of the Heath's hedges are bordered by good habitat, such as Hedges 1, 2 and 3 and some of the Extension hedges. Ditches also run within or adjacent to many of the latter, providing useful complementary habitat.
- Be relatively un-shaded. Hedges provide many of the berries which birds feed on in autumn and winter, and the shrubs fruit more prolifically if they receive plenty of light. Those with an un-shaded south or south-east facing aspect are particularly important, proving warm habitats for feeding, breeding and shelter. Notable here are several hedges on the Extension, and Hedges 1, 2 and 3 on Parliament Hill.
- Be undisturbed: an ideal hedge will not be bordered or crossed by footpaths or roads. Brambly and thistly edges are particularly important, especially in the context of the Heath, protecting hedges from disturbance by dogs and people (as well as providing valuable habitat in their own right).
- Be continuous.

24. There is such a diversity of hedges on the Heath that it is impossible to rate them all according to biodiversity interest. Information on a selection of nine hedges with important biodiversity features is given in table 1 and figure 8. The list is not exhaustive.

Hedge management

25. If hedges are not managed, they tend eventually to grow into tall, leggy and gappy structures, and may expand laterally. The original shrubs may die through competition and shade. Once this has happened it can be very difficult to restore the former character of a true hedge, though they still need to be managed to retain and enhance their landscape and wildlife values.

26. Laying is the traditional way hedges were managed (see photos below). This preserves the hedge and its shrubs, and leads to a dense structure. If repeated periodically, say every seven to ten years, it can preserve the hedge indefinitely. Once layed, the hedge can be allowed to regrow immediately or can be topped annually or biennially to maintain it. It has to be left to grow again for several years before re-laying is carried out.



A recently layed hedge near the Goodison Fountain (above), and the same hedge the following summer (below).



27. It is not practical to lay all the Heath's hedges. Some contain many fine veteran trees, heavily shading the shrubs beneath, which would not thrive with laying. Others have developed into tall, wide barriers of great landscape value; laying the full width would change the landscape and would not recover a hedge-like character without removing trees and shrubs to reduce the width. Examples are Hedges 2 and 3 on Parliament Hill Fields.
28. It may still be beneficial to manage a band of shrubs and trees along the edges of hedges which are now very wide, e.g. by coppicing or laying. This can produce a band of thick growth of much greater biodiversity value than drawn up shrubs and young trees, especially to birds and invertebrates. This had been successfully tried in a number of places, for example on Hedge 3.
29. Alternatively, the full width of wide hedges can be laid, leaving some saplings to grow on into trees if appropriate. This can substantially alter the landscape, creating a shrubby barrier rather than a band of young trees, but it does ensure continuity, preventing the closely-spaced trees from becoming ever more drawn up. The eastern end of Hedge 1 was cut right through in this way in March 2013.
30. 'Gapping up' by planting new shrubs may be required where gaps have developed.
31. Existing hedgerows have been managed on the Heath and new ones planted. In 2012, 105 metres of hedge were laid and about 50 metres of new hedge were planted. Some 219 metres of hedge were laid or coppiced in the early months of 2013.
32. A programme for continuing management is proposed in table 2 and figure 9. Under this schedule, all suitable hedges, totalling just over a kilometre, should have been brought into appropriate management by 2022. This total excludes hedges which are topped or clipped annually, such as some near East Heath Bothy, and newly planted hedgerows (such as in Springett's Wood) which may or may not require management by then.
33. When hedges are gapped up or newly planted, stock is obtained from commercial nurseries. The provenance of this stock is normally required to be south-east England. However, it would be ideal if progeny from shrubs and trees actually growing on the Heath could be obtained, at least for the rarer species of tree and shrub. A priority would be Midland hawthorn, which can still be found in a few places on the Heath, and which might be grown from seed. Cuttings could also be taken from an old crab apple, now in a very poor state, found in a former hedge on the Extension. This appears to be the native species (although some botanists question whether the crab apple is truly native to Britain).
34. Another species worth propagating would be hazel. Because of the difficulty of obtaining nuts from wild trees, due to the ravages of grey squirrels, hazel plants obtained from nurseries are normally grown from nuts obtained from Kentish cobnut orchards. Kentish Cob is a domestic variety of hazel close to but not identical to the native species. Nurseries do not admit their stock is grown from Kentish Cob nuts, and may not realise the implications. Genes of our native stock are therefore being diluted throughout the country. It might be possible to obtain rooted cuttings cut from very old stools growing on the Heath, or to layer suckers

so that they root. Such stools can be found in a number of hedgerows, for example the western arm of Hedge 2.

35. Wild service, which is associated with hedges, has recently been grown from berries collected from trees on the Heath and a programme of planting these out has already begun. It is planned to restore a line of oaks marking an old boundary across Tumulus Field, and natural seedlings growing on the Heath will be used.

Conclusion

36. Hampstead Heath possesses a great number of hedgerows. A large proportion of those present today date back to the 1860s or before, but their character has changed very considerably since that time: although many ancient trees are still present, most of the original shrubs have disappeared in all but a few cases, and many of the old hedgerows now resemble narrow belts of trees rather than classic hedgerows. However, relict hazel and hawthorn stools are present in some.
37. New hedges have been planted, especially over the past quarter century.
38. The value of the hedges historically and for the landscape is immense. The hedges are also of very great value for nature conservation, supporting a wide range of fauna and to a lesser extent flora. They are of particular importance for birds and for bird watchers.
39. Management will prolong the life of the hedges and ensure that they continue to be of optimal value to nature conservation, its enjoyment, and the Heath's landscape.


Figures

Hampstead Heath Hedgerow Survey

Hedges surveyed in 2012

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Figure 1

 Cities Revealed photography copyright The GeoInformation Group, 2010

Hampstead Heath Hedgerow Survey

'True' hedges

Key

-  Hedges planted or replanted since the late 1940s
-  Hedges probably with at least some older trees and shrubs

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Figure 2



Hampstead Heath Hedgerow Survey

Boundaries and individual trees shown on the OS maps of the 1860s

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- Key
- Boundaries with trees
 - Boundaries with few or no trees
 - Trees
 - 1 Boundary between the two Cohen's Fields
 - 2 Saxon Ditch
 - 3 Western end of Hedge 2

Figure 3

Cities Revealed photography copyright The GeoInformation Group, 2010





Figure 4

Hampstead Heath Hedgerow Survey

'Hedges' present today which probably contain significant remnants (trees or shrubs) of features present in the 1860s

Blue: boundary with trees in 1860s

Yellow: boundary without trees in 1860s

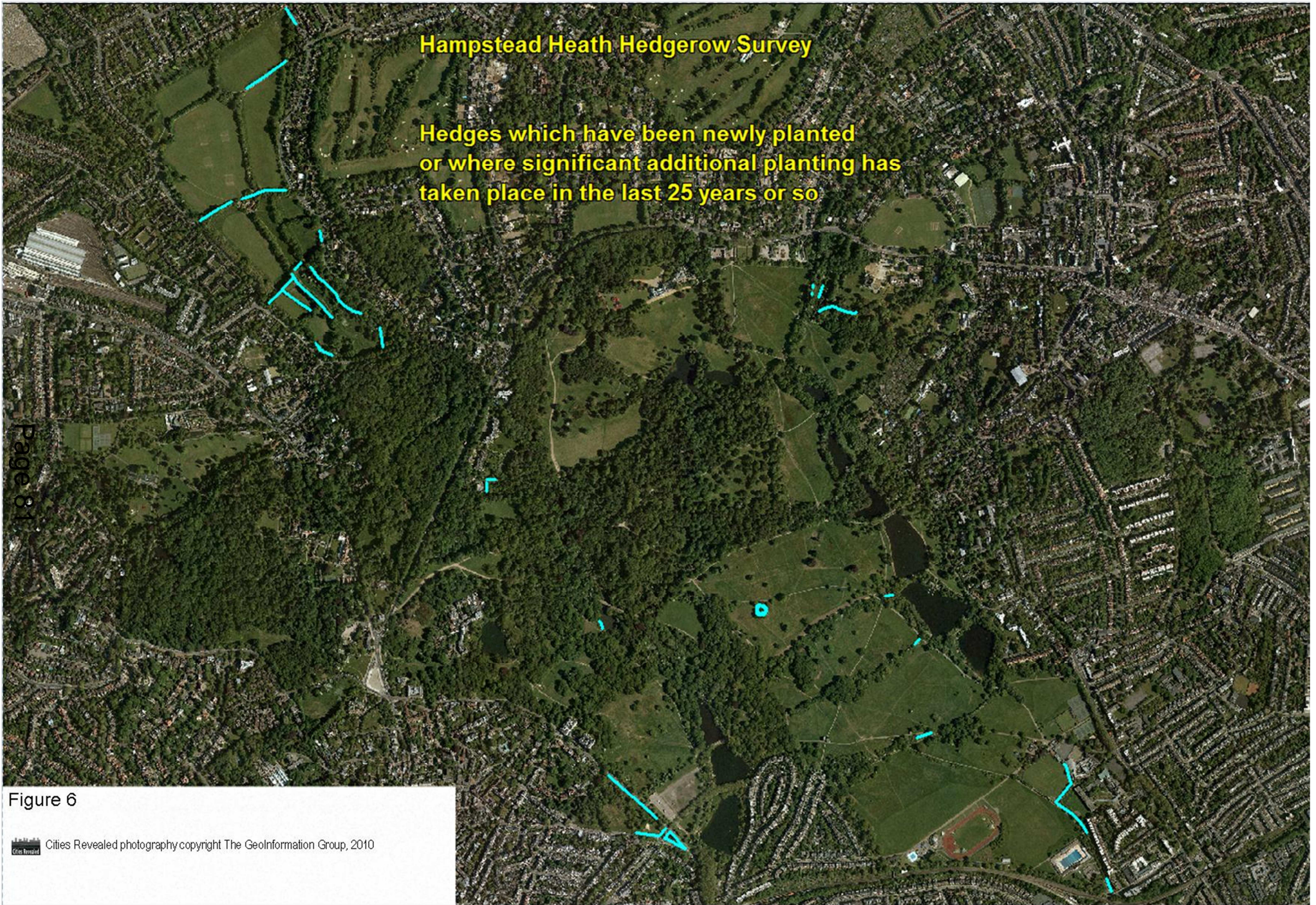
Figure 5

Hampstead Heath Hedgerow Survey

Hedges which have been newly planted
or where significant additional planting has
taken place in the last 25 years or so

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Figure 6



Hampstead Heath Hedgerow Survey Hedges with unusual species of trees

- Wild service
- Wych elm
- Crab apple

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Figure 7



Cities Revealed photography copyright The GeoInformation Group 2010



Hampstead Heath Hedgerow Survey

Nine hedges of particular value for biodiversity

Figure 8

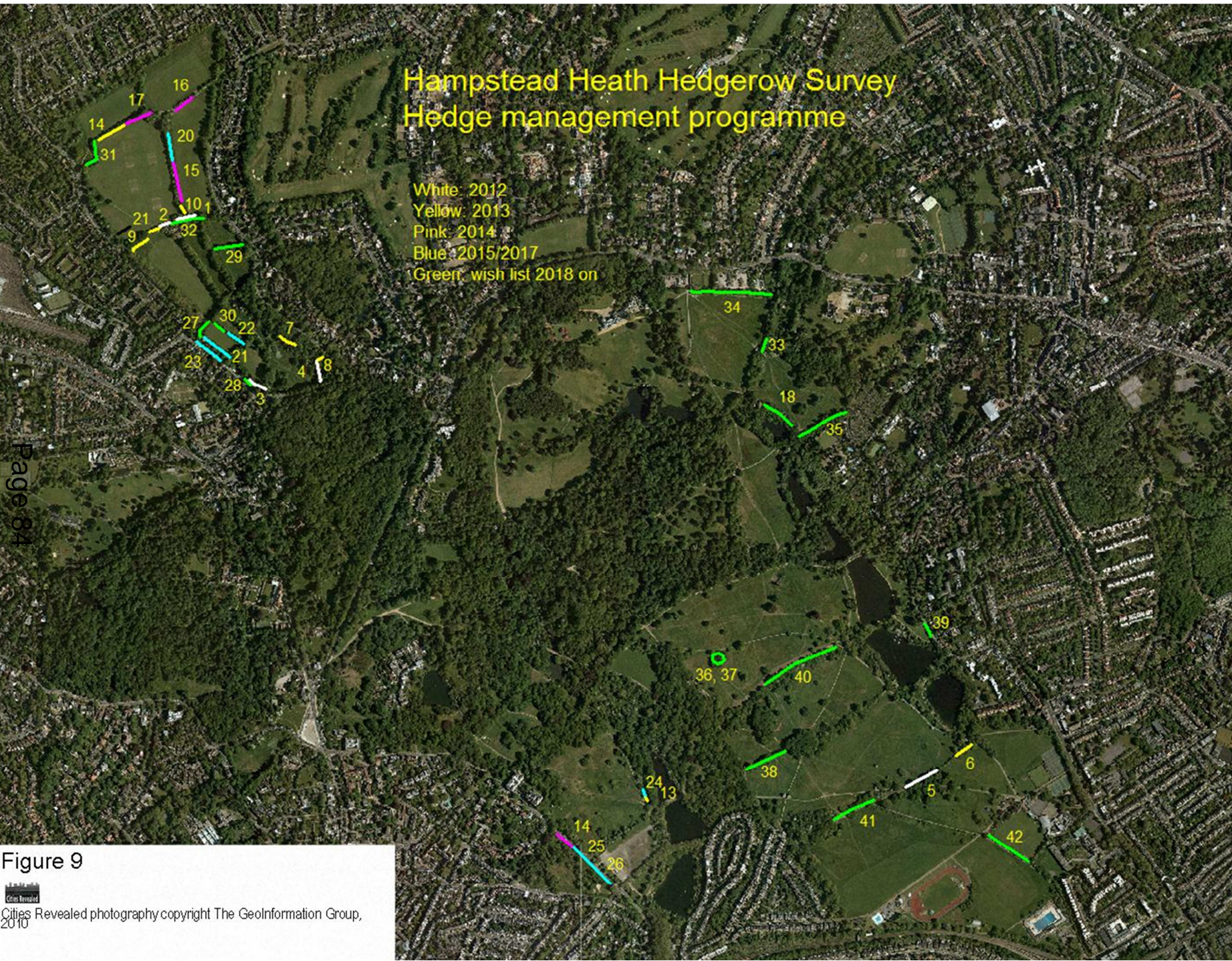
Hampstead Heath Hedgerow Survey Hedge management programme

White: 2012
Yellow: 2013
Pink: 2014
Blue: 2015/2017
Green: wish list 2018 on

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Figure 9

Cities Revealed
Cities Revealed photography copyright The GeoInformation Group, 2010



Tables

Table 1 Nine examples of hedges with special biodiversity features

Map ref	Name/location	Special characteristics
1	Parliament Hill, Hedge 2, eastern section	South-east facing; thick; undisturbed on both sides; adjacent to conservation grassland and scrub; good for birds and enjoyed by birdwatchers
2	Parliament Hill, Hedge 2, western end	South-east facing; thick; undisturbed on both sides & protected by dense bramble; adjacent to conservation habitat; probably good for birds; very old hawthorn and hazel stools
3	Parliament Hill, Hedge 3	South-east facing; thick; south side undisturbed and protected by bramble, especially at western end; adjacent to conservation grassland and scrub; good for birds, including whitethroat, and enjoyed by birdwatchers
4	Kenwood, Stock Pond path hedge	Wonderful old wild service tree
5	Extension, south-west of ???	Large number of wych elms, shrubs and trees; several nice hazel and hawthorn stools; relatively undisturbed; good band of bramble and thistle on NE side
6	Extension, west of central path	Very high number of veteran trees; wild service
7	Extension, short section of hedge east of main path	Very old crab apple; possibility of taking cuttings
8	Extension, between two small meadows	South facing; relatively undisturbed (no footpath on south side); conservation grassland on each side
9	Extension, north of cricket pitches	South facing; ditch on south-facing side

Table 2 Management 2012-2022

Hampstead Heath hedgerow management 2012-2022											
Hedgerow	Map ref	Year	Planned or done?	Description of work & objective	Laying	Thickening	Coppicing	Topping	Other	Totals laying, thickening & coppicing	
2012											
Extension north of horse ride, NW of Bothy	1	2012	Completed	Topping				42			
Extension north of horse ride, north of Bothy	2	2012	Completed	Topping				29			
Extension nr SW corner	3	2012	Completed	Topping				36			
Extension from Pond 1 SW alongside ditch	4	2012	Completed	Laying	35						
Hedge 1 adjacent to copse	5	2012	Completed	Laying	70						
Totals 2012					105			107		105.00	
2013											
Hedge 1, end by pond	6	2013	Completed	Laying, to retain hedge character and thicken up	39						
Extension, old hedge by pond 2	7	2013	Completed	Laying, to preserve remaining old hedgerow shrubs	49						
Extension, hedge in wood from Pond 1 to path	8	2013	Planned (autumn)	Laying, to preserve remaining hedgerow shrubs	15						
Extension, south of horse ride western end	9	2013	Completed	Laying, to retain hedgerow character	53						
Extension, north of horse ride north-west of Bothy	2	2013	Planned (autumn)	Topping, to retain hedgerow character and keep hedge thick				32			
Extension, hedge by cricket nets	10	2013	Completed	Coppicing west side, provide light to stream, preserve any remaining shrubs, and cut back from cricket nets			33				
Extension, north end, hedge by stream, west half	14	2013	Completed	Laying south side, to preserve hedgerow shrubs and provide light to stream	78						
Extension, north end, hedge by stream, east half	17	2013	Planned (autumn)	Laying south side, to preserve hedgerow shrubs and provide light to stream	78						
Topping as per 2012		2013	Planned (autumn)	Topping, to retain hedgerow character and keep hedge thick				107			
Note - proposed Stock Pond path deferred till after 2014											
Totals 2013 excluding Stock Pond Path					312	0	33	139		345.00	

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40.

2014										
Preachers Hill, west edge, north section	14	2014	Planned	Laying and gapping up, to preserve hedgerow character and thicken up	56					
Extension, hedge east of cricket nets - south section	15	2014	Planned	Laying west side, to retain hedgerow character and preserve any remaining hedgerow shrubs	107					
Extension, near NE corner	16	2014	Planned	Laying and gapping up, to preserve hedgerow character and thicken up	57					
Pryor's Field, boundary with Mixed Pond, south end	13	2014	Planned	Laying and coppicing, to thicken up and preserve remaining hedgerow shrubs	12					
Topping as per 2013		2014	Planned	Topping to retain hedgerow character and keep hedge thick					139	
Total 2014					232				139	
Totals 2012-2014										
					532	0	33	385		565.00
2015/7, excluding topping										
Stock Pond Path hedge	18	2015/7	Planned	To be discussed; to thicken hedgerow and reduce cut-throughs		142				
Extension hedge east of cricket squares, north section	20	2015/7	Planned	Laying west side, to retain hedgerow character and preserve any remaining hedgerow shrubs	77					
Extension, hedge east of horse ride latitude of Children's Playground	21	2015/7	Planned	Laying, to preserve old shrubs and retain hedgerow character	89					
Extension, south-west of Children's Playground	22	2015/7	Planned	Laying, to preserve hedgerow character	54					
Extension, intermittent tree line west of horse ride latitude of Children's playground	23	2015/7	Planned	Planting and laying. To create new hedge in place of desultory tree line	84					
Pryor's Field, next section of boundary with Mixed Pond	24	2015/7	Planned	Laying and coppicing, to preserve remaining shrubs and thicken up						
Preachers Hill, west edge, middle section	25	2015/7	Planned	Laying and gapping up, to preserve hedgerow character and thicken up	77					
Preacher's Hill, west edge, southern section	26	2015/7	Planned	Possible laying, to preserve hedgerow character. Will cause temporary major change in appearance	57					
Total 2015/7					438					as required

Wish list 2018-2022, excluding topping									
Extension, near NW corner	31	from 2018	Planned	Laying to maintain hedge density	85				
Extension, north of bothy	32	from 2018	Planned	Laying to maintain hedge shrubs and density	89				
Extension, between 2 small fields	29	from 2018	Planned	Lay north edge to preserve hedgerow shrubs; fell several small trees to provide light	84				
Extension, near Children's Playground	30	from 2018	Planned	Re-lay to preserve hedge density	34				
Extension, horse ride NW corner	27	from 2018	Planned	Re-lay to increase hedgerow density	55				
Extension, SW corner	28	from 2018	Planned	Re-lay to preserve hedgerow shrubs (having left for several years to re-grow)	19				
West of Harry's compartment	33	from 2018	Planned	Lay and gap up	7				
North edge of west Cohen's Field	34	from 2018	Planned	Coppice willow at west end and blackthorn at east end		20			
East edge of east Cohen's Field	35	from 2018	Planned	Coppice streamside to provide light to stream		144			
Tumulus, outer hedge	36	from 2018	Planned	Remove sycamore saplings & trees and bramble growing into gorse				92	
Tumulus, inner hedge	37	from 2018	Planned	Lay, do not gap up due to archaeological interest	73				
Hege 2, west end section	38	from 2018	Planned	Consider major coppicing and laying from north side, to preserve ancient hedgerow shrubs, which are heavily shaded, and thicken up centre	121				
Millfield Lane, opposite Men's Pond	39	from 2018	Planned	Gap up				38	
Hedge 3, eastern half	40	from 2018	Planned	Lay or coppice several sections on north side to take back from cycle track, thicken up and provide grassy adjacent habitat	50				
Hedge 1, central section	41	from 2018	Planned	Lay south side to thicken up and provide better edge habitat. Reduce expansion into grassland on north side	122			15	
Hedge by Lido, north section	32	from 2018	Planned	Lay/coppice and gap up to thicken hedge at bottom and prevent access within hedge	136				
Total, wish list 2018-2022					875	164		145	as required

Agenda Item 9

Committee(s):	Date(s):
Hampstead Heath, Highgate Wood and Queen's Park Management Committee	23 rd September 2013
Projects Sub (Policy and Resources) Committee	26 th September 2013
Subject: Update on the Hampstead Heath Ponds Project	Public
Report of: Superintendent of Hampstead Heath	For Decision
Summary <p>This report summarises the current position and details activity that has taken place over the past few months.</p> <p>Atkins, the designers, have produced a Shortlist Options Report which describes various options on each chain and the trade-offs between the different heights of embankments and work required elsewhere on the chain.</p> <p>Atkins will now work with City officers and stakeholders to distil two preferred options on each chain. A report will then be drafted outlining these preferred options that will be brought before both the Consultative Committee and your Committee in October and November 2013, seeking views and approval to commence the wider public consultation over the winter period.</p> <p>This report also includes details of the Quantitative Risk Assessment, an update on procurement of the construction contractor, and further information on the environmental surveys that are taking place as part of the project.</p> Recommendation <p>Members approve the approach being undertaken to proceed with the project at "deliberate speed" and receive the formal Quantitative Risk Assessment and accompanying Position Statement.</p>	

Main Report

Background

1. Approval was given by the Court of Common Council on 14 July 2011 for the project to upgrade the pond embankments on the Hampstead and Highgate chains. The aims of the project are to reduce the current risk of pond overtopping, embankment erosion, failure and potential loss of life downstream; ensure compliance with the existing requirements of the Reservoirs Act 1975 together with the additional expected requirements under the Flood and Water Management Act 2010 while meeting the obligations of the Hampstead Heath

Act 1871; and improving water quality. At the same time it seeks to achieve other environmental gains through, for example, habitat creation.

Current Position

2. Following the report to your Committee in July 2013, a revised programme of activities and actions was agreed and supported by the independent Panel Engineer, which allowed for an extended period for formal consultation with the public and stakeholders. This has to date focussed on the process of developing design options and their respective “trade-offs” with wider consultation to be held from late November 2013 for a period of 12 weeks on the two preferred options for each chain of ponds. The intention is to submit a formal planning application by the end of May 2014 and subject to consents, for site works to commence early April 2015.
3. To comply with this programme will involve an element of working at risk as the City will need to instruct the Design Team to continue developing a preferred option in advance of knowing the outcome of the public consultation process.

Shortlist Options Report

4. As part of options development phase, Atkins have produced a Shortlist Options Report. This report is an outcome of consultation with Heath users, Heath staff and the Ponds Project Stakeholder Group. In the report, Atkins have started to look in more detail at options on both pond chains and the trade-offs between the different heights of embankments and environmental work required to mitigate the impacts of works. The initial report was drafted following a workshop with the Ponds Project Stakeholder Group on 22nd July 2013. The formal responses to this report have been analysed and a final report issued by Atkins. This report can be found on the City of London’s website at www.cityoflondon.gov.uk/pondsproject in the Reports section.
5. In the report, the options for the Highgate chain are centred on a proposal to raise the dam at the south end of Model Boating Pond by between 2m and 3metres. Depending on the height of this dam raising, the dams for Men’s Bathing Pond, and Highgate No. 1 Pond will also need to be raised by between 0.5 and potentially 2m. Proposed works in the upstream ponds could then be limited to include new spillways at Stock Pond and Ladies Bathing Pond, and only minimal works to fill low spots on the dam at Bird Sanctuary Pond.
6. On the Hampstead chain the options are centred on a proposed new embankment in an existing gully known as the Catchpit. In one option, the embankment is proposed to be 5.6m high, as measured from the lowest point in the gully. This provides additional storage in a largely hidden, wooded area which will then minimise works needed on the existing dams themselves. In any case the spillway capacities at Vale of Health and Viaduct Pond need to be increased. Depending on the proposed amount of raising at Mixed Bathing Pond (proposed to be limited to between 1m to possibly 2 metres, there are various options for dam raising and spillway design for Hampstead No 1 and Hampstead No 2 to pass the flood flows safely. Minimising potential tree loss along the avenue of Plane trees due to works on the Hampstead No. 2 dam has been flagged as important by the Ponds Project Stakeholder Group.

7. Within the Stakeholder Group the current Chairman has unfortunately been unable to attend meetings in recent weeks. The Deputy Chairman has had to also stand down and therefore with the support of the current Chairman of the Group, Karen Beare from Fitzroy Farm Residents' Association has been approached and has agreed to step into the vacant Deputy Chairman role and fulfill the Acting Chairman position.

Consultation Process

8. The next step and final stage in the options development phase involved a further workshop with the Ponds Project Stakeholder Group on 14th September. Following this, Atkins will then produce a report with two options on each chain for formal consultation over the winter period, with the wider public and stakeholders, with the intent of selecting a preferred option which will form the basis of a planning application to be submitted by the end of May 2014.
9. This report will form the basis of an Options Report that will be submitted to the Ponds Project Stakeholder Group in early October, the next meeting of the Consultative Committee and your meeting in November 2013, before wider consultation with the public commences in November 2013. Given the disparate interests represented on the PPSG a consensus agreement on the preferred options is unlikely.
10. Independent specialist consultants with expertise in the field of consultation are being appointed to manage the formal consultation exercise, which will start at the end of November, ensuring it is meaningful and fair. This consultation will be far reaching – aiming to engage as many Heath-users and local residents as possible - and will involve a range of tools such as exhibitions, questionnaires, workshops, posters, leaflets, newspaper editorial and adverts and social media.

Procurement of a Construction Contractor

11. The Competitive Dialogue process is now underway with four contractors entering the discussions. This process was initially delayed, when three out of four tenderers withdrew within a short space of each other during the initial tender process, earlier this year. A new tender process has now commenced and the first stage, which introduces the prospective contractors to the project and allows them an opportunity to deliver a presentation, took place on 13th and 14th August 2013.
12. The second stage – which goes into more detail on both technical and financial aspects of each applicants approach to the project, took place over four days in mid-September. Following these discussions, participants will then submit their tender proposal in October which will be evaluated with a view to an appointment to assist with the detailed design options, in early December.

Project Gateway Report

13. Following the appointment of the successful contractor, and concurrent with the public consultation exercise, the Design Team will need to continue with work

with early contractor involvement on the design details. This is essential in enabling the contractor to bring their experience to the project in terms of potential value engineering and programming of works on site. It has always been recognised that this is work that is undertaken at risk, but maintains progress at “deliberate speed” to mitigate the corporate risk.

14. At the conclusion of the consultation process when the views of the wider public have been analysed, it will be possible to bring together this information and the work of the Design Team and construction contractor to prepare a Gateway 4c Report. This will identify the preferred option that the City will need to approve as the basis for submission of a planning application in May 2014.

Quantitative Risk Assessment

15. As part of the agreed methodology for this project, Atkins have prepared a baseline Quantitative Risk Assessment (QRA). It is unusual for a QRA to be prepared at this stage of the design process, as they are a tool to be used at the end of the options appraisal, to understand the trade-off between cost and residual risk. There is no statutory requirement for a QRA to be prepared, the City has to comply with the industry guidelines set out in the Institution of Civil Engineers “Flood and Reservoir Safety 3rd edition” to meet its obligations in terms of reservoir management. A copy of the QRA and a Position Statement from our retained Panel Engineer Dr Andy Hughes is also appended to this report.
16. In the spirit of cooperation and consultation with the Ponds Project Stakeholder Group, the City asked Atkins to prepare the base-line position for the two chains of ponds on Hampstead Heath. As such, this initial assessment does not reflect the completed process and is best considered as a discussion document at this stage. This document was release to the Ponds Project Stakeholder Group, Consultative Committee and wider public in early September 2013.
17. The QRA has confirmed the work undertaken by CARES, that the City of London holds an unacceptable liability: the probability of collapse of the Hampstead Heath Ponds chains under both shorter and longer return period storm events, and a notable risk to life, particularly residents in basement flats, from such collapse.

Surveys

18. Specialist surveys set out below have been commissioned so that the Design team can fully understand the current position on the Heath. The information gathered during these surveys will supplement the extensive data already held by Heath staff.
 1. Bird surveys – completed. Awaiting report
 2. Great crested newt survey – completed. Report received.
 3. Aquatic survey – on site now.
 4. Archaeology – desk study complete. Report received.
 5. Water Quality – on site now.

6. Invasive species – on site now.
7. Invertebrate review - desk study complete. Report received.
8. Phase 1 Habitat – on site now
9. Bat survey – on site now.
10. Topographical Survey – on site now.
11. Silt-testing – on site now
12. Bathymetric (hard and soft bed levels of each pond to be surveyed) – due on site late September.
13. Fungi – on site now.

Potential for Judicial review and other Legal challenges

19. The possibility of a Judicial Review application remains. Based on previous statements, it is likely that this would focus on the relationship between the Reservoirs Act 1975 and the Hampstead Heath Act 1871, and the assessment of risk / appropriate safety standards under national industry guidelines on which the project is based. It is not clear when such a challenge might materialise, this may be a judgement based on the final designs and whether they are considered acceptable in terms of their impact on the Heath landscape.
20. At the time of drafting this report the City of London has convened a meeting between the Heath & Hampstead Society, their QC, with City officers and our QC on the 20th September 2013 to discuss the process and approach the City is following.

Resources

21. At this stage the estimated overall project costs remain unchanged at £15.12m (+/- 20% at Q4 2010 prices). As part of the production of the options report the Design Team have undertaken a preliminary “overall order of costs of works”. At this early stage of the project process on a ‘like for like basis the figures are commensurate with the estimated costs previously reported (excepting the inclusion of the additional fees incurred resulting from the wider consultation process and the building of an additional dam on the Hampstead chain of ponds). The preliminary overall order of cost figures still, however, require significant refinement.
22. The detailed Urgency report covering the reallocation of expenditure within the approved budget estimate forms a separate report. This includes additional costs as a result of wider consultation on the development of options, the delayed contractor appointment and need to bring forward some site investigations works.

Corporate & Strategic Implications

23. The works support the strategic aim ‘To provide valued services to London and the nation’. The scheme will improve community facilities, conserve/enhance landscape and biodiversity and contribute to a reduction in water pollution whilst meeting the City Corporation’s legal obligations. The risk of any dam breach and serious downstream flooding of communities (and consequent harm to the City’s reputation) is mitigated.

Implications

24. The risk of embankment failure at Hampstead Heath is assessed as a high risk on the City of London Corporation's Strategic Risk Register. In addition to the current measures to mitigate risks, there are other risks that also need to be considered, including the resources needed for on-going consultation and the potential threat of legal challenge that could still potentially delay the project.

Conclusion

25. The options development phase is continuing following the extension of the consultation period, by approximately six months, to allow for more meaningful discussion with stakeholders and the wider public. The formal consultation, due to take place over the winter is now in the planning stages with an external consultant appointed to lead on this. In the meantime the appointment of the construction contractor continues, with an appointment due in November, and the environmental surveys on the Heath well under way.

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Hampstead Heath Ponds Quantitative Risk Assessment

Interim Report



Notice

This document and its contents have been prepared and are intended solely for The City of London Corporation's information and use in relation to the Hampstead Heath Ponds Project.

This document has 30 pages including the cover.

Document history

Job number: 5117039			Document ref: 001			
Revision	Purpose description	Originated	Checked	Reviewed	Authorised	Date
1.0	Draft for Discussion	TRW	TB	MJW	MJW	19-07-13
2.0	Initial Draft	TRW	TB	MJW	MJW	06-08-13
3.0	Initial Draft v2 (not issued)	TRW				
4.0	Draft v3	TRW	TB	MJW	MJW	28-08-13
5.0	Final Issued	TRW	TB	MJW	MJW	29-08-13

Client signoff

Client	The City of London Corporation
Project	Hampstead Heath Ponds Project
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Glossary

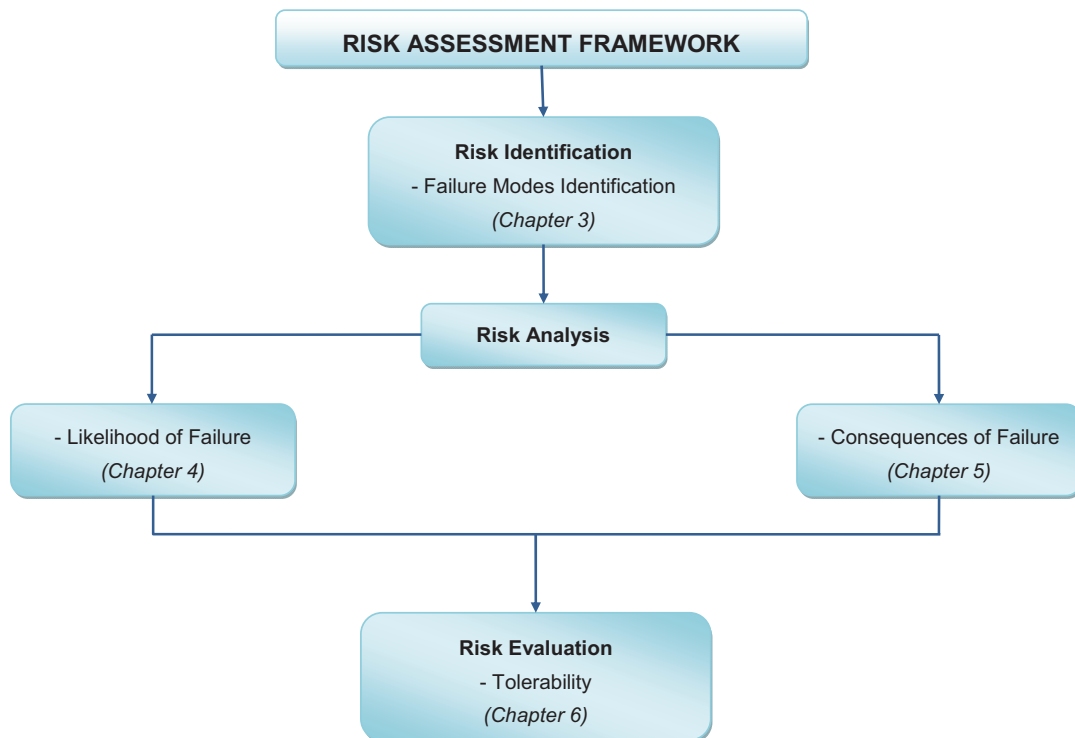
ALARP	As Low As Reasonably Practicable
ASLL	Average Societal Loss of Life
DEFRA	Department for Environment, Food and Rural Affairs
D	Depth (m)
F-N	Frequency – Number of lives likely lost (generally presented as a chart/graph)
FEH	Flood Estimation Handbook
FSR	Flood Studies Report
HSE	Health and Safety Executive
NRD	National Receptor Database
PAR	Population at Risk
PMF	Probable Maximum Flood
RARS	Guide to Risk Assessment for Reservoir Safety Management (DEFRA 2013)
Q	Discharge/flow (m ³ /s)
QRA	Quantitative Risk Assessment
RARS	Risk Assessment for Reservoir Safety Management
SRP	System Response Probability
V	Velocity (m/s)
W	Width of flood plain (m)

Executive Summary

This report sets out the findings of an interim Quantitative Risk Assessment (QRA) for the Hampstead Heath ponds. QRA is normally undertaken at the end of an options appraisal to understand the trade-off between cost and residual risk; the approach allows an insight into the proportionality of costs of competing measures.

In this instance the stakeholders requested an initial QRA to understand the scale of the risk currently faced. The assessment has been undertaken using the latest DEFRA Guidelines for QRA and sensitivity testing has been undertaken to try to show the scale of the outcomes, taking account of the fact that the QRA is not normally used in this way. It is to be noted that the purpose of this document is to provide the methodology and results of the QRA of the existing Hampstead Heath Ponds and is not to be used for design purposes. It is also to be noted that the DEFRA guidelines, and the QRA process, are not a statutory requirement for the management of reservoirs within the UK.

The process adopted for the QRA is presented in the below flow chart. This is the typical process for a QRA as defined in the latest DEFRA Guidelines for QRA. The flow chart also indicates the chapter within the report where the specific areas are covered.



The QRA demonstrates that the most likely mode of failure of the individual ponds is from prolonged overtopping, with high velocity of water flow over the embankments during a flood event. Hydraulic modelling previously carried out as part of the fundamental review shows that for many storms, including those of relatively low return periods, many of the dams are overtopped and may fail.

The QRA also shows that the consequences on failure of the ponds, in terms of Average Societal Loss of Life (ASLL), are very sensitive to the number of basement flats within the inundation zone.

It should be noted that the ASLL estimates do not include potential life loss related to transport infrastructure. These losses could be considerable given the number of 'A' roads, underground and mainline links, and stations, notably Kings Cross and St Pancras stations, within the at risk area.

An example 'cascade' failure of all the ponds within the Highgate chain has been assessed to provide an indication of the tolerability of the event. The results from the assessment have been plotted on the so-called F-N chart which assigns various combinations of probability (F) and consequence (N – number of lives likely lost) to bands of societal tolerability. These bands are not statutory limits as societal tolerance can vary in different situations, but once again allows an insight for the purposes of comparing costs and outcomes for competing options. The limits used here are taken from the RARS Guidelines which are based the Health and Safety Executive Guidelines "Reducing Risks, Protecting People: HSE's decision making process" (R2P2, 2001). For the example scenario, the risk calculated in this way falls in the unacceptable range indicating that the risk of failure of all the ponds in Highgate chain, in their current condition, is unacceptable when applying the methodology within the DEFRA guidelines.

The relationship for "no warning" time has been adopted as the City of London have suggested that the maximum warning time that could be provided to residents downstream of the Hampstead Heath Ponds in the event of a failure is around 40 minutes. This warning limit was based on earlier work by Haycock which examined the time it would take to overtop the embankments if all the ponds were emptied before the design flood arrived. The report went on to state "The maximum time delay of 41.4 minutes for the overtopping of the crests will not provide enough additional warning to make a positive significant difference to the emergency action plan or meet the statutory reservoir requirements. It has been stated that a warning time of two hours is required to make a significant difference to the number of people at risk." As it is not practicable to expect the ponds to be empty prior to the arrival of the design flood, and the nature of the City of London's monitoring system, the "no warning" approach is considered appropriate.

1. Introduction

- 1.1 This interim Quantitative Risk Assessment (QRA) has been carried out in accordance with the Guide to Risk Assessment for Reservoir Safety Management (RARS) published in March 2013 by the Environment Agency / DEFRA (DEFRA 2013). This guide is the latest industry standard for assessing the risk from failure from reservoirs within the United Kingdom. It is an update of the Interim Guide to Quantitative Risk Assessment for UK Reservoirs (DEFRA 2004).
- 1.2 This QRA has been carried out for the existing condition of the Hampstead Heath Ponds. QRA can be applied in this way, however, it is more typically applied to compare the risk associated with various options to allow for risk-based decision-making. This QRA should not be used as the basis of design.
- 1.3 The QRA has been undertaken in accordance with a 'Tiered' assessment methodology as detailed in the RARS guide.

2. Approach

- 2.1 The risk assessment framework approach adopted for this assessment is presented in Figure 2.1.

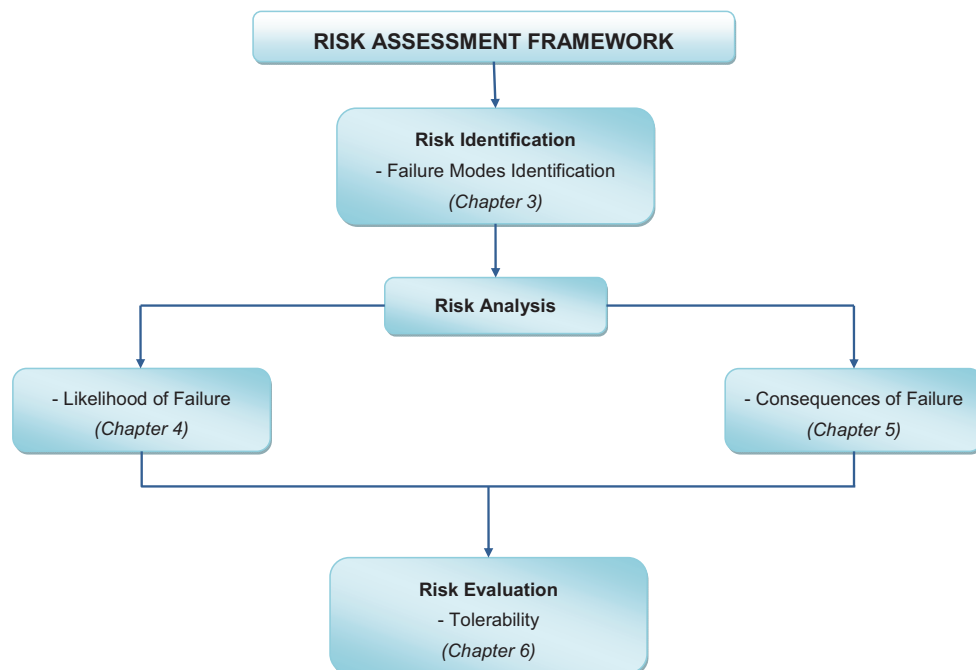


Figure 2.1 – Risk Assessment Framework

3. Failure Modes Identification

- 3.1 The first stage of the QRA involves identifying the potential failure modes. This was carried out based on the type of construction and the current condition of the ponds. The identified potential failure modes for the ponds are presented in Table 3.1.

Table 3.1 – Identified Failure Modes

Description of Failure Modes			Credible?	Justification	Significant?	Justification
Initiation (threat)	Progression	Breach				
<i>Internal</i>						
Normal Operating Conditions	Internal erosion in embankment	Embankment collapse	Yes	Take forward for a precautionary analysis	Yes	Take forward for a precautionary analysis
<i>External</i>						
Flood	Overtopping of crest and erosion of embankment fill	Embankment collapse	Yes	Embankment downstream face could erode	Yes	Likely to have large consequences
Normal Operating Conditions	Slope failure and erosion from either loss of freeboard or reduction in seepage path length	Embankment collapse	Yes	Take forward for a precautionary analysis	Yes	Take forward for a precautionary analysis

4. Likelihood of Failure

- 4.1 The assessment of the likelihood of failure of each of the Hampstead Heath Ponds is presented below. For simplicity the assessment is based on the individual likelihood of failure of each pond and does not take into account any failure of upstream ponds in the cascade. For example, for the overtopping probabilities of failure it is assumed that upstream ponds overtop but do not fail.

Internal Erosion

- 4.2 Internal erosion involves the loss of material from within an embankment to the point where the erosion is so severe that it causes the embankment to fail. For internal erosion to occur a defect needs to be present within the embankment to initiate the erosion, such as a crack or poorly compacted layer. Normal seepage through the embankment can then concentrate at the defect causing an increase in flow velocity and subsequent removal of fine material. If the embankment material downstream of the defect is not able to filter and trap the material being removed it will continue to erode and a 'pipe' will open up in the embankment. Once the pipe gets to a point where it is too large to support itself it collapses, causing the embankment to fail.
- 4.3 To carry out a detailed assessment of the probability of failure of an embankment from internal erosion a significant amount of information is needed regarding the

embankment material properties. This information does not currently exist, and the probability is considered from inspection to be of low likelihood in normal operating conditions. Therefore for the Hampstead Heath ponds the probability of failure from internal erosion has been assessed in accordance with a Tier 2 assessment of the RARS guideline.

- 4.4 The Tier 2 approach requires assessment of the embankment form of construction (intrinsic condition) and the current condition of the embankment (current condition) to estimate the probability of failure. This is carried out by firstly applying the recommended typical probability based on historical failure probabilities and then applying several factors based on the construction and condition of the embankment being assessed. Typically the factors take account of the type of embankment and culverts through the embankment and any known existing issues such as seepage and settlement. Where possible existing data has been used to apply these factors, such as embankment settlement derived from existing annual crest topographic surveys.
- 4.5 The results obtained by carrying out the Tier 2 assessment on each of the Hampstead Heath embankments are provided in Table 4.1.

Table 4.1 – Internal Erosion Probabilities of Failure

HIGHGATE CHAIN	Internal Erosion	
Stock Pond	1.50E-06	1 in 667,000
Ladies Bathing Pond	1.50E-06	1 in 667,000
Bird Sanctuary	2.00E-07	1 in 5,000,000
Model Boating	6.00E-07	1 in 1,667,000
Men's Bathing Pond	2.00E-05	1 in 50,000
Highgate No. 1 Pond	1.50E-06	1 in 667,000

HAMPSTEAD CHAIN	Internal Erosion	
Vale of Health Pond	1.50E-06	1 in 667,000
Viaduct Pond	1.50E-06	1 in 667,000
Mixed Bathing Pond	1.50E-06	1 in 667,000
Hampstead No. 2 Pond	1.50E-06	1 in 667,000
Hampstead No. 1 Pond	6.00E-07	1 in 1,667,000

Overtopping

- 4.6 The failure of the pond embankments due to overtopping is a function of the following:
- Overtopping depth;
 - Overtopping velocity;
 - Duration of overtopping;
 - Embankment fill material properties; and
 - Type and condition of the surface grass covering.
- 4.7 In order to assess the probability of failure of the embankments in relation to the above the overtopping depths, velocities and durations were assessed for various flood events, termed loading conditions, based on information obtained from the flood model as presented in the Assessment of Design Flood Report (Atkins 2013). The results of this are shown in Table 4.2.
- 4.8 In the Design Flood Assessment Report, application of the Defra guidance for the estimation of the 1,000 year and 10,000 year floods resulted in a similar overtopping

depths for both the events. This comes about because the 1,000 year flood was based on Flood Estimation Handbook (FEH) rainfall and the 10,000 year flood on Flood Studies Report (FSR) rainfall. Similar overtopping depths for a 1,000 and 10,000 year events gave rise to an anomaly in the QRA as it would be expected that the overtopping depths would be different for different events. In order to overcome this anomaly, the 1,000 year flood was re-estimated using FSR rainfall so that it was consistent with the 10,000 year flood.

- 4.9 The results indicate that overtopping of the ponds occurs in the Highgate chain for the majority of flood events, whilst overtopping only occurs during the 1,000 year flood and larger events for the Hampstead chain ponds.
- 4.10 Without undertaking specific 'in-situ' overtopping tests on the existing embankments the amount of overtopping that would cause erosion of the embankments and their subsequent failure is not known. In addition there are no definitive publications in probabilistic terms for overtopping failure probabilities of embankments due to the varying nature of embankments and associated grass cover. However, from literature typically an embankment of average grass cover is able to handle velocities of up to a maximum of around 2 to 3 m/s, for a duration of around 2 to 5 hours, before erosion will begin to occur and lead to embankment failure (CIRIA 1987). Whitehead et al. indicates that the critical flow velocity for the failure of grass cover can vary between 1.5 and 2.5 m/s for varying grass quality and a duration of 5 hours (Whitehead et al., 1976).
- 4.11 It should be noted however that the above provides an indication of when erosion will begin to occur but not when the erosion will be severe enough to cause complete failure of the embankment. General industry accepted figures indicate that failure would definitely occur if 0.6 metres of flow depth overtopped an average earth embankment, and a probability of failure of around 0.25 (25%) would be likely with an overtopping depth of 0.1 to 0.3 metres.
- 4.12 In order to estimate the probability of failure of the Hampstead Heath pond embankments from overtopping an assessment of their resistance to erosion and failure was undertaken in relation to the above typical overtopping failure velocities and depths. As the embankments vary in geometry, fill materials and vegetation cover quality, a generally conservative approach was taken in order to develop one probability of failure relationship that covers all the embankments. This assumes the steepest of the existing embankment downstream slopes, relatively granular embankment fill material and medium to poor embankment grass cover, with some large trees on the embankment.
- 4.13 Based on the above, the system response probability (SRP) curve shown in Figure 4.1 was produced to estimate the probability of failure of a Hampstead Heath pond embankment due to different flow velocities, or 'loadings', in accordance with the Tier 3 approach (DEFRA, 2013). The curve indicates that there is a 20% to 40% probability of overtopping causing erosion of the embankment fill, and subsequent complete failure of the embankment, when the overtopping velocity is 2 to 3 m/s (crest overtopping depth of around 0.15m to 0.25m). The probability increases to 100% when the velocity is 5 m/s (crest overtopping depth of around 0.4m).

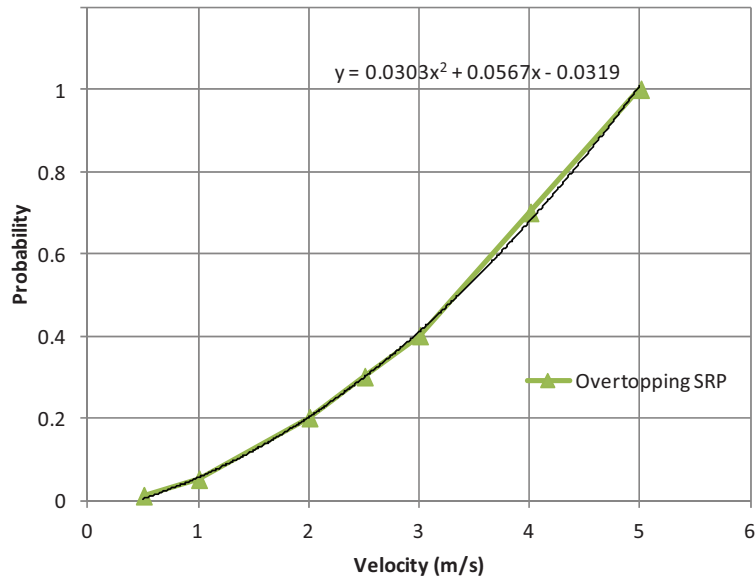


Figure 4.1 – Overtopping System Response Probability Curve

4.14 The above SRP curve was applied to the velocities provided in Table 3.2 for the range of flood events. The resulting probabilities were then multiplied by the annual exceedance probability of the flood event occurring, for each flood event, to obtain the annual probability of failure from the flood event. For example, for 1 in 1,000 year flood event the probability of failure from overtopping was multiplied by 1/1,000 or 0.001.

4.15 The PMF event does technically not have an annual exceedance probability. However, the RARS Guideline (DEFRA, 2013) suggests that when undertaking a QRA an annual exceedance probability for the PMF event should be based on the following average assignments of return periods given in Table 2 of Floods and Reservoir Safety (ICE 1996):

0.5 PMF – 1 in 10,000 AEP

0.3 PMF – 1 in 1,000 AEP

0.2 PMF – 1 in 150 AEP

These relationships are then to be plotted on lognormal probability paper and extending to the PMF. This results in the annual exceedance probability for the PMF of 1 in 400,000 (2.5×10^{-6} /year). This has been adopted for this QRA.

4.16 The results were then summed across the range of flood events to estimate the 'area under the curve' of a plot of return period versus overtopping SRP. This area represents the overall probability of failure of the embankment due to overtopping, for all flood events. The results for each of the Hampstead Heath embankments are provided in Table 4.3.

4.17 The results indicate that the overall probability of failure from overtopping for all flood events for all ponds ranges from 7.69×10^{-2} , or 1 in 13, for Stock Pond, to 1.25×10^{-5} , or 1 in 80,000 for Highgate No. 1 Pond. It is to be noted however that the probabilities in Table 4.3 are based on the overtopping from the floods flows for the particular reservoir only and not any additional overtopping from breach and failure of any of the embankments within the chain.

Table 4.3 – Overtopping Probabilities of Failure

HIGHGATE CHAIN	Overtopping	
Stock Pond	7.69E-02	1 in 13
Ladies Bathing Pond	3.75E-03	1 in 270
Bird Sanctuary	1.07E-02	1 in 95
Model Boating	7.54E-03	1 in 130
Men's Bathing Pond	6.81E-04	1 in 1,500
Highgate No. 1 Pond	1.25E-05	1 in 80,000

HAMPSTEAD CHAIN	Overtopping	
Vale of Health Pond	8.70E-05	1 in 11,500
Viaduct Pond	4.25E-04	1 in 2,355
Mixed Bathing Pond	2.16E-03	1 in 465
Hampstead No. 2 Pond	1.44E-03	1 in 695
Hampstead No. 1 Pond	8.08E-05	1 in 12,500

Slope Instability

- 4.18 Slope instability involves the slip of a section of the embankment allowing an escape of water which causes erosion of the slipped area and eventual failure of embankment. Slope instability can occur for several reasons however for an existing embankment it is normally due to a change in conditions such as an increase in the phreatic surface (the level of water in the embankment due to normal seepage) within the embankment as a result of increased internal seepage. This causes the embankment to saturate decreasing the shear strength of the embankment material. If the associated loading is greater than the strength of the embankment material the embankment will become unstable and slip, causing failure of the embankment.
- 4.19 To carry out a detailed assessment of the probability of failure of an embankment from slope instability a significant amount of information is needed regarding the embankment material properties. As this information does not currently exist for the Hampstead Heath ponds a simplified approach has been adopted in accordance with a Tier 2 assessment of the RARS guideline.
- 4.20 The Tier 2 approach requires assessment of the embankment form of construction, including the geometry, and the current condition of the embankment to estimate the probability of failure. This is carried out by firstly applying the recommended typical probabilities based on historical failure probabilities and then applying several factors based on the type and condition to the embankment being assessed. A factor is also applied based on the frequency of the surveillance of the reservoir, to take account of possible detection of the early signs of slope instability which may lead to subsequent remedial action which could prevent the failure from occurring.
- 4.21 The results obtained by carrying out the Tier 2 assessment on each of the Hampstead Heath embankments are provided in Table 4.4. The results are for failure during normal operating conditions assuming the ponds are full to their top water level.

Table 4.4 – Slope Instability Probabilities of Failure

HIGHGATE CHAIN	Stability	
Stock Pond	1.39E-05	1 in 70,000
Ladies Bathing Pond	3.70E-05	1 in 30,000
Bird Sanctuary	8.33E-07	1 in 1,200,000
Model Boating	3.17E-05	1 in 32,000
Men's Bathing Pond	2.78E-05	1 in 36,000
Highgate No. 1 Pond	5.05E-06	1 in 200,000

HAMPSTEAD CHAIN	Stability	
Vale of Health Pond	5.56E-05	1 in 18,000
Viaduct Pond	3.70E-05	1 in 30,000
Mixed Bathing Pond	5.56E-06	1 in 180,000
Hampstead No. 2 Pond	2.78E-05	1 in 36,000
Hampstead No. 1 Pond	4.44E-06	1 in 225,000

- 4.22 The results indicate that the probability of “sunny day” failure from slope instability for the ponds ranges from 5.56×10^{-5} , or 1 in 18,000, for Vale of Health Pond, to 8.33×10^{-7} , or 1 in 1,200,000 for Bird Sanctuary Pond.

Summary

- 4.23 A summary of the annual probability of failure, from all failure modes and loading conditions, of each of the individual Hampstead Heath Ponds is provided in Table 4.5. Since these are independent (mutually exclusive) events the total probability is the sum of the individual probabilities.

Table 4.5 – Summary of Probability of Failure for each Individual Pond

HIGHGATE CHAIN	Overtopping	Internal Erosion	Stability	TOTAL	
Stock Pond	7.69E-02	1.50E-06	1.39E-05	7.69E-02	1 in 13
Ladies Bathing Pond	3.75E-03	1.50E-06	3.70E-05	3.79E-03	1 in 265
Bird Sanctuary	1.07E-02	2.00E-07	8.33E-07	1.07E-02	1 in 95
Model Boating	7.54E-03	6.00E-07	3.17E-05	7.58E-03	1 in 130
Men's Bathing Pond	6.81E-04	2.00E-05	2.78E-05	7.29E-04	1 in 1,400
Highgate No. 1 Pond	1.25E-05	1.50E-06	5.05E-06	1.91E-05	1 in 52,000

HAMPSTEAD CHAIN	Overtopping	Internal Erosion	Stability	TOTAL	
Vale of Health Pond	8.70E-05	1.50E-06	5.56E-05	1.44E-04	1 in 7,000
Viaduct Pond	4.25E-04	1.50E-06	3.70E-05	4.63E-04	1 in 2,200
Mixed Bathing Pond	2.16E-03	1.50E-06	5.56E-06	2.16E-03	1 in 465
Hampstead No. 2 Pond	1.44E-03	1.50E-06	2.78E-05	1.47E-03	1 in 680
Hampstead No. 1 Pond	8.08E-05	6.00E-07	4.44E-06	8.59E-05	1 in 11,650

- 4.24 The results indicate that the failure due to overtopping from flooding is the greatest threat to the ponds by several orders of magnitude.
- 4.25 The results also indicate that the annual probabilities of failure for the individual ponds are high when considering the Health and Safety Executive (HSE) requirement that the probability of life loss for the individual at greatest risk should be less than 1 in

10,000/year (1×10^{-4}) (HSE 2001). Whilst an estimate of the loss of life for the individual dams has not been calculated their failure could result in loss of life. However, as the ponds are in cascade it is unlikely that failure of a single individual pond would occur without subsequent failure of other ponds downstream, and possibly further loss of life. This is described further below.

Cascade Failure Scenario Probability

- 4.26 The above probabilities of failure are for failure of individual ponds only, from all credible failure modes and loading conditions. However, as the ponds are in a chain or 'cascade' the failure of one pond is likely to cause failure of one, or more, downstream ponds. In order to assess this, two example scenarios have been developed incorporating the above failure modes; one for the Highgate chain and one for the Hampstead chain.
- 4.27 The Highgate chain scenario assesses the failure of Stock Pond and subsequently all the downstream 'cascade' ponds in the Highgate chain. The failure probabilities for Stock Pond are based probabilities of failure presented in Section 4 and include flood overtopping (PMF and 100 year events), normal operating failure; slope instability and internal erosion. The failure probabilities of subsequent downstream ponds were based on the overtopping depth and velocities from the breach of the upstream ponds and the relationship outlined in Section 4.
- 4.28 The probabilities failure of all ponds in the Highgate chain for the above scenario are presented in Table 4.6.

Table 4.6 – Summary of Probability of Failure for Highgate Chain Cascade Failure Scenario

Flood	4.41E-02	1 in 23
Normal Operating - Internal Erosion	6.07E-07	1 in 1,650,000
Normal Operating - Stability	1.50E-09	1 in 670,000,000
TOTAL	4.41E-02	1 in 23

- 4.29 The Hampstead chain scenario assesses the failure of Vale of Health Pond and subsequently all the downstream 'cascade' ponds in the Highgate chain, but not including Viaduct Pond as it is not 'downstream' of Vale of Health. The failure probabilities for Vale of Health Pond are based probabilities of failure presented in Section 4 and include flood overtopping (PMF and 1,000 year events), normal operating failure; slope instability and internal erosion. The failure probabilities of subsequent downstream ponds were based on the overtopping depth and velocities from the breach of the upstream ponds and the relationship outlined in Section 4.
- 4.30 The probabilities failure of all ponds in the Hampstead chain for the above scenario are presented in Table 4.7.

Table 4.7 – Summary of Probability of Failure for Hampstead Cascade Failure Scenario

Flood	5.18E-04	1 in 1,930
Normal Operating - Internal Erosion	6.07E-07	1 in 30,200
Normal Operating - Stability	1.50E-09	1 in 670,000,000
TOTAL	5.51E-04	1 in 1,800

- 4.31 Once again the results from both of the above example scenarios indicate that overtopping from flooding is the main contributing failure mode for each pond chain. Stock Pond is more likely to fail during the lower annual exceedance probability floods than Vale of Health due to the greater amount of overtopping during these events.

- 4.32 The results of the above probability assessment for these example scenarios are combined with the outcome of the consequence assessment to arrive at an assessment of the tolerability of the risks, as discussed below.

5. Consequences

Average Societal Loss of Life Assessment

- 5.1 The assessment of the consequences of failure of the Hampstead Heath ponds has been based only on the possible loss of life at this stage of the QRA. The methodology for assessing the loss of life is provided below in accordance with the RARS guidance (DEFRA, 2013). Details of the hydrological and hydraulic modelling, and associated embankment breach model, developed to assess the potential loss of life are provided in Appendix A.

Methodology

- 5.2 The approach to calculating the Average Societal Loss of Life (ASLL) is in accordance with the Guide to Risk Assessment for Reservoir Safety Management (DEFRA 2013).
- 5.3 The methodology can be split into two stages, as outlined below:
- Stage 1: Population At Risk (PAR): the flood outlines were extracted from the InfoWorks 1D-2D model for the various flood annual exceedance probabilities and overlain on the National Receptors Database (NRD) mapping. A count of the number and type of properties within the flood outline was then carried out and for each residential property the PAR was calculated based on 2.35 people per property. This number was then reduced to account for assumed occupancy rate (80%) during an event. For each non-residential property the number of people affected is linked to the floor area of the property (one person per 40m²). This number is then reduced based on an assumed occupancy rate of 25%. This approach is set out in Table 9.2 of the guidance. This provides the number of people at risk per property, which is then combined with the fatality rate in the next stage to estimate the loss of life.
 - Stage 2: ASLL: the maximum depth (D) and velocity (V) values from the InfoWorks 1D-2D model were extracted and applied to the properties within the flood outline. For each property the Q/W value (discharge per unit width, or a measure of average depth of flow across an area) was calculated based on $0.67 \cdot (D \cdot V)$; the relationship between DV and Q/W is specified in Table 9.2 of the guidance. The fatality rate based on the Q/W value was then assessed using the No-Warning curve in Figure 9.1 of the guidance (as shown in Figure 5.1). For each property the PAR was then combined with the fatality rate to estimate the ASLL.

The relationship for “no warning” time has been adopted as the City of London have suggested that the maximum warning time that could be provided to residents downstream of the Hampstead Heath Ponds in the event of a failure is around 40 minutes. This warning limit was based on earlier work by Haycock which examined the time it would take to overtop the embankments if all the ponds were emptied before the design flood arrived. The report went on to state “The maximum time delay of 41.4 minutes for the overtopping of the crests will not provide enough additional warning to make a positive significant difference to the emergency action plan or meet the statutory reservoir requirements. It has been stated that a warning time of two hours is required to make a significant difference to the number of people at risk.” As it is not practicable to expect the ponds to be empty prior to the arrival of the design flood, and the nature of the City of London’s monitoring system, the “no warning” approach is considered appropriate.

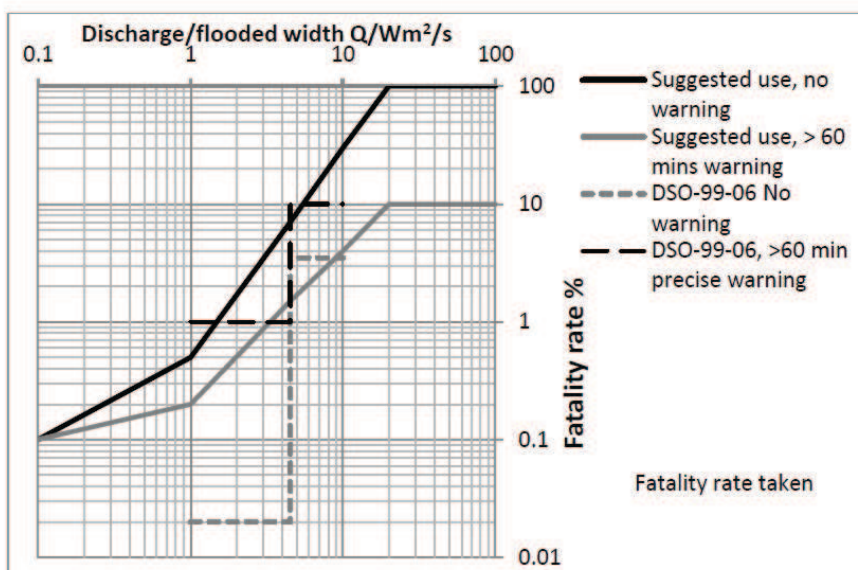


Figure 5.1 - Figure 9-1 from the guidance (suggested relationship of fatality rate to force of water)

5.4 The following property types were removed from the assessment: electricity sub-stations, ponds, public telephone, play areas, post boxes and shelters.

It should be noted that this ASLL does not include potential life loss related to transport infrastructure. These losses could be considerable given the number of 'A' roads, underground and mainline links, and stations, notably Kings Cross and St Pancras stations, within the at risk area. In the normal case, where the QRA is used for comparing options for resolving risk, these 'transient' consequences would effectively balance out in the comparison.

5.5 For the PMF event, there are 8,645 flats, out of a total of 11,115 residential properties in the at risk area. As this property type dominates the residential total, the assumptions applied to flats are likely to have a significant impact on the ASLL totals. At this stage, with the large number of properties involved, the differentiation between basement, ground floor and above ground floor properties has been based on assumed distributions between property types. The assumptions have been assessed using sensitivity tests.

5.6 The NRD indicates which flats are ground floor and which are upper, but does not indicate which are basement flats below ground level. Site visits and existing knowledge of the risk area suggests that there are a large number of basement flats in this area of London. The level of risk for a basement flat is clearly greater than that of ground and above floor flats. This is assessed in one of the sensitivity tests.

5.7 It was not considered appropriate to include all of the 8,645 flats in the assessment as a large number will be above ground floor and may not be directly impacted by flood waters. The sensitivity of ASLL totals to the inclusion of above ground floor flats has therefore been tested.

5.8 The baseline case includes all properties (i.e. houses, terraces, non-residential properties) plus all flats specified as being on the ground floor; these are the base elements of all the sensitivity tests. The following sensitivity tests were completed:

- Baseline case plus 100% fatality rate applied where DV is greater than 7. Table 9.2 of the RARS guidance (DEFRA 2013) states that where $DV > 7$ a building is completely destroyed. It was therefore considered appropriate to apply a 100% fatality rate where buildings are completely destroyed;

- Baseline case with increased fatality rate to 100% for 25% of ground floor flats assuming these are basement flats in the at risk area. This was considered a reasonable estimate of the percentage of basement flats in relation to ground floor flats in the study area and the 100% rate is also reasonable given the 'underground' nature of the flat with very limited egress;
 - Baseline case plus above ground floor flats at the following percentage inclusions: 75%, 50% and 25%. It was considered appropriate to include a percentage of the above ground floor flats, as a proportion would be affected by the flood waters.
- 5.9 No sensitivity tests were considered necessary for the assumptions relating to Non-Residential Properties.

Results

- 5.10 The following tables summarise the results from the assessment for the PMF event only. Table 5.1 compares the number and type of properties in the at risk area between the overtopping and breach scenarios during the PMF event.

Table 5.1 - Property types in the PMF at risk area

Property Type	Number in at risk area – PMF Overtopping	Number in at risk area - PMF Breach
Non-residential properties	848	1,504
Residential Properties	8,443	11,115
Total Flats	6,601	8,645
Flats (ground floor only)	2,318	2,976
Total Properties	9,291	12,619

- 5.11 Table 5.2 compares the ASLL under the PMF overtopping scenario, including the variations based on the differences in assumptions regarding flats.

Table 5.2 - PMF Overtopping ASLL for each sensitivity test

No.	Scenario	Maximum PAR	PAR (including occupancy factor)	ASLL
1	Baseline Case (including flats specified as ground floor)	14,333	8,960	5
2	Baseline Case (plus 100% fatality where DV>7)	14,333	8,960	5
3	Baseline Case (plus increased fatality rate of 100% for 25% of flats – basement flats)	14,333	8,960	1,095
4	Baseline Case (plus 25% of above ground floor flats)	16,849	10,973	6
5	Baseline Case (plus 50% of above ground floor flats)	19,365	12,986	7
6	Baseline Case (plus 75% of above ground floor flats)	21,881	14,999	8

- 5.12 Table 5.3 compares the ASLL under the breach scenario, including the variations based on the differences in assumptions regarding flats.

Table 5.3 - PMF Breach ASLL for each sensitivity test

No.	Scenario	Maximum PAR	PAR (including occupancy factor)	ASLL
1	Baseline Case (including flats specified as ground floor)	20,139	12,074	19
2	Baseline Case (plus 100% fatality where DV>7)	20,139	12,074	37
3	Baseline Case (plus increased fatality rate of 100% for 25% of flats – basement flats)	20,139	12,074	1,414
4	Baseline Case (plus 25% of above ground floor flats)	23,469	14,738	23
5	Baseline Case (plus 50% of above ground floor flats)	26,800	17,402	27
6	Baseline Case (plus 75% of above ground floor flats)	30,130	20,067	32

The results in the above tables indicate that the ASLL is highly sensitive to the number of basement flats in the inundation area. This number is also seen to be the most representative of the actual situation likely to be encountered if a breach were to occur. As a result the *Baseline Case (plus increased fatality rate of 100% for 25% of flats – basement flats)* results have been adopted for the example scenario below.

Cascade Failure Scenario Consequences

- 5.13 Assessment of the PAR and ASLL has been undertaken for various pond breaches associated with the example scenarios of failure of Stock Pond and Vale of Health Pond and subsequent failure of all other ponds in the chains, as described in Section 4. The results are presented in Table 5.4 and 5.5.

Table 5.4 – Breach ASLL for Highgate Chain Cascade Failure Scenario

No.	Scenario	Maximum PAR	PAR (including occupancy factor)	ASLL
<i>1 in 100 year flood causing overtopping failure of Stock Pond and all Highgate chain ponds to breach</i>				
3	Baseline Case (plus increased fatality rate of 100% for 25% of flats – basement flats)	17,564	10,596	1,244
<i>Sunny day slope stability failure of Stock Pond causing all Highgate chain ponds to breach</i>				
3	Baseline Case (plus increased fatality rate of 100% for 25% of flats – basement flats)	15,769	9,344	1,079
<i>Sunny day internal erosion failure of Stock Pond causing all Highgate chain ponds to breach</i>				
3	Baseline Case (plus increased fatality rate of 100% for 25% of flats – basement flats)	0	0	0

Table 5.5 – Breach ASLL for Hampstead Chain Cascade Failure Scenario

No.	Scenario	Maximum PAR	PAR (including occupancy factor)	ASLL
<i>1 in 1,000 year flood causing overtopping failure of Vale of Health Pond and all Hampstead chain ponds to breach</i>				
3	Baseline Case (plus increased fatality rate of 100% for 25% of flats – basement flats)	17,353	10,549	1,271
<i>Sunny day slope stability failure of Vale of Health Pond causing all Hampstead chain ponds to breach</i>				
3	Baseline Case (plus increased fatality rate of 100% for 25% of flats – basement flats)	13,921	8,549	1,044
<i>Sunny day internal erosion failure of Vale of Health Pond causing all Hampstead chain ponds to breach</i>				
3	Baseline Case (plus increased fatality rate of 100% for 25% of flats – basement flats)	0	0	0

5.14 The results from Table 5.4 and 5.5 were annualised in relation to the associated probability of failure, for the associated failure mode, to enable addition of the ASLL numbers. The total annualised loss of life was then divided by the total annual probability of failure to obtain a single ASLL for the failure of all the ponds in the chain, when taking into account the possible failure modes for the scenario, and their probabilities of occurring. The resulting ASLL for the Highgate chain scenario was 709 and for the Hampstead chain scenario, 830.

6. Risk Tolerability

Societal Risk

6.1 As described in the RARS guideline (DEFRA 2013), to assess the tolerability of failure of the ponds the results of the probability of failure and ASLL are plotted on an F-N, as shown in Figure 6.1. The societal risk point plotted on the chart falls into one of the following three categories as divided by the 'ALARP' boundaries:

- A1 'Broadly Acceptable' – risks compared with these that people live with every day, and that they regard as insignificant and not worth worrying about.
- A2 'Unacceptable' – risks are generally believed by individuals and society to be not worth taking regardless of the benefits.
- A3 'Within the range of Tolerability' – individuals and society are willing to live with the risks so as to secure certain benefits, provided that they are confident that they are being properly managed, and that they are being kept under review and reduced still further if and as practicable.

6.2 The above categories are as presented in the RARS guidelines and are adapted from the HSE guidelines "*Reducing Risks, Protecting People: HSE's decision-making process*" (R2P2) (HSE 2001). It is noted that the RARS guidance (March 2013) states:

"For reservoirs below the threshold of 25,000 cubic metres, safety regulation is managed by the Health and Safety Executive (under the Health and Safety at Work (etc) Act 1974) and local authorities (under the Building Act 1984). This guide, and in particular the Tier 1 assessment, was designed with these applications in mind and should also be considered applicable to owners of non-classified reservoirs."

- 6.3 A key principle in achieving Tolerable Risk under the HSE Guidelines (HSE, 2001) is "*reducing risks as low as reasonably practicable*" (ALARP). This principle is discussed in the R2P2 guidelines (HSE 2001) included in Appendix 3 of that document.
- 6.4 The assessment of tolerability of the example cascade failure scenario presented in Section 4 and 5 is shown in Figure 6.1. The probability of failure of the Highgate chain ponds is 4.41×10^{-2} as detailed in Section 4 and the ASLL 709 as described in Section 5. The probability of failure of the Hampstead chain ponds is 5.51×10^{-4} as detailed in Section 4 and the ASLL 830 as described in Section 5.
- 6.5 The resulting risks from both example scenarios both plot in the Unacceptable zone, as show in Figure 6.1, with the Highgate chain scenario representing a high risk than the Hampstead chain. This is due to the higher probability of Stock Pond failing due overtopping in lower annual exceedance probability floods than Vale of Health Pond.
- 6.6 The ALARP upper and lower boundaries shown in Figure 6.1 are as presented in the RARS guidelines and are adapted from the HSE guidelines "*Reducing Risks, Protecting People: HSE's decision-making process*" (R2P2) (HSE 2001).

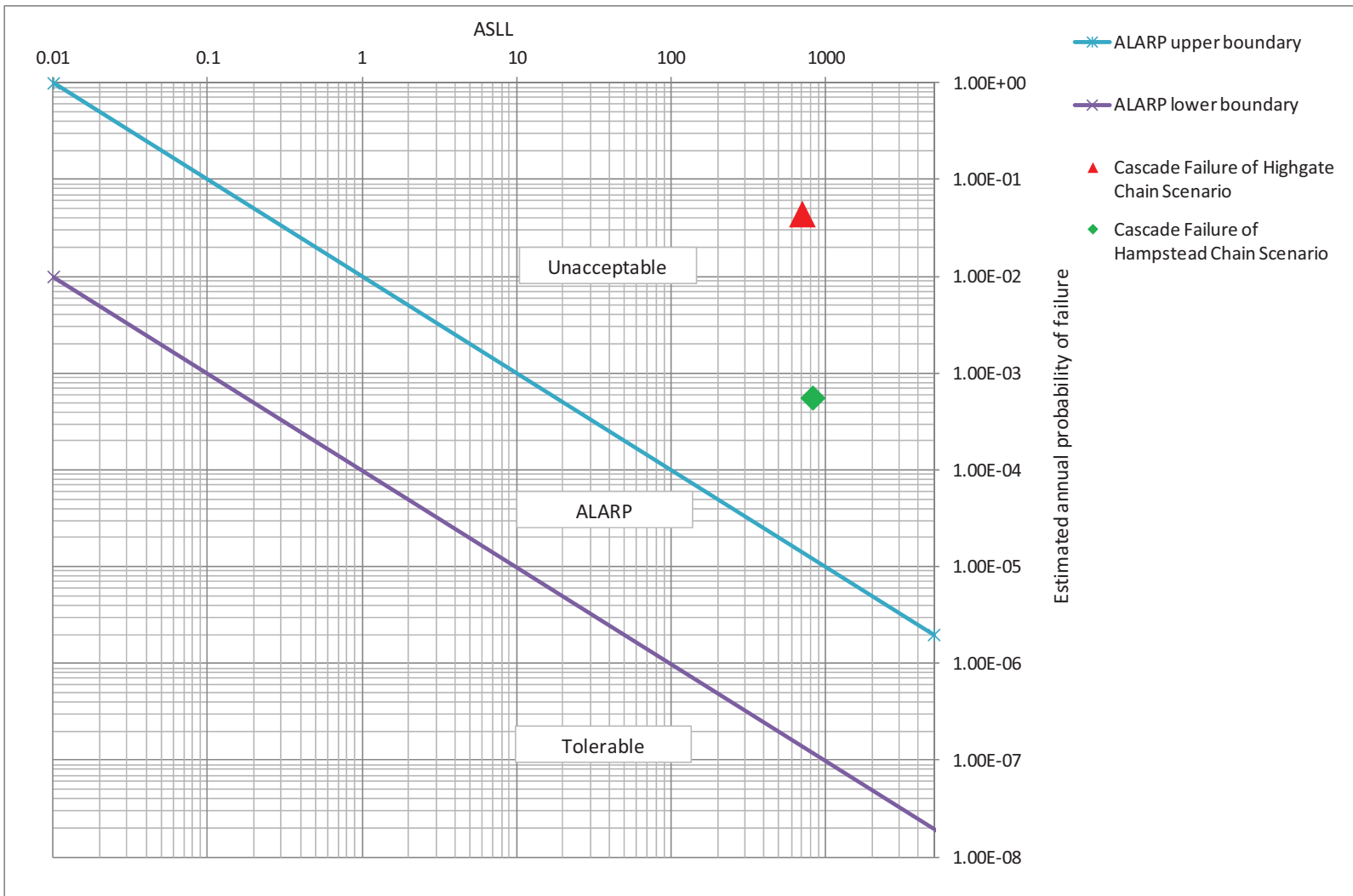


Figure 6.1 Assessment of Risk Tolerability

7. References

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Appendix A – Hydrological and Hydraulic Modelling

Hydrological Modelling

- A1 Hydrological modelling was undertaken to provide input to the hydraulic model and was generated using current industry-standard best practice. The design flood events modelled are the 'standard' extreme events for reservoir safety studies (1 in 1,000 year, 1 in 10,000 year and the Probable Maximum Flood (PMF)) as defined by the Guidance on Floods and Reservoir Safety, and a range of lower return period events (1 in 5 year, 1 in 20 year, 1 in 50 year and 1 in 100 year) which were examined for the purpose of determining the current Standard of Protection (SoP) of each dam.
- A2 The assessment is based on a combination of the Flood Estimation Handbook (FEH)¹ and Flood Studies Report (FSR)² rainfall-runoff methods and is in line with all the appropriate current industry guidelines on normal and extreme flood estimate including:
- Floods and Reservoir Safety, 3rd Edition, ICE, 1996
 - Floods and Reservoir Safety: Revised Guidance for Panel Engineers, Defra, 2004
 - URBEXT2000 - A new FEH catchment descriptor. Calculation, dissemination and application. R&D Technical Report FD1919/TR
 - Flood Estimation Handbook (FEH) Manuals Vols., 1-5, IOH, 1999
- A3 Further details concerning the hydrological modelling can be found in the Atkins report "Assessment of Design Flood", March 2013.
- A4 The critical storm duration for the PMF event, applied in the breach assessment is 9.5 hours. Table A.1 below contains the peak flows for the 100-year, 10,000-year and PMF events.

Table A.1- Summary hydrological inflows

Pond Catchment	Maximum Flow (m ³ /s)		
	1 in 100 year	1 in 10,000 year	Probable Maximum Flood (PMF)
Highgate Chain			
Stock	2.74	6.86	15.54
Ladies Bathing	3.63	9.10	20.35
Bird Sanctuary	5.82	14.53	31.88
Model Boating	6.15	15.65	33.71
Men's Bathing	6.57	17.02	36.48
Highgate No 1	7.02	18.44	39.10
Hampstead Chain			
Vale of Health	0.57	1.45	3.32
Viaduct	0.31	0.78	1.78

¹ The Flood Estimation Handbook (FEH) is the current standard UK method for estimating rainfall, and flood frequency and flows, developed by the Centre for Ecology and Hydrology in 1999.

² The Flood Studies Report (FSR) was the first UK-wide flood estimation method developed in 1975 by IoH. FEH largely supersedes the FSR.

Pond Catchment	Maximum Flow (m ³ /s)		
	1 in 100 year	1 in 10,000 year	Probable Maximum Flood (PMF)
Mixed Bathing	2.46	6.31	14.15
Hampstead No 2	2.81	7.27	16.14
Hampstead No 1	3.34	8.49	18.82

Hydraulic Modelling

- A5 A linked 1D-2D hydraulic model of Hampstead Heath was constructed using InfoWorks RS modelling software, version 12.0.3 as part of the earlier stages of the Hampstead Heath Pond Project. This model has been applied for the breach modelling and ASLL assessment.
- A6 The representation of reservoir as 1-dimensional units linked to the overland flow routes all the way around the perimeter of the reservoir will best represent the overflow from the reservoirs during extreme flood events. Further details concerning the hydraulic modelling can be found in the Atkins report "Assessment of Design Flood", March 2013.
- A7 Flows across the floodplain were modelled in 2D using a 2D simulation polygon with a maximum triangle size of 150m². All ground elevations were taken from the DEM, with no changes made. A universal Manning's n roughness value of 0.02 was used for the entire modelled floodplain area on the Heath. This is a widely recognised value for short-grassed areas with relatively deep flowing water as would be the case in the extreme floods. All channels and the catch pit on the Hampstead Chain were modelled in the 2D domain.
- A8 The only changes to the 1D-2D model for the breach assessment was to extend the 2D domain downstream to the River Thames to allow flood water to propagate to a natural downstream boundary, and apply a higher Mannings 'n' roughness value of 0.05 to account for the built up nature of the downstream area. The LiDAR used to extend the 2D domain is the same data source as that used in the original model. Figure A.1 shows the Hampstead Heath InfoWorks Model schematic, and shows the difference between the original and breach assessment 2D domain extents.



Figure A.1: Schematic showing boundary area included in the hydraulic model

- A9 Flow-time boundary nodes were used to provide each modelled pond with two hydrological inflows:
- A flow hydrograph representing the event runoff from the catchment to each pond (i.e. runoff from land draining into the pond); and
 - A flow hydrograph representing the volume of rainfall that would enter the pond directly from rainfall falling onto the pond surface.
- A10 Model run parameters were the same as those applied in the baseline overtopping modelling.

Overtopping Assessment

- A11 The hydraulic model was run with the PMF event with no breach of dams/embankments to assess the impact of overtopping in isolation, and for comparison against the breach scenario. The difference in ASLL can be used to gauge the residual risks posed by the dams breaching during the PMF. The Sunny Day flows will also be tested to assess the residual effect of the PMF event, and thus identify the risks associated with the PMF event, and the risks related to the retained volume in the ponds.

Breach Assessment

- A12 The breach assessment is based on a worst case scenario in which all the dams/embankments breach. The flow contribution from Kenwood Pond, at the top of

the Highgate chain, is included in the model however the embankment has not been breached.

- A13 Breach parameters were estimated using the Froehlich assessment methodology to calculate breach width. Assumptions include the breach starts 1 hour after the start of overtopping, the time to final breach is 1.5 hours after the start of breaching and the height of the breach is the full height of the dam. The key breach parameters for each pond are displayed in the following table.

Table A.2 - Summary breach parameters

Pond Name	Pond Element						
	Dam length (m)	Dam elevation (mAOD)	Storage Volume (m ³)	Dam height (m)	Breach base level (mAOD)	Breach start time (hrs)	Time to final breach (hrs)
Highgate Chain							
Stock	59.65	81.65	6400	4.5	77.15	3:30	1.5
Ladies Bathing	23.39	76.87	14200	3.73	73.14	5:05	1.5
Bird Sanctuary	60.46	72.57	13000	2.1	70.47	5:10	1.5
Model Boating	73.02	71.87	46000	5.3	66.57	5:40	1.5
Men's Bathing	122.16	68.16	55000	4.7	63.46	5:55	1.5
Highgate No 1	129.98	63.77	42800	3.81	59.96	6:10	1.5
Hampstead Chain							
Vale of Health	129.83	105.44	17800	5.7	99.74	5:50	1.5
Viaduct	65.40	89.97	5000	4.27	85.70	6:00	1.5
Mixed Bathing	69.98	75.46	11900	4.4	71.06	6:00	1.5
Hampstead No 2	104.71	74.91	25400	5.19	69.72	6:00	1.5
Hampstead No 1	120.74	70.91	50600	4.44	66.47	6:40	1.5

POSITION PAPER REGARDING QUANTITATIVE RISK ASSESSMENT FOR THE HAMPSTEAD HEATH PONDS PROJECT

By Dr Andy Hughes, Panel Engineer

EXECUTIVE SUMMARY

Currently dam safety is controlled by the Reservoirs Act, 1975, and there is a “standards based approach” where dams are considered to be “high risk” if lives of 10 or more people are endangered by a reservoir collapse. The future implementation of the Floods and Water Management Act 2010 will alter the definition so that dams are considered to be “high risk” if lives of 1 or more people are endangered.

Quantitative Risk Assessment (QRA) for reservoirs is not currently a statutory requirement. QRA is typically used as best practice for identifying potential failure modes, comparing the risk of reservoir schemes, evaluating the risk of reservoirs prior to, and post, remedial works and prioritising works across a portfolio of reservoirs.

QRA would not normally be undertaken at this stage of the project and was carried out in this instance in response to a request from stakeholders to try to gain an appreciation of the existing risk presented by the Hampstead Heath ponds.

Atkins has undertaken an interim QRA using the latest RARS guidance (2013). Previous studies by CARES/Haycock used the slightly different 2004 Guidance. Both studies confirm that there is a unacceptable risk to life from failure of the ponds during a flood event.

INTRODUCTION

This position paper presents a review by Dr A K Hughes, in his capacity as the currently retained All Reservoirs Panel Engineer for the Hampstead Heath Ponds, on the application of Quantitative Risk Assessment (QRA) for assessment of risks to life presented by the Ponds, taking into account the separate assessment by CARES in 2009 (ref 1) and by Atkins Ltd in 2013 (ref 2).

CURRENT STATUS OF CATEGORISATION OF DAMS

Currently in the UK the risk presented by dams is assessed in accordance with Flood and Reservoirs Safety; An Engineering Guide, 1996, which acts as supporting guidance to the Reservoirs Act 1975. Dams are categorised into four types (Category a to D), depending on the likelihood of a breach causing damage and/or endangering life, with Category A dams having the highest consequence of failure. The assessment of population at risk, made by the Inspecting Engineer under Section 10 of the 1975 Act, is often based on his/her judgement supported by the guidance and any inundation mapping that may be available. Where lives in a community (generally *‘considered to be not less than about 10 persons’*) are considered to be endangered, Category A dams are required to be able to safely pass the design flood. The design flood for Category A reservoirs is the Probable Maximum Flood (PMF) and the dam is required to pass the routed outflow of the PMF.

It should be noted that the recently implemented part of the Floods and Water Management Act, 2010, has revised the categorisation of reservoirs to “high risk” and “not high risk”. High risk reservoirs are those which endanger the life of at least one person.

This is a standards based approach; if there are lives which can reasonably be seen to be endangered the dams should be designed or modified to “virtually eliminate” the probability of collapse. To avoid failure, the excess water which the dam cannot retain in a flood must be passed safely by a spillway, or over and around the dam, without causing the dam to collapse. To virtually eliminate probability of collapse, the PMF has been used as the benchmark for Category A dams since if this extreme low probability event can be safely accommodated it is reasonable to state that probability of collapse has been virtually eliminated.

We all live with risk all the time in our normal lives. In some other areas of life a more risk based approach has been adopted, where an explicit balance, or trade-off, is made between the probability of endangering life and the cost which may be incurred to reduce or remove that risk. The concept of a tolerable level of risk implies that such a balance can be arrived at. Currently the Inspecting Engineer is relied upon to use his/her judgement as to the risk but not to make an explicit trade-off.

In response to this wider view of risk, methodologies have been in development over the last few years, under the aegis of DEFRA. These methodologies offer a more technical and quantitatively based route to assessing types of failure and probabilities of failure for individual dams. The Interim Guide to Quantitative Risk Assessment for UK Reservoirs was published in 2004. Further developments during its trialing, which exposed some difficulties of application in the absence of significant and often unobtainable data, resulted in the issue of the Guide to Risk Assessment for Reservoir Safety Management in 2013 (RARS).

There is no statutory requirement to apply RARS to the categorisation of dams in the UK as the standards based approach is still current for dams with storage capacity greater than 25,000m³.

RARS guides the engineer through a process for estimating probabilities of failure of dams from a number of failure modes, including overtopping leading to collapse. This is a screening tool where the probability estimates remain somewhat subjective. To improve the estimates more investigating is required to reduce levels of uncertainty. RARS is for the moment best used for making comparisons between options, since the subjectivity which is necessarily applied commonly does not have a significant impact on the overall outcome.

OVERVIEW OF STUDIES

Both the CARES report and the Atkins report follow a similar process:

- Adopt the currently available hydrological information
- Assess the probability of failure of the embankments/chain of embankments
- Assess how the water released from the ponds affects the downstream catchment in terms of depth and velocity of flow
- Estimate the number of properties at risk and the number of people at risk from the inundation
- Estimate the likely loss of life based on a relationship between the people at risk and the depths and velocity of possible flows.

There are differences in inputs, processes used for the various steps and the outcomes recorded as noted below.

HYDROLOGY

The starting point for any assessment of the probability of failure of dam embankments is the estimation of the flows to which the system is subjected. The basic process is to establish the rainfall intensities and depths for various return periods, and to estimate based on several factors including soil type, slope, vegetation type, how the rain onto the catchment area runs off the land into the pond systems. For each return period assessed hydrographs are calculated which show the flow rate of water into the system over the duration of the flood.

The CARES study relied on hydrographs and modelled flows derived by Haycock (ref 3) and the Atkins study relied on information from the Atkins Assessment of Design Flood report (ref 4).

As previously commented upon the Haycock study developed higher flows than the Atkins study for the longer return period events; the reason for this is essentially that Haycock assumed that a greater proportion of any rain falling in a storm would run off the Heath and contribute flow to the system than Atkins did when using the industry standard methodology.

PROBABILITY OF FAILURE

Failure modes

The failure modes of an earth embankment generally fall into a few categories: internal erosion of material as water flows through the body of the dam; external erosion of the dam embankment or foundation due to extended durations of water overtopping the embankment crest and instability of the dam slopes. CARES only reviewed erosion due to overtopping and subsequent breach; this is reasonable as in essence the probability of internal erosion or slope instability is not likely to be significant in relation to overtopping. The Atkins assessment included these failure modes for completeness.

Probabilities estimated

In the CARES study the 2004 Interim Guide is used as the basis for the estimation. It is not clear how the cascade effect is included in the assessment although CARES note that the most significant impact on the failure probability is the probability of the uppermost embankment in the chain collapsing.

The Atkins study uses the RARS 2013 methodology and specifically includes the cascade effects, examining the probabilities of failure of individual ponds for different flood events and combining these appropriately to estimate the failure of the cascades. As for the CARES study, Atkins noted that the most significant effect on the probability of failure is the probability of the uppermost embankment in the chain collapsing.

Although slightly different methodologies have been adopted for the assessments, and the resulting probabilities of failure numbers are not exactly the same, both studies concluded that the estimated probability of failure of the Hampstead Heath Ponds are within the unacceptable range.

IMPACT DOWNSTREAM

Both CARES and Atkins produced sophisticated 2D flood models showing how the flows released from failed cascades would spread downstream. The 2D model allows an assessment of extent but more importantly the depth and velocity which are the parameters of the flood flow which most affect likely loss of life. The LISFLOOD model used by Haycock on which CARES based their "persons at risk" and "likely loss of life" is comparable in structure and process to the InfoWorks RS model used by Atkins; InfoWorksRS is widely used in the UK being the modelling suite preferred by the Environment Agency for flood modelling in England and Wales.

Both Atkins and CARES used the current LiDAR data provided by City of London, so the base mapping for both studies is of high quality.

The way in which the breach which releases the water is developed and modelled is dealt with differently in the two studies. The CARES report uses information from Haycock where the breach is instantaneous, thereby releasing the water with great rapidity. In the Atkins study breaches are developed over a period of 1-2 hours, based on the Froelich assessment method, one of the standard breach models.

The CARES report notes that the instantaneous release is likely to result in higher hazard downstream than if a breach develops in a more timed fashion. Clearly there is a significant difference if the breach develops instantaneously or over hours. A slower breach is considered more realistic.

Both CARES and Atkins studies approach the assessment of Population at Risk in a similar way using the same map information about buildings, although the flood envelopes differ due to the differences in input hydrographs and breach modelling as noted above. The Population at Risk were converted to a Likely Loss of Life (LLOL) using the same relationship between Population at Risk and the likely loss of life.

CARES LLOL estimates based on no warning were around 500 however it is unclear what fatality rate was applied to the basement flats and the number of basement flats that were taken into consideration. Atkins LLOL estimate for the PMF and failure of both ponds chains was around 1,400 on the basis that 25% of properties are basement flats and there would be a 100% fatality rate for the inundated basement flats.

It is difficult to compare the estimates in the absence of the details of the number of basement flats and the fatality rate adopted by CARES for inundated basement flats. However, from both studies it is estimated that hundreds, if not thousands, of lives would be lost on failure of the Hampstead Heath Ponds. This is clearly unacceptable in relation to the current guidance.

CONCLUSION

The City of London, as the owner or undertaker for the reservoirs, some of which are currently covered by the 1975 Act, and all of which may be covered by the Flood and Water Management Act 2010, needs to virtually eliminate the probability of collapse. It is noted that eliminating the probability

of collapse will not eliminate flooding downstream from overtopping during extreme events, which could in such events lead to loss of life

As yet the QRA approach is not used for making decisions about whether or not works to dams are required to avoid loss of life, as a threshold approach is currently applied. As such it is not a requirement to quantify the likely loss of life prior to assessing options to virtually eliminate the probability of collapse where lives are reasonably assessed as being at risk.

Risk based approaches such as the QRA are common in other areas of life and DEFRA has been developing the QRA approach since the Interim Guide was published in 2004. However, currently there is no legal requirement for undertaking QRA assessments on reservoirs. Consistent use of the QRA approach over time should improve the reliability and objectivity of the outputs.

Earlier work by Haycock and CARES established that there is a notable probability of collapse of the Hampstead Heath Ponds chains under longer return period storm events and a notable risk to life from such collapse. Atkins has revised the work carried out by Haycock and CARES using current guidance and state of the art methodologies and confirms that there is a notable probability of collapse of the Hampstead Heath Ponds chains under both shorter and longer return period storm events and a notable risk to life from such collapse.

Both CARES and Atkins use the same basic process to attempt to quantify the likely loss of life, although there are differences in inputs and in some details of the guidance between the 2004 and 2013 guides and differences in outputs as a result. Both parties concur that the principal mode of failure of the Hampstead Heath Ponds is erosion due to extended overtopping of the embankments during flood events, and the estimated probabilities of failure are high. In addition, both parties also concur that significant loss of life is estimated upon failure of the ponds, bringing the overall risk of failure into the unacceptable range.

References:

- 1) CARES (July 2009). Flood Risk Assessment for Three Ponds, Hampstead and Highgate.
- 2) Atkins (August 2013). Hampstead Heath Ponds Quantitative Risk Assessment – Interim Report.

Agenda Item 10

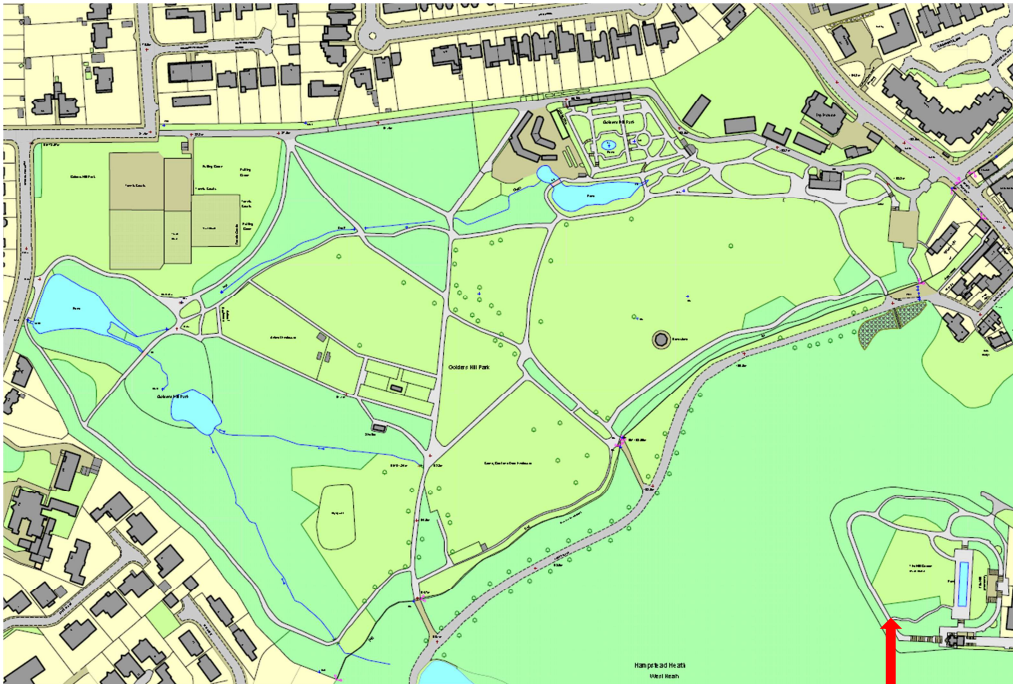
Committee(s):	Date(s):	Item no.
Hampstead Heath, Highgate Wood and Queen's Park Committee	23 rd September 2013	
Subject: Report on maintenance works and future proposals at the Hill Garden & Pergola	Public	
Report of: Superintendent of Hampstead Heath	For Decision	
<p style="text-align: center;"><u>Summary</u></p> <p>This report informs members of construction work undertaken during the last ten years, and proposal to seek a venue licence to hold marriage and civil partnership ceremonies.</p> <p>Recommendation</p> <p>Management Committee:</p> <ul style="list-style-type: none"> • notes the on-going repair and maintenance works undertaken in the Pergola during the last ten years. • endorses the approach to the use of the Hill Garden Pergola for marriage and civil services, the details of which will form a separate report, subject to the views of Consultative Committee being received. 		

Main Report

Background

1. In 1904 William H Lever, later Lord Leverhulme purchased The Hill, a substantial house facing North End Way. He enlisted Thomas Mawson, the first president of the Institute of Landscape Architects to redesign the garden and build the Pergola. Construction was carried out in three phases between 1905 and 1925.
2. The Pergola is situated on the eastern edge of the West Heath area, see Map 1 below. It is a Grade II* Listed structure consisting of a high level walkway, stretching almost 250 metres in length through a colonnade of stone columns. The walk ways are supported off a substructure at lower level that also has an internal walkway in place. Photograph 1 shows the Pergola today, one of the hidden gems of London.
3. After Lord Leverhulme's death in 1925 there were various owners of the Pergola. The City of London Corporation took over its management in 1989 and commenced a major restoration programme costing £1.4M. Works included foundation stabilisation, brickwork repair, and the replacement of stone pillars and oak timbers to match the originals. In 1995 the restored Pergola was reopened for public access.

Map 1: Golders Hill Park / West Heath / Hill Garden



Hill Garden & Pergola

Photograph 1: Pergola today



4. The Hill Garden is included in the English Heritage Register of Parks and Gardens of special historical interest. In early June each year the Hill Garden and Pergola is included in the Open Garden Squares weekend which is organised by the London Parks & Gardens Trust. This year an estimated 300 visitors attended the event.

5. In March 2013 the chairman wrote a comprehensive article for the Ham & High outlining the history of the Hill Garden Pergola –Appendix 1.
6. The Hill Garden and Pergola are popular locations for filming and photography shoots.

Current Position

7. Over the ten years the City Surveyors Department have overseen the completion of the following works in section 1 (green area) and section 2 (pink area) see Plan 1 below. Total costs of works to date for the Pergola and Hill Garden boundary wall total approximately £333,000.
8. When works are being undertaken notices are displayed in key access locations informing members of the public of impending closures to sections of the Pergola, Appendix 2. Also a letter was written to neighboring properties informing owners of planned works – Appendix 3.

Section 1

9. Key stone and re-pointing repairs were completed on the Pergola Bridge in March 2011 at a cost of £10,000.
10. Oak framework repairs were undertaken in February 2012, costing £46,000.00. Repairs included checking all timbers, tightening existing fixings, inserting new fixings and removing and replacing rotten timbers wherever necessary to the whole section, including 4 domed and 2 large tented structures.

11. False windows were re-rendered and painted in April 2013 at a cost of £9,000 – Photographs 2 & 3. Cast iron pipes replaced at a cost of £1,000.
12. A structural survey of the ground level walkway has been carried out costing approximately £9,000.

Section 2

13. The Oak framework was strengthened; works were completed in March 2012 at a cost of £10,000. Works consisted of inserting additional timbers, putting beams back into position and replacing missing screws.
14. Re-laying of the entire paviour pathway was completed in May 2013 at a cost of £50,000. Previously this pathway was a health and safety concern as the path had sunk along the middle causing water to collect, this froze in winter making the path very slippery – Photographs 4 & 5a and b.
15. Coping stones on the wall along the colonnade were made safe at a cost of 3,000 in April 2013.

Hill Garden Boundary Wall

16. Eighty-three meters of boundary wall has been rebuilt at a total cost of £194,000 – Photographs 6 & 7. The works was carried out in three phases.
17. A fourth and final phase of rebuilding forty meters is due to commence in September 2013, at approximate cost of £125,000.

Future Works and Proposals

18. There are additional works that need to be undertaken in the future, subject:

Section 1

- Tanking to high level walkway over ground floor walkway
- Brickwork repairs and repointing
- Repairs to stone balustrades, columns
- Repainting railings
- Paving repairs/replacement
- Stairways – possibly open up and repairs

Section 2

19. Given the age and condition of the structure, as a precautionary measure when wind speeds exceed 50 miles per hour, this section of the Pergola structure is closed to the public.
 - Replace timber framework in section 2
 - Repair stone colonnades

- Brickworks repairs and repointing
- Repairs to stone balustrades and columns to staircases
- Repainting railings
- Paving repairs and replacement
- Stairways – possibly open up and repairs
- Repairs to store rooms underneath Belvedere Structure
- Repairs to Belvedere Structure.

20. These will form the basis of a future Committee report.

Future Use of the Hill Garden Pergola

21. In the Heath Management Plan – Towards A Plan for the Heath, in the Section that gave "A Glimpse of the Future", reference was made that there might be marriage or civil partnerships at the Hill Garden Pergola.
22. The Business Manager has been pro-actively approached by Camden Council who are very keen to pursue this location as a potential venue for marriage and civil partnerships. Having discussed this at both previous Management and Consultative Committee walks with positive feedback, a tentative application has been made for a venue licence.
23. This again could generate additional income to support the management of the Heath, it is however recognised that such an activity must be managed sensitively and not become intrusive to the overriding purpose of the site. The detail relating to this approach will form the basis of a future report.

Corporate & Strategic Implications

24. The Pergola supports several of the City Together Strategy - The heart of World Class City 2008-2014 themes, including: ... *"a support our communities ... protects, promotes and enhances our environment ... is vibrant and culturally rich"*.
25. The Pergola shares the Open Spaces Department Business Plan 2013-2016 aims and objectives for environment: - *"Ensure that measures to promote sustainability, biodiversity and heritage are embedded in the Department's work"*.
26. The Pergola also supports the essential actions and/or aspirational goals in the Hampstead Heath Management Plan Part 1 – Towards a Plan for the Heath 2007-2017, B1 *"Restore and refurbish the Hill Garden and Pergola, the Hill Garden Shelter and Pitt Arch"* and D1: - *"Conserve and enhance the historic and planned elements of the Heaths designed landscapes, while improving their appearance and public facilities"*.

Implications

27. The costs associated with these construction works has all been met from the City Surveyors Department Annual Works Programme ring-fenced maintenance budget.

28. There are no legal, property implications or human resource implications at this stage.

Conclusion

29. This report demonstrates the value of the Annual Works Programme, with ring-fenced maintenance budgets, enabling the City to invest £324,000 to protect, preserve and maintain the Hill Garden & Pergola Grade II* Listed structure in accordance with its statutory obligations for the next generation to enjoy.

30. Designation for use of the location for marriage and civil ceremonies on a limited basis, provides an additional value for this largely undiscovered architectural landscape feature.

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Photograph 2: Re-rendered false windows before works



Photograph 3: Re-rendered false windows after works



Photograph 4: Paviour pathway before replaying works



Photograph 5a and b: Paviour pathway after replaying works



Photograph 5b



Photograph 6: Boundary wall repairs



Photograph 7: Completed boundary wall repairs



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Committee(s):	Date(s):	Item no.
Hampstead Heath, Highgate Wood and Queen's Park Management Committee	23rd September 2013	
Subject: Review of Affordable Art Fair on Hampstead Heath in June 2013 and Proposals for 2014 and Beyond		Public
Report of: Superintendent of Hampstead Heath		For Decision

Summary

This report reviews the success of the Affordable Art Fair that was held at East Heath between the 12th and 16th June 2013. The fair attracted 16,500 (adult) visitors over the course of four and a half days generating £3 million of art work sales by the 113 galleries exhibiting.

The report also sets out the potential proposal from the Affordable Art Fair to hold a further event on the back of the June 2014 art event.

Recommendations

That Committee:

- Note the relative success of the 2013 Affordable Art Fair in welcoming 16,500 (adult) visitors to the Heath and raising additional income for the hire fee of the site.
- Approves the Affordable Art Fair continuing to be held in June and agrees a License for a three further years.
- Approves hosting a second event following the Affordable Art Fair on a three year License and note the plans that are underway with regards to the inaugural GROW London event.

Main Report

Introduction

1. The Affordable Art Fair (AAF) was established in 1999 by Will Ramsay, founder, as a public showcase for contemporary art. Affordable Art Fairs events are now held successfully in Bristol, New York, Amsterdam, Milan, Seattle, Mexico City, Hamburg, Singapore, Hong Kong and Brussels as well as a bi-annual event held in Battersea Park, London.
2. Galleries exhibit original work including paintings, sculpture, photography and prints. AAF creates a relaxed, friendly, enjoyable family environment where the public can browse, enjoy and learn about contemporary art, which is also available for purchase.

3. It is an event which principally supports the visual arts, participation and learning. It is open to the public for four and a half days with two reception evenings, including one charity benefit night.
4. For the three years AAF Hampstead has been on the East Heath Fairground site, the fairs have collectively welcomed a total of 52,000 (adult) visitors with £8.4 million of art work sold by all the participating galleries exhibiting over this time. AAF does not take commission on artwork sold – this figure is solely based on the items sold by all the participating galleries.

Review of 2013

5. The third edition of AAF at Hampstead Heath welcomed 16,500 (adult) visitors over the course of four and a half days and £3 million of art work was sold by the 113 galleries exhibiting. The attendance figure dropped by a significant 2,000 visitors from the November fair in 2012 and was much lower than AAF forecast.
6. Whilst art sales increased slightly, AAF and many of the participating galleries were disappointed in the significant drop in visitor numbers from previous years. AAF are still analysing figures but believe the main reason was hosting this year's fair only seven months after the last one in November 2012. The drop in numbers impacted gate revenue meaning profitability was much lower than forecast (AAF estimated a 10% increase in attendance on 2012 figures).
7. Production costs increased due to potentially hot weather conditions and installing air conditioning (which requires significantly more power and fuel) for temperature control in the marquee. Marketing costs also rose as these can no longer be shared with the Battersea event.
8. Overall AAF made a small profit of just over £8,000. A detailed account of the 2013 AAF is appended to this report.
9. AAF's charity beneficiary was New End School Association, who raised £24,000 (including gift aid), as well as utilising the fair as a platform to promote the fundraising targets of the charity to a wider audience.
10. New marquee and production contractors proved to be very efficient. Making the most of the longer daylight hours at the new June time of year was very beneficial and the contractors were ahead of schedule for the build and breakdown.
11. The drop in gate revenue and the increase in production costs meant that the profitability of the event was compromised and less than 2012. However, overall feedback about the move to June from exhibitors and contractors was good, especially to move the fair away from AAF Battersea and for logistics.
12. 81% of visitors entered the fair using either a complimentary or discounted ticket.

Proposal for 2014 and beyond

13. Based on the success of the 2013 event in June, AAF would like to continue to secure the same dates annually (second week of June) for the forthcoming three years as a minimum. This reflects the success of the event and AAF's commitment to the Heath going forward.

Proposal for 2014 second event

14. Discussions have taken place with AAF about retaining the marquee for an additional week to enable a second event to take place on the back of the AAF in June 2014 and beyond. The Superintendent formally sought approval to the principle of adding a further event in January 2013, which was approved by your Committee and supported in principle by the Consultative Committee, this report finalises these arrangements.
15. The hire period for East Heath Fairground site would be extended by seven days where AAF would take over the site on 29 May 2014 and hand it back on 30 June 2014 before the peak summer season commences on the Heath in July.
16. The potential for a second event that requires only a week extension to the existing Licence could greatly assist in delivering additional revenue to support the Heath, vital at a time when budgets are constantly under pressure.
17. Adding an additional week hire into the License will allow AAF to share marquee overheads. Core venue costs to erect the marquee amount to £440,000. If these expenses can be shared with another event, maximising the usage of the marquee and the time on site, profitability for AAF and the City of London will increase in 2014 and beyond.
18. It is recognised that the second event has to compliment the Heath's activities and the nature of the surrounding community and therefore AAF would like to manage and launch a contemporary garden fair on Hampstead Heath in 2014.
19. Significant research suggested a gap in the London market for a garden fair modelled on the stylish European horticultural events and the surrounding nature and ecology of the Heath is a perfect environment for a fair of this nature.
20. The name of the fair will be a call to action, GROW London, with the same ethos as AAF of providing an accessible, relaxed, aspirational, educational, fun, community event for all ages to enjoy. It aims to be a one-stop shop for garden experts and enthusiasts looking for inspiration, high quality products, great plants and new ideas. It will break away from the existing conventional gardening shows with over 100 carefully selected exhibitors displaying a fantastic mix of plants and products with special emphasis on sustainability, ecology and community planting projects that aims to become an annual festival of flowers, gardening and environment.

21. In recognition of the extra week on site, AAF have offered the City of London £25,000 plus operations fee in the region of £7,000 - £10,000 to reflect additional resources associated with managing the additional event.
22. The two events combined would generate revenue for the City of London in excess of £90,000 for site hire fee and operations in 2014.
23. AAF are taking a big risk to launch a brand new event of this nature and have budgeted for a profit on the event by 2016, should the first event be a success. Provided the event is a success, the City of London would be able to negotiate an increased hire fee for the remaining period of the License.
24. AAF would manage the garden event in its entirety meaning that the City of London continues to deal with the same management staff who know the site, its limitations and who have built a good rapport with the neighbouring community.
25. Promotion of the Heath car parks will also continue which helps with additional income generation, particularly at Jack Straws Castle where the facility is seldom at capacity.

Strategic Implications

26. This proposal supports the City Together Strategy of being “vibrant and culturally rich”. It also helps to support the Open Spaces Business Plan improvement objective of “Marketing our services and adapting events and education programmes to deliver opportunities particularly for young people”.

Financial and Risk Implications

Financial

27. In 2012 AAF Hampstead made a small profit of £15,000. The City received a £30,000 fee for use of the site and a further £25,000 towards operational costs of staff time, transport and materials.
28. In 2013 AAF Hampstead made a lesser profit of £8,000 due to increased costs and a decrease in ticket sales due to a decline in visitor numbers. The City received a £35,000 fee for use of the site and a further £25,000 towards operational costs of staff time, transport and materials.
29. In 2014 the City is seeking a fee of £60,000 for the use of the site for the two events that will contribute to the management of the Heath plus £35,000 for operations.
30. A more detailed analysis of the costs associated with holding the Affordable art Fair and GROW London event during 2014-2016 is included in the non-public agenda.

Risk Implications

31. These are set out in the detailed GROW London 2014 proposal. Ultimately it is a commercial decision for AAF to determine whether or not to hold any event on the Heath. Despite less profit than expected for AAF in 2013 and the financial risk in 2014, adding in a second event in order to split the overheads is a risk AAF thinks is worth taking in order to maximise profitability for AAF. Without being able to reduce venue costs and therefore increase profitability there is a very limited future for AAF on Hampstead Heath. Seeking a significantly increased fee for the two events could potentially result in AAF seeking an alternative London venue.
32. AAF spent considerable time looking into options of sub-letting the venue, thereby reducing financial risks. However, other risks were deemed much greater. Another event organiser using the venue could potentially jeopardise AAF the week before through competition; damage the reputation of AAF; damage the relationship and agreements between AAF and the City of London; create an additional work load for the City of London for managing an outside company; and disrespect the ties AAF have built up with the local community.
33. The ability to earn additional income from the East Heath fairground site was a matter that was raised with many local groups and Societies at meetings held during 2011, about budget reductions. There was a consensus that this area of the Heath could accommodate additional events, if they were complementary to the Heath and local area. The provision of an art fair followed by a garden fair will build upon community partnerships whilst highlighting East Heath Fairground site as a unique, premier destination for popular culture events.

Legal Implications

34. Under article 7(1)(bb) of the Ministry of Housing and Local Government Provisional Order Confirmation (Greater London Parks and Open Spaces) Act 1967 ("the Order") the City may provide exhibitions and trade fairs on the Heath for the purpose of promoting the arts.
35. Under article 7 of the Order the City may erect structures and set apart or enclose a part of the Heath. Under article 8 of the Order the City may enter into a Licence with any person to provide such an exhibition or trade fair subject to such terms and conditions as to payment or otherwise as it considers desirable, and to sell goods. Under article 10 of the Order the City may authorise the Licensee to make reasonable charges for admission.
36. AAF would be responsible for securing all necessary permissions to host both events.

Property Implications

37. The City Surveyor supports the proposal as an appropriate use of the City's assets. In order to protect and maintain Hampstead Heath, it is to be ensured

that a Licence granted to the AAF will contain appropriate indemnity, repair, reinstatement and health and safety provisions.

Conclusion

38. Overall the feedback on the fair has been positive and many views favour an annual fair on the Heath as it underlines the area's rich traditions with the arts and incorporates many community values, whilst creating an invaluable revenue stream for the City of London that has the potential to increase each year.

Appendices

- AAF Post Fair Report 2013
- GROW London Press Release

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AFFORDABLE ART FAIR HAMPSTEAD

12 – 16 JUNE 2013

POST FAIR REPORT

OVERVIEW

- The third edition of AAF Hampstead welcomed 16,500 (adult) visitors over the course of four and a half days and £3 million* of art work was sold by the 113 galleries exhibiting.
- Whilst art sales have increased slightly, we were disappointed in the significant drop in visitor numbers from previous years. We are still analysing figures but believe the main reason was hosting this year's fair only seven months after the last one in November 2012. The drop in numbers impacted gate revenue meaning profitability was much lower than forecast (we estimated a 10% increase in attendance on 2012 figures).
- AAF's charity beneficiary was New End School Association who raised a fantastic £24,000 (including gift aid) as well as utilising the fair as a platform to promote the charities fundraising targets to a wider audience.
- AAF supported local organisations including the Hampstead School of Art, City of London Corporation, Made in the Arts London, Cass Art Hampstead and Thornback and Peel.
- Laithwaites Wine and Faber-Castell sponsored sections of the fair which helped generate revenue. We hope to build on all these relationships and continue the partnerships into the future.
- The move to an annual June date has been met with a positive response from galleries, suppliers, visitors and contractors.
- Operations ran smoothly and AAF management were pleased with the newly appointed contractors. The longer daylight hours and good weather helped the build and breakdown meaning contractors ran on or ahead of schedule at all times.
- Venue and production costs increased due to the time of year.
- AAF worked with members of the local community to support and promote the Hampstead Summer Festival raising awareness by displaying posters and flyers at the fair; including information on e-newsletters and through social media channels before, during and after the art fair.
- For the duration of the fair, East Heath and Jack Straws pay and display car parks were full maximising revenue for COLC.
- On site traffic management was well executed and managed by both COLC and AAF staff.
- AAF Hampstead made a small profit of just over £8,000.

**AAF does not take any commission on artwork sold – this figure is solely based on the items sold by all the participating galleries*

VISITORS

ATTENDANCE	2011	2012	2013
Wed	2500	2500	2350
Thu	2800	3000	3200
Fri	2025	3600	2900
Sat	4550	4400	3950
Sun	5125	5000	4100
TOTAL	17,000	18,500	16,500
ART SALES	2011	2012	2013
Wed	206,696	257,292	382,797
Thu	345,056	511,479	574,032
Fri	337,850	457,200	451,108
Sat	757,575	725,085	721,440
Sun	926,853	933,712	897,093
TOTAL	2,574,030	2,884,768	3,026,470
Announced	£2.6 million	£2.8 million	£3 million

- Visitor numbers decreased by 2,000 from 2012.
- The drop in numbers on the Private View and the weekend can be attributed to bad weather - torrential rain and thunder.
- 81% of the total visitors entered the fair using either a complimentary or a discounted invitation, 60% of which gained free entry.

TICKETS

Complimentary Ticket	Visitor Redemption 2012	Visitor Redemption 2013
Complimentary invitations (Free entry)	11,515	9,924
Total visitors enter for free	11,515 (62% total visitors)	9,924 (60% total visitors)
Discount Ticket	Visitor Redemption	Visitor Redemption
Discount invitations (Half price, concessions)	3,786	3,439
Total visitors coming in with an offer	3,786 (20.5% total visitors)	3,439 (21% total visitors)
TOTAL complimentary & discount invitations distributed	15,301 (82.5% total visitors)	13,363 (81% total visitors)

FINANCE

- Revenue has increased overall on 2012 due to maximising the internal floor area and increasing the number of stands sold. We would have seen a significant increase in profit had we been able to build on the 2012 visitor numbers.
- Due to the change in production requirements of a summer-time event, expenses are very high. We had budgeted for the increase in expenses which include:

- Venue hire is charged at a premium due to peak event season
- Essential air conditioning is expensive to install and requires three times the amount of power and fuel as heating in previous years
- Hampstead marketing budgets increased as they are no longer shared with AAF Battersea
- Unfortunately the drop in visitors coupled with additional production costs means that our income was much lower than forecast.
- AAF offered to increase the 2013 COLC site hire fee to £35,000 – a 16.5% increase from 2012 to help towards the additional costs of using the site in June. Realistically, we are unable to increase the hire fee further in the future until AAF profits at least match the COLC revenue gained from AAF's presence on site.
- Overheads have remained the same from 2011 as we are still recovering losses from the inaugural fair.

INCOME	2012	2013
Rent of stands	749,125 (2305sqm)	794,295 (2,360sqm)
Extra stand fittings	72,000	80,121
Tickets	53,500	39,893
Sponsorship	9,500	7,500
TOTAL	884,125	921,809

EXPENSES	2012	2013
Structures	204,000	210,000
Stand build	47,900	53,100
Stand lighting	22,000	22,660
Heating/A/C & fuel	38,250	52,825
Camden Council	1,900	1,900
Carpets	14,050	14,600
Wi-Fi & Connectivity	4,500	4,500
Production	88,700	81,000
Electricity & rigging	63,000	64,890
Heras fencing & track	13,100	14,300
Toilet hire & service	18,000	18,600
Marketing & PR	133,000	150,000
Overhead	164,800	164,800
TOTAL	813,200	853,175

COLC REVENUE		
Site Fee	30,000	35,000
Operations Fee	25,000	25,000
PV Charity Donation	870	275
TOTAL	55,870	60,275

AAF Total expenses	869,070	913,450
TOTAL PROFIT	15,055	8,359

CONCLUSION

Whilst the third edition of the Affordable Art Fair Hampstead was not as successful as we had hoped for in terms of visitor numbers, the overall atmosphere was positive with some good feedback from visitors. As the sales of artwork were up, despite fewer people through the door, those who did buy artwork from galleries were a quality demographic that spent with confidence. Unfortunately several of the galleries did not have a profitable fair and will not be returning to exhibit next year.

There are various factors that influenced the drop in numbers. Many galleries reported that they felt there was a very different audience to those who visited in previous years, with several commenting on the noticeable lack of presence from local Hampstead and North London residents. As the fair took place only seven months after the last one in 2012, we believe that those who visited the previous two fairs were either unaware of the date change (and therefore expecting it to take place in November 2013) or decided against visiting for the third time.

We had thought that moving the fair to an annual June date would attract more visitors because of the busier summer period on the Heath and by avoiding the school holidays. We are analysing feedback and building a marketing strategy in reaction to this year's results to ensure the 2014 edition attracts our target audience, boosts visitor numbers and makes it as profitable as possible for those exhibiting with AAF.

The decrease in visitor numbers greatly affected the overall profit of the fair. Whilst stand revenue was the highest we can achieve, the total internal floor area we are able to sell to exhibitors has reached its maximum. Therefore gate revenue is the only income we can possibly increase in the future which as we've seen from this year, will always be a risk as it is dependant of visitor numbers.

Ultimately, as the production and venue costs are very high, it will be very difficult to reach a pleasing profit for AAF and COLC unless we reduce these overheads. The addition of a second event taking place after the art fair will help lower AAF's overheads by sharing costs and maximising the use of the venue for the time on site. It will also add to the rostra of popular events on the Lower East Heath fairground site, and attract huge numbers of visitors to the area. Importantly, a second event in 2014 will increase profitability for both the City of London and the Affordable Art Fair, without which the Affordable Art Fair Hampstead has a very limited future.

Affordable Art Fair staff and exhibitors would like to take the opportunity to thank the City of London Corporation staff and members of the Consultative Committees for their continuing help and support. We are all looking forward to working together to build on the successes of the last three years and continue to establish popular cultural events on the Heath in the future.

GROW

LONDON

—
THE CONTEMPORARY
GARDEN FAIR

Page 151

20 - 22 JUNE 2014
HAMPSTEAD HEATH
LONDON



GROW LONDON – A BRAND NEW CONTEMPORARY GARDEN EVENT IS LAUNCHED AND SET TO TAKE THE INDUSTRY BY STORM IN 2014

'*GROW London*,' a fresh and new event which aims to break all the rules in the gardening event calendar, will take place from 20 – 22 June 2014, located on London's iconic Hampstead Heath.

The event will open on Thursday 19 June with an invited preview Garden Party and will follow with three public days. GROW London will deliver exhibitors with a targeted audience of between 14,000 to 16,000 garden enthusiasts and professionals. Visitors will come from far and wide to experience this hub of gardening excellence. There will be a maximum of 100 carefully curated exhibitors, to provide a classic and urban-contemporary mix of the highest quality garden products and plants. Specialist hero nurseries, makers and producers will offer visitors the finest grown plants, garden tools, pots, furniture, and garden paraphernalia.

After several years of unpredictable weather, to ensure further assurance to exhibitors and visitors, the event is being held entirely within a spectacular, 5,000 square metre air-conditioned marquee, offering a weatherproof and beautiful environment. The marquee interior will bring the outside in and inspire visitors with a magical garden set, created by designer Shane Connolly, who shot to global fame for his dramatic design for the Royal Wedding at Westminster Abbey for their Royal Highnesses The Duke and Duchess of Cambridge.

Garden experts will also be offering talks and knowledge for both the experienced and the novice gardener, inspiring all ages and abilities to get growing no matter how small or large their space. Speakers so far

include garden designer Chris Beardshaw, Shane Connolly, Dawn Isaac - horticulture advisor to award winning Cbeebies show, Otter Farm's Mark Diacono and designer and broadcaster James Alexander-Sinclair.

Only 15 minutes from the centre of London, the location is serviced by excellent transport links by the underground and overground services connecting people from London and neighbouring counties. To make it even easier for visitors to get to GROW London, a complimentary visitor shuttle service will run regularly to and from Hampstead underground station with several car parks nearby for those who wish to drive. A plant and product crèche will also be available.

GROW London is the brain child of entrepreneur Will Ramsay - founder of the hugely successful Affordable Art Fair, which is now a global brand with fairs in 14 major cities around the world. Will is keen to create a new and stylish garden event for people of all ages and experience to enjoy.

To turn his dream into reality, Will has brought in the expertise of highly respected garden event specialist Thérèse Lang of TJM Associates as Creative Director for GROW London. TJM are renowned as curators and organisers of many successful gardening events including Cottesbrooke Plant Finders Fair, Future Gardens and The Westonbirt Festival of The Garden. Thérèse Lang is also a lead strategist for The Chelsea Fringe.

Speaking about GROW London, Thérèse said, "*Hampstead Heath is an enviable and sublime location for this stylish, inspiring and innovative*

event which will provide visitors with an amazing hub of gardening excellence. We are going to raise the bar and will work with the very finest garden industry experts. Our handpicked hero exhibitor's are what will make GROW London so special. We have worked with many of these companies and growers before over the years so they will know that we value and support them. We also understand their needs and will work hand-in-hand with them to ensure this new event is a success for both exhibitors and visitors alike."

Sited on the edge of Hampstead Heath, just five minutes from the beautiful Hampstead village, GROW London is set to revolutionise the garden event calendar and will provide a hugely exciting opportunity for garden exhibitors' in one of the world's most prestigious locations. Exhibitors wishing to participate in this inaugural event should apply to Thérèse Lang therese@growlondon.com.

The GROW London website will go live in mid August:
www.growlondon.com

ENDS

Cover image:

Tools on wheel and standing fork SNEEBOER www.sneeboer.com
Plants DERRY WATKINS/ SPECIAL PLANTS www.specialplants.net
Bistro chair BARBED www.barbed.co.uk
Rusted Bell Plant support and plant stakes PLANT BELLES www.plantbelles.co.uk
Antique tools, wooden crate, watering can and clay pots GARDEN AND WOOD www.gardenandwood.co.uk
Flower scissors, twine, stub candles and brush ANCIENT INDUSTRIES www.ancientindustries.co.uk
Flower trug GREEN MAN WOODCRAFTS www.greenmanwoodcrafts.co.uk

Right hand image:

Swing seat THE MODERN GARDEN COMPANY www.moderngardencopany.com

Notes to editors:

GROW London dates:
20 – 22 June 2014

Garden Party and Press Preview
(invitation only):
Thursday 19 June 2014
6 – 9pm

Open to the public:
Friday 20 June 2014
10am – 6pm
Saturday 21 June 2014
10am – 6pm
Sunday 22 June 2014
10am – 6pm

Address:

GROW London
Lower Fairground Site
East Heath Road
Hampstead
NW3 1TH

Thérèse Lang and Will Ramsay are available for interview on request.

Press contact:

Jane Southcott pr
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07787 527430
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To apply for a stand at GROW London please contact:
Thérèse Lang
TJM Associates
therese@growlondon.com
+44(0) 1761 241690



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Agenda Item 12

Committee(s):	Date(s):	Item no.
Open Spaces and City Gardens Committee West Ham Park Committee Epping Forest and Commons Committee Hampstead Heath, Highgate Wood and Queen's Park Committee	7 th October 2013 7 th October 2013 9 th September 2013 23 rd September 2013	
Subject: Green Flag Awards 2013	Public	
Report of: Director of Open Spaces	For Decision	
<p style="text-align: center;"><u>Summary</u></p> <p>Once again the City of London Open Spaces have been successful in the Green Flag and London in Bloom award schemes. This report provides information about the process and the value of these awards.</p> <p>Recommendation</p> <ul style="list-style-type: none"> (i) That the great success achieved by the City of London's Open Spaces in the Green Flag and London in Bloom Awards is noted and reported to the Court of Common Council on the 24th October 2013. (ii) That the members of staff and volunteers at all the Open Spaces are congratulated on their contribution to the success in the awards. 		

Main Report

Background

1. The Green Flag Awards are designed to recognise the best green spaces in the country. The Green Flag Scheme is owned by the Department of Communities and Local Government, who license the management of the scheme to a consortium led by Keep Britain Tidy.
2. Since 1997 the Awards have set the standard for the management of parks and green spaces. Awards are made on an annual basis, and sites must re-apply each year to maintain their status.
3. Parks and green spaces are judged against the following eight criteria:
 - **That it is a welcoming place** (judges will look for good access and good signage)

- **That it is healthy, safe and secure** (for example equipment and facilities are safe, dog fouling is addressed, adequate health and safety policies are in place)
- **That it is clean and well maintained** (policies on litter, vandalism and maintenance are in place and in practice)
- **Sustainability** (that environmentally sound techniques are used in the management)
- **Conservation and heritage** (natural features, landscapes, building and structural features are appropriately managed).
- **Community involvement** (the site should actively pursue the involvement of members of the community and have knowledge of the patterns of use of the site)
- **Marketing** (a marketing strategy should be in place and the space should be promoted as a community resource)
- **Management** (a management plan should be in place, actively implement and regularly reviewed)

2013/14 Green Flag Awards

4. All of the City of London's Open Spaces were successful in retaining their Green Flag status. Nine sites received additional Green Heritage Awards: Epping Forest, Ashted Common, Kenley Common, Burnham Beeches, Hampstead Heath, Highgate Wood, West Ham Park, Bunhill Fields and the Cemetery and Crematorium.
5. Feedback reports from judges have been received for a majority of the sites for the green flag awards. A summary of the feedback received is attached as an appendix.

Other Awards

6. Open Spaces sites have once again taken part in London in Bloom. City of London was also nominated by London in Bloom to be a finalist in Britain in Bloom for 2013. Results of both these competition were not available at the time the report was prepared, but will be available at the time of the committee meeting.

Corporate and Strategic Implications

7. The achievement of Green Flag Awards supports many of the themes of the City Together Strategy relating to supporting communities, protecting, promoting and enhancing the environment and ensuring that the City is vibrant and culturally rich.

Conclusion

8. The achievement of these awards provided independent recognition of the successful work of volunteers, members of staff and elected members in ensuring the Open Spaces are well managed. The Green Flag Award Scheme provides the impetus for on-going improvement at each site and

provides a good benchmark against which the quality of our sites can be measured.

9. The Open Spaces' success in winning these awards will be reported to the Court of Common Council on the 24th October 2013.

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Appendix One

Summary of feedback received from Green Flag Award Judges for Hampstead Heath, Queens Park and Highgate Wood

Highlights

Considering the scale of Heath, the maintenance is excellent, little evidence of litter and the standards of maintenance of the grassland, turf, trees, shrubs and ornamental plantings is very good.

There is clearly a strong interest in, and a detailed programme for the conservation of the natural features on the Heath.

We witnessed some works being done to a veteran tree and saw the comprehensive programme they work to.

The restoration of built features e.g. the Pergola, the viaduct, the lido and that of the overall landscape is really good programme.

Simon and the Team at the Heath are doing a great job. The scale of the Heath with all its complexities is being managed well and delivering good quality results on the ground. New ideas are being introduced and exciting features are being developed thereby maximising the visitor experience alongside the conservation of the natural and built environments.

The [Highgate Wood] Conservation Management Plan is a pleasure to read. It demonstrates good management of the site and provides a clear understanding of aims and objectives. A lot of thought has gone into managing the site in a sensitive way, addressing the needs of site users, whilst mitigating the impact on the natural environment.

[At Highgate Wood the] community are actively encouraged get involved in the site. Many events held and different groups engaged with.

Voluntary groups from nearby linked sites actively involved. Strong input from knowledgeable local residents.

Visitor surveys show extensive consultation with site users

The Queens Park residents association seems to have a big impact on the running of the Park along with the Queens Park Joint Consultative group.

[At Queens Park] Rainwater storage underground is an innovative way of reducing water usage from the mains and recycling grey water.

Areas for future development

Perhaps some signs indicating how far it is to walk to different areas of the Heath would be helpful ie a plan of the heath with radiating circles indicating 5, 10, 15, 20 minutes walking distance.

Perhaps some interpretative materials [at Golders Hill Park] about the built heritage of the site would be a welcome addition eg the Pergola

[At Highgate Wood] Continue to investigate the local heritage – much has already been discovered, but there is obviously more to be found in such a rich site.

Continue to develop Highgate Wood Friends group.

Continuing the ecological surveys [at Highgate Wood] will further the local knowledge of species migrations and population dynamics, that will continue to be of great value to the site and local area

It would be ideal to train the staff [at Queen's Park] to enforce the by-laws through joint training with PCSO's and SNT.

The interpretation signs [at Queen's Park] and signs which detail the features in the park need to be updated, i.e waste recycling points within the park. Consistent design language.

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Committee(s):	Date(s):
Hampstead Heath, Highgate Wood and Queen's Park	23 September 2013
Subject: Highgate Wood and Queen's Park Kilburn Trustees' Annual Report and Financial Statements for the Year Ended 31 March 2013	Public
Report of: The Chamberlain	For Information
Summary	
<p>The Trustee's Annual Report and Financial Statements for the Year Ended 31 March 2013 for Highgate Wood and Queen's Park Kilburn are presented in the format required by the Charity Commission.</p>	
Recommendation(s)	
<ul style="list-style-type: none"> • It is recommended that the Trustee's Annual Report and Financial Statements be noted. 	

Main Report

1. The Trustee's Annual Report and Financial Statements, in the format that is required by the Charity Commission, are presented for information. The draft accounts were circulated to your Chairman and Deputy Chairman. Subsequently the accounts have been signed on behalf of the Trust by the Chairman and Deputy Chairman of the Finance Committee and have been audited.
2. Following the review of the charities for which the City is responsible a report to your Committee on 24th May 2010 detailed key reports that should be presented to your Committee in future. The Trustees Annual Report and Financial Statements was one of these reports. Information from these statements will form the Annual return to the Charity Commission.
3. Much of the information contained within the Annual Report and Financial Statements has already been presented to your Committee via budget and outturn reports.

Alison Elam

Group Accountant, Chamberlain's Department

T: 020 7332 1081 E: Alison.elam@cityoflondon.gov.uk

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HIGHGATE WOOD AND QUEEN'S PARK KILBURN

***REPORT AND FINANCIAL STATEMENTS
FOR THE YEAR ENDED 31 MARCH 2013***

Charity Number: 232986

HIGHGATE WOOD AND QUEEN'S PARK KILBURN

Trustee's Annual Report and Financial Statements for the year ended 31 March 2013

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Balance Sheet	12
Notes to the Financial Statements	13-24

HIGHGATE WOOD AND QUEEN'S PARK KILBURN

Trustee's Annual report for the year ended 31 March 2013

1. Reference and Administration Details

Charity Name:	Highgate Wood and Queen's Park Kilburn
Registered Charity Number:	232986
Principal Address:	Guildhall, London EC2P 2EJ
Trustee:	The Mayor, Commonalty and Citizens of the City of London
Chief Executive:	The Town Clerk of the City of London Corporation
Treasurer:	The Chamberlain of London
Solicitor:	The Comptroller and City Solicitor
Banker:	Lloyds TSB Bank plc City Office, PO Box 72 Bailey Drive Gillingham, Kent ME8 OLS
Auditor:	Deloitte LLP Chartered Accountants and Statutory Auditor 2 New Street Square London EC4A 3BZ

2. Structure, Governance and Management

The governing document

The governing document is the Highgate and Kilburn Open Spaces Act 1886. The charity is constituted as a charitable trust.

Trustee Selection methods

The Mayor, Commonalty and Citizens of London, known as the City of London Corporation, is the trustee of Highgate Wood and Queen's Park Kilburn. Elected Aldermen and Members of the City of London Corporation are appointed to the committee governing Highgate Wood and Queen's Park Kilburn by the Court of Common Council of the City of London Corporation.

Policies and procedures for the induction and training of trustee

The City of London Corporation makes available to its Members seminars and briefings on those various aspects of the City's activities, including those concerning Highgate Wood and Queen's Park Kilburn, as it considers necessary to enable the Members to efficiently carry out their duties.

Organisational structure and decision making process

The committee governing the charity's activities is noted above. The committee is ultimately responsible to the Court of Common Council of the City of London. The decision making processes of the Court of Common Council are set out in the Standing Orders and Financial Regulations governing all the Court of Common Council's activities. The Standing Orders and Financial Regulations are available from the Town Clerk at the registered address.

HIGHGATE WOOD AND QUEEN'S PARK KILBURN
Trustee's Annual report for the year ended 31 March 2013

2. Structure, Governance and Management (continued)

Details of related parties and wider networks

Details of any related party transactions are disclosed in note 15 of the Notes to the Financial Statements.

Risk identification

The Trustee is committed to a programme of risk management as an element of its strategy to preserve the charity's assets, enhance productivity for service users and members of the public and protect the employees.

In order to embed sound practice a Risk Management Group has been established in the City of London Corporation to ensure that risk management policies are applied, that there is an ongoing review of risk management activity and that appropriate advice and support is provided to Members and officers.

The City of London Corporation has approved a strategic risk register for all of its activities. This register helps to formalise existing processes and procedures and enables the City of London Corporation to further embed risk management throughout the organisation.

A key risk register has been prepared for this charity and has been reviewed by the committee acting on behalf of the Trustee. It identifies the potential impact of key risks and the measures which are in place to mitigate such risks.

3. Objectives and Activities for the Public Benefit

The Trustee has due regard to the Charity Commission's public benefit guidance when setting objectives and planning activities.

Lands were transferred to the City of London Corporation under the powers conferred by the Highgate and Kilburn Open Spaces Act 1886. The purpose of the charity is the preservation in perpetuity by the City of London Corporation of the open spaces known as Highgate Wood, Highgate and Queen's Park Kilburn as Public Parks or Open Spaces, for the use by the public for exercise and recreation.

This charity is operated as a separate legal entity consolidated into the City of London Corporation's City's Cash. The City of London Corporation is committed to funding the ongoing net operational costs of the charity in accordance with the purpose, which is the preservation in perpetuity by the City of London Corporation of the open spaces known as Highgate Wood, Highgate and Queen's Park Kilburn as Public Parks or Open Spaces, for the use by the public for exercise and recreation.

HIGHGATE WOOD AND QUEEN'S PARK KILBURN
Trustee's Annual report for the year ended 31 March 2013

4. Achievements and Performance

Key Targets for 2012/13 and review of achievement were:

Highgate Wood:

- Review of the organisational structure of Highgate Wood will commence to accommodate the necessary budgetary reductions in 2014.
During 2012 the focus was on determining a new roster for the team that would enable services to be delivered with a reduction in staffing levels. A new roster has now been prepared that will also involve changes in role for some staff so they move to a more generic role, rather than a specialist area of work.
- Prepare draft plan, undertake wide public consultation and seek committee views before adopting Conservation Management Plan (CMP).
The draft CMP was prepared and submitted to the Consultative and management Committees in the early summer of 2012. During the late summer and autumn period consultation sessions were held in the Wood to ascertain the public's views about the Vision and key Policies within the CMP. At its meeting in January 2013 the Management Committee fully endorsed the Plan and approved as basis for management of the site over the ensuing 10 years.
- Continue to monitor long term management of woodland, detailing the current issues with regard to ecology and compaction.
The survey this year proved to be challenging, mainly due to the late spring and almost total absence of defoliating caterpillars. The oak survey data gathered during June and early July, indicated that the trees were healthier over-all, but this was partly due to lack of defoliation, and later leaf emergence. It is recognised that it will take a number of years to accumulate sufficient data to reach any definitive conclusions on the long term impact of management practices.
- Implement projects and develop services identified in obtaining grant funding to provide educational and biodiversity projects that support communities across Greater London.
The City Bridge Trust grant has provided the focus for natural play by means of the use of a temporary climbing structure as part of the summer programme, installed in conjunction with a specialist company. The programme of walks and talks focussing on environmental matters and awareness has taken place, along with participation in National Tree Week.

Queen's Park:

- Review of the organisational structure of Queen's Park will commence to accommodate the necessary budgetary reductions in 2014.
During 2012 the focus was on determining a new roster for the team that would enable services to be delivered with a reduction in staffing levels. A new roster has now been prepared that will also involve changes in role for some staff so they move to a more generic role to support the work of the team.
- Undertake procurement of lead consultant, establish working group, draft plan, undertake wide public consultation and seek committee views before adopting Conservation Management Plan (CMP).

HIGHGATE WOOD AND QUEEN'S PARK KILBURN

Trustee's Annual report for the year ended 31 March 2013

4. Achievements and Performance (continued)

Key Targets for 2012/13 and review of achievement (continued).

Following a procurement exercise specialist consultants were appointed to lead the development of the CMP. A Working Group was also established in the summer of 2012 comprised of representatives from across the community with specific interest in the main themes of Heritage, Natural environment, Community, Recreation and Built Environment & Infrastructure. Subsequently two seminars were held to enable development of a clear Vision and underpinning policies for the site. The consultants have commenced preparation of the draft CMP

- Develop and implement attractive and sustainable bedding schemes identified as part of the budget reviews.

Works commenced to change the seasonal bedding displays in the Quiet Garden to sustainable plantings, resulting in a reduction in the number of gardening staff. These landscape changes have been supported by the local community.

- Hold at least three outdoor cinema events during 2012 and raise additional income.
The Lexi Cinema and their sister company, Where is the Nomad, had a successful season of three films in the park. The weather was perfect for the three outdoor films in August and September 2012 and attracted an average of 1,200 visitors to each showing.

- Implement construction of two items of play equipment in Phase 1 of the play area development. Establish a Fund-Raising Group with the community and hold three events/meetings.

Three items of play equipment were purchased and installed Timberwood Tangle, Cable Runway and a Pyramid Tower and Slide. The City of London Corporation were indebted to the Queen's Park Area Residents' Association and a local resident for their generous contribution towards these new items of equipment. A Fund Raising Group has been established to help to generate additional money to fund future phases of the project.

- Implement projects and develop services identified in obtaining grant funding to provide educational and biodiversity projects that support communities across Greater London.

The City Bridge Trust grant has provided the focus for natural play and consultation with users has been conducted to further develop the design of the playground to provide natural play elements. Education sessions have taken place at Queen's Park on the theme of environmental learning, along with further engagement with schools with regard to Pets' Corner and the links to environmental awareness.

All of the above achievements enhanced the Open Space for the benefit of the public.

5. Financial Review

Review of financial position

Investment income received through interest of £4,850 (2011/12 £5,008), income received through fees, charges and interest was £61,817 (2011/12 £69,383), sales £1,220 (2011/12 nil) and rental income was £78,012 (2011/12 £76,830). The contribution towards the running costs of the charity amounted to £1,092,654 (2011/12 £1,177,767). This net cost was met by the City of London Corporation's City's Cash. Income from other grants, voluntary income and contributions was £105,850 (2011/12: £188,004).

HIGHGATE WOOD AND QUEEN'S PARK KILBURN

Trustee's Annual report for the year ended 31 March 2013

5. Financial Review (continued)

Review of Financial position (continued)

The land and original buildings integral to the operation of the charity are deemed to have been historically held in trust by this charity and the financial statements reflect this. These original assets of this open space are treated as heritage assets.

Additions to land and capital expenditure on buildings are included in the financial statements as fixed assets at historic cost, less provision for depreciation and any impairment, where this cost can be reliably measured. The charity's balance sheet reflects its ownership of these fixed asset additions net of depreciation, represented by a designated income fund.

Reserves Policy

The charity is wholly supported by the City of London Corporation which is committed to maintaining and preserving Highgate Wood and Queen's Park Kilburn out of its City's Cash Funds. These Funds are used to meet the deficit on running expenses on a year by year basis. The charity has a designated fund and details are set out in note 13 of the Notes to the financial statements.

Investment Policy

The charity's investments are held in units of the City of London Charities Pool. The investment policy of the Charities Pool is to provide a real increase in annual income in the long term whilst preserving the value of the capital base. The annual report and financial statements of the Charities Pool are available from the Chamberlain of London.

The increase in the market value of the investments held in the Charities Pool reflects the general recovery in the UK and overseas stock markets, together with some relative outperformance achieved by the Fund Manager which was mainly due to favourable asset allocation within the portfolio. The investments are managed by Artemis Investment Management Limited and in the year ended 31 December 2012 achieved a total return of 13.3%, which was a relative outperformance of 1.4% compared to its benchmark, the WM Unconstrained Charity Universe.

Going Concern

The Trustee considers the Trust to be a going concern. Please see note 1(b) to the Financial Statements.

HIGHGATE WOOD AND QUEEN'S PARK KILBURN
Trustee's Annual report for the year ended 31 March 2013

6. Plans for Future Periods

The aims for 2013/14 for Queen's Park are:

- Reorganise Queen's Park operational structure to accommodate the necessary budgetary reductions.
- Undertake wide public consultation on the draft plan and seek committee views before adopting Conservation Management Plan.
- Review the Joint Consultative Committee structure and composition and implement approved changes.
- Hold at least four outdoor cinema events during 2013 and raise additional income. Host The Queen's Park Day event.
- Continue to develop the Fund-Raising Group with the community and hold 3 events/meetings. Strive to implement construction of 2 further items of play equipment in Phase 2A of the play area development.
- Implement projects and develop services identified in obtaining grant funding to provide educational and biodiversity projects that support communities across Greater London. Develop proposals for potential future funding.

7. The Financial Statements

The financial statements consist of the following and include comparative figures for the previous year:

- **Statement of Financial Activities** showing all resources available and all expenditure incurred and reconciling all changes in the funds of the charity.
- **Balance Sheet** setting out the assets and liabilities of the charity.
- **Notes to the Financial Statements** describing the accounting policies adopted and explaining information contained in the financial statements.

The financial statements have been prepared in accordance with statutory requirements and the Statement of Recommended Practice *Accounting and Reporting by Charities (Revised 2005)*.

HIGHGATE WOOD AND QUEEN'S PARK KILBURN
Trustee's Annual report for the year ended 31 March 2013

8 Statement of Trustee's Responsibilities

The trustee is responsible for preparing the Trustee's Report and the financial statements in accordance with applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

The law applicable to charities in England & Wales requires the trustee to prepare financial statements for each financial year which give a true and fair view of the state of affairs of the charity and of the incoming resources and application of resources of the charity for that period. In preparing these financial statements, the trustee is required to:

- select suitable accounting policies and then apply them consistently;
- observe the methods and principles in the Charities SORP;
- make judgments and estimates that are reasonable and prudent;
- state whether applicable accounting standards have been followed; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the charity will continue in business.

The trustee is responsible for keeping proper accounting records that disclose with reasonable accuracy at any time the financial position of the charity and enables the trustee to ensure that the financial statements comply with the Charities Act 2011, the Charity (Accounts and Reports) Regulations 2008 and provisions of the charity's governing document. The trustee is also responsible for safeguarding the assets of the charity and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

9 Adopted and signed for on behalf of the Trustee.

R.A.H. Chadwick
Chairman of Finance Committee
Guildhall, London

Raymond Michael Catt
Deputy Chairman of
Finance Committee
Guildhall, London

HIGHGATE WOOD AND QUEEN'S PARK KILBURN

INDEPENDENT AUDITOR'S REPORT TO THE TRUSTEE OF HIGHGATE WOOD AND QUEEN'S PARK KILBURN

We have audited the financial statements of Highgate Wood and Queen's Park Kilburn for the year ended 31 March 2013 which comprise the Statement of Financial Activities, the Balance Sheet and the related notes 1 to 15. The financial reporting framework that has been applied in their preparation is applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

This report is made solely to the charity's trustee in accordance with section 144 of the Charities Act 2011 and regulations made under section 154 of that Act. Our audit work has been undertaken so that we might state to the charity's trustee those matters we are required to state to the trustee in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the charity and the charity's trustee as a body, for our audit work, for this report, or for the opinions we have formed.

Respective responsibilities of trustee and auditor

As explained more fully in the Trustee's Responsibilities Statement, the trustee is responsible for the preparation of the financial statements which give a true and fair view.

We have been appointed as auditor under section 144 of the Charities Act 2011 and report in accordance with regulations made under section 154 of that Act. Our responsibility is to audit and express an opinion on the financial statements in accordance with applicable law and International Standards on Auditing (UK and Ireland). Those standards require us to comply with the Auditing Practices Board's Ethical Standards for Auditors.

Scope of the audit of the financial statements

An audit involves obtaining evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of: whether the accounting policies are appropriate to the charity's circumstances and have been consistently applied and adequately disclosed; the reasonableness of significant accounting estimates made by the trustee; and the overall presentation of the financial statements. In addition, we read all the financial and non-financial information in the annual report to identify material inconsistencies with the audited financial statements. If we become aware of any apparent material misstatements or inconsistencies we consider the implications for our report.

Opinion on financial statements

In our opinion the financial statements:

- give a true and fair view of the state of the charity's affairs as at 31 March 2013, and of its incoming resources and application of resources, for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; and
- have been prepared in accordance with the requirements of the Charities Act 2011.

HIGHGATE WOOD AND QUEEN'S PARK KILBURN

INDEPENDENT AUDITOR'S REPORT TO THE TRUSTEE OF HIGHGATE WOOD AND QUEEN'S PARK KILBURN (CONTINUED).

Matters on which we are required to report by exception

We have nothing to report in respect of the following matters where the Charities Act 2011 requires us to report to you if, in our opinion:

- the information given in the Trustee's Annual Report is inconsistent in any material respect with the financial statements; or
- sufficient accounting records have not been kept; or
- the financial statements are not in agreement with the accounting records and returns; or
- we have not received all the information and explanations we require for our audit.

Deloitte LLP

Chartered Accountants and Statutory Auditor
London UK

Deloitte LLP is eligible to act as an auditor in terms of section 1212 of the Companies Act 2006 and consequently to act as the auditor of a registered charity.

HIGHGATE WOOD AND QUEEN'S PARK KILBURN

Statement of Financial Activities for the year ended 31 March 2013

	Notes	Unrestricted Funds			2012/13	2011/12
		General Fund	Designated Fund	Restricted Fund		
		£	£	£		
Incoming Resources						
Incoming resources from generated funds						
		30,950	-	79,750	110,700	193,012
		1,092,654	-	-	1,092,654	1,177,767
		141,049	-	-	141,049	146,213
	4	<u>1,264,653</u>	<u>-</u>	<u>79,750</u>	1,344,403	1,516,992
Resources Expended						
		1,197,014	16,488	85,661	1,299,163	1,354,940
		67,639	-	-	67,639	64,382
	5	<u>1,264,653</u>	<u>16,488</u>	<u>85,661</u>	1,366,802	1,419,322
		-	(16,488)	(5,911)	(22,399)	97,670
Other recognised gains						
	10	16,846	-	-	16,846	11,231
		16,846	(16,488)	(5,911)	(5,553)	108,901
Reconciliation of funds						
	13	118,485	301,422	6,903	426,810	317,909
	13	<u>135,331</u>	<u>284,934</u>	<u>992</u>	421,257	426,810

There are no recognised gains or losses other than as shown in the statement of financial activities above.

All incoming resources and resources expended derive from continuing activities.

HIGHGATE WOOD AND QUEEN'S PARK KILBURN
Balance Sheet as at 31 March 2013

	Notes	2013	2012
		£	£
Fixed Assets			
Tangible Fixed Assets	9	284,934	301,422
Investments – 18,718 Charities Pool Units	10	135,331	118,485
		<u>420,265</u>	<u>419,907</u>
Current Assets			
Debtors	11	52,480	45,977
Cash		139,205	219,157
		<u>191,685</u>	<u>265,134</u>
Creditors: Amounts falling due within one year	12	(190,693)	(258,231)
Net Current Assets		<u>992</u>	<u>6,903</u>
Total Assets less Current Liabilities		<u><u>421,257</u></u>	<u><u>426,810</u></u>
The Funds of the Charity			
<i>Unrestricted Income Funds</i>			
General Fund	13	135,331	118,485
Designated Funds	13	284,934	301,422
Restricted Income Fund	13	992	6,903
Total Charity Funds		<u>421,257</u>	<u>426,810</u>

Approved and signed for and on behalf of the Trustee

The notes at pages 13-24 form part of these accounts.

Chris Bilsland
Chamberlain of London

HIGHGATE WOOD AND QUEEN'S PARK KILBURN
Notes to the Financial Statements for the year ended 31 March 2013

1. Accounting Policies

The following accounting policies have been applied consistently in dealing with items which are considered material in relation to the charity's financial statements.

(a) Basis of preparation

The financial statements have been prepared in accordance with the Charities Act 2011 and Statement of Recommended Practice *Accounting and Reporting by Charities (Revised 2005)* and under the historical cost accounting rules (except for investments recorded at valuation), and in accordance with applicable United Kingdom accounting standards.

(b) Going concern

The governing documents place an obligation on the City of London Corporation to preserve the open spaces for the benefit of the public. The City of London Corporation is committed to fulfilling this obligation which is reflected through its proactive management of, and ongoing funding for, the services and activities required. The funding is provided from the City of London Corporation's City's Cash which annually receives considerable income from its managed funds and property investments. Each year a medium term financial forecast is updated from City's Cash. The latest forecast for the period to 2016/17 anticipates that adequate funding will be available to enable the Trust to continue to fulfil its obligations. On this basis the Trustee considers the Trust to be a going concern for the foreseeable future, therefore has prepared the financial statements on the going concern basis.

(c) Fixed assets

Heritage Land and Associated Buildings

Highgate Wood and Queen's Park Kilburn comprise 315 hectares (780 acres) of land, together with associated buildings, located in the North London boroughs of Haringey and Brent respectively. The objectives of the charity are the preservation of Highgate Wood and Queen's Park Kilburn for the recreation and enjoyment of the public. Highgate Wood and Queen's Park Kilburn are considered to be inalienable (i.e. may not be disposed of without specific statutory powers). Land and the original associated buildings are considered to be heritage assets. In respect of the original land and buildings, cost or valuation are not included in these accounts as reliable cost information is not available and a significant cost would be involved in the reconstruction of past accounting records, or in the valuation, which would be onerous compared to the benefit to the users of these accounts.

Additions to the original land and capital expenditure on buildings are included as fixed assets at historic cost, less provision for depreciation and any impairment, where this cost can be reliably measured.

HIGHGATE WOOD AND QUEEN'S PARK KILBURN

Notes to the Financial Statements for the year ended 31 March 2013

1. Accounting Policies (continued)

(c) Fixed assets (continued)

Tangible Fixed Assets

These are included at historic cost less depreciation on a straight line basis to write off their costs over their estimated useful lives and less any provision for impairment. Land is not depreciated and other fixed assets are depreciated from the year following that of their acquisition. Typical asset lives are as follows:

	Years
Operational buildings	30 to 50
Landscaping/Conservation	up to 50
Improvements and refurbishments to buildings	up to 30
Equipment	5 to 15
Infrastructure	up to 10
Heavy vehicles and plant	up to 7
Computer systems	3 to 7
Cars and light vans	up to 5

(d) Managed investments

Investments are pooled with those from other City of London charities. Underlying Listed Company investments are valued at The Stock Exchange Trading System price at 31 March 2013. Other investments are valued annually at the middle market price at the close of business on 31 March 2013. Gains and losses for the year on investments held as fixed assets are included in the Statement of Financial Activities.

The unrealised gain on investments at the balance sheet date is included in the Trust's funds.

The net gain on investments shown in the Statement of Financial Activities represents the difference in the market value of investments between 1 April 2012 and 31 March 2013.

(e) Incoming resources

Recognition of incoming resources

All incoming resources are included in the Statement of Financial Activities gross without deduction of expenses in the financial year in which they are entitled to be received.

Voluntary income

Voluntary income comprises of a contribution from investments and other grants.

Volunteers

No amounts are included in the Statement of Financial Activities for services donated by volunteers, as this cannot be accurately quantified.

Grants received

Grants are included in the Statement of Financial Activities in the financial year in which they are entitled to be received.

Grant from City of London Corporation

The City of London Corporation's City's Cash meets the deficit on running expenses of the charity and also provides grant funding for certain capital works.

Rental income

Rental income is included in the Charity's incoming resources for the year and amounts due but not received at the year end are included in debtors.

HIGHGATE WOOD AND QUEEN'S PARK KILBURN
Notes to the Financial Statements for the year ended 31 March 2013

1. Accounting Policies (continued)

(f) Resources expended

Allocation of costs between different activities

The City of London Corporation charges staff costs to the charitable activity and governance costs on a time spent basis. Associated office accommodation is charged out proportionately to the square footage used. All other costs are charged directly to the charitable activity.

(g) Fund accounting

The Trust may, at the Trustee's discretion, set aside funds, which would otherwise form part of general funds, for particular purposes. These funds are known as designated funds. The purposes of these funds are described in Note 13 to the accounts. Restricted funds are those received by Highgate Wood and Queen's Park Kilburn to be used only for the purpose set out in the conditions of the grant.

(h) Pension costs

The City of London's Pension Scheme is a funded defined benefits scheme. City of London Corporation staff are eligible for membership of the pension scheme and may be employed in relation to the activities of any of the City Corporation's three main funds, or any combination of them (i.e. City Fund, City's Cash and Bridge House Estates). As the charity is unable to identify its share of the Pension Scheme assets and liabilities, this scheme is accounted for as a defined contribution scheme in the accounts.

(i) Cash flow statement

The Trust has taken advantage of the exemption in Financial Reporting Standard 1 (Revised) from the requirement to produce a cash flow statement on the grounds that it is a small entity.

(j) Governance costs

The nature of costs allocated to Governance are detailed in note 5.

2. Tax Status of the Charity

Highgate Wood and Queen's Park Kilburn is a registered charity and as such its income and gains are exempt from income tax to the extent that they are applied to its charitable objectives.

3. Indemnity Insurance

The City of London Corporation takes out indemnity insurance in respect of all its activities. The charity does not contribute to the cost of that insurance.

HIGHGATE WOOD AND QUEEN'S PARK KILBURN
Notes to the Financial Statements for the year ended 31 March 2013

4. Incoming Resources

Incoming resources are comprised as follows:

	2012/13 £	2011/12 £
Incoming resources from generated funds		
Other Grants, Voluntary Income and Contributions	105,850	188,004
Interest	4,850	5,008
Grant from City of London Corporation	1,092,654	1,177,767
	1,203,354	1,370,779
Incoming resources from charitable activities		
Sales of products or materials	1,220	-
Fees and charges	61,817	69,383
Rental income	78,012	76,830
	141,049	146,213
Total incoming resources	1,344,403	1,516,992

Other Grants, Voluntary Income and Contributions

This includes funding from the City Bridge Trust of £79,750 to provide educational and biodiversity services to support communities within the Greater London area.

Fees and charges

The fees and charges income relates to income received for use of sports facilities, sports tuition fees and charges for filming within the open spaces.

Grant from City of London Corporation

The City of London Corporation's City's Cash meets the deficit on running expenses of the charity.

HIGHGATE WOOD AND QUEEN'S PARK KILBURN
Notes to the Financial Statements for the year ended 31 March 2013

5. Resources Expended

Resources expended are analysed between activities undertaken directly and support costs as follows:

	Activities undertaken directly £	Support costs £	2012/13 £	2011/12 £
Charitable activities	1,219,169	79,994	1,299,163	1,354,940
Governance costs	-	67,639	67,639	64,382
Total resources expended	1,219,169	147,633	1,366,802	1,419,322

No resources are expended by third parties to undertake charitable work on behalf of the charity.

Charitable activities

Expenditure on charitable activities includes labour, premises costs, equipment, materials and other supplies and services incurred as the running costs of Highgate Wood and Queen's Park Kilburn.

Governance costs

General

Governance costs relate to the general running of the charity, rather than specific activities within the charity and include strategic planning and costs associated with Trustee meetings. These costs are initially borne by the City of London Corporation and then charged to individual charities on the basis of time spent, as part of support costs, where appropriate.

Auditor's remuneration and fees for external financial services

The City of London's external auditor audits this charity as one of the numerous charities administered by the City of London Corporation. The City of London Corporation does not attempt to apportion the audit fee between all the different charities but prefers to treat it as part of the cost to its private funds. No other external financial services were provided for the Trust during the year or in the previous year.

Trustee's expenses

Members of the City of London Corporation are unpaid and do not receive allowances in respect of City of London Corporation activities in the City. However, Members may claim travelling expenses in respect of activities outside the City and receive allowances in accordance with a scale when attending a conference or activity on behalf of the City of London Corporation. No expenses have been claimed in the year (2011/12 £nil).

HIGHGATE WOOD AND QUEEN'S PARK KILBURN
Notes to the Financial Statements for the year ended 31 March 2013

6. Support Costs

The cost of administration which includes the salaries and associated costs of officers of the City of London Corporation, together with premises and office expenses, is allocated by the City of London Corporation to the activities under its control, including this charity, on the basis of employee time spent on the respective services. These expenses include the cost of administrative and technical staff and external consultants who work on a number of the City of London Corporation's activities.

Support costs allocated by the City of London Corporation to the charitable activity are derived as follows:

	Charitable activities £	Governance £	2012/13 £	2011/12 £
Department				
Chamberlain	-	17,236	17,236	20,642
Comptroller & City Solicitor	-	9,321	9,321	8,939
Open Spaces Directorate	43,901	-	43,901	44,410
Town Clerk	-	21,969	21,969	24,411
City Surveyor	5,650	15,758	21,408	18,774
Information Systems	17,798	-	17,798	13,410
Other governance and support costs	12,645	3,355	16,000	22,183
Total support costs	79,994	67,639	147,633	152,769

The main support services provided by the City of London Corporation are:

- Chamberlain** Accounting services, insurance, cashiers, revenue collection, payments, financial systems and internal audit.
- Comptroller and City Solicitor** Property, litigation, contracts, public law and administration of commercial rents and City of London Corporation records.
- Open Spaces Directorate** Expenditure incurred by the Directorate, which is recharged to all Open Spaces Committees under the control of the Director of Open Spaces. The apportionments are calculated on the basis of budget resources available to each open space charity.
- Town Clerk** Committee administration, management services, personnel services, public relations, printing and stationery, emergency planning.

HIGHGATE WOOD AND QUEEN'S PARK KILBURN
Notes to the Financial Statements for the year ended 31 March 2013

6. Support Costs (continued)

City Surveyor	Work undertaken on the management of the Estate properties, surveying services and advice, supervising and administering repairs and maintenance.
Information Systems	The support and operation of the City of London Corporation's central and corporate systems on the basis of usage of the systems; the provision of "desktop" and network support services and small is development projects that might be required by the charity.
Other governance costs	Contribution towards various costs including publishing the annual report and financial statements, central training, the dental service, occupational health, union costs and the environmental and sustainability section.

7. Staff numbers and costs

The full time equivalent number of staff employed by the City of London Corporation charged to Highgate Wood and Queen's Park Kilburn in 2012/13 is 19 (2011/12 21) at a cost of £712,135 (2011/12 £737,351). The table below sets out the employment costs and the number of full time equivalent staff charged directly to the charity.

	No of employees	Gross Pay £	Employer's National Insurance £	Employer's Pension Contribution £	Total £
2012/13 Charitable activities	19	584,295	43,306	84,534	712,135
2011/12 Charitable activities	21	597,799	47,546	92,006	737,351

No staff earned more than £60,000 during the year (2011/12 Nil).

8. Heritage Assets

Since 1886 the primary purpose of the Charity has been the preservation of Highgate Wood and Queen's Park Kilburn for the recreation and enjoyment of the public. As set out in accounting policy 1(c), the original heritage land and buildings are not recognised in the Financial Statements.

Policies for the preservation and management of Highgate Wood and Queen's Park Kilburn are contained in the Highgate Wood and Queen's Park Kilburn Management Plan 2010. Records of heritage assets owned and maintained by Highgate Wood and Queen's Park Kilburn can be obtained from the Director of Open Spaces.

Additions to heritage land or buildings, where relevant information is available, are included at historic cost less accumulated depreciation in accordance with Note 1 (c).

HIGHGATE WOOD AND QUEEN'S PARK KILBURN
Notes to the Financial Statements for the year ended 31 March 2013

9. Tangible Fixed Assets

At 31 March 2013 the net book value of tangible fixed assets relating to direct charitable purposes amounts to £284,934 (31 March 2012 £301,422) as set out below.

	Land and Buildings £	Infrastructure £	Total £
<u>Cost</u>			
At 1 April 2012 and 31 March 2013	166,388	257,130	423,518
<u>Accumulated depreciation</u>			
At 1 April 2012	22,724	99,372	122,096
Charge for year	3,341	13,147	16,488
At 31 March 2013	26,065	112,519	138,584
<u>Net book values</u>			
At 31 March 2013	140,323	144,611	284,934
At 31 March 2012	143,664	157,758	301,422

10. Fixed Asset Investments

The investments are held in the City of London Corporation Charities Pool as a registered UK charity with the Charities Commission (charity number 1021138) and are used internally by the City of London Corporation as a Unit trust.

The value of investments held by the charity is as follows:

	General Fund £	2013 £
Market Value 1 April	118,485	118,485
Gain for the year	16,846	16,846
Market Value 31 March	135,331	135,331
Cost 31 March	107,254	107,254
Units in Charities Pool	18,718	18,718

HIGHGATE WOOD AND QUEEN'S PARK KILBURN
Notes to the Financial Statements for the year ended 31 March 2013

10. Fixed Asset Investments (continued)

The increase in the market value of the investments held in the Charities Pool reflects the general recovery in the UK and overseas stock markets, together with some relative outperformance achieved by the Fund Manager which was mainly due to favourable asset allocation within the portfolio.

The Charities Pool is a UK registered unit trust.

11. Debtors

Debtors consist of amounts owing to the charity due within one year.

	2013 £	2012 £
Rental Debtors	26,148	24,038
Other Debtors	4,829	-
Payments in Advance	5,039	7,617
Recoverable VAT	16,464	14,322
Total	52,480	45,977

12. Creditors

Creditors consist of amounts owing by the charity due within one year.

	2013 £	2012 £
Trade Creditors	14,954	5,133
Accruals	121,983	185,003
Other Creditors	300	4,286
Sundry Deposits	47,194	46,500
Receipts In Advance	6,262	17,309
Total	190,693	258,231

HIGHGATE WOOD AND QUEEN'S PARK KILBURN
Notes to the Financial Statements for the year ended 31 March 2013

13. Movement of Funds during the year to 31 March 2013

	Balance at 1 April 2012	Incoming Resources	Outgoing Resources	Net incoming/ (outgoing) resources	Balance at 31 March 2013
	£	£	£	£	£
Unrestricted Funds					
<i>General Funds</i>					
Investments	118,485	16,846	-	16,846	135,331
<i>Designated Funds</i>					
Capital Adjustment Account	301,422	-	(16,488)	(16,488)	284,934
Total Unrestricted Funds	419,907	16,846	(16,488)	358	420,265
Restricted Funds					
City Bridge Trust funding	6,903	79,750	(85,661)	(5,911)	992
Total Restricted Funds	6,903	79,750	(85,661)	(5,911)	992
Total Funds	426,810	96,596	(102,149)	(5,553)	421,257

Notes to the funds

Unrestricted funds

1) *General funds*

Consisting of Charities Pool units following the transfer of the assets from the Ward's People's Recreation Ground Fund to Highgate Wood and Queen's Park Kilburn on 10 August 2011.

2) *Designated funds*

Designated funds consist of fixed assets at historic cost less accumulated depreciation in accordance with Note 1 (c).

Restricted funds

3) *City Bridge Trust*

Funding from the City Bridge Trust to provide educational and biodiversity services to support communities within the Greater London area.

HIGHGATE WOOD AND QUEEN'S PARK KILBURN

Notes to the Financial Statements for the year ended 31 March 2013

14. Pensions

The triennial valuation undertaken as at 31 March 2010 revealed a reduced funding level of 86% (from 87% in 2007). Following this valuation, the contribution rates to be applied for 2011/12, 2012/13 and 2013/14 are 17.5%.

In 2012/13, the total employer's contributions to the pension fund for staff employed on City's Cash activities were £6.1m amounting to 17.5% of pensionable pay. The figures for 2011/12 were £6.0m and 17.5% of pensionable pay.

Although the Pension Fund is a defined benefit scheme, for the purpose of FRS 17 City's Cash is unable to identify its share of the underlying assets and liabilities. Consequently the pension arrangements are treated as a defined contributions scheme in the City's Cash and these accounts. The deficit of the scheme calculated in accordance with FRS 17 by independent consulting actuaries at 31 March 2013 is £342m (2011/12 £351m).

15. Related Party Transactions

The following disclosures are made in recognition of the principles underlying Financial Reporting Standard 8 concerning related party transactions.

The City of London Corporation as well as being the Trustee also provides management, surveying and administrative services for the charity. The costs incurred by the City of London Corporation in providing these services are charged to the charity. The City of London Corporation also provides banking services, allocating all transactions to the charity at cost and crediting or charging interest at a commercial rate. The cost of these services is set out in the Statement of Financial Activities under "Resources expended" and an explanation of these services is set out in note 6 for support costs of £147,633. The City of London Corporation's City's Cash meets the deficit on running expenses of the charity. This amounted to £1,092,654 (2011/12: £1,177,767) as shown in note 4 to the financial statements.

The City of London Corporation is also the Trustee of a number of other charitable Trusts. These Trusts do not undertake transactions with Highgate Wood and Queen's Park Kilburn with the exception of the City Bridge Trust (Charity number 1035628). A full list of other charitable Trusts of which the City of London Corporation is Trustee is available on application to the Chamberlain of the City of London.

HIGHGATE WOOD AND QUEEN'S PARK KILBURN
Notes to the Financial Statements for the year ended 31 March 2013

15. Related Party Transactions (continued)

Members of the City of London Corporation responsible for managing the Trust are required to comply with the Relevant Authority (model code of conduct) Order 2001 issued under the Local Government Act 2000 and the City of London Corporation's guidelines which require that:

- Members sign a declaration agreeing to abide by the City of London Corporation's code of conduct;
- a register of interests is maintained;
- pecuniary and non-pecuniary interests are declared during meetings;
- Members do not participate in decisions where they have an interest.

There are corresponding arrangements for staff to recognise interests and avoid possible conflicts of those interests.

In this way, as a matter of policy and procedure, the City of London Corporation ensures that Members and officers do not exercise control over decisions in which they have an interest. There are no material transactions with organisations related by virtue of Members and officers interests which require separate reporting. Transactions are undertaken by the Trust on a normal commercial basis.

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Agenda Item 18

By virtue of paragraph(s) 3 of Part 1 of Schedule 12A
of the Local Government Act 1972.

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Agenda Item 19

By virtue of paragraph(s) 3 of Part 1 of Schedule 12A
of the Local Government Act 1972.

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Agenda Item 20

By virtue of paragraph(s) 3 of Part 1 of Schedule 12A
of the Local Government Act 1972.

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