

Committee(s): Epping Forest & Commons Epping Forest Consultative Group	Dated: 23/11/2023 28/02/2024
Subject: Epping Forest Wildfire Plan Review 2022 – 2023 (SEF 28/23)	Public
Which outcomes in the City Corporation’s Corporate Plan does this proposal aim to impact directly?	11
Does this proposal require extra revenue and/or capital spending?	N A further report will be bought forward if the spending discussed in the report is progressed
If so, how much?	£ N/A
What is the source of Funding?	N/A
Has this Funding Source been agreed with the Chamberlain’s Department?	N
Report of: Bob Roberts, Interim Executive Director	For Information
Report author: Paul Thomson, Assistant Director Epping Forest	

Summary

This report updates your Committee with regard to the review of actions being undertaken following Forest wildfires in the summers of 2022 and 2023. The review is seeking to provide assurance of risk reduction through the removal of mature vegetation which can fuel wildfires, improvements to fire breaks and signage, together with dedicated fire patrols and the training of personnel, a review of equipment, and a continuing commitment to partnership working with the fire brigades and community.

Recommendation(s)

Your Committee is requested to note this report.

Main Report

Background

1. Following significant fires on Leyton and Wanstead Flats in 2013 and London’s largest wildfire on Wanstead Flats in 2018, the Epping Forest Emergency Plan – Wildfire Plan was substantially reviewed to reflect the experiences and learning from the 2013 and 2018 wildfire seasons.
2. Epping Forest was also asked to give evidence, alongside the London Fire Brigade (LFB), in October 2022 on behalf of the Open Spaces sector, to the All-Party Parliamentary Group (APPG) on fire prevention in the countryside, which

was considering pilot bans on the sale of disposable barbeques. The serious wildfires at Beam Park Country Park, Dagenham affecting 14 homes and the 100-acre wildfire affecting 14 homes at the Green, Wennington have also focused the APPG's attention on the risk to property from wildfires.

3. The summer of 2022 saw prolonged periods of low rainfall and record-breaking temperatures driving a series of heatwaves, resulting in very low soil moisture content levels and the drying up of many Forest watercourses and waterbodies. On 12 August 2022 a drought was declared in eight Environment Agency areas including Thames and East Anglia which include the full extent of Epping Forest. During 2022, Epping Forest recorded fifty-nine incidents of fires on Forest and Buffer Land, a corrected figure on the previously reported level of sixty-eight. Eleven of these incidents were significant wildfires in terms of size and length of burn, occurring between mid-July and mid-August, with nine wildfires located across the Leyton and Wanstead Flats grassland and heathland areas.
4. In contrast, 2023 was a very warm and rather wet year. Preceded by some very dry spring months, June was warm, dry, and settled with high pressure and was the UK's warmest and fourth sunniest June on record. In contrast, July and August mainly comprised unsettled weather. Through May - July 2023, thirty-three fires were reported on Epping Forest land, of which ten were wildfires with the remaining fires originating from campfires and barbeques.

Current Position

5. The risk of wildfire on Forest Land continues each year and is recorded on the Charity's Risk Register as a score of 8 (yellow). The prevalence of wildfires is directly related to key elements of the fire 'triangle' which consists of Oxygen, Heat and Fuel. At Epping Forest, the reduced spring rainfall and dry hot dry summer periods drove the 'heat' element of the triangle with the habitat type and importantly its fuel load has clearly key factors. There is also an additional element regarding visitor behaviour related to discarded litter, the careless disposal of cigarette ash and stubs, together with the growth of cooking and barbeque fires.
6. This report highlights measures taken since 2022, with the aim of further reducing the severity of new wildfires in both the high-likelihood grassland areas and across the Forest as a whole. The review has considered the following areas:

Fire Breaks

7. The frequency of fire break cutting across Wanstead and Leyton Flats has increased been from a single cut in June or July to three cuts – June, July, August, with the arisings of the first cut being collected and removed to minimise the fire risk. Particular attention has also been focused on ensuring a full three metre width to the fire breaks. Further consideration is being given to subsoiling the centre line of fire breaks during High Fire Severity periods to remove all vegetation and break the soil pan which can resist soil saturation from fire hoses. Subsoiling will require Natural England approval in Sites of Special Scientific Interest (SSSI) areas.

Decarbonisation and Fuel reduction

8. The 2018 wildfire plan sought to remove the later carbon-rich seral succession stages in heathland development. The presence of mature gorse and broom and young standard aspen and birch trees in the later succession stages are particularly likely to fuel wildfires and increase their spread.
9. Approximately 2ha of broom and bramble were removed from areas either side of Centre Road and near Alexandra Lake, Wanstead Flats during November and December 2022. Approximately 2ha of overmature gorse was also removed across Leyton Flats. These areas are maintained in accordance with site scrub management plans for rejuvenation - removal of old, dead material and management of re-growth - in some areas, and prevention of re-growth in others.

Vegetation Against Property

10. A key response to the devastating 2022 property fires at Dagenham and Wennington is the proposed creation of new fire breaks adjacent to residential areas designed to provide defendable boundaries by improving access for firefighters; starving wildfires of fuel and to better manage the higher vegetation that tends to be associated with boundaries. Trees associated with high underlying shrub vegetation are described as 'fire ladders' which can convey wildfires into trees and onto gardens and buildings. Surveying is underway to update the Vegetation Against Property Policy approved by your Committee in 2020 to facilitate additional regular cutting work. This work may be controversial as many properties often consider impenetrable bordering vegetation barriers on Forest Land as a security benefit to their property.
11. Individual isolated properties across the Forest have also raised concerns regarding the wildfire risk associated with boundary vegetation. The Urban Health Partnership has promoted the benefit of the 'Firewise UK communities' initiative, first developed in the USA. Through a dedicated website and associated leaflets, Firewise provides valuable information on how to minimise the risks to property through pre-emptive action. Firewise is a franchised arrangement and will require the purchase of promotional rights.

Equipment

12. Two Cam-Am Tractor utility vehicles were purchased in March 2022 to enable more efficient access to fire sites with smaller containers of water and to support dedicated staff fire patrols.
13. The existing bowser trailer has been fully overhauled to include a new pump and fire-fighting hoses providing additional capacity to extinguish and dampen medium and larger areas of wildfire.
14. Funds are also being sought for a second fire fogger as outlined in the 2018 Wildfire Plan to provide more versatility and redundancy. Recent experience has demonstrated that the current fire fogger mounted on a fixed trailer cannot be towed across more challenging terrain. A powered trailer or independent platform may be preferable, however, costs at £85,000 for a mobile platform will need to rely on third party fundraising.

15. The Forest Keepers completed the purchase of four new Villfirest 20 litre backpack fire pumps to aid the Forest Service team in extinguishing small fires.
16. Discussions have been held with the LBF regarding loan arrangements with Essex Fire and Rescue Service and requests that the Charity purchases further equipment to support wildfire fighting. Some National Parks have sought partnership funding to purchase All-terrain platforms to carry fire fighters and firefighting equipment to more remote and less accessible moorland and forest areas.
17. The LBF has invested in 11 'Smarthose™' reels that can quickly saturate firebreaks and lines ahead of advancing wildfires. The Smarthoses were successfully trialled and launched at Wanstead Flats on 10 July 2023.

Training

18. Annual pre-summer training on use on the fire fogger was undertaken by the Forest Services Team.
19. A new Lantra accredited computer-based wildfire training is in the process of being rolled out to the Forest Service Team and will be repeated following further recruitment.

Partnership working

20. Meetings with both London and Essex Fire Brigades have taken place to determine fire-fighting capabilities, roles and responsibilities.

Communications

21. Local signage and social media communications have been enhanced with additional large red roadside banners highlighting the fire severity and risk associated with campfires and barbeques to potential visitors whilst reminding them that these are prohibited under the local byelaws.
22. The Fire Brigades and City Corporation also coordinated social media messaging at the beginning of the fire season to ensure public awareness of risks. The LFB also dual messaged around the risk of drowning from thermal shock in water bodies during hot weather especially in early summer. This issue will be addressed by the Charity by revisions to the current Water Safety Policy.
23. During high summer in 2022 additional fire patrols in high likelihood areas during peak periods across 12noon to 8pm were mounted drawing Managers and staff from other duties. Each fire patrol has provided up to 100 advisory conversations, and as well as focusing on removing combustible material especially litter.

Smoking in Open Spaces

24. The dedicated fire patrols were welcomed by Forest users. Staff identified smokers as a 'hard to reach' audience regarding discarded smoking materials. Many smokers who avoid smoking at home, or at facilities provided at work or in places of entertainment, are particularly reliant on open spaces as an

unregulated area for smoking and were resistant to requests around changed behaviour regarding discarded ash and cigarette stubs. A sponsor will be sought for the next wildfire season to fund the free distribution of personal metallised pouches for the temporary storage of ash and stubs.

Increased habitat resilience and adaptation

25. The new Natural Environment Strategy will include objectives around improving the resilience and adaptation capacity of existing habitats. This could include initiatives such as widening Forest rides to provide greater fire break capacity, impeding drainage to retain more moisture in Forest habits for longer or expanding conservation grazing across the Flats areas, to graze down grassland and heath land fuel loads. These initiatives would be principally designed to offer more fortitude in the face of climate change and would also offer benefits in managing wildfire exposure.

Options

26. To further reduce fuel load within the higher risk areas may have a negative impact on biodiversity and habitat. Consideration should be given to the scrub and broom within the skylark enclosure and how this could be managed to better reduce wildfire risk whilst maintaining a suitable habitat for the ground-nesting birds.
27. Increase the number or width of fire breaks at the cost of biodiversity.
28. Re-introduce cattle to reduce fuel load through trampling and grazing. This option would improve the landscape ecology. However, the lack of suitable infrastructure and risk to livestock welfare posed by the public and, dogs has prevented this action being taken before.
29. Reduction of fuel by the process of spring swaling or prescribed burning is an option that requires specialist skills and human resource. However, this may be difficult to deliver within the urban surrounding and would not necessarily offer the benefits seen in larger areas of heathland due to the smaller mosaic landscapes at Epping Forest, punctuated by roads and cut fire breaks.

Proposals

30. Further removal of gorse and bramble at Wanstead Flats is planned for the coming winter of 2023/24.
31. An additional 10m fire break to be introduced at Manor Flats.

Key Data

32. None.

Corporate & Strategic Implications

33. Financial implications – The increased frequency of fire break cutting has been included within existing staff resources for conservation mowing, with arisings

disposal being part of the annual composting contract with a local farmer. Further fire break cutting of Forest boundaries with residential areas will present additional costs, as will subscription to the Firewise Communities network. External funding is likely to be sought to help fund additional fire-fighting machinery.

34. Resource implications – Work is currently underway to assess a winter/spring initiative designed to cut boundary vegetation bordering urban areas. Given the current pressures on hazardous tree work, this work will initially at least be conducted by contractors using specialist mulching equipment.

35. Legal implications – None

36. Risk implications – New training to support the wildfire plan will place an emphasis on supporting fire professionals in fire fighting major fires. Epping Forest staff will not fight major fires and will instead focus on extinguishing small fires where safe to do so and damping down areas where fires have been previously extinguished.

37. Equalities implications – None

38. Climate implications – Wildfires will release carbon being sequestered in woody material and grassland humic layers. Fire reduction measures will help preserve the work of carbon sequestration.

39. Security implications - None

Conclusion

40. Epping Forest remains at risk of vegetation wildfires due to its key designated habitat types, particularly acid grassland and wet heath, together with its peri-urban location and pressure from high levels of recreational visits.

41. Managing the landscape to reduce fuel load, implementing effective fire and access breaks, providing suitable training and equipment to Forest staff, and maintaining good relationships with the emergency services and communities help reduce the severity of wildfires. Improved communications with the public are intended to reduce the likelihood of fires being started.

Appendices

- Appendix 1 – List of wildfire locations 2022
- Appendix 2 - List of wildfire locations 2023
- Appendix 3 – Fire Mapping

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