

Action and Implementation Plan

Short Term – 1-3 years Medium Term – 4-10 years Long Term – 10 to 15 years

HIGH PRIORITY

MUHP - Manager Urban Planning and Heritage
 MDAS - Manager Development Assessment Services
 MTS - Manager Technical Services
 MIS - Manager Infrastructure Services
 MRC - Manager Regulation & Compliance
 MES - Manager Environment & Sustainability
 MIM - Manager Information Management
 MVE - Manager Visitor Experience & Events

	Priority	Proposed Timing	Proposed Resourcing	Responsibility Lead/Assist
PRINCIPLE ONE – RETAIN AND PROTECT				
ACTION 1.1 PROTECTION OF EXISTING TREES ON PRIVATE LAND				
1.1.1 Undertake a holistic review of Council DCP controls and investigate LEP opportunities to improve the protection of trees and provision of new trees on private land, including deep soil and planting requirements.		Ongoing service	Funded by recurrent Departmental budgets	MUHP/MDAS
1.1.2 Develop a public tree valuation framework to allow placement of monetary values against tree assets. Development of this framework should be considered as part of the broader LEP and DCP review (Action 1.1.1).		Long Term	Consider in DP & OP and LTFP	MUHP/MTS, MIS

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1.1.3 Review the current Development Approval (DA) conditions to ensure alignment with the Urban Forest Strategy, including consistency and application of best-practice tree management on private land.		Medium Term	Consider in DP & OP and LTFP	MDAS
1.1.4 Undertake regular reviews of tree protection and tree planting specifications in line with industry best practice for use by developers on private land.		Ongoing Service	Funded by recurrent Departmental budgets	MUHP/MDAS, MTS
ACTION 1.2 PROTECTION OF TREES ON PUBLIC LAND				
1.2.1 Manage public trees to their full Useful Life Expectancy (ULE) and only remove trees when all other options to retain the tree are exhausted. Review (as required) the assessment criteria or framework to facilitate a consistent approach to removal and provide the public with clarity around processes.		Ongoing Service	Funded by recurrent Departmental budget	MTS
1.2.2 Where appropriate, implement the use of 'Tree Bonds' on publicly owned trees to protect and maintain the health of these trees as part of any future development applications.		Ongoing Service	Funded by recurrent Departmental budget	MDAS
1.2.3 Investigate mechanisms and funding to increase the use and extent of aerial bundled power cables in priority areas		Medium Term	Consider in DP & OP and LTFP	MUHP
1.2.4 Investigate mechanisms to require developers to bundle power cables adjacent to new developments, with preferencing for underground power.		Medium Term	Consider in DP & OP and LTFP	MUHP
1.2.5 Investigate mechanisms to require developers to provide expanded soil volumes/vaults for new public domain tree plantings (in local and neighbourhood centres).		Medium Term	Consider in DP & OP and LTFP	MHUP
1.2.6 Review existing tree protection and tree planting specifications in line with industry best-practice for use by developers and utility service providers on public land.		Medium Term	Consider in DP & OP and LTFP	MUHP/MDAS, MTS

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1.2.7 Maintain clear lines of communication and establish processes with utility service providers in the area to ensure value is placed on protecting trees. Advocate for improved processes and practices.		Ongoing Service	Funded by recurrent Departmental budget	MTS/MUHP
1.2.8 Prioritise the protection and health of existing mature trees when infrastructure conflicts arise. Ensure the implementation of alternative designs or engineering solutions to allow for trees to be retained.		Ongoing Service	Funded by recurrent Departmental budget	MTS
ACTION 1.3 ENSURE URBAN FOREST DIVERSITY AND PROTECT AGAINST PESTS AND DISEASES				
1.3.1 Develop a 'Plant Pest and Disease Management Plan' with a focus on appropriate weed and pest hygiene practices for horticultural and arboricultural staff and contractors, and pest and disease monitoring and control guidelines. Set benchmarks of acceptable levels of pest/disease and establish actions for management within this Plan.		Medium Term	Consider in DP & OP and LTFP	MES
1.3.2 Respond to suspected pest and disease outbreaks identified by the urban forest monitoring program or routine inspections.		Ongoing Service	Funded by recurrent Departmental budget	MTS/MES, MRC
1.3.3 Assess canopy species diversity within the urban forest, with an emphasis on priority areas (linked to Action 3.4.1 'Develop a public tree inventory database'.)		Medium Term	Consider in DP & OP and LTFP	MES/MTS

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PRINCIPLE TWO – EXPAND AND INTEGRATE				
ACTION 2.1 INCREASE TREE PLANTING ON COUNCIL LAND				
2.1.1 Develop, fund and deliver an expanded ongoing 'Urban Forest Replenishment Program' to increase canopy cover and offset projected tree losses. Ensure the 'Urban Forest Replenishment Program' allows for adequate establishment maintenance of trees.		Short term	Seek additional funding by way of Council resolution Actively seek grant funding	MTS/MUHP
2.1.2 Implement tree planting replacement ratios in line with Council's 'Environmental Impact Assessment Process'.		Ongoing Service	Funded by recurrent Departmental budget	MTS
2.1.3 Prioritise, fund and align planting programs with the Kuring-gai 'Public Domain Plan' precinct plans for each Local Centre.		Short Term	Existing resources Funded by recurrent Departmental budget	MUHP/MIS, MTS
2.1.4 Develop a 'Street Tree Master Plan' or similar to guide future tree planting programs. This plan should incorporate a tree planting prioritisation framework that incorporates heat mapping, canopy mapping, green grid, local centres, major cycle and pedestrian routes and social vulnerability mapping.		Short Term	Consider in DP & OP and LTFP	MUHP

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2.1.5 Develop a program to convert above-ground powerlines to bundled cables or underground services in areas where existing high value trees are being impacted and in areas with lower-canopy cover to make room for larger sized trees. Work with service providers to form a partnership to achieve this.		Long Term	Consider in DP & OP and LTFP	MUHP/MTS, MIS
ACTION 2.2 INTEGRATE DELIVERY OF GREEN, BLUE AND GREY INFRASTRUCTURE CAPITAL PROGRAMS				
2.2.1 Establish a culture and processes that promote collaboration and best-practice urban forest management.		Ongoing Service	Funded by recurrent Departmental budgets Consider for inclusion in DP & OP	MES/MUPH
2.2.2 Integrate capital delivery programs to ensure all projects consider opportunities for improved urban forest outcomes. All new capital or infrastructure renewal works should incorporate and appropriately budget for new tree planting, greening, and shade provision where practical.		Ongoing Service	Funded by recurrent Departmental budgets Actively seek grant funding to supplement	MTS/MIS, MUPH
2.2.3 Embrace innovative civil infrastructure design solutions such as structural soil and soil vaults for built-up areas where soil volume is limited, and green roofs or green walls for areas where building footprints restrict traditional plantings.		Ongoing Service	Funded by recurrent Departmental budgets and capital works Actively seek grant funding to supplement	MTS/MIS, MUPH

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2.2.4 Incorporate WSUD principles (such as passive irrigation) as established in the Ku-ring-gai 'Water Sensitive City Policy and Strategy', for new tree planting projects.		Ongoing Service	Funded by recurrent Departmental budgets and capital works Actively seek grant funding to supplement	MTS/MIS, MUPH
2.3 INTEGRATE URBAN ECOLOGY VALUES INTO PROGRAMS				
2.3.1 Ensure the planning, design and management of public open spaces, including through private development, considers and incorporates ecological values, such as use of native species and use of understorey planting to promote multi-layered ecosystems with good vertical complexity.		Ongoing Service	Funded by recurrent Departmental budgets	MES/MTS, MUPH, MIS
2.3.2 Continue to incorporate 'habitat trees' in the landscape where appropriate. Habitat trees are trees (live or dead) that are retained or modified to include (fauna) species-specific habitat hollows. Develop an assessment framework in collaboration with Council's Natural Areas Team to determine where and when to retain or incorporate these habitat trees.		Ongoing Service Short Term	Funded by recurrent Departmental budgets and capital works Actively seek grant funding to supplement	MES/MTS, MIS
2.3.3 Investigate a 'Timber Reuse' program and opportunities to utilise wood from urban trees as a timber resource. Kur-ring-gai is home to many high-value timber tree species and when these trees require removal, they are usually turned into wood chips, the lowest value product possible. Timber could be used in Council projects (e.g. logs in playgrounds) or milled and provided to the community. Proceeds from timber sales could be used to fund tree planting projects and contribute to the circular economy.		Long Term	Consider in DP & OP and LTFP	MES/MTS

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2.4 IMPROVED MANAGEMENT OF TREES IN BUSHFIRE PRONE LAND				
2.4.1 Investigate/develop guidelines for tree planting in bushfire prone lands, for both public and privately owned land.		Medium Term	Funded by recurrent Departmental budgets Actively seek grant funding to supplement	MES
2.4.2 Collaborate with research institutions, agencies and relevant stakeholders in the trial of bushfire resistant species in bushfire prone areas.		Medium Term	Funded by recurrent Departmental budgets Actively seek grant funding to supplement	MES
2.4.3 Develop processes for assessing future greening initiatives for incorporation into DCP, to ensure they align with the <i>Kuring-gai Council Bushfire Management Policy 2020</i> and other related legislation.		Ongoing Service	Funded by recurrent Departmental budgets	MES/MTS, MUPH, MIS, MDAS
2.4.4 Ensure tree planting programs in Bushfire Prone Land are delivered in coordination with Council's Bushfire Technical Officer and in line with best practice knowledge determined as part of action 2.4.2.		Ongoing Service	Funded by recurrent Departmental budgets	MES/MTS, MIS, MDAS

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PRINCIPLE THREE – MONITOR AND MAINTAIN				
ACTION 3.1 MONITOR VEGETATION AND CANOPY COVER				
3.1.1 Acquire airborne imagery of the Council on a biennial basis (every two years) throughout the implementation of the Strategy (10 years) to identify changes in cover. Acquisitions should use the same metrics and parameters each time and assess canopy cover based on 3m and 10m height stratification.	Consider budget allocation by way of Council resolution HIGH PRIORITY	Ongoing Short Term	Consider in DP & OP and LTFP Actively seek grant funding	MES
3.1.2 Use acquired airborne imagery to accurately record the number of trees removed on public and private land, as a cross-reference to Council’s record-keeping and monitoring of illegal tree removal (linked to action 3.4.1 Creation of a tree inventory database).		Ongoing Service	Funded by recurrent Departmental budgets	MES/MTS, MUHP
ACTION 3.2 MONITOR LAND SURFACE AND AIR TEMPERATURE				
3.2.1 Acquire airborne thermal imagery data on a biennial basis (every two years) throughout the implementation of the Strategy (10 years) to identify urban heat islands and the relationship between vegetation cover and land surface temperature.	HIGH PRIORITY	Ongoing Service Short Term	Consider in DP & OP and LTFP Actively seek grant funding	MES
3.2.2 Focus planting efforts (and shade provision) in areas identified as urban hot spots (in conjunction with action 2.1.4 – ‘Develop a tree planting prioritisation framework’).		Ongoing Service	Funded by recurrent Departmental budgets	MUPH/MTS, MIS
3.2.3 Use acquired airborne thermal imagery to inform urban design, built form, shade provision, and new park placement.		Ongoing Service	Funded by recurrent Departmental budgets	MUPH/MTS, MES

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3.2.4 Invest in and trial innovative smart technologies for real-time monitoring of air temperature in different streetscapes to quantify the effect of street design and planting on air temperature. Consider collaborating with research agencies and other local governments. Use this data to feed back into planting efforts and urban design.		Long Term	Consider in DP & OP and LTFP	MES/MUPH
ACTION 3.3 MANAGE THE CONTRIBUTION OF THE URBAN FOREST TO SOIL AND WATER RESOURCES				
3.3.1 Trial innovative smart technologies for real-time monitoring of soil moisture and plant growth for targeted water application and early mitigation of tree disorders.		Long Term	Consider in DP & OP and LTFP	MES/MTS
3.3.2 Consider the use of new plantings along waterways and stormwater lines to intercept runoff.		Ongoing Service	Funded by recurrent Departmental budgets	MTS/MIS, MDAS, MES
3.3.3 Monitor and review policy mechanisms to encourage cost-effective implementation of urban stormwater management.		Ongoing Service	Funded by recurrent Departmental budgets	MES/MTS, MIS, MDAS, MUPH
ACTION 3.4 IMPROVE ASSET AND DATA MANAGEMENT				
3.4.1 Audit trees in priority areas on Council-managed land (excluding bushland) and develop a tree inventory database. Utilise existing aerially acquired tree data as a base for this inventory. Collect additional fields such as species, condition, risk profile and Useful Life Expectancy via ground-based assessment. Priority areas for data collection include a number of District Parks throughout the LGA, as well as Green Grid Links, and can be seen in Appendix B.		Short Term	Additional funding required	MTS/MES

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3.4.2 Opportunistically collate audit data on significant trees outside priority areas on private and public land.		Short Term	Funded by recurrent Departmental budgets	MTS/MES
3.4.3 Investigate options to incorporate the tree inventory database for priority areas into Council's asset management system. If Council's system is not suitable for recording tree data, a proprietary tree asset management software may be appropriate.		Short Term?	Additional funding required	MTS/MES, MIM
3.4.4 Ensure the inventory is maintained as a 'live' asset management database. This includes adding newly planted trees into the database and recording all removals and maintenance works on Council trees as they happen.		Ongoing	Additional funding required	MTS/MIS, MIM
3.4.5 Develop and implement an internal auditing tool to monitor the success of annual planting programs. Incorporate tree planting targets into delivery program KPIs.		Medium Term	Consider in DP & OP and LTFP	MTS/MIS
3.4.6 Improve record keeping for private tree applications and DAs to enable accurate monitoring of tree removal on private land.		Short Term	Existing resources	MTS/MDAS
3.4.7 Ensure data pertaining to Greenweb mapping is regularly updated to enable accuracy of recorded threatened species and communities for protection.		Ongoing	Existing resources	MES
ACTION 3.5 IMPROVE TREE MAINTENANCE PRACTICES				
3.5.1 Develop a proactive tree maintenance program based on data collected in tree inventory database. The proactive program should be based on priority areas determined by volume of traffic (pedestrian and vehicle) and the risk profile of trees, and be scheduled on a cyclic basis.	HIGH PRIORITY	Medium to Long Term	Consider in DP & OP and LTFP	MIS/MTS
3.5.2 Undertake an operational service review to assess and make recommendations regarding best use of tree maintenance and tree planting resources.	HIGH PRIORITY	Medium to Long Term	Consider in DP & OP and LTFP	MIS/MTS

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PRINCIPLE FOUR – COLLABORATE AND INCENTIVISE				
ACTION 4.1 ENABLE, SUPPORT AND EMPOWER THE COMMUNITY TO ACTIVELY PARTICIPATE IN THE PLANNING AND MANAGEMENT OF TREES				
4.1.1 Develop and subsidise a tree program to help increase tree canopy on private land and providing the opportunity to positively engage with the community and promote the benefits of trees. Align these programs with established tree events such as ‘National Tree Day’, or local community events like farmers’ markets or festivals.		Medium Term	Consider in DP & OP and LTFP	MES/MTS
4.1.2 Develop and expand on existing community education programs such as ‘Smart Schools’.		Ongoing Service	Funded by recurrent Departmental budgets Consider including task in DP & OP	MES/MVE
4.1.3 Explore opportunity for involvement with indigenous community.		Ongoing Service	Funded by recurrent Departmental budgets	MES/MUPH
4.1.4 Conduct regular community planting days to involve and engage with the community. Continue to deliver corporate planting days. Align these programs with established tree events such as ‘National Tree Day’.		Ongoing Service	Funded by recurrent Departmental budgets	MES/MTS

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ACTION 4.2 INCENTIVISE INCREASED CANOPY ON PRIVATE LAND				
4.2.1 Investigate a new grant/subsidy program for residents to assist with the ongoing maintenance of trees on private land. This could include subsidies towards gutter cleaning, additional green waste collections, tree inspections and/or subsidised pruning of trees on private land.	HIGH PRIORITY	Medium	Consider in DP & OP and LTFP	MES/MUPH
4.2.2 Provide community information and support relating to tree maintenance and planting on private land.		Short to Medium Term	Funded by recurrent Departmental budgets	MES/MTS
4.2.3 Develop and maintain a list of suitable tree species for use by residents.	HIGH PRIORITY	Ongoing	Funded by recurrent Departmental budgets	MES/MTS
ACTION 4.3 ADVOCATE FOR GREATER RECOGNITION OF GREEN INFRASTRUCTURE				
4.3.1 Continue to actively participate in working groups and forums that seek to improve the recognition of trees as essential assets.		Ongoing Service	Funded by recurrent Departmental budgets	MUPH/MTS, MES, MIS, MDAS
4.3.2 Advocate for BASIX and other sustainability tools to be updated and strengthened to incorporate green infrastructure.		Ongoing Service	Funded by recurrent Departmental budgets	MUPH/MDAS
4.3.3 Identify champions within Council to advocate and lead the implementation of this Strategy and associated urban forest programs.	HIGH PRIORITY	Short Term	Funded by recurrent Departmental budgets	MUPH/MTS, MES, MIS, MDAS
4.3.4 Establish an Urban Forest Working Group of staff who share responsibility for the Urban Forest Strategy and establish clear lines of communication and processes.	HIGH PRIORITY	Short Term	Funded by recurrent Departmental budgets	MUPH/MTS, MES, MIS, MDAS, MRC, MIM, MVE