UFSP 2015 and Draft UFS 2022

Comparison Analysis of Measures and Actions

Banyule
City Council

Comparing the Measures and Actions of the Urban Forest Strategic Plan and the Draft Urban Forest Strategy 2022

Background to this Analysis

Councillor feedback to the briefing on the Draft Urban Forest Strategy requested more specific detail on the status of measures set out in the 2015 Urban Forest Strategic Plan and the mapping the 2015 actions that have equivalent actions in the Draft Urban Forest Strategy, or which are no longer relevant.

2015 UFSP Measures	Retained/Enhanced in 2022 UFS	Discarded for 2022 UFS	Replaced/Improved in 2022 UFS
40	26	7	7

2015 UFSP Actions	Achieved	Retained/Enhanced in 2022 UFS	Discarded for 2022 UFS	Replaced/Improved in 2022 UFS
94	15	41	4	34

Achieved means the 2015 UFSP action was achieved and is now an included as a part/process/procedure/policy for council operations, such as adopting Australian Standards for planting and tree pruning.

Retained/Enhanced means the 2015 UFSP action is included/carried over in the 2022 UFS using the same approach/intent or using similar wording. The UFSP action may have been enhanced for the UFS, such as using multiple/incremental actions that better specify how the new action/s will be achieved.

Replaced/Improved means the 2015 UFSP action is significantly changed in the 2022 UFS, such as changing the broad/unrealistic canopy target for all roadways to a specific/achievable/measurable target of shading of footpath network. Other replaced/improved actions may address timeframes and suburb canopy cover measurement.

Discarded means the 2015 UFSP action or measure does not have an equivalent 2022 action as raised or proposed during the consultative processes.

Measures

The 2015 Urban Forest Strategic Plan set out a series of goals for the Strategic Plan, under two themes:

People and Planet

- Increase environmental benefits of urban forest
- Improve biodiversity and increase habitat
- Increase canopy cover in available open space
- Improve the health of urban forest
- Improve species diversity

Place, Participation & Performance

- Raise the profile of the urban forest within Council
- Improve community engagement with the urban forest
- Improve the establishment rate of new tree plantings
- Apply Best Practice

A series of measures were to be used to assess the success of working towards or achieving the goals. The status of those measures is described in the following table.

2015 UFSP Measure	Notes
Goal: Increase environmental benefits of urban forest	
Average street tree annual iTree Eco benefit increased by 20% at maturity	It is unclear what this was targeting. The average iTree Eco benefit of mature trees, or the score for individual trees? Either score would naturally be increased as trees reach maturity. More specific measures and targets have been developed in the UFS2022 to better achieve canopy quality and ecosystem measurable outcomes. **Discarded**
Average park tree annual iTree Eco benefit increased by 15% at maturity	As above. It is unclear what this was targeting. The average iTree Eco benefit of mature trees, or the score for individual trees? Either score would naturally be increased as trees reach maturity. More specific measures and targets have been developed in the UFS2022 to better achieve canopy quality and ecosystem measurable outcomes. **Discarded**
Annual carbon sequestration increased by 20% across municipality within 15 years	This is too difficult to measure. UFS2022 outcomes focuses on measurable wellbeing and environmental benefits from having an expanded urban forest, such as shading, cooling and reduced UHI. **Discarded**
Annual pollution removal increased by 25% within 15 years	This is too difficult to measure, there is no baseline. iTree Eco modelling for pollution removal is not well developed for Australian trees, as the tool is focussed on North America modelling. UFS 2022 outcomes are more focussed on human benefit from having an expanded urban forest. **Discarded**
Reduce urban heat island in industrial and low tree density areas	2015-2022 the highest rate of tree planting (measured as trees per ha) was in Bellfield, Heidelberg West and Heidelberg Heights, which responds positively to this action. Matches UFS 2022 actions 1.1 **Retained**
Goal: Improve biodiversity and increase habitat	
Greater native tree species diversity in bushland reserves	**Retained**
Greater native tree species diversity in streets around bushland	**Retained**
Reduction in significant weed species in bushland reserves	**Retained**
Increased creation and retention of habitat trees and logs	**Retained**
Goal: Increase canopy cover in available open space	
Improved tree planting mortality to less than 5% after 24 months for all public planting projects	Council's current tree planting contract and management practices achieves this. All trees that die or fail within the 2-year establishment maintenance period are replaced. Tree mortality at 24 months is zero. **Retained**
Reduce vacancy rates in streets to less than 1 vacancy per 100 trees within 15 years	2013: 20% street vacancy Now it is 14% street vacancy UFS 2022 seeks the same saturation, will achieve within 15 years of UFSP **Retained**
Tree planting increased in parks to achieve 50% canopy cover at maturity (an increase of 15%)	Not being pursued, leave to Open Space Plan to ensure best mix of park space. Target 50% canopy over walking/bike paths and play spaces as a functional canopy target. **Replaced**
Tree planting increased in streets to achieve 75% canopy cover at maturity	Modelling showed 75% to be unrealistic given space available for appropriate trees in the streetscapes. To be replaced by canopy target over footpath network, 45% cover by 2040. Some suburbs will reach 50-60% as they are already at 40%, other suburbs will be lifted from 20% to 45%. **Replaced**

2015 UFSP Measure	Notes
Increased canopy cover on non-council managed land by 20% within 15 years	Can retain the target, we will be able to measure progress when canopy is measured. **Retained**
Reduce tree removal on non-council land by 20% within 10 years	Can retain the target, we will be able to measure progress when canopy is measured. S6.16 focuses on understanding reasons for tree loss and S4.3 will record canopy change, analyse it and report annually and S5.8 is an example action for a program to offer trees to residents in the private realm. **Retained**
Goal: Improve health of urban forest	
Improve canopy vigour across entire tree population	There is no baseline or historical data, but actions for canopy cover imaging make this feasible. **Retained**
Increase average estimated life expectancy of street tree to greater than 30 years	This has been achieved. The 2013: Useful Life Expectancy (ULE) < 25 years was 65% of inventory and it is 19% < 30 years ULE, based on 2021 inventory. The high numbers of young trees have driven this change, as well as the more proactive removal of trees with low ULE. **Retained**
Reduce tree planting mortality to less than 5% after 24 months	Council's tree planting contract achieves this. All trees that die or fail within the 2-year establishment maintenance period are replaced. Sites with frequent vandalism are now marked and avoided until easier vacancies are filled. **Retained**
Goal: Maintain and improve urban character	
Average street tree annual iTree Eco benefit increased by 20% at maturity	It is unclear what this was targeting. The average iTree Eco benefit of mature trees, or the score for individual trees? Either score would naturally be increased as trees reach maturity. More specific measures and targets have been developed in the UFS2022 to better achieve canopy quality and ecosystem measurable outcomes. **Discarded**
Average street tree amenity value increased by 20% at maturity	It is unclear what this was targeting, the average amenity of mature trees or the amenity for individual trees. Amenity value (using current models) naturally increase as trees mature, subject to other values remaining constant. **Discarded**
Maintained and improved Heritage overlay conformance	Action S4.5.4 - a public facing app that shares the tree data, showing people what trees are in their space and what the future species will be. **Retained**
Neighbourhood Character strategy is maintained	Action S4.1 - Product will include decision-making flow-chart on species selection including if there's a neighbourhood character tree that is location and climate suitable then continue to use it, else use the identified species that is the suitable renewal replacement that is more climate suitable. Action S4.5.4 - a public facing app that shares the tree data, showing people what trees are in their neighbourhood and what future species will be planted. **Retained**
Goal: Raise the profile of the urban forest within Council	
Annual tree planting budget is increased to accommodate the planting of 4000 trees per annum for the next 15 years	Not completed because it hasn't been funded. UFS seeks funding for increasing progressively to 5,000 p.a. until vacancies are fulfilled and then returning to 2,000 p.a. for ongoing replacements. **Replaced**

2015 UFSP Measure	Notes
Annual tree maintenance budget is increased over the next 15 years to allow sufficient funds to proactively manage 280,000 trees annually in streets, parks and bushland reserves	Unfunded. Current BAU maintenance budget allows for proactive maintenance of existing street trees (~70,000), some targeted proactive maintenance of high-profile trees in civic places, parks and reserves, including significant trees, and the reactive maintenance of all other public trees. **Replaced**
Develop and implement Street Tree Master Plan	Action S2.6 - Developing the list of species, S3.5 maintaining that list with incoming data on climate suitability. Action S4.1 - Product will include decision-making flow-chart on species selection including if there's a neighbourhood character tree for that location that's climate suitable then continue to use it, else use the identified species that is the suitable renewal replacement that is more climate suitable. Action S4.5.4 - a public facing app that shares the tree data, showing people what trees are in their space and what the future species will be. **Replaced**
Develop and implement Urban Forest Management Plan	Will be met through action S4.8, Tree Risk Management plan. **Replaced**
Greater consideration for trees within Council developments	Sub-actions of 6.3 are specific to achieve better outcomes in Council developments. 6.9 is to trial low-cost and repeatable WSUD implementation as new standard for tree planting in paved areas and for new kerbing on roadways. **Retained**
Goal: Improve community engagement with the urban forest	
Greater community connection with urban forest management	There are more targeted actions to deliver the outcome, whether they are delivered would be the first measure. **Retained**
Goal: Improve establishment rate of new tree plantings	
Reduce new tree planting mortality to less than 5% after 24 months	Council's tree planting contract achieves this. All trees that die or fail within the 2-year establishment maintenance period are replaced. Sites with frequent vandalism are now marked and avoided until easier vacancies are filled. **Retained**
Reduce vandalism and criminal damage	Vandalism and malicious damage of new trees is now tracked so that the locations are avoided for replanting, reducing future damage. UFS has action S6.19 to continue to focus on the importance of the local law to protect public trees. **Retained**
Goal: Improve species diversity	
Average street tree annual iTree Eco benefit increased by 20% when at maturity	It is unclear what this was targeting. The average iTree Eco benefit of mature trees, or the score for individual trees? Either score would naturally be increased as trees reach maturity. More specific measures and targets have been developed in the UFS2022 to better achieve canopy quality and ecosystem measurable outcomes. **Discarded**
Greater species diversity in streets and parks	Diversity of plantings expanding. In 2015 & 2016 there were 121 and 136 species planted; in 2022 there were 172. Increase in diversity has come from wider range in each category of indigenous, native, and exotic. **Retained**
Improved species diversity across entire municipality	Difficult to measure on private land. Some actions seek to influence private land vegetation planting. S5.8 would see Council give trees to residents; this could assist with diversity. **Retained**
Improved species diversity in suburbs identified with low diversity	The decision-making process for species selection covered in S2.6 would include diversity factor to reduce replication of species in proximity, to be balanced with neighbourhood character. **Retained**

2015 UFSP Measure	Notes
Goal: Apply Best Practice	
All Council work conducted in accordance with Australian Standards and Best Management Practices	Current works contracts specify Australian Standard. **Retained**
Development of Urban Forest Management Plan	Met through action S4.8 **Replaced**
Development of Water Sensitive Urban Design Guidelines	Water Plan 2019-2023 has since been written. UFS has actions for specific WSUD outcomes in S3.4 and S6.4. **Retained**
Improved education of all Council arboriculture staff.	Training and development are part of ongoing operational expenses. **Retained**
Manage the urban forest in accordance with best international arboriculture practices with annual budgets that reflect its true value as a living asset	**Retained**
Reduced tree loss from conflicts with infrastructure	S4.1 decision making process for species selection will avoid inappropriate species selection for sites. S4.2 for introducing amenity valuation of trees will support balanced consideration when assessing action to take to resolve conflict. S6.1 and S6.3 improves the design of new works to factor in trees, reducing future conflicts. **Retained**

Actions

The Urban Forest Strategic Plan had 96 actions. Many were associated with multiple goals. They are listed in the table below without the goals to reduce repetition of the notes, links to the 2022 UFS actions are stated.

Actions	Notes
Plan and prioritise avenue replacement where trees are over-maturing or senescing.	Not yet begun, 2021 inventory has rough age data. Prioritising aging trees will be part of prioritisation matrix in S1.1. Action S6.14 is to masterplan gateways and avenues which will incorporate renewal. **Replaced**
Adhere and enforce Australian Standards for plant selection.	Already being done, panel supply contract for trees specifies the standard. Rejecting stock results in some inability to complete planting plans. Bringing more production inhouse proposes to reduce this risk further. **Achieved**
Adhere and enforce Australian Standards for protection of Trees on development sites	Process is well established. S6.7 – monitoring, reviewing trends and updating approaches to enforcement. **Retained**
Adhere and enforce Australian Standards for tree pruning.	Australian Standard is already incorporated as business as usual for tree works contractors and there is an active audit process. **Achieved**
Adhere and enforce Best Management Practices for tree planting and risk management.	Tree planting is managed through current contract. Risk management action is S4.8 **Replaced**
Adhere and enforce Best Management Practices for tree planting.	Best Management Practices are already defined in current Tree Planting contract, the results are actively audited, the contractors held to account for non-compliance. **Achieved**
Adhere to the Neighbourhood Character Strategy for tree species selection where possible.	Already being done, Neighbourhood Character is key factor in species selection. Some mistakes identified with outlier species chosen in some locations. Will be formalised in the S4.1 decision making model for species selection. **Replaced**
Assess and geographically locate all street trees.	Completed early 2021. UFS has actions that will improve this data and share it with public S4.4 & S4.5 **Achieved**
Audit internal and external contractors during maintenance periods.	Already being done, formal auditing with data collection **Achieved**
Audit planting programs to measure and monitor vandalism and criminal damage.	Auditing of planting program is being done. Historically inconsistent data collection on vandalism, detail now improving. This has not been replicated as an action in UFS but is a measure to report on. **Replaced**
Commence an "Adopt a tree" watering program during summer months.	2022 updated the planting letter to encourage resident to water new trees. **Achieved**
Conduct annual community planting day on National Tree Planting Day.	Already being done on National Tree Days primarily through Bushland team. S5.7 to join "Tree City of the World" program will make this an ongoing requirement **Replaced**
Conduct canopy cover assessment of current private land.	Not done to date, has not been funded or resourced. S4.3 is the method to achieve this. S6.6 is the reporting to the public. S6.16 is the analysis to understand the drivers for losses. **Retained**
Conduct canopy cover assessments of streets, parks and bushland reserves.	Not done to date, has not been funded or resourced. S4.3 is the method to achieve this and S6.6 is the reporting to the public. **Retained**

Actions	Notes
Conduct iTree Eco sample survey of municipal streets and parks after 15 years	Contradicted by the action calling for iTree-eco in the -5-year inventory. No longer required, having larger, healthier trees will increase iTree Eco scores. **Discarded**
Conduct periodic canopy cover assessments to measure efficacy of programs	Not done to date, has not been funded or resourced. S4.3 is the method to achieve this and S6.6 is the reporting to the public. **Retained**
Conduct strategic sample of all park trees within Municipality	No longer required, UFS 2022 proposes data management that will maintain real data, not rely on samples. **Replaced**
Conduct tree inventory (including iTree Eco) of all street and park trees every 5 years	Significant budget would be required, no clear benefit. No longer required, having larger, healthier trees will increase ITree Eco scores. **Discarded**
Consult committees and relevant stakeholders on major planting projects.	Consistent with UFS action S5.5. **Retained**
Develop an Urban Forest Management Plan, drawing on existing document such as the Street Tree Strategy developed in 1998	Management of the urban forest such as risk aspects and decision processes will be met by S4.8. The Street Tree Strategy doesn't replicate directly, replaced by actions: Action S2.6 - Developing the list of species; S3.5 maintaining that list with incoming data on climate suitability; Action S4.1 - Product will include decision-making flow-chart on species selection including if there's a neighbourhood character tree that is location and climate suitable then continue to use it, else use the identified species that is the suitable renewal replacement that is more climate suitable. Action S4.5.4 - a public facing app that shares the tree data, showing people what trees are in their space and what the future species will be. **Replaced**
Develop and implement integrated pest and disease management program	Currently delivered as Elm Leaf Beetle program. Disease management will be outcome of improved, targeted biodiversity plantings (S2.1, S2.2). Action S3.1 is focussed on significant trees on public land. **Replaced**
Develop and implement proactive tree maintenance program.	Current street tree program is in place. No program for park maintenance. Action S4.8 will establish formal process document. **Retained**
Develop Street Tree Master Plan to provide preferred species list.	Not yet delivered. UFS deals with more than species selection, it includes the importance of design for spaces. Action S2.6 for species lists and street design is the outcome of S4.1. Action S6.14 is specifically for master planning gateways and avenues. **Replaced**
Develop tree establishment and maintenance guidelines.	Process well established, defined in Tree Planting and Maintenance Contract which is actively audited. **Achieved**
Develop water sensitive urban design principles and guidelines for council.	Water Plan 2019-2023 has since been written. UFS has specific actions on WSUD in S3.4 to make it business as usual for projects; S6.3.1 for a committee to review capital works designs against urban forest priorities; S6.9 to trial small scale WSUD that could be standard for new kerb works or rebuilds **Retained**
Diversify environmental benefits through strategic species selection and planting.	Will be met through actions on species selection and expansion of biodiversity focussed plantings – S2.1, S2.5, S2.6, S3.6. **Replaced**
Educate and promote communities of the benefits of the urban forest.	Ongoing through current Environment programs. UFS has actions S5.2 focussed on community engagement and S5.7 which will bring the formal requirements to be a Tree City of the World. **Retained**

Actions	Notes
Educate and promote communities of the importance of remnant vegetation.	Ongoing through current Environment programs. UFS has actions S5.2 focussed on community engagement and S5.7 which will bring the formal requirements to be a Tree City of the World. **Retained**
Educate the community of fire risk management guidelines.	Not in new strategy. UFSP had no background or measure for this. **Discarded**
Encourage private planting plantings through community engagement and education programs	Ongoing through current Environmental programs. UFS has actions S5.2 focussed on community engagement and S5.7 which will bring the formal requirements to be a Tree City of the World. Action S5.8 will give residents trees to plant. **Replaced**
Encourage private realm tree and garden plantings.	Ongoing through current Environmental programs. UFS has actions S5.2 focussed on community engagement and S5.7 which will bring the formal requirements to be a Tree City of the World. Action S5.8 will give residents trees to plant. **Replaced**
Enforce maintenance of newly planted trees (i.e., watering, mulching, pruning and pest and disease management).	Defined in current contract and audited. **Achieved**
Enforce monitoring of new tree plantings during the establishment period.	Defined in current contract and audited. **Achieved**
Ensure Banyule's community Garden Policy/Guidelines reflects the directions of the Urban Forest Strategic Plan.	Ongoing. Will be updated to the UFS through action S6.12. **Retained**
Ensure correct species selection and provenance where applicable.	Ongoing. Species selection approached using evidence base. Recent planting seasons expanded use of species range including wider range of indigenous species. Action S2.6 will ensure ongoing selection rigour. Action S1.7 will work with local indigenous nurseries to obtain more local provenance stock. **Retained**
Ensure nature strip Planting Policy/Guidelines compliments the direct of the Urban Forest Strategic Plan.	Not yet achieved, specific action S2.4 to deliver an outcome on this in UFS. **Retained**
Ensure tree establishment and maintenance guidelines are included in relevant council design and construction guidelines.	Ongoing. Retained in S6.3.4, S6.4. **Retained**
Ensure trees are established within the landscape during maintenance period.	Ongoing. Retained in S6.3.4, S6.4. **Retained**
Ensure updated Public Open Space Strategy reflects the directions of the Urban Forest Strategic Plan.	Ongoing. Will be updated to the UFS through action S6.12. **Retained**
Facilitate school programs to promote the benefits of the urban forest.	Not yet implemented. UFS action S2.3 will investigate the co-management of spaces for planting. **Replaced**
Identify and educate community of significant tree weed species in municipality.	Banyule's Weed Strategy 2022 covers this action. **Achieved**
Identify areas of low planting density.	Partially achieved through street inventory. Actions for canopy cover measurement will deliver wider results that include open space and private land. Setting the importance of acting on low density is in Action S1.1. **Replaced**
Identify areas of poor tree health and short life expectancy.	Partially achieved through street inventory collected 2021. Actions for canopy cover measurement will deliver wider results that include open space and private land. Setting the importance of acting on low density is in Action S1.1. Maintaining the data will be done through the database that is the action S4.4, associated action S4.5 make the data publicly available. **Replaced**
Identify suburbs and areas that have declining tree health, poor species selection, or low planting density.	Partially achieved through street inventory collected 2021. Maintaining the data will be done through the database that is the action S4.4, associated action S4.5 make the data publicly available. **Replaced**
Identify suitable sites for annual community planting day.	Ongoing, tree planting days are usually led by Bushland. Action for Tree City of the World membership will formalise the requirement for an annual day to celebrate planting. **Replaced**

Actions	Notes
Improve inspection and reporting response times for customer requests.	Not identified as an issue in the UFS, current UF CRMs are at historic low. Action S4.8 will establish service level agreements for customer requests. **Replaced**
Improve planting opportunities in high imperviousness and industrial areas.	Ongoing. Action S1.1 sets the approach to identify and prioritise the areas. Action 4.1 sets out the design guidelines for the spaces. S6.3.2 is to coordinate tree planting plans with capital works programs to gain efficiencies to plant in these areas. **Retained**
Improve planting survival across municipality.	Ongoing. Current Tree Planting Contract specifies standard, program is actively audited. Action S6.4 is to bring consistent maintenance plans for planting into all council projects. **Retained**
Improve staff education by facilitating opportunities for higher education.	Ongoing. Urban Forestry staff have been supported in higher education including Cert V in Arboriculture, Graduate Certificate in Arboriculture, TRAQ and ISA qualifications for assessing risk. Has not been identified as action in the UFS, existing operational budgets include training and education which are being utilised. **Achieved**
Improve tree planting stock selection, planting procedures and maintenance programs	Ongoing. Current Tree Planting Contract specifies standard, program is actively audited. Action S6.4 is to bring consistent maintenance plans for planting into all council projects. **Retained**
Increase annual budget for tree maintenance and monitoring.	The UFS proposes more proactive maintenance and initiatives to manage public trees, shifting from reactive maintenance of streets (other than street trees). Proactive maintenance will progressively lead to better operational efficiency. **Replaced**
Increase annual planting program to approximately 4000 trees per year.	4,000 trees pa is more than current BAU budget ($513k) which allow for ~1500-2000 trees. S1.6 UFS proposes accelerated infill planting program to fill the ~10,000 vacant street tree sites wthin6-10 years. Once vacant sites are filled the BAU program will revert to ~2000 pa. **Replaced**
Increase annual planting program.	Non-specific, other actions specified size of increase. UFS action S1.6 is to increase capacity for a short period to plant all street vacancies then return to current levels. **Replaced**
Increase planting density in streets and parks.	Currently happening in streets, multiple small trees are planted where larger trees are not possible. S4.1 will establish design layouts to guide planting density in different spaces. **Retained**
Increase planting density under power lines.	Currently happening in streets, multiple small trees are planted where larger trees are not possible. S4.1 will establish design layouts to guide planting density in different spaces. **Retained**
Investigate and utilise opportunities for reengineering of above ground services to facilitate the integration of larger trees in streets.	Ongoing. Action S6.2 is to advocate to State Government and authorities for positive change for urban forestry outcomes. **Retained**
Investigate and utilise water sensitive urban design to facilitate the integration of larger trees in streets and improve longevity.	UFS has specific actions on WSUD in S3.4 to make it business as usual for projects; S6.3.1 for a committee to review capital works designs against urban forest priorities; S6.9 to trial small scale WSUD that could be standard for new kerb works or rebuilds **Retained**
Keep dead logs in bushland reserves and suitable parks as habitat and allow natural decay for soil nutrients.	Being done as standard practice, large logs are regularly moved from parks and streets to bushland reserves for habitat purpose. Will continue. **Achieved**
Maintain and enforce planning protections within relevant EPO, HO, SLO, and VPO	Ongoing. UFS actions S6.7, S6.8, S6.11, S6.14 to measure and regularly review success of approaches used for enforcement and revise. S6.6 commits to sharing canopy change data. **Replaced**
Maintain Council's tree removal and pruning policy.	Policy is to be formalised through UFS action S4.8. **Retained**

Actions	Notes
Maintain staff education with annual attendance to relevant industry conferences, seminars, and workshops.	Ongoing. Urban Forestry staff have been supported to attend conferences such as the Treenet Symposium, Council Arboriculture Victoria and Parks & Leisure Association. Has not been identified as action in the UFS, existing operational budgets include training and education which are being utilised. **Achieved**
Maintain watering schedule (using recycled, reclaimed water where possible).	Newly planted trees are watered for two years, specified in planting and maintenance contracts. Watering events are logged. Contractors refill at Council facilities that include recycled water. **Achieved**
Manage identified tree weed species in all bushland reserves according to risk prioritisation.	Ongoing. Banyule's Weed Strategy 2022 covers this action. **Replaced**
Measure and monitor urban heat island through use of thermal imaging.	Canopy to be monitored instead (S4.3) and shared with the public (S4.5 & S6.6). **Replaced**
Monitor tree health in accordance with proactive tree management.	Ongoing. System improvements are required to make this easier to aggregate date (S4.4). S4.8 will detail risk management approach response. **Replaced**
Plan and prioritise streetscape rejuvenation projects according to areas of need.	Action S1.1 will formalise the identification and ranking of priority, S1.5 will respond to planting in the locations with highest need first. **Retained**
Plant advanced tree stock (i.e.,, >40 litres nursery stock) where suitable.	Current budget does not allow for this to be achieved fully now. A mix of sizes (23cm to 45cm) is used depending on species and location. Bare root used to achieve large size at lower cost for some species. Action S1.7 would support planting larger stock at a lowered price by growing to a larger size in-house. **Replaced**
Plant all identified vacant planting sites with suitable tree species.	Streets done through 2021 inventory. Parks done in coordination with OSP masterplans. S1.6 is to plant out all vacant street sites, approx. 16,000 trees including the removals in the surge planting period. **Replaced**
Plant larger tree stock and species in parks and around sports grounds.	Budget does not allow for this to be achieved fully now. A mix of sizes (23cm-40cm pot) is used depending on species and location. Bare root used to achieve large size at lower cost for some species. S1.8 would support planting larger stock at a lowered price by growing to a larger size in-house. **Replaced**
Plant larger tree stock and species in suitable streetscapes.	Budget does not allow for this to be achieved fully now. A mix of sizes (23cm-40cm pot) is used depending on species and location. Bare root used to achieve large size at lower cost for some species. S1.8 would support planting larger stock at a lowered price by growing to a larger size in-house. **Replaced**
Plant larger tree stock and species within suitable Council developments.	Being done. Council capital works projects usually plant at least a 43cm pot tree. **Achieved**
Plant tree species with larger canopies in parks and around sports grounds.	Ongoing, tree selection is done in collaboration between Open Space Design and Urban Forestry teams. Action 2.6 will detail suitable large canopy trees for use in Banyule. Action S6.10 is for the planting of trees with very large canopies in appropriate spaces, which will include some parks and sporting grounds. **Replaced**
Plant tree species with larger canopies in suitable Council developments.	Ongoing, Action S6.3.1 will require consideration of urban forestry outcomes for Council projects, action 2.6 will detail suitable large canopy trees for use in Banyule. Action S6.10 is for the planting of trees with very large canopies in appropriate spaces, which will include some council developments such as carparks. **Replaced**

Actions	Notes
Plant tree species with larger canopies in suitable streetscapes.	Ongoing. Action S6.4 will be streetscape designs to include largest suitable canopy for streetscapes considering the constraints. Action 2.6 will detail suitable large canopy trees for use in Banyule. Action S6.10 is for the planting of trees with very large canopies in appropriate spaces, which may include some streetscape spaces such as roundabouts. **Replaced**
Prioritise all streets, suburbs and parks for maintenance and improving tree canopy cover.	Ongoing. Action S1.1 will formalise the prioritisation method. **Retained**
Prioritise and increase planting in areas of low canopy coverage.	Ongoing. Action S1.1 will formalise the prioritisation method. **Retained**
Promote Council and community planting programs.	Ongoing. UFS has actions S5.2 for promoting urban forest benefits through community events and programs and S5.7 to become a Tre City of the World that formalises the need to promote the urban forest. **Retained**
Promote the environmental and functional values and benefits of the urban forest.	Ongoing. UFS has actions S5.2 for promoting urban forest benefits through community events and programs and S5.7 to become a Tree City of the World that formalises the need to promote the urban forest. **Retained**
Reduce effects of urban heat island in areas of low canopy coverage.	Ongoing. Action S1.1 will formalise the prioritisation method. **Retained**
Reduce use of herbicides for weed control.	Banyule's Weed Strategy 2022 covers this action. **Replaced**
Remove major tree weed threats in sensitive environments according to risk prioritisation.	Banyule's Weed Strategy 2022 covers this action. **Replaced**
Remove underperforming trees in key locations	Ongoing. Action S4.8 will incorporate underperforming trees in the risk management approach to urban forestry management. **Retained**
Retain dead trees in bushland reserves and suitable parks as habitat.	Being done as standard practice. Will continue and be improved when combined with the formalised mapping of priority biodiversity corridors. **Achieved**
Review and compare canopy cover on private land after 15 years.	Not yet at 15years since the UFSP. UFS S4.3 proposes to do this annually so it can be acted upon progressively. Action S6.6 is to share results with the public. **Replaced**
Strategically improve species and age diversity in bushland reserves.	Ongoing. Will be achieved through actions on species selection (S2.6), diversity of species as a prioritisation factor (S1.1) as well as planting strategic locations for biodiversity (S2.1). **Retained**
Strategically improve species and age diversity in parks with additional plantings.	Ongoing. Will be achieved through actions on species selection (S2.6), diversity of species as a prioritisation factor (S1.1). **Retained**
Strategically improve species and age diversity in streets with additional plantings.	Ongoing. Will be achieved through actions on species selection (S2.6), diversity of species as a prioritisation factor (S1.1). **Retained**
Strategically plan new planting programs within groups of streets to improve the efficacy of 2-year maintenance processes.	Not started. Tree planting has been driven by streets with low canopy cover and customer requests. UFS through S1.1 proposes to focus on priority areas which will achieve this action of planting heavily in more localised areas. **Retained**
Strategically select tree species that can achieve greater efficiency for targeted pollution removal	Little data available for this and pollution removal efficiency is only one criterion in matrix of neighbourhood character, climate suitability, size suitability etc. Generally best pollution removal comes with adverse trait of increased allergy risk from trichome hairs (e.g., Plane trees). **Discarded as an action**
Systematically remove over-maturing trees to facilitate generation transition.	Ongoing. Action S4.8 will incorporate over-mature trees in the risk management approach to urban forestry management. **Retained**

Actions	Notes
Use local streetscapes to improve connectivity and buffering of bushland reserves.	Ongoing. UFS has actions S2.5 to formalise the mapping of habitat corridors to apply to planting plans; S2.1 is to identify underutilised land for increasing understory planting for biodiversity outcomes; S1.7 is to use more local provenance stock in vegetation planting. **Retained**
Use location vegetation community information to assist in planting selection.	Ongoing. Through UFS action S4.1 vegetation corridor will be key factor in species selection through the decision-making process. Action S2.5 is to formalise the mapping of habitat corridors to apply to planting plans; S2.1 is to identify underutilised land for increasing understory planting for biodiversity outcomes; S1.7 is to use more local provenance stock in vegetation planting. In Action S4.1 vegetation corridor will be key factor in species selection through the decision-making process. **Retained**
Work with development to improve retention of mature trees on private property.	Ongoing. UFS action S6.5 includes reviewing processes on tree protection during development and other stages to ensure no gaps in protection. Action S6.17 is to update the Banyule Tree Planting Zone Guidelines January 2011 to best practice. **Retained**
Work with development to improve tree planting on private property.	Ongoing. UFS action S6.5 includes reviewing processes on tree protection during development and other stages to ensure no gaps in protection. Action S6.17 is to update the Banyule Tree Planting Zone Guidelines January 2011 to best practice. Action S3.5 will be to provide recommended vegetation species lists to make support better choices for appropriate species. **Retained**