

#### **Questions and Answers**

Questions have been grouped by topic and speaker. Questions addressed to a particular speaker have been so noted. Some questions have been combined and/or edited for clarity.

#### Summit Related

1. Will this summit be available on YouTube? I think it would be extremely beneficial for my team to familiarize themselves with this information as we plant trees throughout the city.

The Summit was livestreamed on YouTube and the video remains available here: <u>https://www.youtube.com/watch?v=KfjbUZVKJSc</u>

The Summit is also available to view on the <u>StreetsLA Tree Summit</u> webpage.

#### 2. Can the presentations be shared? Great information.

All three presenters have provided copies of their presentations for inclusion on the <u>Tree Summit webpage.</u>

#### 3. Can/will a participant list be shared from today's event?

City participants included Adel Hagekhalil, Greg Spotts and Teresa Villegas. Guest speakers included Dr. Tom Smiley, Miranda Hutten and Dr. Matt Ritter. The list of attendees is not public.



# 4. Can you share how many participants we have? Do you have information on who participants are in general (residents, experts, city officials, etc)?

Over the course of the Summit we had over 200 unique attendees. Approximately half identified as city employees and we were also joined by a mix of advocates, tree experts, city officials, planting partners and interested parties.

#### **Urban Forest Division, StreetsLA**

#### 5. How many trees has the City of Los Angeles removed?

This Fiscal year the Urban Forestry Division has removed 2,444 dead trees, including stump removal.

#### 6. How about the sidewalk/tree conflicts in the Porter Ranch area?

A request has been made for sidewalk repairs on Sesnon Blvd on both sides of the street between Tampa Ave and Porter Ranch Drive. The requests for the removal of tree well covers will be scheduled when staffing and resources allow.

#### 7. What's the reason there is no mulch in the parkway?

Parkway maintenance and upkeep is the responsibility of the abutting property owner(s). In the case of the example in the presentation, mulch was added after the photos were taken.

#### 8. Are the free mulch locations still open?

According to LA Sanitation and the Environment, <u>https://www.lacitysan.org/</u>, free mulch is available for pick up at locations around the City while home deliveries are currently suspended. With situations changing rapidly we advise double checking hours of availability prior to your visit.



9. Great to see the pilot program on Cherokee to learn and align expectations. Are the new afrocarpus trees planted with root barriers? Would you consider the Ficus nitidia planted with root barriers to keep the same species on the street?

The new Afrocarpus trees will have root barriers installed. No, Ficus nitida trees are not being considered as they are too aggressive for this size parkway. UFD is looking at different varieties of Ficus trees for the future but they need a large parkway to be planted in.

10. Regarding N Cherokee - the stakeholders who fought for solutions to removing these trees should also be acknowledged. Does StreetsLA recognize the fact that this solution would not have been considered and implemented if not for stakeholder participation?

The success of the Cherokee project is the result of many factors, including the active interest of the community. This project would not have been possible without the support of the stakeholders and City leadership combined with the unique attributes of the trees themselves which allowed for more aggressive root pruning than would otherwise have been feasible or safe.

11. Is there a current recommendation on applying compost, biochar and mycorrhizal fungi amendments for treating soil compaction, increasing long term soil microbiology, and improving root growth?

Current tree planting specifications (S-456-2) requires backfill with organic soil amendment. See link for current tree planting standard plans <u>http://eng2.lacity.org/techdocs/stdplans/s-400/S-456-2.pdf</u>



12. Will the Urban Forestry Division be working together with Metro to plant trees around the Metro subway and light-rail stops, including the "last-mile" for making walking hospitable? Is it possible to start this planting sooner than later so we have larger trees in place when the new stops open? Or, does Metro handle this on their own?

StreetsLA and the Bureau of Engineering staff work in conjunction with Metro on landscape improvements within the public right-of-way. Plans are routed to our group for review and for determining tree locations and species selection. Metro constructs the plans and fulfills the plant establishment agreement. Trees are planted when the site is ready for tree planting with a watering with a maintenance agreement for a three-year establishment period.

13. Who verifies that these Metro project trees are planted and survive for several years?

Urban Forestry Division staff inspect and verify.

14. How does one maintain a healthy parkway tree after the front yard has been converted to drought tolerant plants? Other than the free mulch that is provided by the City, what is the other ground covering that is best for parkway trees that was mentioned today?

The property owner should have a means to provide irrigation to the street tree during the summer and long periods of drought. Please refer to the StreetsLA <u>Residential Parkway Landscaping Guidelines</u> for additional information.



# 15. Is there an updated tree species list? We are planting a lot of new trees in Venice and the species list is rather limited considering how diverse the existing City canopy is.

We will be posting an updated list soon, however, the issue of species diversity will be addressed more comprehensively as the tree inventory progresses. The tree inventory will give the City data that will guide decision making in terms of trees to prioritize based on desired species diversity, existing stocking rates, size of available planting locations and other factors. We look forward to engaging with communities to share, and receive feedback, on our plans for tree species selection based on that data.

Bob Perry, noted tree species expert, has been contracted to provide feedback relative to the City Forest Officer and Mayor's Office goals to align the tree species list with the City's Biodiversity efforts. The final tree species list will be data driven, informed by the City's tree inventory, reflect key species diversity targets and community feedback.

### 16. How does LA catch up to the leadership of cities such as Seattle and, more locally, Santa Monica?

We are fortunate to have City leadership that understands the importance of the urban forest, is committed to improving it, and has spent the past few years increasing the resources available to manage the urban forest. Our tree inventory is a key component of the City's ability to adopt leading-edge tree policies and practices. The data will help us understand the total resources needed to appropriately manage it, and the inventory system itself is a valuable tool for tracking and managing trends in our urban forest.

Additionally, the development and adoption of the Urban Forest Management Plan will give us an opportunity to set forward ambitious targets and the roadmap to reach them. Since the Tree Summit, the



City learned that it will be receiving an Urban Forest Management Activities grant from CalFire to support our work on the inventory and UFMP.

On-going participation from our stakeholders supports progress toward Los Angeles being a leader in urban forestry, to adopt progressive policies and the funding necessary to care for and grow our urban forest.

#### **Tree Inventory**

### 17. Where are the inventory one-pagers available, and what is the online portal for the tree data again?

The inventory reports by Neighborhood Council are/will be available on the Tree Inventory website: <u>streetsla.lacity.org/tree-inventory</u>. We encourage you to utilize the notification system on that webpage so you will receive notification when your Neighborhood Council(s) of interest have been completed.

#### 18. What's included in the calculation of annual benefits? Seems extremely high if it is only talking about environmental services. Would be interesting to separate environmental economic value from property value.

The inventory is using i-Tree to calculate the benefits and they do include both environmental and property values. Each Report indicates that i-Tree was used and the date of release.

### 19. You can present at our Neighborhood Council meeting. We are eager for a presentation.

We are happy to present to any Neighborhood Council. Please submit a request to <u>melinda.gejer@lacity.org</u> for further coordination.



20. How is the tree inventory effort coordinating with other local tree programs to ensure there is a comprehensive view of current and future state of the urban forest. In Westchester there is a lot of activity by a streetscape organization cutting a lot of mature trees that may or may not be accounted for in the inventory as the team rolls through.

The street tree inventory is on a 2-year schedule for completion. StreetsLA, Urban Forestry Division, is responsible for updating the inventory as it is completed, which they will do during daily activities, in order to maintain a current and accurate inventory.

## 21. In the locations with empty tree wells, is there an opportunity to educate the homeowner so they can work with City Plants to get new trees in.

Outreach to, and education of, our community members is the foundation of a healthy and thriving urban forest, and we are in the process of devising a community education campaign as part of the UFMP, as funding permits. In the meantime, we encourage homeowners to utilize the educational tools provided by City Plants on their <u>website</u> for the selection, care, and energy-saving benefits of their tree. An additional tool is the Tree Inventory which will identify available planting locations and may assist in targeting outreach to the most vulnerable populations.

#### 22. Is there a layer in the mapping that shows where Stormwater BMPs are installed so the additional water being infiltrated can be included in the data about tree conditions?

No, there is not a layer in the tree inventory software that shows Stormwater BMP installations.



#### Tree Removal/Replacement/Retention

# 23. Large stature street trees are being replaced with small stature street trees. What evaluation has Streets LA done regarding the consequences of downsizing of the urban forest streetscape?

Trees at the end of their life-cycle are larger than the young trees that replace them. The replacement of end-of-life-cycle trees with trees of a similar stature would be cost prohibitive, and mature trees can be more prone to failure upon transplant. StreetsLA commits to maintaining a healthy urban forest and strives to achieve urban forest age diversification Best Management Practices for enhanced resiliency. We remain open to replacement strategies that can further enhance our urban forest.

### 24. Adel mentioned a motion (to preserve and retain trees). What motion are you referring to?

The Council has put forward many motions relative to the urban forest. These include, but are not limited to, the following, the majority of which will be addressed through the development of the Urban Forest Management Plan:

CF 13-1339, expansion of the Protected Tree Ordinance

<u>CF 03-1459</u>, strengthening of the Protected Tree Ordinance

CF 15-0499, protection of wildlife areas, urban forest and biodiversity



# 25. If the "core metrics" are pruning, removing and planting, could you add a core metric for preserving and retaining? If this is not a core metric, how will it be prioritized?

The Bureau of Engineering, which is responsible for the management of the Sidewalk Repair Program, does count the number of trees which are able to be retained in place. Now that there is a requirement for pre-development consultation with the Urban Forest Division prior to pulling permits, we are also able to quantify the number of trees retained through that process.

### 26. Can we consider narrowing some less-traveled streets to accommodate tree retention?

We are supportive of helping to identify opportunities to retain trees wherever possible, and we welcome further discussion of ideas like this. Generally speaking, the reclassification of a street would be considered by the Department of Transportation using the City's Mobility Plan 2035.

# 27. Can you address the impact that development has on the urban forest as well as enforcement and replacement requirements for removal of protected trees on private property? Can developers donate replacement trees to the City in lieu of planting them on site?

Development has a marked impact on the urban forest. Street trees that are removed as a result of development are required to be replaced at a 2:1 ratio. The removal of protected trees require replacement at a 4:1 ratio, and are the only trees currently governed on private property.

It is no longer City policy to allow developers to donate replacement trees to a city nursery. The recently adopted Tree Replacement Guarantee is an ordinance created to address the issue of developments that are unable to replace trees on-site. Since the



adoption of the Ordinance, if a development project is unable to fit replacement trees on-site, the developer pays a fee that covers the tree, procurement, planting and the first three years of maintenance. These trees are then able to be planted as part of a cohesive project for the area and receive dedicated establishment care.

# 28. Regarding tree replacement when trees are removed - is there a deadline or time limit on the required "tree replacement"? If not, why not?

The timeframe for tree replacement varies depending on the program. The Sidewalk Replacement Program re-plants within seven months. A-Permit planting takes place before the A-permit Expires. B-permit and Engineering projects planting takes place at the end of construction and the time varies. The plantings associated with the Guaranteed Tree Replacement are done annually based on the prior year funds received.

When trees are removed, they are replaced based on tree planting funding for the Division. The Division is generally funded to plant 1000 trees per fiscal year. Most planting is performed by non-profit organizations through City Plants. The non-profit partners' time to plant is an average turnaround time of six months.

# 29. How can large/impactful trees be included in development projects that receive yard reductions? Can we consider bulb-outs into the street or eliminate front yard reductions all together? It might require an amendment to LAMC 12.22 A31 or/and 12.22A25.

These types of recommendations will be considered during the development of the UFMP. We will be working closely with the Department of City Planning to identify any Code sections that may require revision.



#### **Development**

30. Development in the City (ie: mansionization, accessory dwelling units) is causing trees to be removed from private property and not replanted. Could a tree protection ordinance support replanting/mitigation for these losses. Are there additional nonregulatory solutions to this problem?

The City is looking at ways to thoughtfully expand tree protections for mature trees on private property and provide related guidance to property owners and developers. The <u>Protected Tree Ordinance</u> currently regulates the removal and replacement of four indigenous species. The City is looking at potential modifications to this ordinance, both in terms of the species it covers and enforcement procedures. Any solution, regulatory or non-regulatory, will have to include an active community education and engagement effort on the benefits of trees.

31. Can we add green infrastructure requirements for private landowners? Lots of apartment buildings have no trees at all. Can't the city add some minimum requirements, even if it started small?

StreetsLA and the City Forest Officer are in the process of coordinating with the Department of City Planning to identify open space requirements for development projects and opportunities to enhance or strengthen those requirements. We will consider this idea.

# 32. How can we prevent developers from removing all vegetation, including mature trees, both specimen and protected, from a soon to be developed property?

Tree species which are included in the City's Protected Tree Ordinance (PTO) are not to be removed from private property without



the required permits. There is not currently legislation in place which prohibits the removal of other vegetation from private property. Violation of the PTO can result in a citation or a fine.

While there is no way to prevent bad-actors from violating the Code, the City is looking at ways to update the PTO in terms of species protected, enforcement procedures, and violation penalties as part of the development of the UFMP. The education of the public is also a critical component of any strategy to increase the health of the urban forest.

33. Please address developers cutting down trees, some with and some without permits. City must give more time to residents and NC's to address permit requests for removal and must address and require replanting as required.

Permits are required to remove any dead or alive Protected tree in the City of Los Angeles under ordinance 177,404. Violators can face misdemeanor charges and fines. Urban Forestry Division follows the Brown Act for notification purposes when there are more than 3 trees required to be removed and the report goes to the Board. When it is two trees or less the Division has added a 30-day hold for any objections (increased from 3 days). All replanting commitments are bonded to ensure the tree is planted and survives.

### 34. Can we regulate Ficus m. planting through Building & Safety? Not only as street trees but as hedges in new construction?

Qualifying landscaping projects require approval by the Director of Planning as described in the <u>Landscape Ordinance</u>. This Ordinance discourages use of Ficus (ficus microcarpa nitida) as a street tree but does not address it as hedges. The Department of Building and Safety does not currently have a role in this process; landscape reviews on private property are done by the Planning Department.



# 35. In Los Angeles County older communities typically have larger parkways. What is being done throughout the state to encourage larger parkways that can host larger shade trees in new developments?

We are not aware of State-wide efforts to legislate the size of parkways to accommodate large trees. Within the City, departments are working with the City Forest Officer to identify ways to increase tree canopy, particularly as it relates to the Mayor's Green New Deal goal to "increase tree canopy in areas of greatest need by at least 50% by 2028." This includes collaboration with the City's Chief Design Officer, Christopher Hawthorne, as his team explores issues of urban design, including the public right of way.

#### Financing

### 36. In light of the City's financial issues, can the Willits settlement be renegotiated?

We are not aware of any current plan to renegotiate the Willits settlement. Bureau of Engineering staff have plans to continue to meet the settlement obligations in the next fiscal year.

# 37. Have you reviewed the CAO's financial comparison of retaining vs. removing trees? They reported that costs are reduced by retaining. The environmental benefits are much greater with mature trees vs. new plantings.

We are familiar, and agree with, the CAO's findings. Our policy is to retain trees where feasible. Typically, street trees are approved for removal if they are dead, dying, diseased, or otherwise compromised to the point of being a hazard. Trees that are approved for removal to accommodate development projects are required to be replaced on a 2:1 ratio.



38. Tree planting projects do not have sufficient funding during the establishment period when the newly planted trees are most vulnerable. No funding for maintenance after 3 to 5 years. What is the plan for ongoing watering/maintenance for young trees after 3 to 5 years?

The City standard commitment is for three years of watering during the establishment period after which time the trees are moved to the standard tree maintenance which does not include watering. The establishment period is a tremendous expense. Any support advocates can provide in sharing the importance of these early maintenance activities, and their associated expense, is greatly appreciated.

Los Angeles' non-profit partners and others around the state worked diligently with CalFire (one of the main funders of tree planting grants), to expand the funding they will cover for tree maintenance. Currently, applicants can request funding for "extended maintenance" for years 3-5 in their CalFire grants. To see this offered in other programs, Angelenos should communicate with their state and local officials on the importance of this kind of funding for "extended" maintenance to their projects.

39. We need to have development projects pay a fee, much like the arts in public places, for urban forestry maintenance. <u>https://culturela.org/percent-public-art/private-arts-development-fee-program-adf/</u>

Thank you for offering a creative solution for funding urban forestry maintenance. The City is committed to understanding the full scope of its urban forestry management needs and determining a path to fund those activities. Recently City Plants received funding from the U.S. Forest Service and CalFire for a Financing Study for Los Angeles Urban Forestry. This project will explore funding mechanisms for our urban forest, and we will share this idea in that research.



#### 40. Should people get a DWP credit for watering a new street tree?

That is an interesting suggestion, and we're exploring it further with LADWP. LADWP has provided significant funding for tree planting in Los Angeles for more than 15 years as part of their Energy Efficiency Solutions program.

#### 41. Was the wildlife pilot study budget cut?

While in the current budget the funding for the positions related to the Wildlife Pilot study are not continuing into the fiscal year beginning July 1, 2020, the Planning Department is still working to provide recommendations for the study area.

#### **Outreach and Advocacy**

42. What can we do to create a more organized approach to rebuilding canopies on major streets that are highways in the middle of neighborhoods and important walkways that are routes between public transit points? How can neighborhoods work together with the city on this?

The City and our non-profit partners frequently prioritize planting projects, particularly those that come with dedicated funding, to areas like the ones described in this question. Some examples are LA Sanitation and the Environment's grant projects, along corridors like Vermont, Reseda, and many more; and Koreatown Youth and Community Center's projects along Western Avenue, Olympic Avenue, 8th Street, etc. in Koreatown as well as Western Avenue and Vernon Avenue in South Los Angeles.

The first implementation plan for the Guaranteed Tree Replacement program, approved by City Council, also reflects this type of prioritization. The staff that developed the plan considered several factors, one of which was whether it was a highly used corridor that would benefit a larger number of residents in the Council District.



Planting projects include community outreach in a variety of forms, including with Neighborhood Councils and the Council office to understand where there is an identified community need, and with existing neighborhood groups and schools. Additionally, City Plants has a "Block Leader" program where neighborhoods can work to garner support for a planting project on a specific street.

## 43. How can the City consider broader community input than the Neighborhood Councils as the Neighborhood Councils do not always reflect the needs of the entire community?

We rely on a number of mechanisms to engage with the public, such as this Tree Summit, the Community Forest Advisory Council, and environmental and tree-planting organizations. We engage with the Neighborhood Councils and the Council Offices and ask them to utilize their infrastructure to share information with their residents. In addition, for neighborhood specific efforts, we also want to engage neighborhood groups and schools. We communicate through social media and encourage residents to follow us on Instagram (bsslosangeles) and Twitter (@bsslosangeles). We encourage engagement and welcome comments and questions from the community at any time.

#### 44. What can the tree-advocate agencies here do to better influence the City to plan and design for maximum preservation of the urban forest and biodiversity?

Your voice is important in supporting the City to improve its protection, care and growth of the urban forest and biodiversity. You can engage and provide feedback in policy development on biodiversity being done by the Department of City Planning (e.g. Community Plan Updates, re:code) and to communicate with decision makers about the need for additional capacity for review of biological resources on development project sites.



We also invite your involvement with the Community Forest Advisory Council. You can let your Council member know that you support adequate funding for the care and growth of the urban forest. You can stay involved in the development of the Urban Forest Management Plan. As an attendee of the Tree Summit you will be automatically added to the contact list of interested parties for the UFMP.

# 45. Can our realtors become part of the equation of educating the buyer of a home that the parkway trees are to be maintained by the owner, not harmed/cut down or otherwise severely trimmed?

I appreciate this recommendation for realtors to be another audience we educate and engage. Any further recommendations on specific groups that might be conduits to that audience are appreciated, as they could be included in a future education campaign.

#### **Dr. Smiley/Root Pruning**

46. My question concerns root pruning mature parkway street trees in order to repair sidewalks, widen driveway aprons, and other types of construction or repair around the tree. Can we reduce the risk of tree failure by removing and replanting a tree instead of root pruning it?

Certainly. This is a major tenant of tree risk management. If you remove the tree, you remove the risk. However, you also remove all of the future benefits associated with that tree. Moreover, trees greater than 12" in diameter provide the greatest benefits, so installing a 2" tree is not going to provide benefits for a decade or more.

As an alternative, there are many options for getting the tree and the infrastructure to work better together. We can have benefits and good transportation.



47. Does root pruning a street tree in public right of way increase the chances of tree failure in the future, or can we as tree experts say to the public that a tree that has been root pruned is now as stable or more stable than it was before it was root pruned?

Yes, root pruning a street tree in the public right-of-way increases the chances of tree failure in the future. A tree is *never* more stable after root pruning. Root pruning is an intervention of last resort and may only be considered as conditions allow.

Root pruning within known limits will increase the likelihood of failure. Outside those limits, there may be an impact on tree health. What we are seeing in our ongoing research is that trees do recover strength after root pruning. The risk is that a weather event will occur during that recovery period that will push them to failure. In addition, it may take 5 years or more for root decay to progress and increase the likelihood for failure. As the tree tries to increase its root strength, root decay associated with large cuts may be decreasing the tree's strength.

## 48. What trees were planted in the studies cited in your presentation?

On our sidewalk trail, we planted London plane trees.

#### 49. Were they ever fertilized?

Yes, they were fertilized annually with the goal of promoting growth. We wanted them to grow as quickly as possible so that we could get results.

#### 50. What PH was the gravel used as a barrier?

I do not know for sure, but the stone should not have affected the soil pH in a significant way.



51. What are your thoughts on the impacts of semi-impermeable tree well covering materials such as decomposed granite on tree root oxygen exchange, especially in an otherwise very impermeable urban street setting?

There are many benefits to porous pavement systems. A number of research papers on this topic discuss the benefits and costs (some are listed below). There are several types of permeable pavement, most of which are more appropriate for sidewalks, park paths, and parking lots. If there is a lot of pedestrian traffic on a DG covered tree well, there is probably little benefit as there is likely to be a lot of soil compaction. If there is little traffic, leaving planting wells open, especially if they can be mulched, can be beneficial.

https://www.sciencedirect.com/science/article/abs/pii/S1618866718305 387

https://www.researchgate.net/publication/262567328\_Using\_permeabl e\_pavements\_to\_promote\_street\_tree\_health\_to\_minimize\_pavement \_\_damage\_and\_to\_reduce\_stormwater\_flows

https://www.sfbetterstreets.org/find-project-types/greening-andstormwater-management/stormwater-overview/permeable-paving/

https://www.greenblue.com/na/permeable-pavement-the-pros-andcons-you-need-to-know/

#### 52. What City was the root barrier experiment done?

Charlotte NC

#### 53. Soil type?

Sandy clay loam



#### 54. Watering schedule (frequency)?

Only during droughts for the first 3 years

#### 55. Watering method?

Overhead sprinkler

#### 56. Mulch?

Yes, fresh arborist wood chips from near the tree trunks to the root barrier line.

#### 57. Staking?

Not needed.

### 58. Does the reduction in root mass/numbers have a negative effect on the tree or reduce the tree's stability?

Yes. Any time there is a loss of roots, or limitations on root growth, there is likely to be a reduction in stability or a negative impact on tree health or growth.

# 59. If a tree is root pruned when repairing a sidewalk, would you recommend a long-term routine root pruning schedule to prevent roots from growing back?

I think it is usually more cost effective to install a root barrier to reduce root regrowth or to redirect that growth deeper in the soil.



# 60. Dr. Smiley, what is your opinion on no irrigation being provided to the trees after plant establishment. Will the trees sustain a healthy growth?

With climate change there will certainly be times when native and nonnative trees will not receive enough water to survive severe droughts. We need to have plans in place to provide irrigation to those trees. Since water will be very limited at that time, trees to irrigate will need to be carefully selected based on species susceptibility, benefits the trees are providing, and other factors. The new tree inventory can be used to locate trees that meet the selected criteria.

Even established trees are killed if the drought is severe enough. If we don't want to lose the current and future benefits they provide, we need to plan to keep them from dying.

### 61. What do you think about no irrigation being provided (deep well system) during the establishment period of the tree.

Many trees will benefit greatly from summer irrigation during the first few years after planting. I previously worked for the City of Lansing MI, and even in that humid climate, we found a large increase in tree survival with summer watering. LA city may need to do an economic analysis of watering. My guess is that it is more cost effective to water during the first few years than to replant the tree. Mulch can have similar impacts.

I am not familiar with the 'deep well system.' We used surface application and soil injection. Gator bags or similar can also be effective.



62. Would you please share your recommendation for a tree watering schedule and method for newly planted street trees and mature street trees in our climate and our parkway soil type (typically clay, compacted)?

Please see the above answer. I am not familiar enough with your situation to make specific recommendations. This sounds like a research project to me.

Dr. Susan Day's research in VA pointed to the application of 1 gallon of water per inch of trunk caliper per week during the establishment period for trees to thrive. Your species and soil may require less, and less water may be required if the goal is simply survival.

### 63. Regarding the 18" deep root barrier you presented today- can we install it after root pruning to protect sidewalk lifting?

Yes, this is a less desirable time to install them, but it is better than having to come back and re-prune.

Many CA cities require the installation of 10-12' of root barrier along nearby sidewalks at the time of tree installation. I don't know if LA has this requirement, but it could save millions in sidewalk repair.

#### Miranda Hutten/Research

#### 64. Would you please define what you mean by tree "stewardship?"

In this context stewardship organizations broadly refers to those organizations which work in resource management.



65. If the Stew Map has contacts of local organizations doing work all around the City, can that same database be used to send out information on what is happening at the Urban Center, such as seminars or other resources you have that can help communities?

We encourage you to visit the Urban Center to keep involved and engaged with the research and resources available. Please visit us at <u>http://laurbanresearchcenter.org/stay-connected/</u> for news, events, tools and presentations that may be of interest to you.

66. Is this the LA County canopy assessment Lidar study that was completed about a year ago?

Yes.

67. Thanks for the great presentation. Will the LiDAR Online Viewer be restricted to the City of LA or will the map share data Countywide?

It will be County-wide.

68. How can the results of the Biodiversity Group's findings and their Ecotopes maps be included in your work, tree species list, and planting priorities?

The City has partnered with the LA Urban Center on a number of projects, including projects like the "<u>Climate Ready Trees</u>" study. We are looking at ways to conduct a conversation with the Urban Center on various research needs in a virtual fashion in the future. We are excited for the ways the LA Urban Center and their research fellows can help inform our work.



#### **Dr. Ritter/Tree Selection**

#### 69. Should we install irrigation for street trees?

More community watering is important. The city is partnering with community members to get more trees watered. Neighbors: drag your hose out to your tree once a week to water your beautiful new tree, that is improving your property value, for the first three years. The cost of water to establish a new tree in LA is about the cost of a few lattes. If the water cost is significant, the city should supplement.

#### 70. Is there an ideal watering schedule for tree establishment?

Trees should be watered regularly (once every week) from one month after the last rain (usually late April in LA) until the first rains (usually October or November). This watering should be maintained for the first 3-5 years after a tree is planted (or until it is established).

# 71. Planting trees is good. Maintaining the mature trees we have is better. We are awash with grants for tree planting programs. But there are no grants for maintenance, which is vital for survivability. Any ideas what can be done about this?

The City and our non-profit partners have worked diligently to include tree establishment care in our grant applications. As this is the most expensive part of tree planting, we cannot always secure funding for 100% of trees planted to receive that dedicated watering. We are committed to continue finding resources for tree care. However, rather than limiting the number of trees planted, we offer the opportunity for residents to get a tree planted (along with the permitting and inspection process for the City) for free if they are committed to watering and caring for the tree during the establishment period.



When looking at mature tree maintenance, the City is aware of the shortfall in resources to meet industry standards for trim cycles. Again, funding for regular, ongoing tree maintenance allows the City to maximize the benefits provided by our urban forest resource, while minimizing the risk to the public. City Plants has received funding from CalFire and the USFS to do a Financing Study for Los Angeles' urban forest. This will likely include hiring a municipal financial consultant to help us understand our options for securing the funding levels needed for a healthy urban forest. An example of such a study is one done by <u>San Francisco</u>, though it should be noted that the funding provided to City Plants is not as much as SF had to complete their study.

#### 72. Is there a list of tree species tolerances to pruning?

Not that I know of. Most tree species are tolerant to some pruning. Serious pruning involving large limbs should always be done by a certified arborist.

### 73. In working on diversity, shouldn't we be focusing on California natives?

We want successful tree planting with thoughtful tree selection. Where a species is native to is one of the considerations for good tree selection, but it is only one of many. We can't plant only native species as there are too few of them (and fewer still that are not riparian), and it would reduce the planting palette and make the urban forest vulnerable. Native tree species should be protected and conserved in native habitats, but in urban areas like Los Angeles (especially where few tree species are native) we need to go for as much diversity as possible, which is what will lead to resilience.



74. Do you think we should be making efforts as we seen on Cherokee project to saving large trees (i.e. Ficus microcarpa) for shade and carbon sequestration that were not planted correctly? or start over with the correct species?

We should consider the removal of large trees very carefully. Can the infrastructure be changed around them to save them? Sidewalks come and go, but old trees are incredibly valuable for the reasons you mention.

75. In low income urban communities, the parkways are often narrow, there are overhead power lines, and multiple other conflicts. Given these conditions, the choices for appropriately sized tree species are limited. What are your thoughts?

Rachel and her staff are working hard to deal with all the challenges of increasing canopy cover across all neighborhoods in LA. We should always be planting the longest lived, most drought tolerant, largest trees we can that are appropriate for the planting spot.

Rachel Malarich adds: The City of LA is committed to finding ways to plant trees in neighborhoods across Los Angeles. Finding space for larger tree species in neighborhoods like the ones described above is one of the issues we are tackling and will be addressing in response to the Mayor's goal to increase canopy in these neighborhoods by 50% by 2028, as well as in our Urban Forest Management Plan.

76. Should we first look to neighboring floristic provinces (Mojave, Sonoran, Sierra Madre, Chihuahuan) for trees better suited to hotter, dryer climates? Would they not be more apt to provide habitat benefits for native and migratory biodiversity than say something from southern Australia?

We should do both. We should look for the most tree diversity we can from hot, dry places in the world, including Australia and all the other places you mention.



## 77. What are your suggestions for trees in LA that are NOT being planted today?

There are many, and I have published a list of <u>"Undeservedly Rare"</u> tree species for Southern California.

78. Are there common street tree species known to be less hardy in extreme heat? Might heat zone ratings for trees be needed in the future to ensure we are planting trees that can survive both acute and long term increasing extreme temperatures?

Yes, knowing the degree of resistance a tree species has to heat is an important consideration when we are selecting species. Selecting species that have evolved in areas at least as hot and dry as California can help this.

79. Thank you for promoting a scientific and data driven approach to tree selection. How can agencies and Landscape Architects address issues of "arboriphobia" within the communities where tree planting is often desperately needed?

Tree planting must be a partnership between the city and community members. Part of the reason that certain communities are less interested in having trees planted is due to maintenance cost and/or experiences with trees/limbs that have failed. Trees that are regularly maintained per industry standards are less likely to pose a risk-however, that requires resources. The City is looking for ways to better engage these communities, including working with City Plants on developing a pilot project to provide an opportunity for community members to engage with a Certified Arborist in their neighborhood.



Agencies and landscape architects can listen to people in these communities and hear their tree related concerns and experiences. If appropriate, information can then be shared about how City actions and/or following tree best practices can address their concerns. It is also helpful to understand what tree benefits are most important to them as community members. One person may be motivated by habitat value or beauty, another by health benefits through improved air quality, etc. Trees provide us with so much, it is helpful to highlight the tree facts that resonate with a person's specific interests or needs.