



## Palisades Forestry Committee and Resilient Palisades

September 11, 2023

**POSITION PAPER OPPOSING** the so-called “Trees for Biodiversity” motion.  
Los Angeles City Council Motion CF:22-1469

A 100% natives ordinance has been proposed to ban all non-native plants and trees in Los Angeles. If this motion is passed it would:

- Require all city agencies to plant **ONLY** native plants and trees in the City of Los Angeles,
- Require all residents, commercial businesses, and governmental agencies to plant **ONLY** 100% natives,
- Ban the sale of non-native trees and plants in nurseries, stores, wholesalers, etc., citywide by 2025, and
- Prioritize promoting planting of native milkweed for Monarch butterflies.

### **Radical motion will result in less biodiversity**

This “100% Natives” motion is radical and damaging. It will lead to increased monoculture, not diversity. Restricting the sale and planting of all trees & plants to a far narrower choice of only 100% natives does not increase the biodiversity of trees and other plant and animal species.

### **It risks the health of the urban forest by concentration of too few tree species**

The 100% native requirement will risk the health of the urban forest by relying on a short list of native trees. Only some native trees are adaptable to the urban environment. And those few will be more susceptible to disease and pests due to the over-planting of fewer species.

## **We encourage planting more natives**

We support and encourage the planting and sale of native trees and shrubs throughout Los Angeles, including native milkweed for Monarch butterflies. The city should continue to promote the planting of natives by our residents, businesses, and government agencies, educating all of us to the benefits of native trees in our parks, along our streets, and around our businesses and private residences. But not as a restrictive mandate.

## **Biodiversity includes all trees and plants, not just natives**

The motion is directly in conflict with the definition of “biodiversity”. According to the World Wildlife Fund, “biodiversity is all the different kinds of life you’ll find in one area—the variety of animals, plants, fungi, and even microorganisms like bacteria that make up our natural world. Each of these species and organisms work together in ecosystems, like an intricate web, to maintain balance and support life. Biodiversity supports everything in nature that we need to survive: food, clean water, medicine, and shelter.” Moreover, a diverse urban tree and plant community provides the oxygen we need to survive.

## **Restrict invasives, not climate appropriate trees and plants**

Rather than focus on outlawing everything that is not native, the focus should be on the invasive species that compete with and displace natives in the wilderness. The California Invasive Plant Council publishes lists of invasive plant species, the Cal-IPC Inventory. Its 2006 report, California is home to 4,200 native plant species. About 1,800 non-native plants also grow in the wild in the state. Of those, approximately 200 are considered by the Inventory to be “invasive,” which the inventory categorizes as “invasive non-native plants that threaten wildlands.” A city ban on the planting of those invasives would be more appropriate.

## **We support conserving our wild open spaces and creating more parks**

Conserving and increasing our wild and open spaces in the city should be a priority, especially in areas that lack such parks and open spaces. We need more Griffith Parks, conservation of more wilderness open spaces like those in the Santa Monica Mountains, more habitat restoration parks of all natives like George Wolfberg Park at Potrero Canyon in Pacific Palisades, and inner-city parks like Augustus F. Hawkins Nature Park in South Central LA.

## **Cities are not devoid of diverse species, and can even benefit regional ecosystems**

Cities are not biological deserts, devoid of wildlife or native plant species. Rather, cities have a diverse array of unconventional habitats, with remnants of native ecosystems such as forests, wetlands, grasslands, undeveloped slopes and valleys, as well as urban green spaces like parks, back yards, cemeteries, golf courses, community gardens, and roof top gardens. Animal and insect species that are more adaptable in those urban habitats to increased heat brought on by climate change may help colonize and fortify rural populations of those adaptable species. (“Urban Refuge: How Cities Can Help Solve the Biodiversity Crisis”, by Janet Marinelli, July 1, 2021, Yale Environment 360, published by the Yale School of Environment.)

Cities can provide benefit to surrounding regional landscapes in several ways. Urban areas can provide relief for stressed plant and animal populations by offering food, water, and other resources. Cities can provide increased regional habitat heterogeneity, and a last refuge for some species. Sites within urban areas may be used for migration stop overs, with denser food resources and fewer predators. Cities can contribute to species’ genetic diversity and preadaptation to climate change. Finally, cities can enable and bolster intensive engagement and stewardship. (“The Biological Deserts Fallacy: Cities In Their Landscapes Contribute More Than We Think to Regional Biodiversity”, Erica N. Spotswood, et al., an online abstract from an article in BioScience published February 2021.)

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### **Arguments Against the Motion:**

*Motion point 1 -- The motion states, “The Los Angeles region faces a biodiversity crisis wherein over 90% of local butterflies, songbirds, and other pollinators have disappeared in the last century driven by the heretofore unconscious replacement of local native flora with non-native plant and tree species.”*

**Urbanization and Growth Of The City Is The Cause.** It is not the replacement of native flora with non-native flora that is driving the decrease in biodiversity. Rather, the underlying cause is the tremendous growth of the City of Los Angeles since it was “founded” in 1781 by the Spanish Governor. That urbanization has created a variety of ecosystems that are urban, not untouched wilderness.

The Motion makes no reference to the impact of the increased building density of businesses, homes, and roads in the last couple of centuries displacing trees and plants and therefore butterflies, songbirds, and pollinators. No mention is made of the adverse effects of urbanization on climate zones, including heat islands, soil compaction, and drought that are killing both native and non-native trees and plants, and the other life forms they otherwise would support.

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*Motion point 2 -- The Motion states that “California native landscaping plants and trees can thrive in our urban environment and furnish all the benefits non-native plants and trees can offer.”*

**Some Natives Do Not Adapt Well in City Environments.** This Motion’s point that natives thrive in cities sounds wonderful, but current research from respected scientists indicates this is not correct. Of 5,000 native species across California, only 95 are trees. California’s urban forests are made up of over 1400 species, some native to California, and many from all over the world. (Love et al., 2022 “Urban Forestry & Urban Greening” <https://doi.org/10.1016/j.ufug.2022.127679>.)

“Of the 95 native species, many native trees are inappropriate for urban environments, either because they are riparian species that need a lot of water, or just aren’t adapted for the challenges of growing in an urban setting. With so few native options compared to non-natives, it can be unwise to plant only native species for our urban environments.” (“Native to Where? California’s Native Trees and Their Use in the Urban Environment”, by Camille C. Pawlak, Matt K Ritter, Ph.D., et al., Western Arborist, Vol. 49, No. 2, Summer 2023.)

In an urban forest, having a diverse set of species is key to having a healthy forest, because higher species diversity minimizes the risk of tree loss to individual threats like pests, diseases, or climate change (Huff et al., 2020; Nitschke et al., 2017; Paquette et al., 2021; Raupp et al., 2006; Wood and Dupras, 2020). Monocultures can lead to deforestation of cities by disease and pests, such as happened with Dutch Elm Disease wiping out millions of trees.

We’ve been told that Urban Forestry Division, StreetsLA (fka Street Services), LA City Public Works Dept.) opposes the Motion. In their experience of planting and caring for natives in our urban streets and public spaces, some natives can survive while others cannot adapt to the harsh built environment.

*Motion point 3 -- The Motion further states “There are abundant and sufficient California native plant and tree options for every ornamental landscaping application in Los Angeles, including more than 30 California native tree species already on the City of Los Angeles Approved Street Tree List and over 500 California native drought tolerant plants that have been adopted into horticulture trade to fill every landscape niche for size, shape color fragrance, bloom season and beauty.”*

**There Are Not Enough Native Species to Sustain Our Urban Forest.** Please note that the Motion confirms there are only 30 California native tree species on the City of Los Angeles Approved Street Tree List. That is far too few species to populate an urban forest on both public (10% of the City’s Urban forest) and private properties (90% of the Urban Forest). This motion would prohibit the sale and planting of non-native plants in 100% of Los Angeles – both public and private lands. Every individual garden will be restricted to 100% native planting according to this motion. That restriction is radical over-reaching.

The suitability of a tree for an urban environment is dependent on more than just its native or non-native status. When selecting a species, we must consider the climates that this species can handle, the amount of water it needs, the growing space, the hardiness of the species to the urban environment, and many other factors. Most parkways around Los Angeles at 4 to 7 feet are too narrow to support the planting of some of our favorite natives like the Sycamore or the Coast Live Oak which need 8 to 10 feet of space. Identifying the right species for the right place is a difficult task. If only natives are available, most parkways will be planted with just a few species, the opposite of biodiversity.

SelectTree lists 75 California native tree species that grow taller than 25 feet. Of these trees, 51 have enough drought tolerance to grow in the water stressed California landscapes of our present and likely future. Of these trees, only 17 are commonly available in nurseries. (<https://selecttree.calpoly.edu/> See “Native to Where? California’s Native Trees and their Use in the Urban Environment”, Western Arborist, at p. 4 above.)

Planting a mix of climate appropriate species increases the diversity of an urban forest. But that should include non-natives from similar climates around the world. This motion would drastically limit the number of species we could plant as street or park trees, while rejecting the wide diversity of trees that are non-native but have been introduced here over centuries with the same qualities of climate

suitability and sustainability that the natives offer. Our local public institutions like the LA County Arboretum and The Huntington Gardens have long introduced new species from the world over. Local growers for the nursery trade like Devil Mountain Wholesale Nursery are now introducing trees from northern Mexico that thrive in that climate, which is where our climate is heading.

## **Conclusion**

The Motion is extreme and would further contribute to damaging the city's biodiversity. When the planting circumstances (climate zone, water availability, biodiversity of tree species in the area) allow the planting of a native species, then native species should be chosen for planting. Additionally, the planting of native milkweed (but not tropical milkweed) to support the Monarch butterflies is an admirable requirement. The city should focus on not allowing the planting of invasive species, and on making greater efforts to manage and reduce their spread.

But the absolute restrictions of planting and selling 100% native plants and elimination of the availability of non-native species is misguided. This Motion will lead to increased monoculture, not diversity.

Our urban environments are predicted to get hotter and drier due to climate change. Species selected for California's future urban forests should be chosen based on overall suitability for tree species survival rather than solely on a native versus non-native status.