

CITY OF LOS ANGELES
INTER-DEPARTMENTAL CORRESPONDENCE

DATE: May 11, 2021

TO: Councilmember Mitch O'Farrell, Chair
Councilmember Mark Ridley-Thomas
Councilmember Paul Koretz
Councilmember Kevin de Leon
Councilmember Paul Krekorian
Energy, Climate Change, Environmental Justice, and River Committee

FROM: Enrique C. Zaldivar, Director and General Manager
LA Sanitation & Environment 

SUBJECT: **LA SANITATION & ENVIRONMENT REPORT BACK TO APRIL 17, 2018
ENERGY, CLIMATE CHANGE, AND ENVIRONMENTAL JUSTICE
COMMITTEE MEETING (COUNCIL FILE 15-0499)**

RECOMMENDATIONS

1. Instruct LASAN to report back regularly on progress on biodiversity initiatives.
2. Instruct LASAN to continue to lead and work with the Biodiversity Expert Council, the Biodiversity Interdepartmental Team, and the Biodiversity Stakeholders in order to complete the first baseline measurement of the LA City Biodiversity Index.
3. Instruct LASAN to continue to seek funding for biodiversity initiatives and pilot projects.

TRANSMITTAL

1. PDF of the 2020 Biodiversity Report

DISCUSSION:

Biodiversity Updates:

Since LA Sanitation & Environment (LASAN) reported to the Energy, Climate Change, and Environmental Justice Committee in April 2018, LASAN has continued to lead the work of the Biodiversity Expert Council, the Biodiversity Interdepartmental Team, and the Biodiversity Stakeholder Group to design and implement a Biodiversity Index specific to the City of Los Angeles.

LASAN has also been working hard to engage the public about the benefits of biodiversity through outreach, public presentations, workshops, and more. In June 2019, Dr. Mas Dojiri, one of LASAN's Assistant General Managers attended and presented at the Hotspot Cities Symposium at the University of Pennsylvania and in October 2019, he presented at the 10th Anniversary Singapore Index Workshop in Singapore. In November 2020, LASAN and the Association of Professional Landscape Designers co-hosted a Biodiversity Symposium to share knowledge with landscapers and the general public about biodiversity and suggestions for including biodiversity considerations in project designs. In March 2021, Michelle Barton presented at a three-part lecture series on Biodiversity and the intersection of nature and design

hosted by UCLA Extension. In April 2021, LASAN virtually presented information on the Biodiversity Program to the 2nd International Forest City Conference, held in Nanjing, China. LASAN is also teaching Angelenos that pollution, habitat loss, and climate change continue to threaten LA's unique plants, animals, and ecosystems. To this end, LASAN is promoting activities that Angelenos can engage in to protect biodiversity in the City including:

- Participating in community science to contribute to biodiversity knowledge
- Creating wildlife habitat by planting site-appropriate native plants and using sustainable practices (e.g., water conservation, avoiding invasive species)
- Avoiding the use of harsh pesticides and herbicides.

LASAN is promoting wildlife-friendly practices on the LASAN biodiversity and habitat webpages, across social media platforms, using digital and print flyers, and via digital and in-person community events.

LASAN has also been seeking grant funding opportunities to support green infrastructure and the creation of habitat across the City. In March 2021, LASAN submitted a grant application for the Slauson Corridor: Making Connections project to the California Natural Resources Agency's Environmental Enhancement and Mitigation grant program. The project aims to plant 1,600 new street trees as well as native understory shrubs along the Slauson corridor in South Los Angeles. If funded, this project will serve as a pilot project to provide tree canopy and understory habitat for both community members and local wildlife. LASAN's Biodiversity team has also been involved in a National Science Foundation (NSF) grant proposal with WestEd and UCLA that proposed to use Next Generation Science Standards at LAUSD intermediate schools to plant native plants and track biodiversity improvements on school campuses.

Certification as a Community Wildlife Habitat

In May 2021, the City of Los Angeles became the largest City in the USA to be certified by the National Wildlife Federation through the Community Wildlife Habitat Program. This accomplishment is a real testament to the power of collective action by Angelenos, who registered 1078 residential yards, 34 schools, and 140 common areas, that cumulatively allowed the City to become certified as a whole. The City registered for the program with the National Wildlife Federation in August 2020.

To achieve Citywide certification, the City of Los Angeles encouraged residents, schools and organizations to apply for and achieve their own certification by gardening with wildlife in mind, using native plants and sustainable practices, providing cover and food, and reducing or eliminating the use of chemical pesticides and fertilizers. Designing gardens and green spaces following these principles supports wildlife, restores connectivity, and enhances climate resilience.

Transmittal of 2020 Biodiversity Report

Los Angeles Sanitation and Environment (LASAN) is pleased to share the 2020 Los Angeles Biodiversity Report. This report presents 1) the resulting LA City Biodiversity Index, 2) the ecotopes spatial management framework, and 3) an approach for measuring urban habitat quality and connectivity in Los Angeles. It also includes a number of biodiversity case studies that serve as emerging models for biodiversity stewardship in Los Angeles.

As key locations for impacts and benefits associated with biodiversity, urban areas in cities worldwide are emerging as a new frontier for nature stewardship. While California has long

been a global leader in managing threatened and endangered species, Los Angeles recently embarked on a more comprehensive approach to biodiversity when the Los Angeles City Council adopted the Biodiversity Motion introduced by Councilmember Paul Koretz of Council District 5 (Motion 25A, Council File No. 15-0499) on May 10, 2017. The motion directed the development of a customized biodiversity index for LA focused on conservation and access to nature and biodiversity in urban areas, among other products. LASAN prepared the 2018 Biodiversity Report, which documented measurement of the Singapore Index on Cities' Biodiversity for Los Angeles, and contained recommendations for a customized LA City Biodiversity, in response to the adoption of the Biodiversity Motion. The 2020 Biodiversity Report builds upon the action items and concepts identified in the 2018 Biodiversity Report.

This work also supports the City's official goal of no-net biodiversity loss by 2035 put forth in the 2015 Sustainable City pLAN and in LA's Green New Deal (2019 pLAN).

LA City Biodiversity Index

Chapter 1 of the 2020 Biodiversity Report shares the LA City Biodiversity Index and a proposed strategy for measurement and long-term application. The LA City Index is tailored specifically to the Los Angeles context and to monitor progress toward the no-net loss target. It includes indicators that account for three core themes of urban biodiversity: conservation of native biodiversity, social aspects of biodiversity, with a focus on equity, and governance and management activities.

Ecotopes

Application of the LA City Index is integrated with a framework of ecological subregions, or ecotopes, for Los Angeles presented in Chapter 2. A key point of consensus early in the initial process was that with over 300,000 acres of extremely diverse ecological conditions, the future LA City Biodiversity Index needed to better account for the distribution and variation of biodiversity across the City, versus the cumulative City-wide assessment provided by the Singapore Index. Ecotopes combine landform, microclimate, and biotic characteristics, key building blocks of biodiversity, to differentiate spatial units for measuring and reporting the LA City Biodiversity Index results. They are also envisioned as future management units to address biodiversity and related urban ecosystem stewardship topics of ecosystem services, pollution, and ecological hazards. The ecotopes framework is accompanied by a high-resolution dataset of environmental factors relevant to biodiversity stewardship and site-level decision making. The dataset will support management decisions, such as urban landscape design for biodiversity and maximizing site urban ecosystem services such as stormwater management, urban heat island reduction, and sea level rise. Chapter 2 summarizes the theoretical basis and methods for selecting and partitioning 16 subregional ecotopes within the City of Los Angeles and 10 additional related ecotopes within neighboring areas. Detailed descriptions and maps for each ecotope are included in the Report Appendix.

Measuring Urban Habitat Quality and Connectivity in Los Angeles

Chapter 3 presents measurement methods, results, and stewardship implications associated with two key indicators of the LA City Index: habitat quality and connectivity of landscapes and open spaces. While habitat connectivity is often mentioned as a key tool for conserving urban biodiversity, spatially explicit measurements of connectivity are often lacking for cities. This chapter presents application of leading edge modeling techniques to provide a quantitative, spatial valuation of urban habitat quality for the City of Los Angeles and surrounding areas, and connectivity modeling for native biodiversity

in the Elysian Valley that can serve as a pilot approach for the broader City. The results have implications for both urban habitat conservation and equitable access to urban nature, two key objectives of the Biodiversity Motion and no-net loss biodiversity target. They also provide a roadmap for incorporating biodiversity stewardship considerations into urban and landscape design, planning, and management.

Urban Biodiversity Case Studies

The final chapter, Chapter 4, includes a series of case studies that demonstrate how the concept of biodiversity is changing the way we manage and steward nature in City projects. These projects provide early examples of how the concept of biodiversity is reshaping the way projects are being crafted in the City of LA and the increased benefits they are providing for both nature and neighborhoods. They also demonstrate the potential and need for the analytic tools presented in this report, and others, to guide and measure protection and enhancement of biodiversity in LA.

Next Steps

LASAN is making progress on the baseline measurement of the 25 metrics in the LA City Biodiversity Index. In April 2021, LASAN hosted a series of four workshops with the Biodiversity Expert Council to refine the methodology for four brand-new metrics. LASAN has also had the opportunity to engage with various academics and students as part of this process. LASAN is grateful for the contributions of seven Sustainable Development Goal interns (hired through the Mayor's Office, Summer 2020) and 12 UCLA undergraduate students enrolled in senior practicum courses that have performed valuable background research and preliminary measurements on various biodiversity metrics in the index.

LASAN will continue to work on the baseline assessment of the LA City Biodiversity Index and is looking forward to sharing the results of the first index measurement with the City Council and the general public. LASAN is recommending benchmark assessments of the index every ten years and monitoring assessments every three years.

LASAN's Biodiversity Team will continue to work with other City departments (e.g., Bureau of Engineering, Department of Recreation and Parks, and the Department of City Planning) to promote practices, programs, and projects that support biodiversity, improve connectivity, and make Los Angeles more sustainable and resilient. LASAN's Biodiversity Team will also work with the Department's Watershed Protection Division to incorporate biodiversity elements into Safe, Clean Water (Measure W) projects to ensure that these projects create habitat that support local species and enhance wildlife connectivity across the City.

FISCAL IMPACT STATEMENT:

LASAN will continue to work with the Biodiversity Expert Council, the Biodiversity Interdepartmental team, the Biodiversity Stakeholders, and students from local universities to advance biodiversity assessments and research in the field. LASAN is not requesting any additional funding for biodiversity during FY 21-22.

MB:EZ

C: Dr. Mas Dojiri
Lisa Mowery