

File No. 190587 Committee Item No. 2
Board Item No. _____

COMMITTEE/BOARD OF SUPERVISORS
AGENDA PACKET CONTENTS LIST

Committee: Land Use and Transportation Committee Date November 4, 2019

Board of Supervisors Meeting Date _____

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Resolution 107-18, San Francisco Biodiversity Policy Implementation Progress & Next Steps Report to the San Francisco Board of Supervisors

We appreciate your partnership in passing the landmark San Francisco Biodiversity Policy on April 17, 2018. The Department of the Environment, together with our key partner, the Planning Department, and fellow City agencies, are pleased to submit this formal report on our collective implementation of Resolution 107-18, which established local biodiversity as a San Francisco priority, created a framework for interagency collaboration for nature-based initiatives and adopted the Citywide Biodiversity Vision:

Citywide Biodiversity Vision (Resolution 107-18): San Francisco is a place where our local biodiversity thrives in climate-resilient ecosystems that integrate healthy native wildlife and plant habitats throughout our city's physical environment, connecting ALL San Franciscans to nature daily and inspiring stewardship of our unique natural heritage in every neighborhood.

Table of Contents

Why Biodiversity?	2
Implementing the San Francisco Biodiversity Policy	2
Key Survey Findings: Opportunities and Challenges.....	4
Next Steps for the Interagency Biodiversity Working Group.....	7
Conclusion	7
Appendix A: Global Context of Biodiversity and Climate Change	8
Appendix B: Local Biodiversity and Nature Equity in the City.....	9
Endnotes	10

Why Biodiversity?

Biodiversity is the interconnected richness of species, habitats and ecosystems that constitutes the global web of life upon which human beings depend. The current pace of biodiversity loss is unprecedented, with 200 species going extinct every day and an estimated one million at risk of extinction by end of century. Urban development, industrial agriculture and increasingly, the climate crisis, are driving habitat loss; all are the result of human action. These global emergencies are inextricably linked, as are their solutions. Ecosystem restoration of land and water, urban forestry and greening with local plant species are key strategies for supporting both biodiversity and climate change mitigation and adaptation. They will be included, as part of the City's tool kit for sequestering carbon and protecting people and assets from climate impacts, in the new Hazard and Climate Resilience Plan and the 2020 Climate Action Strategy. For more information on the global biodiversity crisis and its connection with the climate emergency, please see Appendix A.

Despite 95% of its land area being developed with buildings, roads and parks, San Francisco retains remarkable native biodiversity that is worthy of understanding, protection and stewardship. Biodiversity within the city is not only important for rare species, habitats and general ecosystem health, it is also important for our human residents. Healthy ecosystems manage pests sustainably; conserve water and healthy soil; help manage floods and stormwater; promote clean air and water and enhance robust insect pollination of our community food gardens; all of which contribute to our climate resilience. Biodiversity in the city enhances quality of life and happiness for all San Franciscans by providing everyone with opportunities to connect to nature every day. Promoting nature in the city provides workforce development and employment opportunities in natural resources management and stewardship. Please see Appendix B for more information about nature equity and the city's natural heritage.

Implementing the San Francisco Biodiversity Policy

The San Francisco Biodiversity Policy - at its heart, an equity and good governance initiative - directs City departments to strengthen collaboration on behalf of the Citywide Biodiversity Vision, complete department-level biodiversity surveys and make public commitments to support biodiversity through agency specific work and responsibilities. Building on years of inter-agency cooperation, implementing the San Francisco Biodiversity Policy was a significant next step in further aligning fifteen City agencies under a common vision, agenda and five goals: (1) Biologically Rich Ecosystems; (2) Equitable Access, Awareness, and Experience of Nature; (3) Community and Ecological Stewardship; (4) Ecological Planning and Design; (5) Resilience in a Living City. Together, we have bolstered our efforts to understand and document individual departments' progress, needs and gaps in order to illuminate where our focus should be going forward; highlights and summary finding are outlined below.

BIODIVERSITY SURVEY: EXISTING CONDITIONS

In the fall of 2018, all 15 agencies completed a biodiversity survey of their individual activities to date and proposals for future projects. The Department of Environment (SFE) collated the data into a large compendium of initiatives that promote or have significant potential to promote biodiversity and ecosystem restoration.

Collaboration and a Common Agenda

The most significant feature that has emerged from the process of implementing the biodiversity resolution is the amplified degree of collaboration among the fifteen City agencies. Several years prior to the April 2018 BOS resolution, these same departments formed the Interagency Biodiversity Working Group (IBWG) to cooperate on devising a framework for collective impact on behalf of the City's natural heritage; the Biodiversity Policy's strong direction helped evolve a common agenda and solidify our charge. As with other complex San Francisco challenges, creating a nature-based city and doing our part to stem global biodiversity loss requires deep, long-lasting commitment to robust collaboration among agencies and elected officials, as well as regional partners, community-based organizations, the business sector and non-profits. Staff among

the fifteen City agencies have shown wonderful and sustained enthusiasm and aptitude and have the potential to deliver significant collective impact.

Key Citywide Findings

While the range of responsibilities varies widely across the fifteen departments, each plays a role in enhancing the city’s biodiversity and natural heritage. Assembling the Departments’ Biodiversity Surveys illuminated the following findings as to how the City operates and the potential to improve our work on behalf of our local nature and biodiversity:

1. San Francisco has 120 policies, programs, initiatives or resources that relate directly or indirectly to biodiversity.
2. The City employs over a dozen staff ecologists among the Recreation and Parks Department (RPD), the San Francisco Public Utilities Commission (SFPUC), Department of Environment (SFE), Public Works and the San Francisco International Airport (SFO).
3. Five departments own and manage land through a lens of biodiversity and natural resources management: SFPUC, RPD, the San Francisco Port (Port), Treasure Island Development Authority (TIDA) and SFO.
4. Several more departments own land in the urban environment that has current or potential value for biodiversity, such as Real Estate (RED), Public Health (DPH), San Francisco Municipal Transportation Agency (SFMTA), Public Works and Office of Community Investment and Infrastructure (OCII).
5. Hundreds of acres of City land could be restored to include productive, climate-resilient ecosystems.
6. The City possesses considerable data resources related to local nature and biodiversity, including geographic information systems; data on RPD’s 32 natural areas; the San Francisco plant finder database; iNaturalist data; and myriad other natural resources-related datasets.

Current Department-Level Work Contributing to a Biodiverse City: Highlights for the 15 Named City Agencies

DEPARTMENT	PROJECT, PROGRAM OR INITIATIVE
<i>Airport</i>	Manages for the federally-listed endangered San Francisco garter snake and the threatened California red-legged frog.
<i>Animal Care and Control</i>	Provides education about coyotes and living with wildlife in the city.
<i>Children, Youth and Families</i>	Funds programs that expose children, youth and families to nature.
<i>Environment</i>	Convenes 15 City Departments to implement the vision of a biodiverse San Francisco.
<i>Municipal Transportation Agency</i>	Provides San Franciscans and visitors equitable access to nature at over 4,000 acres of neighborhood green spaces and 230 parks and natural areas, including weekend service to the Marin Headlands.
<i>Office of Community Investment & Infrastructure</i>	Builds new biodiverse parks at Hunters Point Shipyard, Candlestick, Mission Bay and Transbay Terminal.
<i>Planning</i>	Incorporates biodiversity into the built environment through area plans, major developments and the Planning Code; hosts www.sfplantfinder.org .
<i>Port</i>	Restores and stewards resilient and biodiverse wetland and upland habitats at Pier 94 and Heron’s Head Park.
<i>Public Health</i>	Promotes equity in efforts to connect children and families to nature in the city.
<i>Public Library</i>	Creates equitable experience and connection to nature through programming, collections, outdoor gardens, living roofs, seed-lending libraries, bio-blitzes and partnerships with environmental organizations.
<i>Public Utilities Commission</i>	Includes the core element of Environmental Stewardship, to “protect our land, people and the ecosystems we affect” in its 2020 Strategic Plan.
<i>Public Works</i>	Plans and implements plantings into the City’s public right-of-way, such as

	the Sunset Boulevard Master Plan that includes biodiversity as a foundational objective, and designs nature play areas at parks and other city properties.
<i>Real Estate Division</i>	Supports stewardship and maintenance of biodiverse landscaping on City properties within Real Estate’s jurisdictional authority, such as the living roof on One South Van Ness.
<i>Recreation and Parks</i>	Directs the management and stewardship of 1,100 acres of natural areas across 32 different parks throughout San Francisco.
<i>Treasure Island Development Authority</i>	Implements the Yerba Buena Island Habitat Management Plan, including operation of the Yerba Buena Island Public Natural Resources Stewardship Program.

PUBLIC COMMITMENTS SUMMARY

This spring and summer, departments implemented the next element of the Biodiversity Policy: public department-level commitments to support the Citywide Biodiversity Vision and highlight key opportunities that were identified through the surveys. Please see the summary table below. Materials will also be uploaded to SFE’s website: www.sfenvironment.org/sfbiodiversitypolicy.

Department-Level Commitments to a Biodiverse City

<i>DEPARTMENT</i>	<i>PUBLIC COMMITMENT PATHWAY</i>
<i>Airport</i>	Airport Commission Resolution 19-0040, adopted March 5, 2019
<i>Animal Care and Control</i>	<i>Memo In progress</i>
<i>Children, Youth and Families</i>	<i>Memo In progress</i>
<i>Environment</i>	Environment Commission Resolution 004-17-COE, adopted May 23, 2017
<i>Public Library</i>	Presentation to Commission, March 21, 2019
<i>Municipal Transportation Agency</i>	Memo to SFMTA Board, March 29, 2019
<i>Office of Community Investment and Infrastructure</i>	<i>Commission Presentation pending scheduling</i>
<i>Planning</i>	Planning Commission Resolution 2013.4117CWP, adopted April 11, 2019
<i>Port</i>	Port Commission Resolution 19-09, adopted March 26, 2019
<i>Public Health</i>	Memo to Public Health Commission, April 9, 2019
<i>Public Utilities Commission</i>	Memo to SFPUC Commission, April 9, 2019
<i>Public Works</i>	Memo from PW Director to SFE, April 18, 2019
<i>Real Estate Division</i>	Memo from RED Director to SFE, June 25, 2019
<i>Recreation and Parks</i>	Memo from RPD Director to SFE, April 8, 2019, & presented during General Manager’s report at RPD Commission meeting, April 18, 2019
<i>Treasure Island Development Authority</i>	TIDA Commission Resolution 19-13-05/08, adopted May 8, 2019

Key Survey Findings: Opportunities and Challenges

ONGOING COLLABORATIVE EFFORTS

As part of the Fall 2018 Survey, departments worked internally and across agencies to identify tangible opportunities for amplifying biodiversity through enhanced efforts. In total, Departments proposed 40 new ideas, projects or initiatives, summarized below as ongoing collaborations and potential new projects.

1. **Interagency Coordination and Facilitation.** The SFE Biodiversity Coordinator convenes and provides technical expertise to foster the work of the IBWG. The monthly meetings have been well attended by a large subset of the fifteen agencies and have provided for a rich exchange of ideas and problem-

solving around nature and biodiversity issues in the city. The IBWG will continue to convene monthly, strengthening the group's ability to collaborate, communicate and make measurable progress.

2. **The San Francisco Plant Finder.** The Planning Department (Planning) and SFE created (and now manage/update) this web-based tool for incorporating native plants into local landscaping: www.SFplantfinder.org. This resource helps public- and private-sector landscape professionals enhance designs to amplify nature experiences. SFE and Planning worked with Public Works and the SFPUC to incorporate all the City plant lists and test the tool (along with RPD staff) in their project planning. The IBWG wants to accelerate our pace of progress this fiscal year toward the goal that sfplantfinder.org becomes *the* resource for sustainable and habitat-friendly city landscape plant selection and education.
3. **Biodiversity Design Guidelines.** SFE and Planning have produced a working draft of biodiversity design guidelines for open spaces, streets/sidewalks and buildings that is currently being piloted with landscape designers and staff in major development projects. The principles and palettes are also being applied to implementation projects of the Central SoMa Plan and several major development projects currently under design and entitlement review. Feedback will be shared and iterated with the IBWG in order to develop final guidelines and plant palettes that can support both City and private-sector projects and inform potential evolutions in city policies and regulations.
4. **Biodiversity Training.** With support from Planning, SFE has produced and delivered a beta biodiversity training to several groups of City staff, including the IBWG. Per Resolution 107-18, it is being refined as a two-part educational presentation and inter-active workshop for key staff at all 15 agencies to complete. It will solicit dialogue among various groups of City staff around different project typologies and help integrate and operationalize a biodiversity lens throughout City policies and practices. The training will also help land-owning agencies understand how to manage their properties to incorporate and support biodiversity.

RECOMMENDATIONS FOR POTENTIAL NEW INITIATIVES

Opportunities abound for San Francisco to deliver on our Citywide Biodiversity Vision and address the challenges highlighted in this memo. Below are key recommendations curated from the Department-level surveys and IBWG discussions. In addition to promoting local nature, ecosystem restoration and biodiverse greening, all these ideas also contribute to a climate resilient San Francisco.

1. **Local Native Plant Production Expansion.** Currently local native plant cultivation within the city is limited to RPD's native plant nursery in Golden Gate Park (for City projects) and several non-profits and small businesses (for restoration projects and retail sale). Considering the growing need for local native plants to populate new major development project open spaces, street and right-of-way projects, and on Yerba Buena and Treasure islands, the City could consider expanding its production of local native plants, perhaps in collaboration with existing non-profit native plant nurseries; e.g., Literacy for Environmental Justice's nursery at Candlestick State Park. Native plants (and street tree) nurseries would be a great temporary use on currently vacant or underutilized land, such as future development sites and under-freeway parcels.
2. **Pollinator Mega-Gardens.** Within its vast landholdings and ongoing public realm and open space projects, the City can lead the restoration of nature into the built environment by integrating significant pollinator landscapes. These public mega-gardens would be collaborative inter-departmental projects to transform significant, visible pieces of City property into magnificent and biodiverse pollinator- and wildlife-friendly habitat gardens; for example, as part of accessible public open spaces like Civic Center Plaza. These projects would help confirm optimal native plant palettes and initiate a new branding of San Francisco biodiversity that fosters awareness of local nature. These gardens can draw inspiration from existing successful models, such as the Presidio's Baker Beach Apartments, Green Hairstreak Corridor and other parks and community gardens around the city.

3. **Healthy Housing Landscapes.** The City of Los Angeles implemented a model for local native plant landscaping at public housing sites to give local, underserved residents the opportunity to connect to nature “in their own backyard.” SFE staff have been exploring the model, including enhancing social-economic benefits through incorporating workforce development.
4. **Local Native Plant Requirements and Funding Mechanisms.** Per the Planning Department Biodiversity Resolution, we understand that City code requires new development and significant redevelopment to provide open space and landscaping in front set-backs, but the former does not require plantings and the latter does not specify biodiversity supportive species. As is typical with most enhanced requirements, the City could lead the way by testing various greening and plant species metrics, as well as potential cost implications, in its own projects. In this, the City could explore the creation of a “Sustainable Landscape Maintenance Fund” that would ensure the capacity of agencies to steward projects that are implemented as part of any new policies.
5. **Twin Peaks (or San Miguel Hills) Bioregional Park and the Crosstown Trail.** The Bioregional Park is a grassroots vision initiated ten years ago by several local non-profits that would involve multiple City departments to actualize. The idea is to connect lands in the geographic heart of the city owned by multiple City agencies into a biodiverse parkland with nature trails and restored wildlife habitat. The area intersects with the Crosstown Trail, a delineated recreational walking and biking route originated in the General Plan Recreation and Open Space Element (ROSE) that traverses the city from the southeast (Candlestick State Park) to the northwest (Presidio and Land’s End) corners. The Trail was recently mapped out by a coalition of community non-profit organizations and posted online to inform the public of this new opportunity to connect to nature in the city. The City could build climate resilience on its lands along this corridor by restoring biodiversity and provide wayfinding and interpretative signage along the route to foster public education.
6. **Citywide Biodiversity Targets and Ecosystem Restoration Strategy.** Currently, SFE and RPD are working with the Presidio Trust and the California Academy of Sciences to create a comprehensive method for measuring and tracking species and ecosystem health in San Francisco. The City could set species, ecological community and ecosystem targets, and incorporate them into a comprehensive citywide biodiversity and ecosystems restoration strategy, which would provide the scientific framework for implementing the City’s Biodiverse City Vision.
7. **Deepen Partnerships and Collaborations with Educational and Research Institutions.** The City could increase collaborations with the San Francisco Unified School District (which currently hosts over 100 Green Schoolyards), San Francisco State University, University of San Francisco, the San Francisco Estuary Institute and the California Academy of Sciences, among others, to more effectively connect students and the public of all ages with local biodiversity and engage them as stewards.

KEY CHALLENGES

1. **Staffing Resources.** The biodiversity survey and subsequent IBWG conversations have revealed that staff resources for biodiversity are typically limited and insecure year to year. Even the SFE Biodiversity Coordinator is currently an annually funded position with only 0.1 FTE available to facilitate and coordinate the IBWG. In other partner agencies staff can engage in monthly IBWG meetings and intermittent product review, but it is often challenging to find dedicated resources to support new biodiversity related projects (like our proposed initiatives) unless they are earmarked in department budgets. Agencies that manage some of their lands for biodiversity have some earmarked staff resources, but typically they face tight budgets that do not have extra capacity for enhanced efforts.
2. **Maintenance Costs.** For San Francisco to be a truly green and biodiverse urban environment, the City needs sustainable maintenance and stewardship resources. In public realm projects (streets, sidewalks, plazas), capital costs for installing landscaping are usually equivalent or less expensive than paving solutions, but ongoing maintenance costs are higher for landscaping than hardscape, so usually

cannot be accommodated within overall project budgets. This means project managers and approval bodies sometimes need to subtract greening elements in order to ensure long-term maintenance capacity. Likewise, project teams working to maintain greening elements sometimes need to spend extra time securing sufficient maintenance funds which slows the pace of turning grey to green (to biodiverse). In addition to public realm projects in the built environment, land-owning departments also typically have limited financing mechanisms for natural resource management, stewardship and rare species recovery.

3. **Availability of Healthy (and disease free) Local Native Plants.** Scientists and the public increasingly advocate for the use of local native plants (above and beyond more generalized California natives) since they are superior for creating healthy and resilient habitats for local wildlife and connecting us to our natural heritage. In response, local native plant production has increased significantly over the last several years; however, for the purposes of larger-scale City and developer-driven projects, some Departments are apprehensive about existing nurseries' ability to deliver sufficient quantities and diversity of plants that are also disease-free. Growing plants within the city would also reduce truck traffic and support the City's emissions-reductions/climate goals.

Next Steps for the Interagency Biodiversity Working Group

In addition to continuing the ongoing projects featured above, the IBWG will pursue the following priorities in the next six months:

1. Invite leaders from the City's racial equity initiative to make a presentation to the IBWG, so that we can consider how to continue to prioritize diversity, equity and inclusion in our implementation of the Citywide Biodiversity Vision.
2. Convene our community partners and stakeholders to gather input for opportunity project scoping.
3. Further refine and prioritize the key opportunity efforts presented above for incorporation into department work plans and budgets, and review with respective department leaders for refinement and approval.
4. Convene a special meeting to discuss solutions to the ongoing issue of limited maintenance resources for urban greening, with insights and specific resource considerations provided by key landholding and operations departments; e.g., Public Works, RPD, Port and SFPUC.

Conclusion

The City Departments involved in implementing the San Francisco Biodiversity Policy recognize the urgency of addressing local biodiversity in our city, within California and internationally, including making biodiversity a key solution for climate change mitigation and adaptation. Strengthening our efforts to conserve, restore and steward biodiversity in the city will enable wildlife and native plants to thrive, and *all* San Franciscans to experience nature every day. The Departments look forward to working with the Board of the Supervisors to prioritize initiatives that will create a truly biodiverse city.

Appendix A: Global Context of Biodiversity and Climate Change

Global Biodiversity Science, Policy and Advocacy

The San Francisco Biodiversity Policy is critical when considered in a statewide and international context. On the eve of the September 2018 Global Climate Action Summit,ⁱ Governor Brown adopted an Executive Charter and signed an Executive Order directing State agencies to collaborate on the California Biodiversity Initiative to secure the future of California's natural heritage.ⁱⁱ On May 6, 2019, the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) issued a ground-breaking global assessment on the state of the planet's biodiversity.ⁱⁱⁱ The 1800-page IPBES report detailed the dire state of the planet's species and ecosystems due to human activities (e.g., some scientists are using the term "insect apocalypse")^{iv} and outlined a program for what is needed to stem the sixth global mass extinction, including massive ecosystem restoration.^v International conservation advocates have started a "Nature Needs Half" movement; i.e., half of the world's surface needs to be permanently preserved for nature, ecosystems and biodiversity.^{vi} And on October 7, 2019, the E.O. Wilson Foundation and the University of California, Berkeley, College of Natural Resources co-hosted Half-Earth Day: How to Save the Natural World.^{vii} In the wake of the IPBES report, in July of this year, Governor Newsom signed a budget that includes over \$18 million dollars for the California Biodiversity Initiative.

The Climate Crisis and the Restoration of Ecosystems

While attention to the climate crisis has recently accelerated at multiple social and political scales, attention toward our living planet has not kept pace in the media.^{viii} Both the IPBES global assessment (and related international policy efforts) and the California Biodiversity Initiative make explicit connection to the climate crisis, stating that global heating and related impacts are part of the cause of global biodiversity loss and that global climate solutions must include aggressive, widespread restoration of ecosystems to create ecological and community resilience. The United Nations Convention on Biological Diversity hosts an entire web portal on the relationship between biodiversity and climate change.^{ix} The United Nations announced earlier this year that 2021–2030 will be the UN Decade on Ecosystem Restoration.^x The Bonn Challenge calls for 350 Million hectares of ecological restoration by 2030, which could sequester up to 1.7 gigatons of carbon dioxide equivalent annually.^{xi} According to Conservation International, nature can provide at least 30% of the mitigation action needed to limit global warming to 1.5 degrees Celsius.^{xii} Conservation scientists are calling on world leaders at the 15th Conference of the Parties^{xiii} to the Convention on Biological Diversity, to be held in China in 2020, to commit to a Global Deal for Nature to be paired with the Paris Climate Accords.^{xiv} The IPBES report may indeed mark a turning point in awareness of biodiversity at the international level. As the City develops and implements its 2020 Climate Action Strategy and acts in support of its recent Climate Emergency Resolution, it is important to recognize that living systems are the foundation of creating a climate-resilient city, region and state.

Appendix B: Local Biodiversity and Nature Equity in the City

The City's Natural Heritage

San Francisco harbors a diverse mosaic of over 220 parks, over 50 natural areas, dozens of community gardens, over 100 green schoolyards and a variety of other open spaces. The city's various green areas are managed for beauty, recreation, biodiversity, wildlife habitat and increasingly for climate resilience. The city hosts wetlands, grasslands, shrublands, oak woodlands, and eucalyptus and conifer plantations, all of which store and sequester carbon, in addition to conserving local biodiversity and providing San Franciscans with opportunities to connect to nature where they live. Local agencies and non-profits have performed ecological restoration and stewardship throughout the city's natural environment since the 1980s. These efforts started small, and then the local chapter of the California Native Plant Society successfully advocated for the National Park Service and San Francisco Recreation and Parks Department, respectively, to create their own natural resources stewardship programs in the city. Within their collective land management responsibilities exist nearly a dozen types of native plant communities, dozens of rare and endangered species, important urban refuges for native wildlife, and critically, myriad opportunities for San Franciscans to connect with and develop a relationship to nature in the city. Among the City's thousands of acres of land in San Francisco—in the large open spaces and in the dense built environment—multiple opportunities exist for further ecological restoration and enhancement, and the installation of extensive pollinator gardens and landscapes.

Equity in Connecting People and Nature in San Francisco

Pollution and other environmental problems have disproportionately affected vulnerable populations in San Francisco for decades. Similarly, access to and experience of nature has not been shared equitably among all San Franciscans. Recognizing these historic inequities, the National Park Service, RPD, the Presidio Trust and local non-profits, most notably Literacy for Environmental Justice, have implemented land-based programs that integrate diversity, equity and inclusion since the 1990s. In the context of the City's increasing focus on social and economic equity across multiple sectors, access to and experience of nature in the city has become a core element of the citywide equity policy discussion. Following their own biodiversity resolution in 2017, in which nature connection equity was stated as a core goal, the Environment Commission passed a resolution in 2018 affirming its commitment to racial equity in all of its initiatives.^{xv} Subsequently, during the Global Climate Action Summit, San Francisco joined the community of C40 Cities who pledged inclusive climate action.^{xvi} In 2014, the San Francisco Recreation and Park Commission passed a resolution endorsing the San Francisco Outdoor Children's Bill of Rights, which states that every child has the right to connect to nature every day.^{xvii} Recreation and Parks now leads a citywide, inter-jurisdictional, cross-sector initiative, San Francisco Children and Nature – including many City departments - whose mission is to implement the vision of every child connecting with nature in the city every day.

The San Francisco Children and Nature collaboration was catalyzed by a national Cities Connecting Children to Nature movement.^{xviii} Social scientists have been studying the problem of park and nature access for many years, and a wide body of research has accumulated about the various health, wellness, education and employment benefits of early childhood access to and experience of nature. As we continue to implement the San Francisco Biodiversity Policy and its bold and inclusive Biodiverse City Vision, equity must play an expanded role, especially given the current economic challenges of so many San Franciscans. Expanding access to nature, resourcing local nature awareness programs and funding ecological restoration and stewardship have proven potential to contribute to a nature-based green economy. In the same way that the climate justice movement has infused climate action, environmental justice will continue to be central to fostering San Franciscans rebuilding their relationship to nature where they live.

Endnotes

ⁱ Global Climate Action Summit

<https://www.globalclimateactionsummit.org/events/biodiversity-summit/>

ⁱⁱ California Biodiversity Initiative

<http://www.californiabiodiversityinitiative.org/>

ⁱⁱⁱ Intergovernmental Science-Policy Panel on Biodiversity and Ecosystem Services

<https://www.ipbes.net/news/Media-Release-Global-Assessment>

^{iv} Global Insect Decline

<https://www.sciencedirect.com/science/article/pii/S0006320718313636>

<https://www.theguardian.com/environment/2019/feb/10/plummeting-insect-numbers-threaten-collapse-of-nature>

<https://www.theguardian.com/environment/2019/may/07/humanity-must-save-insects-to-save-ourselves-scientist-warns>

^v The Sixth Mass Extinction

<https://www.pnas.org/content/114/30/E6089>

<https://science.sciencemag.org/content/360/6393/1080.2>

<https://www.theguardian.com/environment/2017/jul/10/earths-sixth-mass-extinction-event-already-underway-scientists-warn>

^{vi} Nature Needs Half: International Union for Conservation of Nature

<https://www.iucn.org/content/why-nature-needs-half>

^{vii} Half Earth Day: How to Save the Natural World

<https://www.half-earthproject.org/half-earth-day-2019/>

^{viii} World Wildlife Fund Living Planet Report

<https://www.worldwildlife.org/pages/living-planet-report-2018>

^{ix} Convention on Biological Diversity: Climate Change and Biodiversity

<https://www.cbd.int/climate/copenhagen/>

^x UN Decade on Ecosystem Restoration

<https://www.unenvironment.org/news-and-stories/story/new-un-decade-ecosystem-restoration-inspire-bold-un-environment-assembly>

^{xi} The Bonn Challenge

<http://www.bonnchallenge.org/content/challenge>

^{xii} Climate Change at Conservation International

<https://www.conservation.org/what/pages/climate.aspx>

^{xiii} Convention on Biological Diversity Agenda for Action

<https://www.cbd.int/action-agenda/>

^{xiv} Global Deal for Nature

<https://www.globaldealornature.org/>

^{xv} Commission on the Environment Racial Equity Initiative

https://sfenvironment.org/sites/default/files/policy/resolution_005-18-coe_racial_equity_initiative.pdf

^{xvi} C40 Inclusive Climate Action

<https://www.c40.org/programmes/inclusive-climate-action>

^{xvii} San Francisco Children's Outdoor Bill of Rights: San Francisco Recreation and Parks

<https://sfrecpark.org/sf-rec-and-park-school-board-ymca-national-park-service-and-presidio-trust-join-san-francisco-youth-sign-san-francisco-childrens-outdoor-bill-of-rights/>

^{xviii} Cities Connection Children and Nature

<https://www.childrenandnature.org/initiatives/cities/>

BOARD of SUPERVISORS



City Hall
1 Dr. Carlton B. Goodlett Place, Room 244
San Francisco 94102-4689
Tel. No. 554-5184
Fax No. 554-5163
TDD/TTY No. 554-5227

MEMORANDUM

TO: Deborah Raphael, Director, Department on Environment
John Rahaim, Director, Planning Department
Harlan Kelly, Jr., General Manager, Public Utilities Commission
Elaine Forbes, Executive Director, Port Department
Mohammed Nuru, Director, Public Works

FROM: Erica Major, Assistant Clerk, Land Use and Transportation Committee

DATE: May 28, 2019

SUBJECT: HEARING MATTER INTRODUCED

The Board of Supervisors' Land Use and Transportation Committee has received the following hearing request, introduced by Supervisor Fewer on May 21, 2019:

File No. 190587

Hearing on the implementation of efforts to make biodiversity a city-wide priority, following the passage of Resolution No. 107-18 one year prior; and asking the Department of the Environment, Planning Department, Public Utilities Commission, the Port, and Public Works to report.

If you have any comments or reports to be included with the file, please forward them to me at the Board of Supervisors, City Hall, Room 244, 1 Dr. Carlton B. Goodlett Place, San Francisco, CA 94102.

c: Peter Gallotta, Department of the Environment
Charles Sheehan, Department of the Environment
Scott Sanchez, Planning Department
Corey Teague, Planning Department
Lisa Gibson, Planning Department
Devyani Jain, Planning Department
AnMarie Rodgers, Planning Department
Dan Sider, Planning Department
Aaron Starr, Planning Department
Joy Navarrete, Planning Department
Laura Lynch, Planning Department
Juliet Ellis, Public Utilities Commission
Donna Hood, Public Utilities Commission
John Scarpulla, Public Utilities Commission
Christopher Whitmore, Public Utilities Commission
David Steinberg, Public Works
Jeremy Spitz, Public Works
Jennifer Blot, Public Works
John Thomas, Public Works
Lena Liu, Public Works
Daley Dunham, Port Department

Print Form

Introduction Form

By a Member of the Board of Supervisors or Mayor

BOARD OF SUPERVISORS
SAN FRANCISCO

2019 MAY 21

Time stamp
or meeting date

I hereby submit the following item for introduction (select only one):

- 1. For reference to Committee. (An Ordinance, Resolution, Motion or Charter Amendment).
- 2. Request for next printed agenda Without Reference to Committee.
- 3. Request for hearing on a subject matter at Committee.
- 4. Request for letter beginning : "Supervisor [] inquiries"
- 5. City Attorney Request.
- 6. Call File No. [] from Committee.
- 7. Budget Analyst request (attached written motion).
- 8. Substitute Legislation File No. []
- 9. Reactivate File No. []
- 10. Topic submitted for Mayoral Appearance before the BOS on []

Please check the appropriate boxes. The proposed legislation should be forwarded to the following:

- Small Business Commission
- Youth Commission
- Ethics Commission
- Planning Commission
- Building Inspection Commission

Note: For the Imperative Agenda (a resolution not on the printed agenda), use the Imperative Form.

Sponsor(s):

Fewer, Mandelman

Subject:

Hearing - Implementation of efforts to make a biodiversity a citywide priority

The text is listed:

Hearing on the implementation of efforts to make biodiversity a citywide priority, following the passage of Resolution 107-18 one year prior; and asking the Department of the Environment, Planning Department, and other key agencies including the San Francisco Public Utilities Commission, the Port, and Public Works, to report.

Signature of Sponsoring Supervisor:

Sandra Lee Fewer

For Clerk's Use Only