

**Notes from Biodiversity Vision 2020
November 18, 2019**

San Francisco Biodiversity Vision 2020 Survey:

What's the number one barrier to improving biodiversity in San Francisco?

Answer	Percentage	Number (total 48)
Public/Awareness of the problem	35%	17
Funding	17%	8
Lack of local policies	17%	8
Other	13%	6
• No strategy or plan		
• Political will>importance of local gov't priorities		
• There is no one barrier – all of the above		
• No understanding of need for locally adapted native species		
Habitat loss	10%	5
Climate Change	4%	2
Staffing	4%	2
My dang boss	0%	0
New Development	0%	0
What barriers? We are improving Biodiversity	0%	0

Question 1: How can we improve biodiversity in San Francisco?

I. Government Policy:

1. Create policies about planting native plants in public/private lands
2. Biodiversity:
 - Move the biodiversity resolution to an ordinance
 - Measure and report biodiversity by city area so that info could be used in development, garden, etc. plans
 - Make a Biodiversity Council (a la Urban Forest Council)
 - Biodiversity Master Plan/Strategic Plan (a la Urban Forest Plan) with targets, including city departments' inventory of what is being done
 - Government funding to support biodiversity
 - Float Muni Bond for green infrastructure/water use efficiency w/ biodiversity elements
 - Ban sale of problematic plants
 - Ban sale of neonicotinoids at commercial nurseries
3. Government Hires:
 - Have scientist/biodiversity expert in all city departments
 - Create city biologist position
4. Native Plant Nurseries:
 - Change RPD nursery from predominantly non-natives to SF natives
 - Provide land in Golden Gate Park for expanded "native-plant only nurseries"
 - Native plant nurseries for jails/prisons
5. Conference about biodiversity policy
6. Enforce leash laws in sensitive areas

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II. Landscaping

1. Plant native plants:
 - Landscaping, new developments, public projects, college campuses
2. Have native plant nurseries throughout the city:
 - Free native plants for residents
 - Recommend native plant guides for all nurseries and landscape companies
 - Every nursery sells natives
 - Partner with local nurseries to educate consumers (i.e., SF Native section)
3. Native plant and urban ecology training program and biodiverse certification for area landscapers and developers
4. Create habitat zones guide for appropriate plant choices using historical ecology
5. Restoration of natural areas stepped up with dedicated staffing and funding
6. Specific recommendations/approaches:
 - A “Bradley Method” like approach to remnant native plant populations – where you start with the places with the most species or last or most unique and protect no matter what, and then work your way out to do more.
(<https://static1.squarespace.com/static/585dc42c725e25ca57806ffc/t/58870aa31b631b203a2a303c/1485245092145/Bradley+Method.pdf>)
 - Living roof and shoreline
 - Bring back priority species – quail, native pollinators, red-legged frog
 - More outdoor meeting places
 - Tear out a street and green it

III. Developers and Development:

1. Native plants for city landscaping, developments, public projects, college campuses
2. Native plant and urban ecology training program and biodiverse certification for area landscapers and developers
3. Density transfer for developers to protect open natural areas
4. Advocate at community level for developers to increase open space

IV. Homeownership:

1. More incentives, free plants, consultation, rebates for including biodiverse landscape and water conservation, energy conservation. Penalize for not complying
2. Create a backyard certification program, like the one that exists with the National Wildlife Federation Program (<https://www.nwf.org/garden-for-wildlife/certify>)
3. Educate homeowners about the value of planting natives in their yards.
 - Expanded front yard ambassador program – with natives

V. Education

1. Get CCSF and other colleges to teach gardeners/landscapers ecology, the biodiversity crisis, and the solution (plant SF natives)

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2. SFUSD: Incorporate native biodiversity into K-12 education system in a systematic way with teacher training, funding, native plant gardens, outdoor experiences, restoration gardeners at each school
3. Educate nurseries to promote native plants and ban invasive plants
4. Develop and promote a native plant and urban ecology training program and biodiverse certification for area landscapers, developers and city gardeners. Put it online to make it easier for them to take
5. Seed collecting workshops

VI. Marketing, Awareness, Media and Community Outreach

1. Increase public awareness about biodiversity:
 - Social media, videos, funny billboards, plaques around town, virtual reality
 - Engage the public through charismatic species: bugs, insects, quail, butterflies, poppies
 - Relate biodiversity to people's lives. For example, connect biodiversity to food/agriculture. Presidio food trucks on Sunday, farmers' markets, etc.
 - Convey the idea of Malcolm Margolin "inexpressible fertility" of the Bay Area prior to the arrival of Europeans
 - A comprehensive identification of what is left and where and a localized education/public awareness campaign based on that
 - Outreach to non-homeowners (who outnumber homeowners and vote)
 - Get neighborhoods involved
 - Go through community groups – religious groups, dog owners, etc.
2. SF biodiversity documentation by citizen scientists:
 - Bio-blitzes and native-plant monitoring events
 - Community science group expansion
3. Paid and volunteer habitat stewards
4. Events:
 - Expose people to natural environments so that they can envision what could be in their homes and parks
 - Create culture of celebrating/having fun and pride in biodiversity. Ex. Birds and beer and flower and trees festivals
 - CNPS members leading more neighborhood gardening clubs
 - A month of nature – talks about elk and grizzlies and explain biodiversity
 - 50th anniversary of Earth Day
 - Have a city-wide festival to announce and celebrate biodiversity/annual event
5. Biodiversity training:
 - Classes
 - Brochures
 - TED talks
 - Urban watershed awareness
 - Ecological interactions of plants and other wildlife
6. Increase diversity, equity and inclusion in conservation community:
 - Make job opportunities in conservation field for under-represented populations

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- Expand Conservation Corps Jobs program to reach more areas and more people
7. Demonstrate biodiversity in public areas:
- Develop a native prairie landscape to replace a large lawn landscape to demonstrate its beauty (irrigate it for success)
 - Ohlone Garden
 - Ethno botany garden
 - Living roof green
 - Living shoreline

VII. Corridors and public spaces

1. Improve connectivity/corridors:
 - Spatial, science-based strategy showing how to link parks, greenways, street trees, green roofs, landscape into a biodiversity system
 - Incentivize planting natives in corridors
 - UCSF/GGNRA/SFSU corridor planning
2. Improve public spaces:
 - Adopt sidewalk and median strips, add native plant gardens
 - Open SF sidewalks – engage with International Society of Arboriculture Western Chapter
 - Get FUF to plant more native trees
 - Public lands (open spaces and parks) as priority for native plant restoration
 - Reduce/eliminate chemicals in city plantings
 - Solar on all parking lots of public buildings
 - Acquire new open space parcels in park-poor neighborhoods
 - Indigenous land trusts (ex. Sogorea Te <https://sogoreate-landtrust.com/>)
 - Acquire more land
3. Specific restoration recommendations:
 - Partner with SFPUC on native plants to be used in commercial/green infrastructure grant program
 - Partner with all Bay Area water districts to use native plants in all turf charge out programs
 - More native restoration in Golden Gate Park
 - Preserve what diversity we currently have. E.g., *Silene Verecunda* on Mt. Davidson
 - Daylight/restore Islais Creek and Mission Creek Channels
 - Shrink Alemany and I-280 to restore and daylight Islais Creek
 - Restore Lake Merced and Sharp Park
 - Replace sports stadiums with natives
 - Promote living shorelines and retreat for habitat where possible
 - Doyle Drive-type treatment of roadways, particularly in South East area of SF (<http://www.presidioparkway.org/about/>)
 - Shrink Great Highway to expand dunes and create walking/cycling boardwalk
 - Create biodiversity pollinator corridor in Dolores Street media
 - Create Twin Peaks biodiversity park on public lands between Glen Park and GG Park

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- Create oyster beds where derelict piers now stand

VIII. Research, Technology and Science

1. Research:
 - Survey: evaluate, protect, restore
 - A comprehensive identification list of what is left and where
 - Create habitat zones to guide appropriate plant choices using historical ecology
 - Set biodiversity targets
2. Technology:
 - Create a computer program modeled after the “Mannahatta project” to educate people about what historic SF was like
 - Have a native plant website that helps match native plants with local conditions of need
 - Provide a tool to show which plants would most improve biodiversity
 - Citywide biodiversity challenge and data gathering in partnership with tech
3. Science:
 - Design/conduct scientific projects that can test/demonstrate the value and importance of native species
 - More bio blitzes and focus on inverts or base of food chain
 - Large scale citizen science native-plant monitoring
 - Connect the carbon market to local plant impact on carbon sequestration
 - Spatial analyses of green space access, citizen science data

IX. Advocacy

1. Coordinated advocacy at City Hall on behalf of biodiversity, native plants and funding
2. Strenuously advocate on community level for developers to increase open space
3. Ability to sue – legal aid

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Question 2: How do we better collaborate with one another?

I. Collaboration

1. More collaboration and connection between non-profits
2. Create a list of all non-profits in city doing outreach about nature
3. Coordinated implementation across sectors
4. Need an organizing/coordinating entity and having a top-down mandate (like biodiversity resolution) is helpful
5. Bridge between scientific community and activism
6. Work swaps (e.g., Rec/Park>Presidio Trust)
7. Specialization between groups with strong connectivity and resource-sharing
8. Collaborate with potential funders and philanthropists like Salesforce
9. Use knowledge to enforce policies
10. Hard for city workers to advocate – we help them, show up for public comment

II. Planning/organization

1. Unifying plan/goals created with NGOs, government and communities
2. Create deadlines for projects we are working on
3. Making the case for local nature with other organizations – public health/water/homeless/traffic calming/greenways/bicycles
4. Get to know who the various groups are, what is their expertise: agencies, NGOs, funders, public action committees, citizen groups
5. Find the groups that have already solved the problem
6. Get all groups in attendance at the BioD event to support a petition asking the city to take action with an ordinance/policy/plan to prioritize SF native plants

III. Technology

1. Biodiversity Listserv to unify network
2. Better data-sharing platform
3. Local nature wiki/web site – comprehensive resource forum

IV. Events

1. A coordinated month of nature–April 2020, City Nature Challenge, 50th anniversary of Earth Day
2. Regular meetings for nature advocates for knowledge-sharing and networking with different institutions host the meetings
3. Outward event