Limited Cross Agency Coordination Hinders Green Infrastructure Progress

Experts indicated significant challenges regarding coordination between the various agencies involved in developing and implementing green infrastructure (GI). State, regional, and local agencies vary significantly in their level of resources, technical expertise, staff capacity, and political will. These typically align with the organization’s specific mandates and responsibilities, which tend to be fairly narrow in scope (e.g., managing stormwater, improving air quality, maintaining roadways, etc.). Agencies tend to have limited and inflexible funding, tied to specific monitoring and reporting requirements and clearly mandated outcomes. These limitations make collaboration very difficult for government agencies, in some cases even preventing staff from attending meetings with potential partner organizations because those activities are deemed “out of scope.” Coordination is necessary for implementing GI projects, as these often require blended funding coming through multiple agencies, more expansive data collection and monitoring, and more holistic outcomes related to community climate resilience, public health, and social equity. Therefore, green infrastructure projects generally require more collaboration than many gray infrastructure approaches. Furthermore, different agencies and departments, at the state and local levels, may have vastly different budgets, staff capacity and expertise, and insurance required for GI design, implementation, and ongoing maintenance and stewardship.

Interviewees described that it can be difficult to find appropriate funding and collaborative partners, when many of the agencies who might be involved in a GI project have distinct mandates and prioritize specific outcomes. For example, the Department of Water Resources and the State Water Resources Control Board are focused on water quantity, quality, and infrastructure, the Air Resources Board is focused on air quality, the Natural Resources Agency protects and manages natural lands, the Department of Parks and Recreation promotes outdoor recreation for residents, and the Department of Transportation works to provide a safe and reliable transportation network. While many of these agencies are tasked with meeting state climate goals and protecting communities — in addition to the more specific mandates and outcomes — funding and work remain highly siloed. Increased coordination and collaboration at the state and local level, including braiding funding, joint implementation, and shared support of long-term maintenance of GI is essential to furthering shared climate, health, and equity goals.

Enhanced Cross Agency Coordination to Advance Green Infrastructure, Climate Resilience, & Health Equity

The State should develop a standing structure and framework for collaboration of all agencies involved with the planning, implementation, and maintenance of green infrastructure. The assignment of a dedicated coordinating agency to set goals, provide technical assistance, and hold
partners accountable will help advance GI across the state. California has several robust initiatives and plans aimed at conserving natural lands, increasing access to parks and open space, and increasing Complete Streets implementation in transportation projects; however they fall short when it comes to GI. For example, California’s 30x30 Initiative outlines 10 strategies for achieving the overall goal of 30% of California’s land and coastal waters by 2030, and includes expanding access to nature as a key objective. However, California 30x30 is entirely focused on nature-based solutions, and stops short of providing strategic guidance on expanding green infrastructure strategies more broadly. Additionally, the Outdoors for All Initiative, which includes a “$1 billion investments in access-related infrastructure and programs, especially for disadvantaged communities,” is a critical step in addressing park and greenspace inequities, but does not include more expansive goals or strategies to increase GI (as of May 2022). Furthermore, the Department of Transportation issued a policy requiring the inclusion of complete streets features in all new projects, which is critical in advancing climate, public health, and equity goals, but as with the other referenced initiatives does not explicitly include GI as a required component. Therefore, the State should invest in the development of a Comprehensive Green Infrastructure Strategy.

• **Enact Legislation Mandating the Office of Planning and Research to Develop a Comprehensive Green Infrastructure Strategic Plan** – The Office of Planning and Research (OPR) “studies future research and planning needs, fosters goals-driven collaboration, and delivers guidance to state partners and local communities, with a focus on land use and community development, climate risk and resilience, and high road economic development.” Given the cross-agency, multi-benefit opportunity of widely implemented GI, OPR is the most well-suited state agency to convene and coordinate other agencies and stakeholders for GI advancement. Further, as a participant in the 2018-2022 cohorts of the Capitol Collaborative on Race and Equity, OPR brings capacity to apply an equity lens to this planning, policy, and convening process, which is critical for ensuring that GI supports equitable impacts for California communities. This includes not only what types of GI are developed, but also maximizing community benefits, avoiding displacement and deep partnerships with the community. OPR is well positioned to ensure that resources reach the communities that need them most, state staff reflects
The GI Strategic Plan should include the following elements:

- Recommendations to the legislature regarding any needed legislation to remove legal constraints to broadly implementing GI, including state-level funding restrictions.
- Specific implementation plans with roles and responsibilities for each participating agency, including timelines for plan benchmarks.
- Statewide goals, benchmarks, and metrics.
- Discussion of health equity and racial equity implications of GI, including how each recommendation will improve equity across a variety of indicators.
- Community engagement requirements and guidelines that include the following:
  - Mechanisms to continuously inform, engage, and collaborate with the community throughout planning, implementation, and ongoing operations and maintenance.
  - Processes to identify the needs and priorities of communities.
  - Jointly-developed agreements for transparency and accountability.
  - Timeline of proposed activities.
  - For more information, see the Strategic Growth Council’s Transformative Climate Communities Guidelines.

OPR should identify opportunities to improve braiding and blending of funding, and prioritization of GI over gray infrastructure.

OPR should work with the agencies and departments outlined above to develop standards to increase the use of GI (see Data Brief for more information).

Establish California Green Community Schoolyard Initiative - The Office of Planning and Research, through the proposed green infrastructure workgroup, should identify and implement strategies to accelerate green community schoolyards statewide.

Vastly increasing the number of community accessible green schoolyards across the state is a critical strategy to improve park equity and public health, climate mitigation and resiliency, and air and water quality. According to a Trust for Public Land report, “opening all public schoolyards to the public during non-school hours would put a park within a 10-minute walk of more than 19.6 million people, including 5.2 million children, who currently lack access.” Replacing concrete and blacktop with gardens and drought-resistant native trees and plants, improves student attendance and test scores. A growing body of research supports green schoolyards as a positive strategy for enhancing student and teacher health outcomes, decreasing energy consumption, and minimizing environmental impact. Green Schoolyards that are open after school hours and on the weekends for community use, reduce the park equity divide and can be used as part of an onsite green stormwater management system with the use of bioswales, gardens, and porous surfaces.
OPR’s proposed Green Infrastructure Workgroup, in collaboration with local school district representatives and community based organizations, should develop a strategic plan (as a component of the Comprehensive Green Infrastructure Strategy outlined above), including funding resources, technical expertise, and a timeline to scale-up community green schoolyards as a health equity and climate resiliency strategy. The strategic plan should include the following:

- **Increase Funding for Green Community Schoolyards throughout California**
  - The California Natural Resources Agency and Department of Parks and Recreation should establish an ongoing grant program for green schoolyards as a high-value priority, in alignment with existing green infrastructure and parks priorities.
  - Funding for the conversion of schoolyards should be prioritized in communities disproportionately impacted by health inequities, limited park access, and climate change impacts.
  - The Land and Water Conservation Fund should prioritize green schoolyards in the funding allocated for schoolyard renovations in the Outdoor Recreation Legacy Partnership.

- **School Districts Should Establish District Wide Green Schoolyard Initiatives**
  - Local school districts should pass and implement district wide policies that advance the implementation of green community schoolyards, including integration of green schoolyards into facilities master plans, and operations and maintenance plans.
  - Oakland Unified School District passed a policy committing to “transforming all of its school grounds over time from pavement into park-like spaces,”6 as well as integration of green schoolyards into the facilities master plan, including the evaluation of “new revenue opportunities and outside grants such as leasing disposable space, joint use fees, taxes, and partnerships.”7

- **Implement Broad Joint-Use Agreements**
  - Local and regional governments should partner with school districts to create joint-use agreements (JUAs) to allow community access to green schoolyards. Joint use agreements are an essential strategy to increase community access to recreational green space, especially in areas with high land costs and/or limited land availability. For an example of a successful joint use agreement, see Lemon Grove, California’s HEAL Zone.
  - JUAs should contain clear language on insurance, indemnification, dispute resolution, and enforceability.8
  - JUAs should include specific guidance regarding priority use, access and security, maintenance, and shared-cost distribution.9
  - For more information, see Building the Evidence: Creating a Framework for Assessing Costs and Impacts of Shared Use Agreements, and Model Joint Use Agreement Resources.
Local & Regional Level Opportunities

In alignment with State Comprehensive Green Infrastructure Strategy, local and regional agencies should develop comprehensive, coordinated plans for the development and implementation of GI in relevant local infrastructure projects. Given the cross-agency potential of GI and the numerous opportunities to integrate GI across different sectors and local government agencies, jurisdictions need to jointly develop a coordinated strategy, funding plan, and timeline. Local jurisdictions have the potential to significantly increase the use of GI in infrastructure projects, including transportation, stormwater, parks, housing, and private development.

- Enact Legislation and Provide Funding to Require Local Jurisdictions to Develop and Implement Local Green Infrastructure Strategies – Local government agencies should develop comprehensive green infrastructure plans in partnership with community-based organizations and other stakeholders. Some jurisdictions currently have green infrastructure plans or elements as it relates to stormwater management and public transportation. For example, the City of Richmond, upon reissuance of their Municipal Regional Stormwater Permit, required the development of a Green Infrastructure Plan, which includes identification of prioritized projects for GI, targets for the amount of impervious surface to be retrofitted by 2020, 2030, and 2040, tracking mechanism, and funding mechanisms. However, as described above in reference to the statewide GI strategy, GI plans at the local level should integrate components related to parks, housing development, schools, etc. Comprehensive local GI plans also need to include standards related to co-benefits, such as public health, climate resilience, and equity (see Data Brief for more information). In addition to local Green Infrastructure Plans, local jurisdictions should integrate GI into the following plans and guidance.

> Include GI prioritization in Local Hazard Mitigation Plans – Green infrastructure is an essential strategy to increase community resilience to the impacts of climate change and other hazards, including extreme heat, flooding and storms. Integration of GI should be a core component of local and regional disaster preparedness, planning, and rebuilding. Identifying and quantifying the multiple benefits of GI with hazard mitigation plans has the potential to expand the sources of funding for particular projects. For example, the Federal Emergency Management Agency funds hazard mitigation efforts, while state and local environmental agencies fund projects related to water quality, and parks agencies fund park access and improvements. For more information, see Storm Smart Cities: Integrating Green Infrastructure in Local Hazard Mitigation Plans by the EPA.

> Integrate Authentic Community Co-Development in GI Planning – Community based organizations and residents should be included in the development of GI-related plans in order to prioritize projects based on community needs, increase community buy-in to GI projects, and identify opportunities to increase the local workforce. Community engagement should include the following:

- Mechanisms to continuously inform, engage, and collaborate with the community throughout planning, implementation, and ongoing operations and maintenance.
- Processes to identify the needs and priorities of communities.
- Jointly-developed agreements for transparency and accountability.
- Timeline of proposed activities.
- For more information, see Preparing for Climate Change: A Guidebook for Local, Regional, and State Governments by the University of Washington Climate Impacts Group and King County, Washington.
• Coordinate with Local Health Jurisdictions to Enhance the Health and Equity Benefits of Green Infrastructure – Local Health Jurisdictions will be tasked with a vital role in both improving community resilience to climate change and improving health outcomes during the ongoing effects of climate change. Local Health Jurisdictions should be funded to participate in cross-agency collaboration to advance GI.

Consult with local health jurisdictions to identify communities that are or will be disproportionately burdened by the impacts of climate change, have limited adaptative capacity, and would reap the most benefits from GI. LHJs can be particularly helpful in integrating health and equity considerations into GI projects, such as the location of parks and greenspace, inclusion of food security strategies such as community gardens or food forests, etc.

- Incorporate activity and health equity by collaborating to build a connected system of open and green spaces and encourage physical activity through parks, trails, natural areas, greenways, bike paths, and park programming.

- The Los Angeles County Department of Public Health’s PLACE Urban Forest Work supports communities, including rural and unincorporated communities, for forestry and community tree projects.

For more information about the importance for integrating local health jurisdictions in climate resilience planning, see Climate Change, Health, and Equity: A Guide for Local Health Departments by the Public Health Institute Center for Climate Change and Health.

See the full Green Infrastructure, Climate Resilience, & Health Equity Policy Agenda for more information.

1. Nature-Based Solutions are actions that work with and enhance nature to help address societal challenges. This term is an umbrella concept being used across the world to describe a range of ecosystem-related approaches that protect and restore nature to deliver multiple outcomes, including addressing climate change, protecting public health, increasing equity, and protecting biodiversity – Pathways to 30x30 California: Accelerating Conservation of California’s Nature
2. https://resources.ca.gov/Initiatives/Access-for-All
3. Complete Streets provide mobility for people of all ages and abilities, particularly those who are walking, biking, using assistive mobility devices, and riding transit. Complete streets offer several benefits, including enhancing safety and creating more sustainable transportation options to decrease dependence on driving and improving public health by encouraging active transportation like walking and biking – CalTrans