

EMERALD NECKLACE FOREST TO OCEAN EXPANDED VISION PLAN:

Towards a Common Vision

The Emerald Necklace Forest to Ocean Expanded Vision Plan: Towards a Common Vision
Funded by: The Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal
Protection Bond Act of 2006 Proposition 84 and the State of California Strategic Growth Council



THE
CONSERVATION FUND

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EMERALD NECKLACE FOREST TO OCEAN EXPANDED VISION PLAN: EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

The Emerald Necklace Forest to Ocean Expanded Plan for Los Angeles County outlines a set of strategies and action items to make Los Angeles County a better place to live. Produced by Amigos de los Rios and The Conservation Fund, with lead support from the California Strategic Growth Council, the new plan provides a pathway for residents to connect with park and recreation lands—improving the overall health of the people and the environment—from the mountains to the sea.

As one of the nation's largest metropolitan areas, the Los Angeles region should be leading the country in park and recreation opportunities. It is not. Our Expanded Vision can change that. It draws from the best practices of metropolitan regions across the country through the Metropolitan Greenspaces Alliance and outlines a common vision for Los Angeles County through a conceptual map, regional goals, and collaborative priorities and strategies.

In the late 1920s, the Los Angeles Chamber of Commerce commissioned two visionary landscape architecture firms—Olmsted Brothers, based in Brookline, Massachusetts, and led by the sons of Frederick Law Olmsted, and Harland Bartholomew & Associates of St. Louis, Missouri—to create a vision for the Los Angeles region. At the time, community leaders were concerned that Los Angeles County had far fewer acres devoted to playgrounds and parks than other metropolitan areas its size. They wondered if traffic, air pollution, and swelling populations could have a negative impact on the county's future. They worried other cities might outpace them by attracting and retaining young talent. They worried their children might not have enough safe places to play.

Fast forward 80 years and many of those concerns have come to fruition. Los Angeles County spans 4,000 square miles and its 88 cities are home to more than 10 million people. There's no other place in the United States quite like it; Los Angeles County on its own would be the eighth most populous state in the U.S. and the 88th most populous country in the world. The valley holds nearly ¼ of California's population and is one of the most ethnically diverse places in the nation. Its geology is unusual too. Framed by mountains and forests to the north and east, and beaches and oceans to the west, its interior is dominated by grey. Large-scale infrastructure supports a vast population, resplendent with gridlocked freeways, bustling ports, paved riverbeds, and concrete irrigation channels.

To help unravel some of these challenges, Amigos de los Rios commissioned The Conservation Fund to take a fresh look at how we might use green infrastructure—and an interconnected network of parks, rivers, and lands—to help reconnect people and wildlife to the county's lands and waters. For 18 months, The Conservation Fund worked with Amigos to convene focus groups, synthesize existing plans, analyze mapping data, and evaluate potential implementation strategies across the county.

We found that despite the significant alteration of the natural landscape over the past century, many of the core recommendations of the Olmsted-Bartholomew Plan are as relevant today as they were in 1930. There is tremendous opportunity to align a broad coalition of government agencies, nonprofit organizations, and local institutions to strive to make a world-class network of parks and public open spaces connected by river greenways for greater Los Angeles. We can adapt the original plan to modern times. We can create a network of walking and biking trails that connect the forest to the ocean. We can improve public health by getting more kids outside. And we can create green jobs that support conservation, restoration, and recreation.

The Expanded Vision also broadens the geographic scope of the 2005 and 2008 Emerald Necklace Vision Plans, produced by Amigos de los Rios, which outlined the development of a 17-mile loop of parks and greenways connecting 10 cities and nearly 500,000 residents along the Río Hondo and San Gabriel Rivers. Further efforts by Amigos linked more than 1,500 acres of parks and open space along an interconnected greenway around the Río Hondo, San Gabriel, and the lower Los Angeles Rivers. Today, Amigos de los Rios works with the Emerald Necklace Coalition, 38 partners committed to building stronger connections between parks and people in East Los Angeles County.

The coalition is an important start. But it's not enough. We hope the Expanded Vision will instill a fierce sense of urgency—a call for real and lasting results—across the entire county. We believe the Expanded Vision can serve as our roadmap to unite East and West, outlining how we can implement existing plans, rather than reinvent the wheel, and how we can promote best practices in design and access, link open spaces across boundaries and scales, and follow best practices case studies.

Here's our vision. We hope you will join us.

Claire Robinson, Amigos de los Rios *Will Allen*, The Conservation Fund

Photo Credits: Loretta Quach, Barbara Eisenstein, Ron Luxembourg, Whitney Flanagan, Claire Robinette, Claire Robinson

AMIGOS DE LOS RIOS

Amigos de los Rios, formed in 2003, is a nonprofit organization that creates vibrant communities by designing quality public environments. In collaboration with local governments, businesses and residents, Amigos de los Rios brings renewed life to urban neighborhoods within economically disadvantaged communities in Southern California. The mission of Amigos is to create sustainable open spaces, protect the environment, and strengthen community life in order to benefit current and future generations.

Ten years ago we began to bring the 1930 Olmsted-Bartholomew Plan for the Los Angeles Basin to life by working on a case study project in the City of El Monte. This project constitutes the original Emerald Necklace – the success of which opened the door to expansion of the vision to all of Los Angeles County. We selected The Conservation Fund as our partner because of its national expertise in green infrastructure planning and its work with peer metropolitan regions across the country.

A MESSAGE FROM THE CONSERVATION FUND

For nearly 30 years, The Conservation Fund has been saving special places across America. We have protected more than 7 million acres of land and water in all 50 states, from the park down the street to historic battlefields, wild areas, and favorite destinations of all kinds. Working with community, government and business partners, we strive to balance economic and environmental goals. The Conservation Fund ranks among the top 1% of charities nationwide.

We hope this plan will compel you to join Amigos de los Rios in improving the quality of life for every resident of Los Angeles County. Similar efforts have taken place in other metropolitan regions across the country, including Chicago, Houston, and Portland. It is time for Los Angeles to show the nation that this world-class community can also have a world-class open space system.

THE CONSERVATION FUND

Will Allen *Claire Robinette*
Clare Amundsen *Whitney Flanagan*
Jazmin Varela *Reggie Hall*
Jena Meredith *Will Maith*
Brian Phelps *Hawkins Partners, Inc.*

AMIGOS DE LOS RIOS

EMERALD NECKLACE FOREST TO OCEAN EXPANDED VISION PLAN

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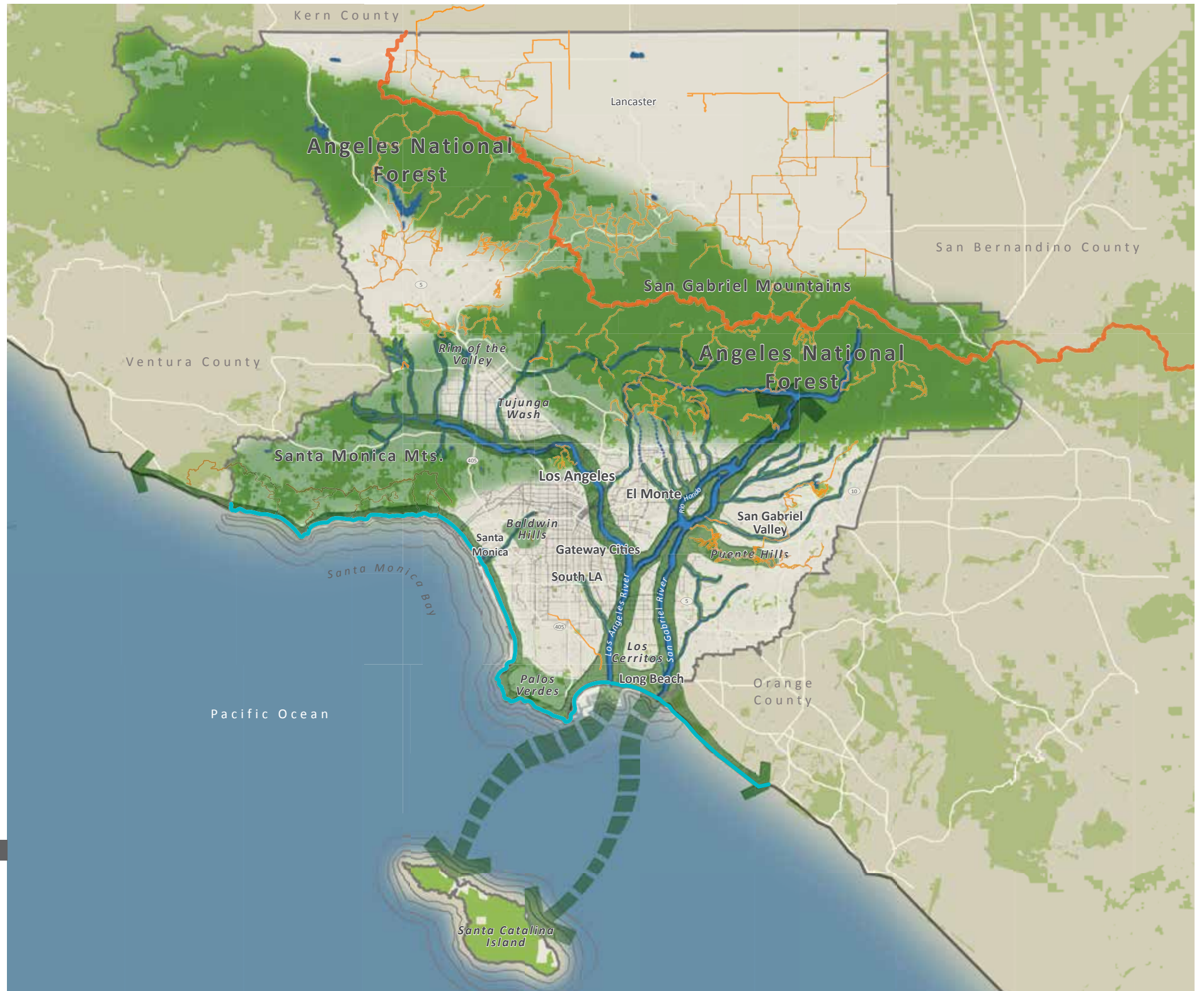
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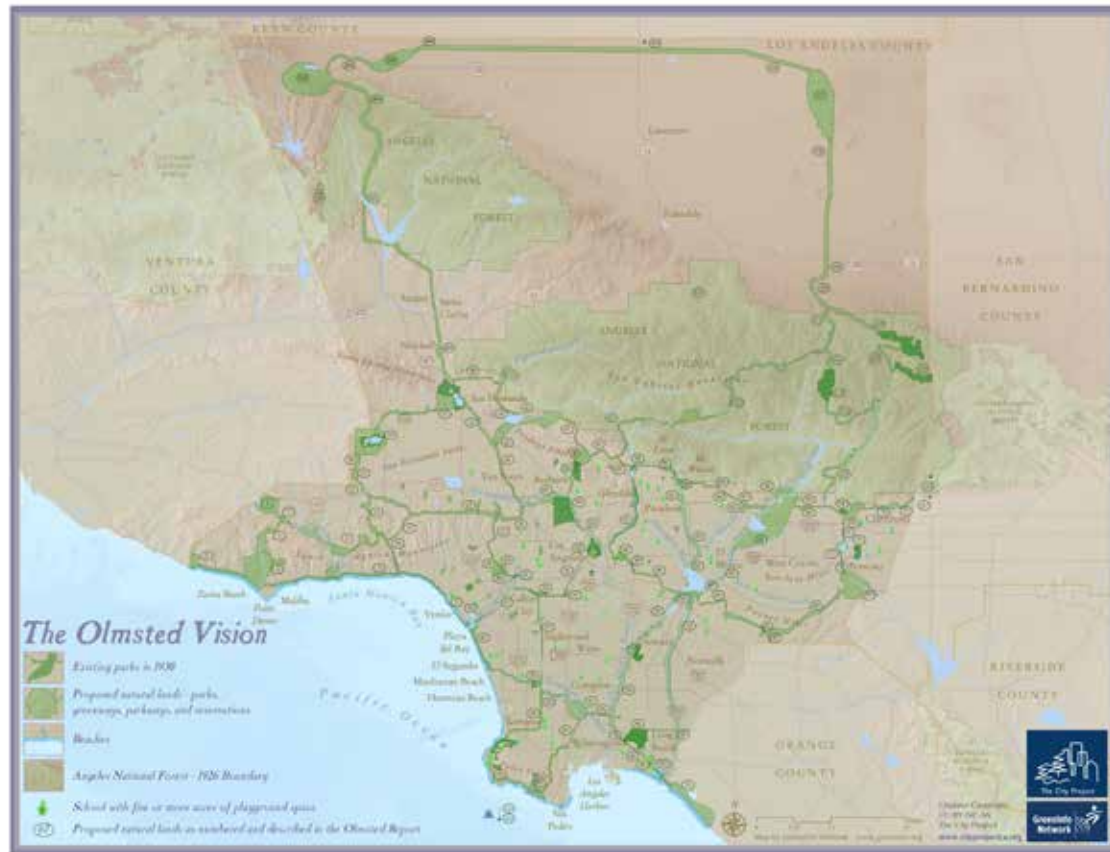
LEGEND

-  Emerald Necklace Greenway Rivers/Washes/Creeks
-  Trails
-  Beach Trails
-  Managed Lands
-  Pacific Crest Trail

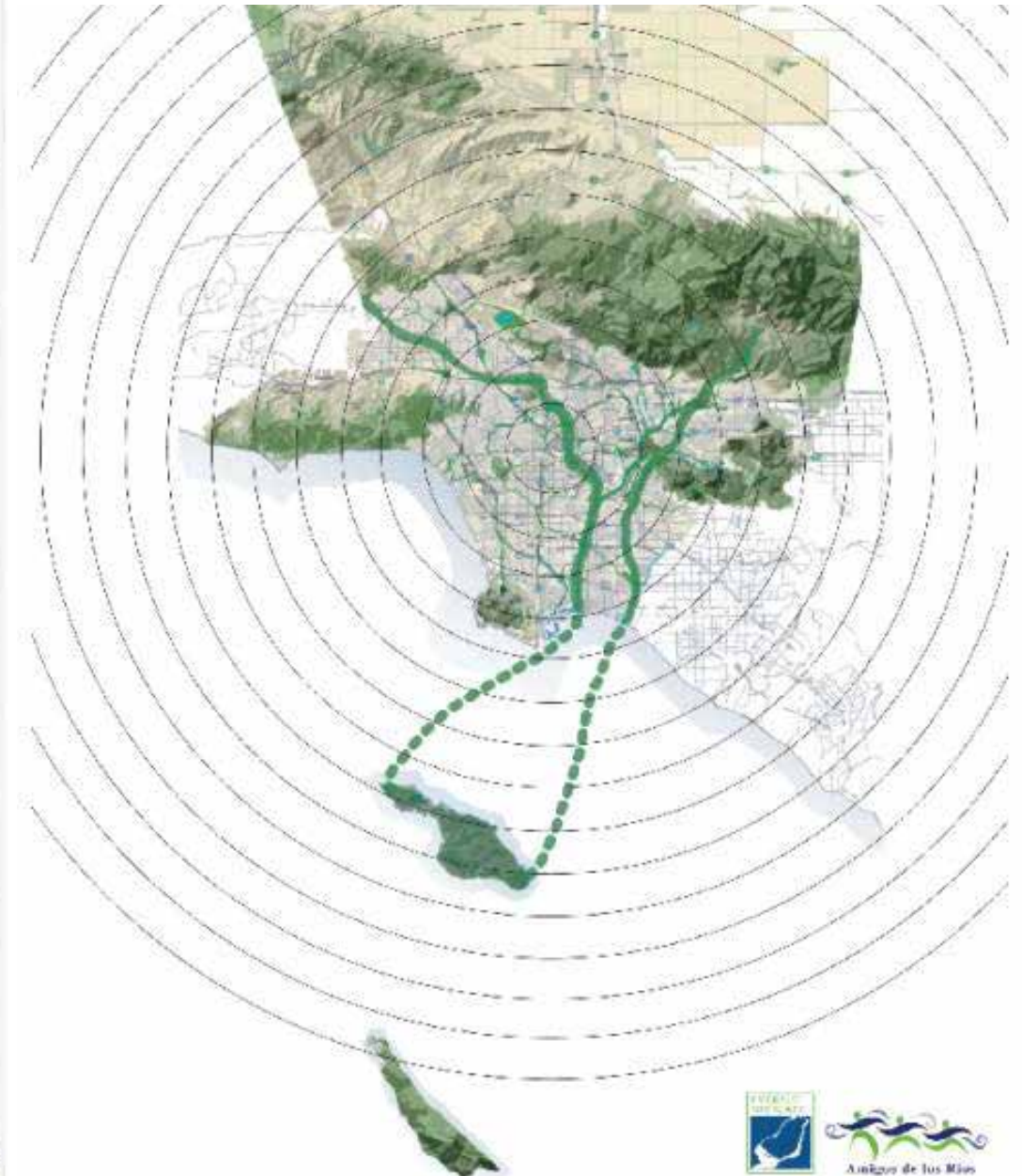
TOWARDS A COMMON VISION

1930 OLMSTED-BARTHOLOMEW PLAN FOR LOS ANGELES COUNTY

A MAP FROM THE ORIGINAL 1930 OLMSTED-BARTHOLOMEW PLAN ALONGSIDE A MAP WITH THE EMERALD NECKLACE FOREST TO OCEAN EXPANDED VISION SUPERIMPOSED UPON THE 1930 MAP.



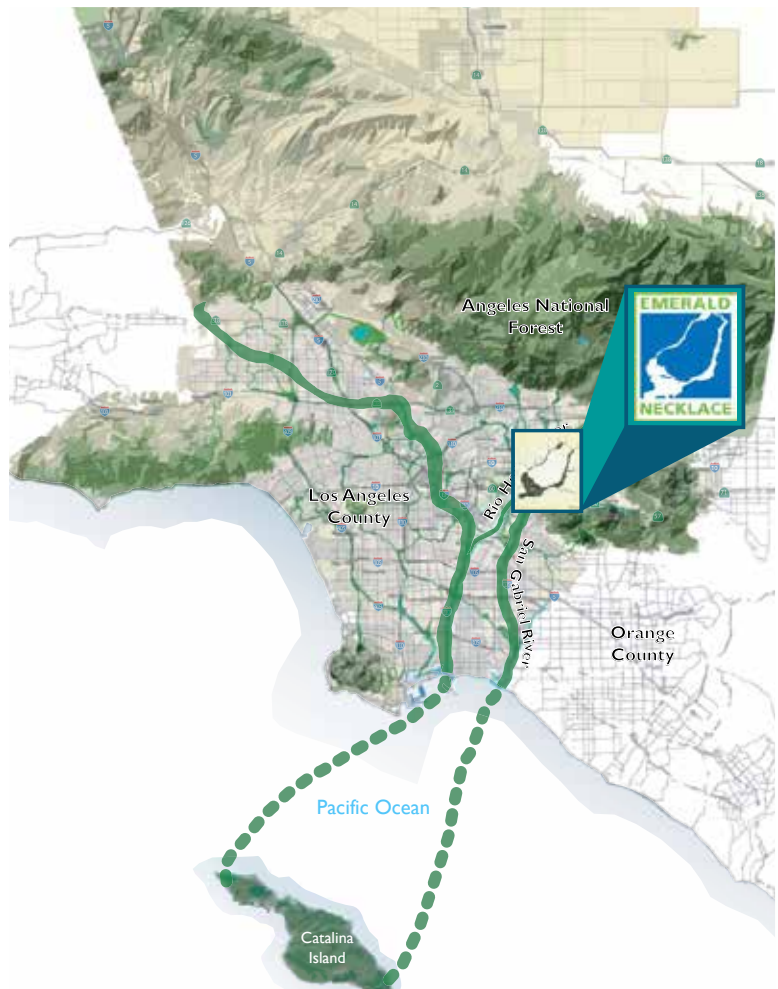
A REPRODUCTION OF THE 1930 OLMSTED-BARTHOLOMEW PLAN USING MODERN GIS AND MAPPING TECHNIQUES. CREDIT: THE CITY PROJECT



AMIGOS DE LOS RIOS



2005 Emerald Necklace Vision Plan



Emerald Necklace Forest to Ocean Expanded Vision Plan with 2005 Vision Plan

Completed Projects



Lashbrook Park



Durfee



Rio Vista



San Gabriel Canyon



Gibson Mariposa



Columbia



Peck Trolley and Bus



Peck



Veterans Park



Madrid

A CALL TO ACTION FROM AMIGOS DE LOS RIOS

We hope that you will find this Emerald Necklace Forest to Ocean Expanded Vision Plan for Los Angeles County an inspiration for your continued efforts to make Southern California a better place to live, work, and play. This plan simply would not have been possible without your support as one of the many partners throughout Los Angeles County striving to provide a higher quality of life in our metropolitan region for our children and future generations.

We started the Emerald Necklace Vision in 2005 with the Cities of El Monte, South El Monte, Baldwin Park, Whittier, and Irwindale as our case study area. With these efforts in a smaller region, we were able to successfully implement 10 multi-objective projects:

- Lashbrook Park
- Durfee Thompson Joint Use Trail
- Rio Vista Park
- San Gabriel Canyon Forest Gateway Park
- Gibson Mariposa Park
- Columbia School Joint Use
- Wilkerson School
- Peck Road Water Conservation Park
- Veterans Memorial Park
- Madrid School Nature and Exercise Trail

We hope that the common vision articulated in this Expanded Vision Plan will foster a “fierce urgency of collaboration” that will enhance and expand the great work already underway to invest in our region’s green infrastructure – the interconnected and strategically managed network of natural, cultural, and recreational resources that provide multiple benefits to nature, people, and the communities in which we live.

Green infrastructure not only provides places for children to play and valuable green space in our neighborhoods, but also helps provide clean air, clean water, and wildlife habitat. Investments in green infrastructure create a recreational network that serves as an alternative to automobile travel, restores natural water flow and groundwater infiltration, helps a community become more resilient to climate change, provides outdoor classrooms for youth, and preserves historic and cultural heritage.

Over 80% of Americans now live within urban megaregions such as Los Angeles County. We urgently need to develop green infrastructure to protect the quality of life for urban youth and families, and we need to engage these communities in green infrastructure development so as to give it a human face and engender a new generation of urban environmental stewards. The time horizon to realize this common vision is NOW.

Over the past ten years, we have demonstrated that multiple objective projects work and that we can solve many challenges simultaneously when we work together in partnership and collaboration. When we maintain a holistic approach – systematically focusing on each local project and weighing its role to improve the mega region – we maximize efficiencies and benefits.

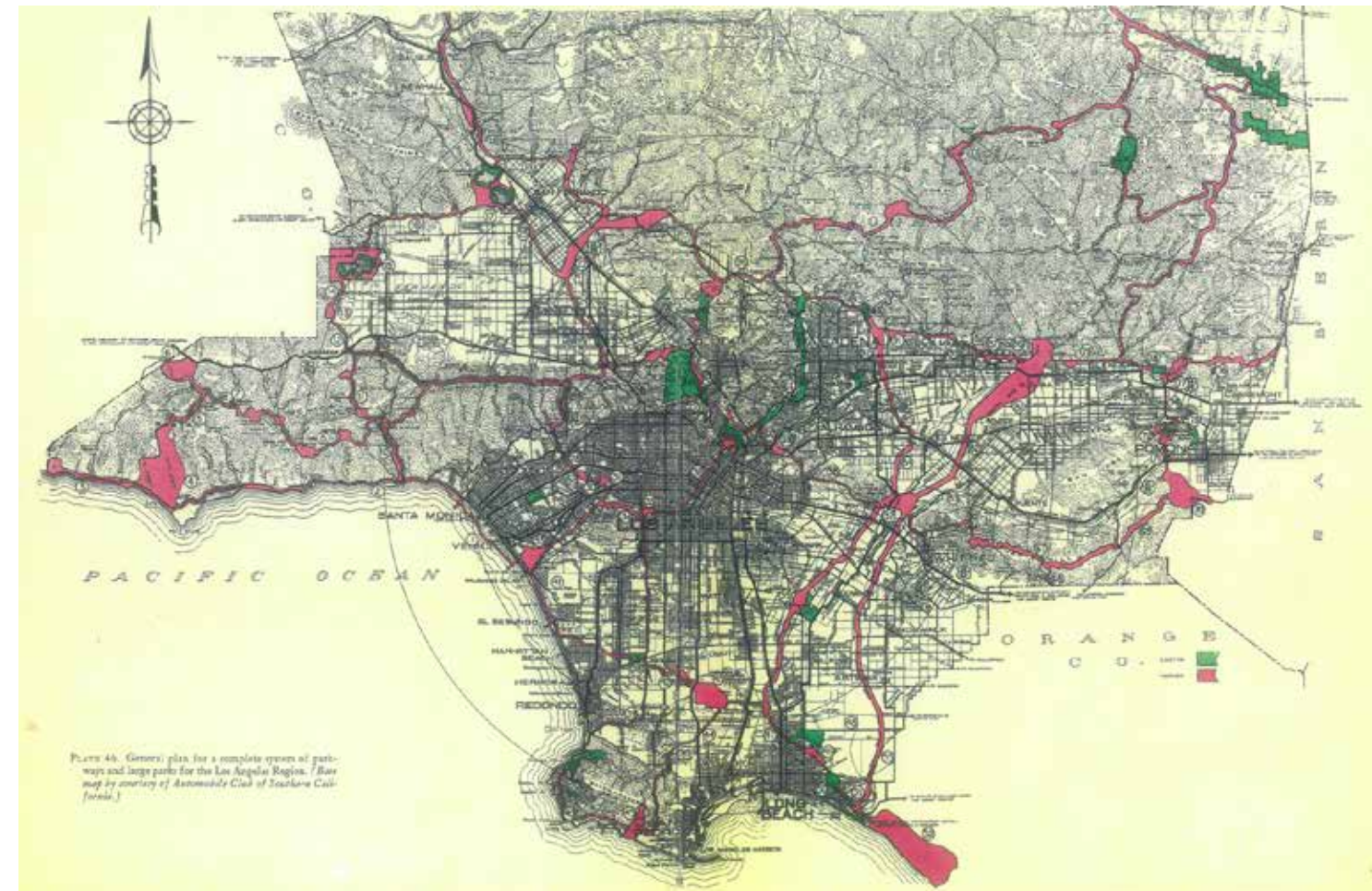
We believe the Emerald Necklace Forest to Ocean Expanded Vision Plan for Los Angeles County provides an aspirational framework for recreation, restoration, watershed protection, and habitat conservation that will be in sync with the region’s ongoing transportation planning, air and water resource planning, climate change action planning, and historic and cultural heritage preservation and education efforts.



EXPANDED VISION PLAN APPROACH

In concert with its local partners, The Conservation Fund has completed green infrastructure plans across the country and contributed its expertise in planning and implementation for this effort. The Expanded Vision Plan is grounded in The Conservation Fund's green infrastructure approach that emphasizes identifying and implementing multiple-benefit conservation, restoration, and recreation projects. Benefits of green infrastructure projects may include but are not limited to: human health, stormwater management, wildlife habitat protection and enhancement, water quality, water supply, air quality, and reductions in greenhouse gas emissions. Multiple-benefit projects can achieve regulatory or agency goals from adopted plans and programs while also improving a community's quality of life. Green infrastructure projects can be implemented at multiple scales – from landscape level projects that connect critical wildlife habitat to site level projects that infiltrate and clean rainwater.

To develop this Expanded Vision Plan, The Conservation Fund and Amigos de los Rios convened focus group meetings in August 2012 and February 2013 to learn more about partner efforts in the region: to identify key geographic information systems (GIS) layers for mapping, to compile existing and adopted resource management plans, and to highlight best practices for conservation and restoration in the region and nationwide. Over 60 planning, research, and visioning documents were synthesized, and over 100 GIS mapping layers were collected and analyzed to help identify the best ways to realize the Expanded Vision and facilitate future collaboration. This Expanded Vision Plan document serves as an overview of the detailed assessments that were completed.



ORIGINS OF THE EXPANDED VISION PLAN

Los Angeles is a city inspired by dreams and visions of a brighter tomorrow. To understand the opportunities that residents, community leaders, and government officials have today, it's helpful to understand the often competing visions for the Los Angeles Basin.

The development of the modern city and its relationship with nature can be traced in many directions and influences. Yet, the impact of Frederick Law Olmsted Sr. and the landscape architecture firm he founded in 1850 is significant and directly relevant to Los Angeles. In 1858, Frederick L. Olmsted and Calvert Vaux undertook the design of Central Park in New York City. Between 1878 and 1895 the Olmsted firm worked on the ambitious Emerald Necklace project in Boston, Massachusetts, designing a series of parks linked together by a network of protected streams and restored wetlands. These two projects kindled the imagination of the nation in a breathtaking fashion, and city leaders from across the country sought to bring the Olmsted firm to their region to design equally captivating landscapes and parks.

The appeal of Olmsted's work is rooted in his belief that a crafted landscape was a tool for molding both individual

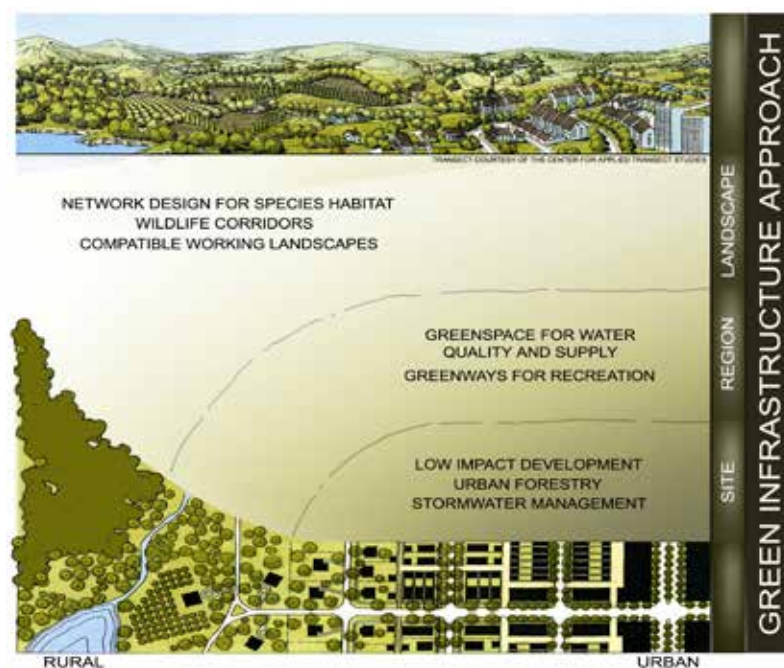
behavior and civic life. Landscapes evoke emotions, ennoble human pursuits, and inspire action. The key purpose of Central Park was to help society integrate diverse ethnic communities and immigrant populations into a more cohesive and tight knit American family. Visiting a park was a formal occasion; only certain types of behavior were expected and acceptable. A park was designed to evoke a pastoral past akin to Thomas Jefferson's "Yeoman Farmer" vision for the country; one that espoused that hard work on the land made people strong, morally upright and good citizens. Grazing lands for sheep or other farm animals was a landscape that Olmsted favored. Olmsted was actually reaching an essence far deeper and older in the human experience, as a number of researchers in different academic fields have theorized that humans may, in fact, have an innate preference for grassland landscapes – dating back to our ancestors' experience on the African savannah.

Another central tenet of Olmsted's is the power of travel; that movement through a landscape was a transformative and exhilarating experience. The concept of a parkway was born; a linear park that provides both daily transportation

needs and connects the traveler to nature by moving them through carefully sculpted landscapes that seek to break the travelers out of their daily routine, placing them in the larger environmental context, re-framing their day, and achieving a more balanced perspective. Parkway were designed to be powerful and emotional experiences affecting the very attitudes of the commuter or traveler. Olmsted recognized that people used different types of transport such as automobiles, horses, bicycles or walking to move through his parkways, and he determined that these users needed to be separated so that each user group had its own unique landscape designed for the pace of that travel experience.

Over its 130-year history, the Olmsted firm completed over 6,000 projects across the country including over 700 public parks, parkways, and recreation areas. The Olmsted firm was very active in shaping the early image of California through such projects as the plan for Yosemite in 1868 as the country was recovering from a brutal civil war and needed a vision of a positive future. The Olmsted Grove in the Prairie Creek Redwood State Park is a testament to the deep connection the Olmsted firm had with the state of California.

Frederick Law Olmsted Jr. continued his father's work, and expanded its influence. Widely considered one of the founding visionaries of the National Park Service, Frederick Law Olmsted Jr. wrote the statement of purpose for the National Park Service in 1916. In 1927, the Citizens' Committee on





valuation. To translate that cost, Olmsted observed that “this is equivalent to the cost of operating each pleasure automobile in the county approximately eight miles per month.” The regional park agency was not created, and this lack of a central implementing agency effectively blocked the implementation of many of the recommendations. However, the vision for the region and the need for parkways and parks have remained. Despite the significant alteration of the natural landscape in the last 80 years, some of the core recommendations of the plan remain as relevant today as they were in 1930. Opportunities exist to implement the plan’s vision and provide a framework for future collective action by partners all across Los Angeles County.

Parks, Playgrounds and Beaches hired the Olmsted firm and Bartholomew & Associates to conduct a comprehensive inventory of parks, assess the need for public parks, and make implementation recommendations. The central finding of the inventory confirmed that Los Angeles was chronically lacking in parks, playgrounds, and public beaches for a city of its size and ambition. Within the inventory, one compelling finding was that of the 726 schools in the region, only 73 had five acres or more of open space for play grounds. “Positively reprehensible” was the reserved description offered by Olmsted on the level of parks for the residents and children of Los Angeles. This level of condemnation was based on Olmsted’s strong belief that parks were necessary public health infrastructure, and the park deficit was only going to get worse as the Los Angeles Basin experienced significant forecasted population growth.

The report recommended four types, or scales, of park development: 1) Increased public access to beaches, 2) Expanded number of regional athletic fields, 3) Additional large reservations or parks, such as mountain ranges, canyons and islands, and 4) Interconnected network of parkways to link all of the above park assets together. In addition, Olmsted estimated the cost for additional land acquisition and park construction. For access to beaches and building recreational facilities on the coast, Olmsted calculated around \$27 million. To correct the deficit of local parks, Olmsted recommended raising \$40 million with another \$7 million for athletic fields. For the large parks and parkways, Olmsted asserted that around 70,000 acres were needed, which would have been an increase of 54,000 acres.

To carry out this plan, Olmsted recommended establishing a new regional park agency, modeled on several eastern cities including the Metropolitan District Commission in Boston, the South Park District in Chicago, Westchester County in New York, and the New Jersey County Parks District. Olmsted believed that the budget for the new agency and steady rate of progress of park expansion could be achieved without increasing taxes beyond 15 cents per \$100 in assessed



EMERALD NECKLACE VISION

Over the past ten years, Amigos de los Rios has worked as a liaison between the community and public agencies to facilitate the collaborative effort known as the Emerald Necklace, building on the Olmsted vision for the region. Amigos de los Rios has provided planning and landscape architecture expertise to implement green infrastructure projects along the Emerald Necklace.

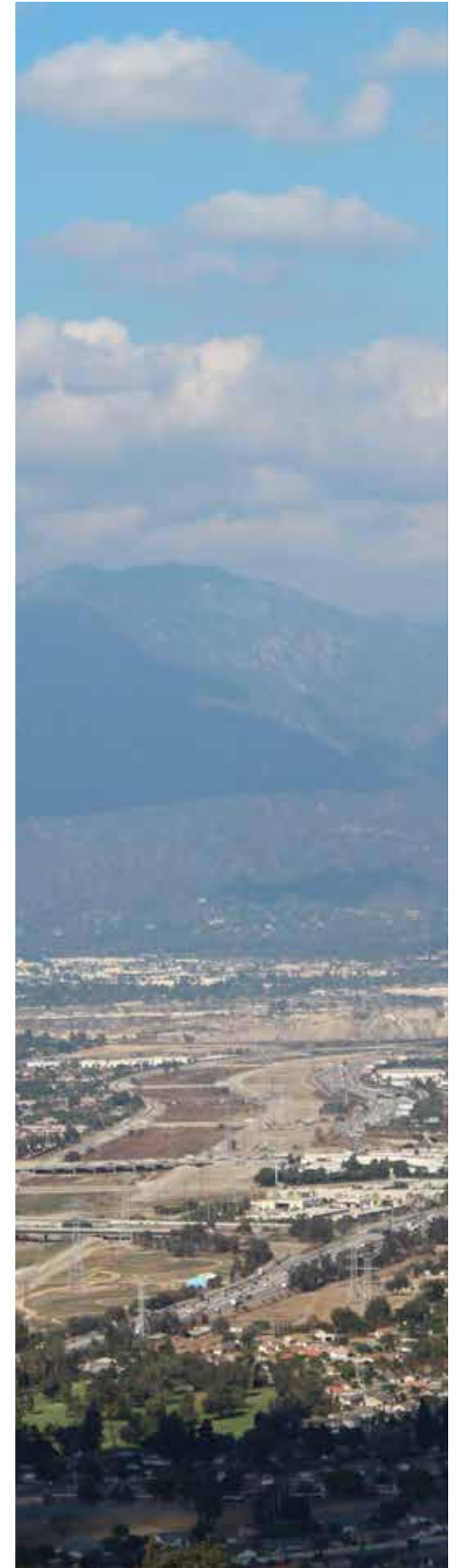
In 2005, Amigos de los Rios introduced the Emerald Necklace Vision Plan that outlined a detailed strategy for the development of a 17-mile loop of beautiful multi-benefit parks and greenways connecting 10 cities and nearly 500,000 residents along the Rio Hondo and San Gabriel Rivers watershed areas located in East Los Angeles County. The plan’s parks and greenways provide desperately needed recreational areas for communities suffering from extreme density and urban decay, and the associated social and health issues.

In Los Angeles County, Amigos de los Rios has helped implement the Emerald Necklace by forming the Emerald Necklace Coalition, comprised of 62 member agencies with a connection to East Los Angeles. All Emerald Necklace Coalition members have signed the Emerald Necklace Accord, a legal document that pledges its signatories to work collaboratively to preserve and restore the Los Angeles and San Gabriel watersheds and their rivers and tributaries for recreational open space, native habitat restoration, conservation, and education.

In 2008, the vision was expanded to help unify a vast region of Southern California, from the desert through the San Gabriel Mountains to the Pacific Ocean, by linking more than 1,500 acres of parks and open spaces along an interconnected greenway around the Rio Hondo, San Gabriel, and the lower Los Angeles Rivers. In 2012-13, Amigos de los Rios and The Conservation Fund undertook a planning process to “visualize” the expanded region and provide concrete action steps to make the vision a reality.

The Expanded Vision Plan for Los Angeles County seeks to inspire a broad coalition of government agencies, NGOs, and local institutions to create a world-class network of parks and public open spaces connected by river greenways for greater Los Angeles. As one of the nation’s largest metropolitan areas, the Los Angeles metropolitan region needs to have a leading network of park and recreational lands.

The Expanded Vision Plan recognizes that Los Angeles County is comprised of much more than the City of Los Angeles alone. To truly benefit the region as a whole, this plan advocates fostering both north-south and east-west linkages. It is worth noting that while the City of Los Angeles is the second largest in the nation, with a population of nearly 4 million, the combined population of Los Angeles County’s San Gabriel Valley and Gateway cities, which the original Emerald Necklace serves, boasts the same figure. Further, these two combined populations still do not account for Los Angeles County’s total population of over 10 million across 4,000 square miles. These figures highlight the vast scope covered by the Emerald Necklace Expanded Vision and underscore the crucial need for coordination and collaboration between the myriad agencies, organizations, and institutions to realize the vision outlined in this plan. The aim of this plan is to make a strong call for meaningful collaboration, and to utilize best practices in local planning and policy documents from metropolitan regions across the country.

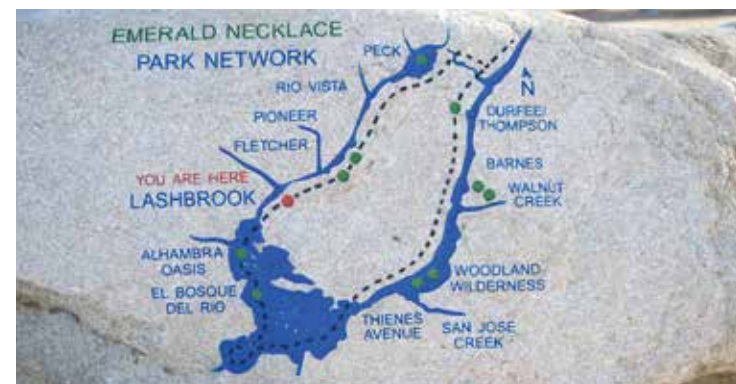


WHY A COMMON VISION?

According to the U.S. Army Corps of Engineers (USACE), the greater Southern California metropolitan region is the third largest economic center in the world based on a gross metropolitan product of over \$735 billion in 2010. In terms of gross domestic product, it is considered the 15th largest economy in the world. The Ports of Los Angeles and Long Beach alone support almost 5 million jobs across the nation.

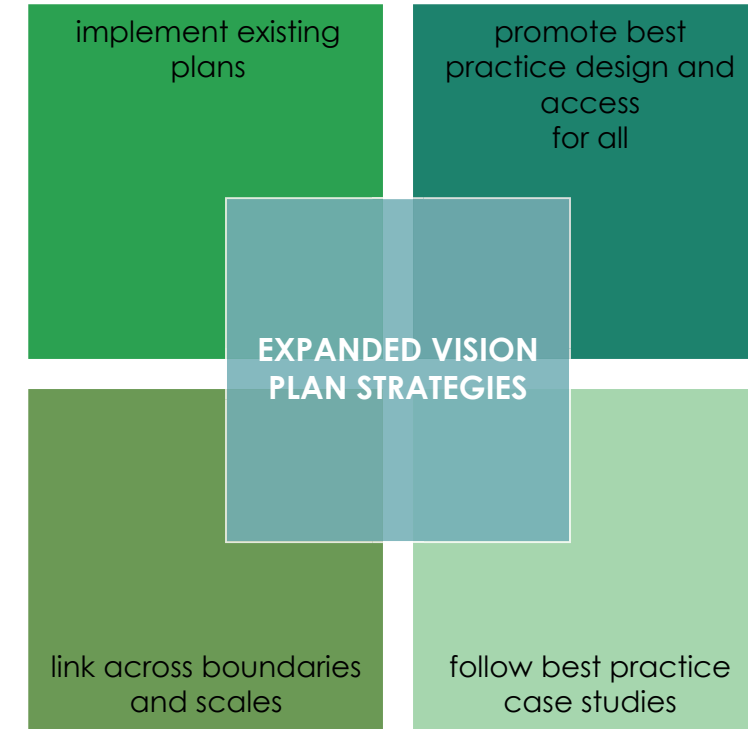
While the region's economy is able to support a high quality of life, it is also a region with a high percentage of disadvantaged communities and a natural resource base that is under continued strain. The USACE Civil Works Strategic Plan shows Southern California as having the nation's most vulnerable water supply, with little resilience to earthquake damage, drought, and population increases. At least 2 million people are at risk for sea level rise and storm surges from climate change impacts. Continued development pressure and infrastructure expansion puts increasing strain on the region's biodiversity, wildlife habitat, and community open space.

Amidst this challenging context, an array of agencies and organizations work every day to make Los Angeles County a better place to live through conservation and restoration projects, including the Department of the Interior, which, in its recent America's Great Outdoors Fifty-State Report, highlighted Los Angeles and San Gabriel Trail Improvements as one of two priority conservation projects in California to reconnect Americans with the outdoors. The Emerald Necklace Expanded Vision Plan supports the development of green infrastructure as a contributor to community revitalization and the development of a sustainable economy. This plan helps identify opportunities to develop a locally-based, skilled workforce to take advantage of emerging industries that support a greener future. The maps in this plan provide a visual representation of what the conservation and restoration partners in Los Angeles County would like to see. It is an aspirational framework that can guide collective action moving forward to implement the Expanded Vision.



COMMON VISION ELEMENTS

The Emerald Necklace Expanded Vision Plan identifies eight Regional Goals that can help move Los Angeles County towards a common green infrastructure vision. Each regional goal includes collaborative priorities and strategies that can help realize the vision. The strategies fall into four main categories, shown below.



The strategies were designed to acknowledge the depth and breadth of the diverse plans examined and synthesized in the preparation of this document, and to help organize their scale and content to point out distinct collaborative priorities for each Regional Goal.

- Implement Existing Plans** - Amigos de Los Rios recognizes the wealth of existing planning, research, and visioning documents related to green infrastructure in Los Angeles County. In addition to data, a variety of both proven and promising concepts, strategies, and goals were found in the 60+ documents Amigos de Los Rios and The Conservation Fund examined. Yet in many cases, the visions of these documents remain unfulfilled and their recommendations un-implemented. For each Regional Goal, Amigos de Los Rios and The Conservation Fund recommend implementation of specific components of existing plans to strive towards realizing the Expanded Emerald Necklace Vision.
- Link Across Boundaries and Scales** - By its very nature, the Emerald Necklace Expanded Vision Plan encompasses a variety of scales and jurisdictional boundaries. To achieve the Regional Goals set forth in this Vision plan, fostering collaboration among diverse stakeholders representing a variety of scales and interests is paramount. Creating these linkages is integral to the success of the Regional Goals and the success of the Expanded Emerald Necklace Vision as a whole.
- Promote Best Practice Design and Access for All** - The Emerald Necklace Expanded Vision Plan stresses the need for thoughtful, inclusive design practices across all Regional Goals. Projects resulting from the plan's vision must be designed to have a lasting, multi-benefit impact that can only result from attentive planning that engages the community and prioritizes accessibility for all community members.
- Follow Best Practice Case Studies** - In addition to carrying out the sometimes un-implemented recommendations of existing plans, another key strategy of the Emerald Necklace Expanded Vision Plan is to build on the successes of green infrastructure initiatives across the nation. Identifying best practices and applying them in areas targeted by the Expanded Vision Plan will prove beneficial, while opening up opportunities for collaboration.

PLAN RECOMMENDATIONS

REGIONAL GOALS

1 Promote Active Transportation – Walking, Biking, and Alternative Mobility Options

2 Create Functional and Multi-Purpose Natural (Green) and Built (Grey) Environment Networks

3 Improve Public Health by Expanding Access to Nature and Outdoor Recreation

4 Treat Water as a Precious Resource and as a Multi-Benefit Amenity

5 Design and Build Resilient Communities that Adapt to and Mitigate the Current and Projected Impacts of Climate Change

6 Enhance Regional Wildlife and Natural Area Anchors

7 Celebrate Culture and Foster Environmental Awareness Through Education, Outreach, and Workforce Training

8 Foster a Green Economy that Creates Jobs and Spurs Investment in Local Multi-Benefit Projects

1 A comprehensive network of walking, biking, and riding trails, from forest to ocean and from East to West

2 Interconnected and complementary green and grey infrastructure networks

3 A nature-based network of recreation facilities that promotes public health, social justice, and equity

4 A water network that helps manage municipal water supplies, infiltrates groundwater, and provides public health benefits.

5 Communities resilient to changing water supplies, climate extremes, and sea level rise

6 A linked network of open space treasures from the Mountains to the Sea

7 A network of culturally aware and civically involved communities that supports conservation, restoration, and recreation

8 A robust, inclusive, and sustainable local economy that produces new economic opportunities around green infrastructure

TOWARDS A COMMON VISION



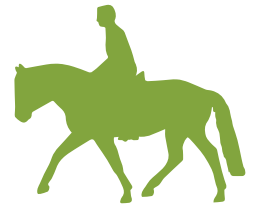
SCALE

- S** STATE (AND FEDERAL)
- R** REGION
- W** WATERSHED
- C** COUNTY
- M** MUNICIPALITY
- P** PROJECT

 METROPOLITAN GREENSPACES ALLIANCE

The planning work and projects captured in this document occur at a variety of scales, from state and federal levels to the project level. In order to realize the Emerald Necklace Expanded Vision, collaborative efforts must consider all scales and be coordinated effectively among all of them.

The Metropolitan Greenspaces Alliance (MGA) is a growing network of conservation coalitions working to integrate nature into metropolitan regions. With 9 member cities across the nation, the MGA’s work informs and influences the Emerald Necklace Expanded Vision. Use the key to identify MGA member city projects and efforts referenced in this plan.



REGIONAL GOAL

Promote Active Transportation – Walking, Biking, and Alternative Mobility Options

COLLABORATIVE PRIORITIES

Strategies to implement the Emerald Necklace Expanded Vision:

- Establish an integrated, county-wide bicycle and pedestrian system, including a comprehensive network of off-street multi-use trails that links the cities of the San Gabriel Valley, the Gateway Cities, the City of Los Angeles, and other municipalities and unincorporated areas.
- Expand existing Emerald Necklace Trails and connect missing linkages by adding trails and bridges along rivers and washes, under-crossings, and signalized crossings where necessary to connect residents of local cities to the regional trail network.
- Expand use of utility rights-of-way, vacant and under-utilized lands, low-use rail corridors, and existing transit corridors for bicycle, pedestrian, and equestrian infrastructure.
- Improve access to key destinations such as business districts, employment centers, schools, parks, and community facilities through enhanced street crossings, expanded bicycle and pedestrian networks, and improved transit access.
- Provide ancillary infrastructure to support bicycling and walking, such as secure bike parking, bike detection at traffic signals, and improved signal timing for pedestrians.
- Develop a network of Complete Streets, crosswalks, and other amenities to create safe routes to school and implement walking school buses.

TOWARDS A COMMON VISION

A comprehensive network of walking, biking, and riding trails, from forest to ocean and from East to West

Los Angeles County is known for its considerable traffic and the related air quality impacts. At the same time, many in the region suffer from the unhealthy effects of a sedentary, car-oriented lifestyle. Further, low-income populations are at greater risk for cancer due to poor air quality and obesity, a result of limited access to park space and alternative transport opportunities (along with limited access to healthy food options). Promoting active transportation options in the context of the Emerald Necklace Expanded Vision can counter many of these ills at once. Establishing an active transportation network around green infrastructure will increase access to clean air and recreation opportunities as it promotes physical activity and gets people out of their cars.



CONNECTING THE MOUNTAINS TO THE SEA

implement existing plans



City of Los Angeles – General Plan: Transportation Element and Bicycle Plan (2010)
 “Create an integrated system of pedestrian priority street segments, bikeways, and scenic highways.”



San Gabriel River Corridor Master Plan (2006)
 “Extend existing trails, create new trails, and enhance connectivity of the trail network.”



Los Angeles County – Bicycle Master Plan (2011)
 “Improving mobility of bicyclists and encouraging more bicycle ridership within the County by expanding the existing bikeway network, connecting gaps, addressing constrained areas, providing greater local and regional connectivity and, encouraging more residents to bicycle more often.”



Los Angeles River - Revitalization Master Plan (2007)
 “Develop reliable green connections of bikeways, pedestrian paths, repurposing schoolyards, vacant lots, and education campuses.”



Azusa River Wilderness Park Plan (2007)
 Create a connection to the LA County Bikeway Network to spatially tie the site into existing open space and to develop much needed connectivity. Connecting the park to the bikeway would also link the San Gabriel Mountains to many other urban park sites, including the Emerald Necklace.

link across boundaries and scales



Los Angeles County Metro Long-Range Transportation Plan (2009)
 “Support sustainable transportation options – such as...bikeways and pedestrian linkages.”



Plan Recommendation:
 Support Greenway 2020 efforts, CicLAvia expansion to San Gabriel Valley, and implementation of bicycle master plans across the LA Basin.



SCAG Regional Comprehensive Plan (2008)
 “Improve the efficiency of the transportation system by strategically adding new travel choices to enhance system connectivity in concert with land use decisions and environmental objectives.”



Compton Creek Watershed Management Plan (2005)
 “Connect open spaces to bike paths and transit access points and create a network of trails and open spaces through the watershed to link public facilities and open spaces.”



Plan Recommendation:
 Fully implement all opportunity areas and projects highlighted within the Emerald Necklace feasibility study and Rio Hondo feasibility study for the 17-mile Emerald Necklace loop.

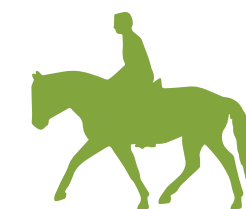
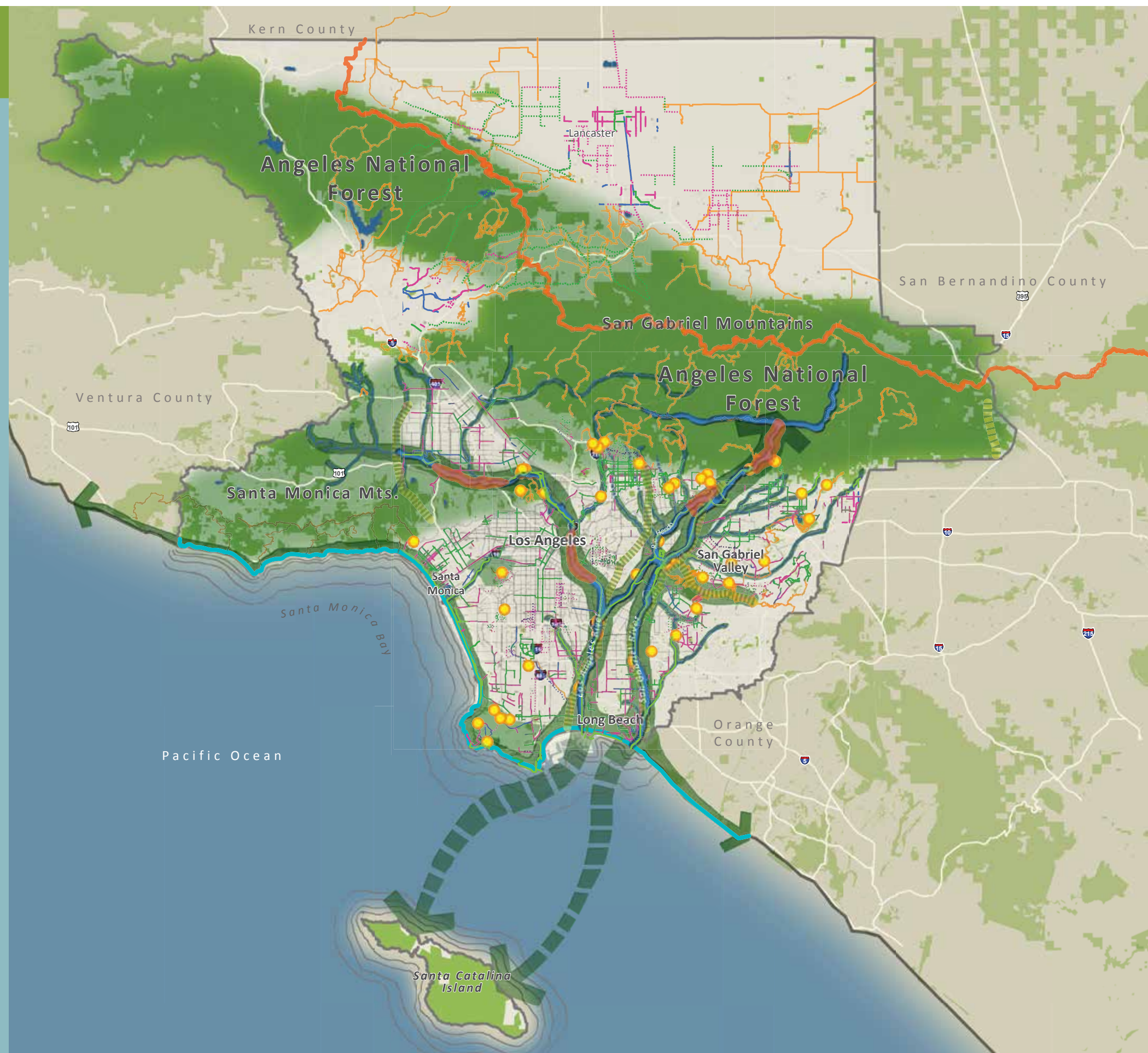
ACTIVE TRANSPORTATION MAP

This map depicts the areas of opportunity for improving and connecting existing infrastructure by expanding the use of utility rights-of-way, enhancing street crossings, bicycle, pedestrian, and equestrian access, and transit connections.

These potential trail developments represent opportunities for alternative modes of transportation that will improve walkability and connect communities by greening rights-of-way and trails.

LEGEND

-  Emerald Necklace Greenway
-  Trails along Rivers/Washes/Creeks
-  Utility Rights of Way
-  Waterway Bike Trails
-  Proposed Waterway Bike Trail Connections
-  Class I Bikeway (path)
-  Class II Bikeway (lane)
-  Class III Bikeway (route)
-  Existing Trails
-  Beach Trails
-  Pacific Crest Trail
-  Equestrian Centers



ACTIVE TRANSPORTATION

1

CONNECTING THE MOUNTAINS TO THE SEA

promote best practice design and access for all



SCAG Regional Transportation Plan 2012-2020 (2011)

“Reduce greenhouse gas emissions through an integrated approach to transportation, land use, and housing.” R

SCAG Regional Transportation Plan 2012-2035, Active Transportation Appendix (2012)

The need for active transportation must be fully considered for all transportation planning projects. Increased accommodation for bicyclists and pedestrians requires increased funding, multi-modal planning, programming, and design. As planners boost accommodations for active transportation users, an increase in bicyclist and pedestrian safety should also occur. R



Rio Hondo Vision Plan: Emerald Necklace (2005)

Themes found across these specific projects include development of trails to increase biking, equestrian activity, and walking; improvement of connectivity between existing trails and regional trails; habitat restoration and protection for native plants and animals; provision of recreation facilities; promotion of education and awareness-building through use of signage explaining the flow of storm water and its impact to the river channel; and the provision of wildlife viewing areas for school field trips. P



The Los Angeles County **PLACE (Policies for Livable, Active Communities and Environments) Program**, housed in the county’s Department of Public Health, fosters policy change that improves the county’s built environments in order to create healthier, safer, and more active communities. PLACE integrates public health considerations into land-use and transportation policy by providing input and technical assistance on city and county planning and by providing active living policy grants for cities and non-profits. PLACE’s advocacy encompasses issues such as active transportation and safety, access to healthy foods, as well as outdoor recreation opportunities, and safe routes to schools. C

follow best practice case studies

Recommendation: Recreational Trail Use of Utility Corridors

Many examples exist of successful recreation corridors co-sited along utility rights-of-way. National Grid, a utility company serving New York and New England, has worked with municipalities and non-profits on a range of trail projects. According to the National Grid recreation trail policy, allowable uses for trails along their utility corridors include walking, jogging, and bicycling – motorized vehicles are prohibited.

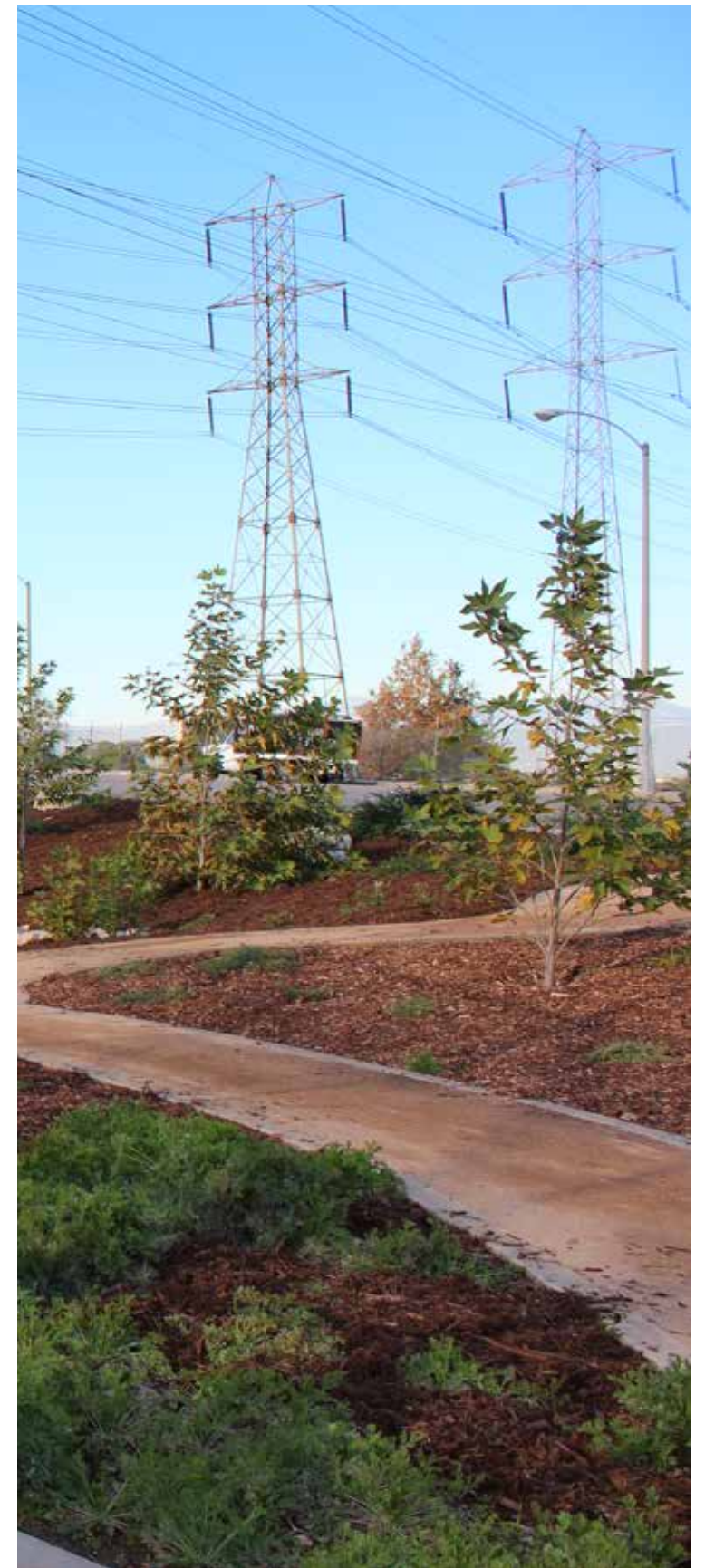
Southern California Edison (SCE) has a long history of working with communities and partners on trail projects. Opened in 1984, the Atchison, Topeka, and Santa Fe (ATSF) Trail in the City of Irvine is a recreation trail on a right-of-way easement managed by SCE. The ATSF Irvine Trail consists of a 10-ft wide trail using a 200-ft wide easement owned by SCE as part of the Orange County Transportation Authority’s active railway corridor neighborhoods along the trail have started to add pocket parks adjacent to the trail. M R

Metro Countywide Sustainability Planning Policy & Implementation Plan (2012)

Universal Policy XI - Complete Streets

“Explore opportunities through policy and project development to increase access for all used by making streets more ‘complete’ and promote complete streets at the local level through partnerships and incentive programs.”

“Implement, encourage and sponsor projects that create safe, attractive, and efficient conditions for active transportation, transit-use, and slow speed vehicles (i.e roadway design for lower vehicle speeds, installing bicycle parking in the public rights-of-way, etc). Encourage integrated trips with transit and active mode.” C





Hollydale Regional Park trail with native planting and bioswale under utility lines in South Gate
Inset: Planted park



Emerald Necklace Wayfinding Map



El Monte General Plan Community Results



Nature trail at Rio Vista Park with interpretive elements in El Monte

This word cloud features a diverse array of terms in English, Arabic, and Chinese. The largest and most prominent words include "conscience", "green", "culturalmente", "CULTURALLY", "recreation", "pramote", "greater", "space", "workforce", "communities", and "awareness". Other significant terms include "biodiversity", "heritage", "corridors", "stormwater", "active", "efforts", "wildlife", "quality", and "plants". The cloud also contains several words in Arabic, such as "وعي" (awareness), "ثقافة" (culture), "البيئة" (environment), and "مساحات" (spaces), and Chinese characters for "culture" (文化) and "awareness" (意识). The words are arranged in a dense, overlapping pattern, with larger fonts indicating higher frequency or importance.



REGIONAL GOAL

Create Functional and Multi-Purpose Natural (Green) and Built (Grey) Environment Networks

COLLABORATIVE PRIORITIES

Strategies to implement the Emerald Necklace Expanded Vision:

- Implement 176 miles of the Emerald Necklace greenway to connect the cities of the San Gabriel Valley to the Gateway Cities, the City of Los Angeles, and other LA County municipalities and unincorporated areas.
- Partner with the U.S. Army Corps of Engineers in implementing multi-benefit projects that result in large scale restoration of functional natural systems in the Los Angeles and San Gabriel River watersheds.
- Revitalize communities in East and South Los Angeles County that lack a proportionate balance of green and grey infrastructure by the enhancing of schools and their surrounding neighborhoods.
- Create greenways and trails under and adjacent to existing utility and transportation corridors by working with rights-of-way owners, including the California Department of Transportation, Southern California Edison, the Los Angeles County Department of Public Works, the Los Angeles County Department of Water and Power, Union Pacific Railroad, and other area railroads.
- Complete a comprehensive urban forest and canopy coverage health assessment of the entire Los Angeles Basin.
- Employ best practice green design techniques along freeways and on- and off-ramps, especially when adjacent to schools and when bisecting neighborhoods.

TOWARDS A COMMON VISION

Interconnected and complementary green and grey infrastructure networks

High costs of land acquisition, murky ownership records, and a complex planning process are but three of the challenges facing the creation of green infrastructure in Los Angeles County. Along with an existing dearth of open space, these challenges underscore the need for green infrastructure projects delivering multiple benefits. Establishing a network of multi-purpose conservation, restoration, and recreation projects will link human and natural communities, resulting in benefits to health, wildlife habitat protection, water quality and supply, stormwater management, air quality, and greenhouse gas emissions reductions.

SCALE

- S** STATE (AND FEDERAL)
- R** REGION
- W** WATERSHED
- C** COUNTY
- M** MUNICIPALITY
- P** PROJECT

MGA METROPOLITAN GREENSPACES ALLIANCE



BALANCE OF GREEN AND GREY

CONNECTING THE MOUNTAINS TO THE SEA

implement existing plans



City of Los Angeles – General Plan Open Space Element (2001)

Policies encourage utilizing open spaces for multiple benefits, such as safety, health, and social welfare; environmental and ecological balance. M



Los Angeles River – Revitalization Master Plan (2007)

In the long-term, this plan recommends restoring riparian vegetation to support birds and mammals, and ideally, developing fish passages, fish ladders, and riffle pools to allow for restoration of steelhead trout habitat. In the short-term, the plan seeks to modify water channels to provide green terraces for wildlife habitat, water quality treatment, and increased public enjoyment. W R

Metro Countywide Sustainability Planning Policy & Implementation Plan (2012)

Universal Policy III - Green Design

Implement and encourage local incorporation of green design techniques that minimize the environmental impact of transportation projects and/or support local urban greening; consider requiring green design techniques as a condition of funding when these techniques can be implemented with little or no additional cost to project sponsors (i.e. native landscaping). C



Reconnecting the San Gabriel Valley (2000)

Recommends the creation of urban wildlife movement networks through a greenway system of riparian corridors and ridgelines within the San Gabriel River, Puente Hills, San Jose Hills, and the Arroyo Seco. W R



SCAG Regional Transportation Plan 2012-2035 (2011)

Supports natural land restoration, conservation, protection and acquisition, offering greenhouse gas emissions reduction benefits. R



The **Visioning Whittier Narrows Master Development Plan (2010)** process identified multi-benefit outcomes, including environmental and economic sustainability, reconnecting surrounding communities to natural areas, and improving habitat and water quality. Ultimately, the plan anticipates needs over a 15-20 planning horizon and seeks to provide useful information to the U.S. Army Corps of Engineers as it updates the Corps' most recent master plan for the basin completed in 1996. P



Historical Ecology and Landscape Change of the San Gabriel River and Floodplain (2007)

This collaborative technical report uses a historical approach to “document and understand historical reference points” for wetland and riparian losses in Southern California in order to guide future restoration and management policy. The report ultimately concludes that, “Recreating past conditions through restoration is not practical or desirable in all places or instances, especially in the San Gabriel River watershed where urban infrastructure poses severe limitations on future restoration work... Thus, historical analysis must be used to inform, but not replace the tools commonly used in watershed restoration science.” W R

link across boundaries and scales







GREEN AND GREY INFRASTRUCTURE MAP

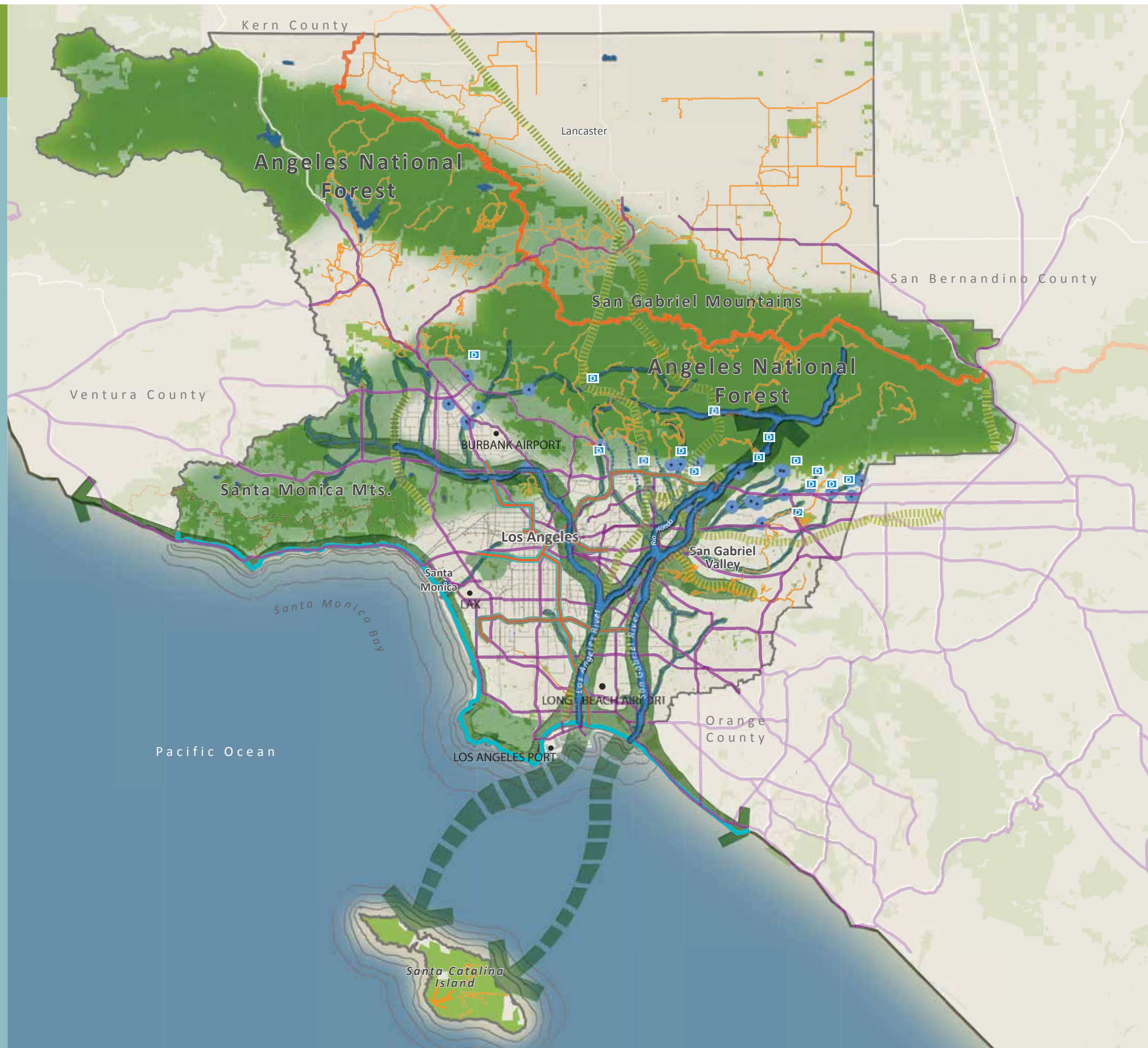
This map depicts existing grey infrastructure that we propose be greened and utilized.

We propose to use the residual spaces underneath the utility lines to create greenways and natural areas.

We can also improve the greening surrounding the freeways and public transit lines.

LEGEND

-  Emerald Necklace Greenway along Rivers/Washes/Creeks
-  Greenways under utility lines
-  Improved greening within and adjacent to freeways
-  Improved greening along public transit
-  Spreading Basins
-  Dams



BALANCE OF GREEN AND GREY

2

CONNECTING THE MOUNTAINS TO THE SEA

promote best practice design and access for all



The **Compton Creek Watershed Management Plan (2005)** proposes to improve water quality by installing in-line treatment systems in storm drains and channels, as well as other technologies and best management practices. Although the plan acknowledges on-site treatment and infiltration of stormwater as preferable, removal of pollutants during conveyance, such as through constructed wetlands in stormwater channels or detention facilities, also can improve water quality. The plan also recommends utilizing permeable concrete for bicycle trails and crushed granite for walking trails where feasible, as water quality issues associated with trails are derived primarily from their impermeability. W

Los Angeles River - Revitalization Master Plan (2007)

“Develop reliable green connections of bikeways, pedestrian paths, re-purposing schoolyards, vacant lots, and education campuses.” W R

The **Green Solution Project (2008)** found a substantial need for Green Solutions projects, especially in the Upper and Lower Los Angeles River watersheds. For the Upper Los Angeles River watershed, 7,826 acres of green land are needed to treat runoff. A substantial need was also identified in the Upper San Gabriel River watershed (5,326 acres). Community Conservation International (CCI) also found that a substantial amount of public land in Los Angeles County is potentially suitable for Green Solution projects. In the San Gabriel River watershed, 1,144 parcels were identified, equating to 11,442 potential acres of green infrastructure, parks, and natural open space. Overall, 19,063 acres of public land in Los Angeles County was determined to be potentially suitable for Green Solutions projects (not too steep, receiving significant drainage). If all of this land was converted into green open space, 40% of the county’s runoff clean-up needs could be met. W



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Flood Control and Multi-Benefits

The 2013 California Flood Future Report from the U.S. Army Corps of Engineers (USACE) and the California Department of Water Resources found that one in five Californians lives in a floodplain and that the current infrastructure for flood prevention is not projected to meet future needs. One of the guiding principles of the report was to fund projects with “multiple benefits including flood risk reduction, environmental restoration and improving water supply.” Recreation is also a part of the USACE mission; the Corps is the largest provider of water-based outdoor recreation in the nation. USACE recently completed a multiple-benefit project study for the Upper Los Angeles River and is authorized to do a comparable analysis in the San Gabriel River watershed. S W

Re-imagining a [Greater] Cleveland

A partnership was formed to develop a strategy for assessing and transforming vacant properties into working assets for the community. The Northeast Ohio Ecological Consortium developed the Vacant Land Rapid Assessment Procedure for screening vacant lands to determine their potential for wildlife habitat, stormwater management, parks, and gardens. Based on its initial use, this science based, but user-friendly questionnaire demonstrated that it could effectively sort parcels that had potential as future parks from lands that were more appropriate for commercial redevelopment. M MGA





Balancing green and grey at Hollydale Park in South Gate



Lashbrook Park, a linear park within residential and industrial area



Rio Vista River Trail in El Monte



BALANCE OF GREEN AND GREY

2





REGIONAL GOAL

Improve Public Health by Expanding Access to Nature and Outdoor Recreation

COLLABORATIVE PRIORITIES

Strategies to implement the Emerald Necklace Expanded Vision:

- Ensure that protected natural areas, parks, and trails are distributed equitably throughout the region so that residents of all ages have access to nature and healthy living.
- Implement multi-benefit projects on school grounds including walking trails and nature discovery outdoor classrooms.
- Implement a county-wide, comprehensive and multi-benefit tree planting program for new and existing open space areas that results in urban wildlife habitat, increased biodiversity, stormwater management, and an ability to mitigate urban heat island effects from changes in temperature and precipitation from climate change.
- Improve access to recreational opportunities in park-poor neighborhoods.
- Perform a comprehensive regional tree canopy study and increase tree canopy in areas where it is currently lacking in order to increase the amount of pervious surface area and to help deter and reduce crime in recreational areas.

TOWARDS A COMMON VISION

A nature-based network of recreation facilities that promotes public health, social justice, and equity

The green infrastructure advocated for in Regional Goals 1 and 2 must be readily accessible to all of Los Angeles County’s communities, especially those that are currently under served. In Los Angeles County, where only 36 percent of children live within one-quarter mile of a park (compared to 91% in New York and 85% in San Francisco), we must pursue all opportunities to expand access to healthy and safe outdoor recreation opportunities. An accessible network of transportation and recreation-oriented green infrastructure will result in better public health and positive social justice outcomes as more equitable access is achieved.

SCALE

- S** STATE (AND FEDERAL)
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 METROPOLITAN GREENSPACES ALLIANCE

CONNECTING THE MOUNTAINS TO THE SEA

implement existing plans



Common Ground, from the Mountains to the Sea: Watershed and Open Space Plan for the San Gabriel and Los Angeles Rivers (2001)

Opportunities include creating a continuous strip of open space, trails, active and passive recreation areas, and wildlife habitat along the Los Angeles, San Gabriel, and Rio Hondo Rivers. In addition, the hillside open space network, in conjunction with the river network, should “connect the San Gabriel Mountains with the Puente and Chino Hills and the Santa Ana Mountains; the Angeles National Forest with the Cleveland National Forest; and the Santa Monica Mountains with the Santa Susana Mountains, Verdugo and Simi Hills, and the San Gabriel Mountains.” **W R**



Emerald Horseshoe Concept Plan (2008)

Priority goals include: 1) restoration, preservation, and reconnection of habitat; 2) preservation of sensitive native species; 3) sufficient open space; 4) access and linkages; 5) land acquisition; and 6) healthy communities. The plan promotes a restorative approach to landscape planning and all design decisions relating to plants and wildlife attempt to restore and preserve native species to the greatest extent possible. All recreational design decisions aim to create places for community building, environmental education, stewardship, and outdoor activity. **P**



link across boundaries and scales



Los Angeles County Bicycle Master Plan (2011)

The plan recommends 800 miles of bikeways, including 72 miles of Class I trails, to be completed within 20 years. **C**



Rio Hondo Vision Plan, Emerald Necklace (2005)

Recommends trail development to increase biking, equestrian activity, and walking; to improve connectivity between existing trails and regional trails; to promote education and awareness-building through the use of signage explaining the flow of storm water and its impact to the river channel; and to provide wildlife viewing areas for school field trips. **P**

Parks, Playgrounds, and Beaches for the Los Angeles Region (1930)

The Olmsted-Bartholomew Plan identifies a park shortage in the Los Angeles region and recommends interconnected park system facilities that serve both local and regional needs. **R**



SCAG 2008 Regional Comprehensive Plan

“Foster livability in all communities – Foster safe, healthy, walkable communities with diverse services, strong civic participation, affordable housing and equal distribution of environmental benefits.” **R**



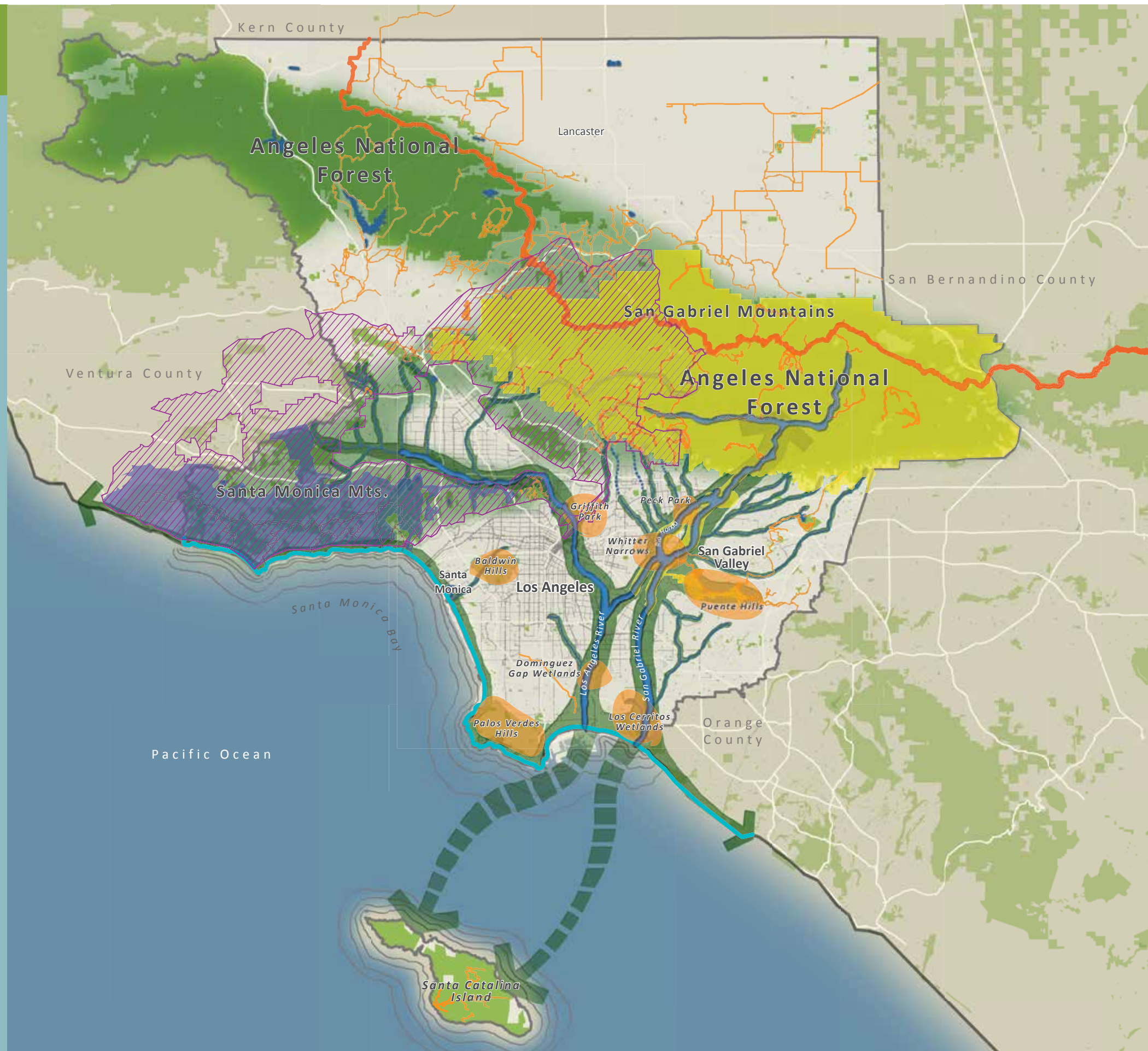
ACCESS TO NATURE MAP

This map depicts the existing natural areas within the Expanded Emerald Necklace. These valuable spaces are connected through the river network, linking the areas together.

Also depicted is the existing Santa Monica Mountains National Recreation Area (NRA) as well as the Rim of the Valley and San Gabriel Watershed and Mountains study areas, which are currently under consideration for national designation and whose proposed borders are shown here, a status that would enhance the management of protected outdoor space in Los Angeles County.

LEGEND

-  Emerald Necklace Greenway along Rivers/Washes/Creeks
-  Proposed San Gabriel Watershed & Mountains Permanent Protections
-  Proposed Rim of the Valley Corridor
-  Santa Monica Mountains National Recreation Area
-  Major Regional Anchors
-  Existing Trails
-  Beach Trails
-  Pacific Crest Trail



3 ACCESS TO NATURE & RECREATION

CONNECTING THE MOUNTAINS TO THE SEA

promote best practice design and access for all



City Project's Healthy Parks, Schools, and Communities Report (2011) defines "park poor" as less than 3 acres of green space per 1,000 residents and "income poor" as average household income of \$47,331. City Project has mapped the most disadvantaged areas of California. Los Angeles County is particularly park poor, and people of color with low income are disproportionately negatively affected. City Project also has mapped childhood obesity in Southern California with respect to park access and found a significant relationship between limited park access and childhood obesity. In its vision of the future, City Project sees a comprehensive and cohesive network of parks, rivers, beaches, forests, and schools in Southern California, as well as an effective Transit to Trails system that promotes clean and equitable transportation options and a healthy environment.

S R C

Los Angeles River Master Plan (1996)

This plan arose out of a growing interest in the 1980s to identify "ways to revitalize the publicly-owned rights-of-way along the Los Angeles River and Tujanga Wash into an urban treasure," and required that safe trail access be included as part of development plans. W C

According to the **Green Visions Plan for 21st Century Southern California (2008)**, only 14.6% of the region's population has easy access to a park. This plan includes an analysis of park congestion and strategies to increase park equity. R



follow best practice case studies

Houston Wilderness Passport provides an accessible guide to visiting the natural world. The passport lists state parks, wildlife refuges, museums, arboretums, and nature centers in each of Houston's eco-regions. The passport was piloted in 2005 and distributed to thousands of fourth graders in the Houston Independent School district. M



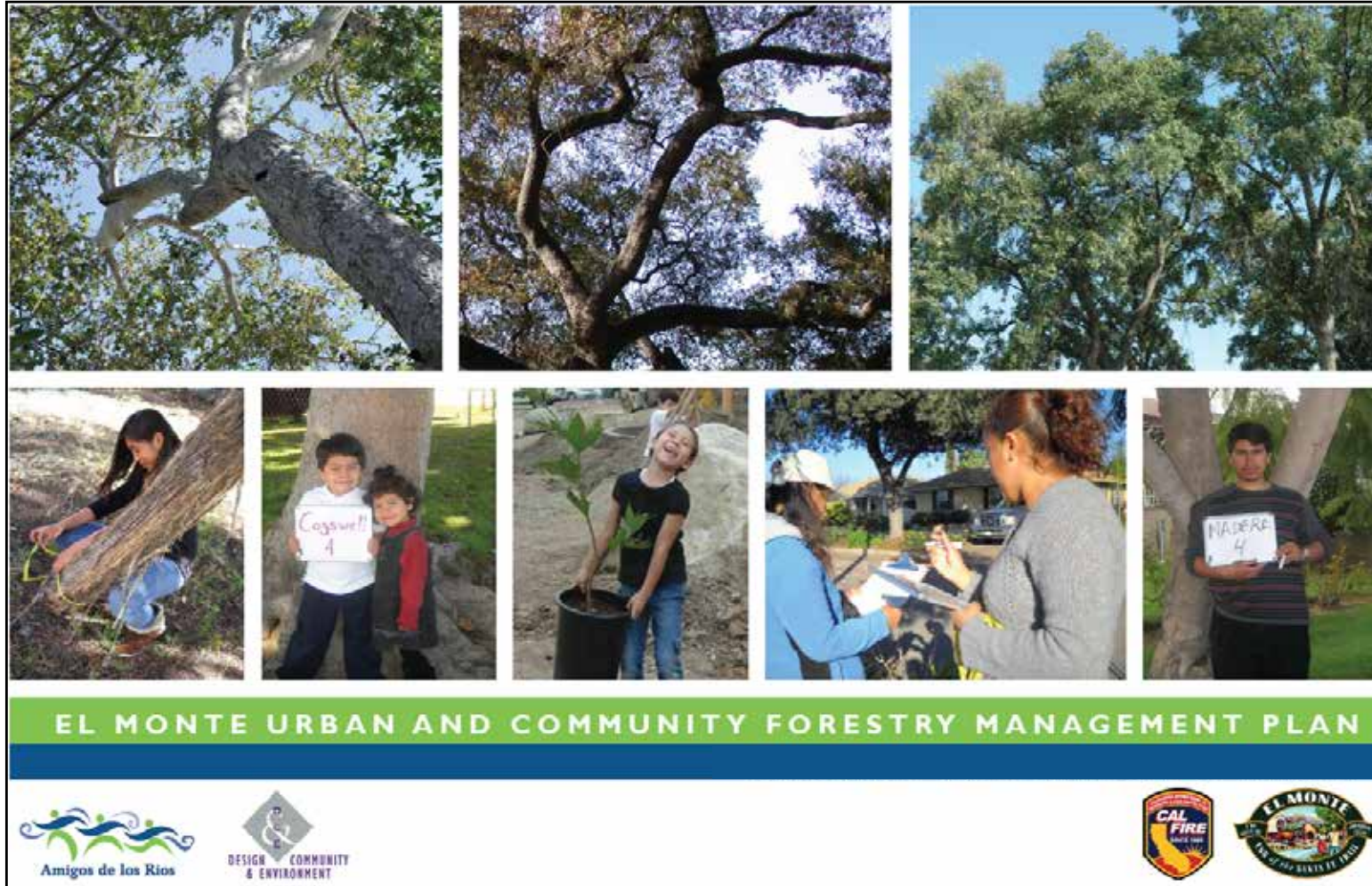
Linking Transit and Trails

The Bay Area Open Space Council's Transit and Trails Program brings nature within reach of all Bay Area residents. The website, and associated app for iPhone and Android phones, helps users locate nearby trailheads and then helps get them there by suggesting public transportation alternatives as well as providing directions to walk, bike, or drive. For more information, please see: <http://www.transitandtrails.org/>. R

The **Chicago Wilderness Leave No Child Inside Initiative** sponsored a month-long slate of over 40 events that involved 115 organizations and more than 15,000 children and adults in June of 2013. Children and adults participated in a wide array of family-friendly events such as birdwatching from a canoe, catch and release fishing, playing in the mud, and many more activities designed to nurture a sense of wonder and discovery. Beyond giving kids and families a chance to get outside, Chicago Wilderness and its member organizations crafted events that complement the Children's Outdoor Bill of Rights. This bill puts a child's need to experiment with his or her environment into perspective by encouraging activities such as learning to swim, planting flowers, and playing in the mud. Such opportunities encourage families to find new ways to connect to each other and nature. Outdoor play helps children develop physically, socially, and emotionally. R



Families picnicking and strolling through Rio Vista Park in El Monte



Cover of El Monte Urban and Community Forestry Management Plan



Exercise equipment along Rio Hondo River Trail by Rio Vista Park

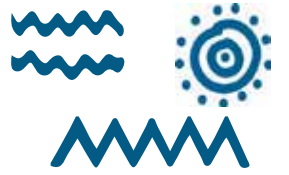


ACCESS TO NATURE & RECREATION

3

PROJECTS
SURFACE
lands
DESIGNATED
AGUA
WATER
Water
BASSIN
VERSANT
WATERSHED
GROUNDWATER
AREAS
WATERSHED
GROUNDWATER
AREAS

Management
ADMINISTRACIÓN
AUGMENTATION
WATER GREEN
INVEST
Recycled
AREA
可持續發展
IMPERVIOUS
INFRASTRUCTURE
DISTRICT
ANENITY
شالوده



SCALE

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MGA METROPOLITAN GREENSPACES ALLIANCE

REGIONAL GOAL

Treat Water as a Precious Resource and as a Multi-Benefit Amenity

COLLABORATIVE PRIORITIES

Strategies to implement the Emerald Necklace Expanded Vision:

- Boost awareness of water as a precious resource among youth and families to encourage the next generation of environmental stewards.
- Support local municipal water supply agencies to meet their mandates and promote water supply management strategies that match the sources of water supplies to their uses.
- Invest strategically in multi-benefit projects in areas designated as high value groundwater augmentation areas, high priority stormwater catchments, and lands suitable for removal of impervious surface in order to transform the appearance and function of urban communities and to comply with the Clean Water Act.
- Demonstrate regional examples of low water use in public spaces that make use of recycled water, incorporate bioswales, Complete Streets, and other Low Impact Development (LID) elements.
- Design trails and recreation areas that incorporate permeable materials and increase tree canopy to enhance water quality and infiltrate groundwater.
- Expand recreation opportunities adjacent to water conveyances and spreading basins.
- Implement distributed solutions for water resource challenges, such as local rainwater harvesting, and create local revenue sources to implement interventions.

TOWARDS A COMMON VISION

A water network that infiltrates groundwater, manages wet weather events, and provides public health benefits

In addition to increasing access to a network of green infrastructure with equitably distributed active transportation and recreation opportunities, the Emerald Necklace Expanded Vision takes into account the region's water supply, working to identify key interventions that improve how this resource is managed. The state is in the midst of a record-breaking drought, and Los Angeles County is reliant on increasingly strained sources of imported water; imports currently support approximately two-thirds of the county's water demand with the rest coming from local sources. As such, making strategic investment in projects that protect local water quality, increase groundwater infiltration, and decrease impervious surfaces to increase and improve the region's local water supply is critical.



WATER AS A MULTI-BENEFIT AMENITY

CONNECTING THE MOUNTAINS TO THE SEA

implement existing plans



Rio Hondo Watershed Management Plan (2004)

The goals of this plan are to improve in-stream water quality; create, protect, and enhance open space; improve habitat quality, quantity and connectivity; improve recreational opportunities; integrate public health and safety into watershed enhancement efforts; and maintain current minimum flood protection levels. All projects emphasize a multi-objective approach, providing an institutional framework for oversight, management, and measurement while recovering and restoring the watershed, and by establishing public awareness and stewardship campaigns. **W**



The **Los Angeles River Revitalization Plan (2007)** recommends the re-creation of a continuous riparian habitat corridor within the channel and removal of the river's concrete walls to restore the river's naturalized condition and promote its ecological functionality. The plan also calls for storing peak flows so that the river's flow velocity is lowered and visitors can enjoy multiple benefits such as an increase in open space and an improvement in water quality. **W R**



The **Port of Los Angeles/Port of Long Beach Water Resources Plan (2009)** seeks to support the attainment of full beneficial uses of harbor waters and sediments by addressing the impacts of past, present, and future port operations, and to prevent port operations from degrading existing water and sediment quality. **P**

Los Angeles County – Integrated Regional Water Management Plan (2012)

"Increase water supply by increasing the infiltration, capture, and treatment of stormwater. Improve the quality of urban and stormwater runoff by increasing the capacity to capture and treat runoff and preventing certain dry-weather flows." **C**

link across boundaries and scales



The **Coyote Creek Watershed Management Plan (2007)** encourages a shift from traditional stormwater management to water conservation and green infrastructure, as well as improved communication and cooperation between agencies and jurisdictions, and increased engagement with stakeholders in the community. **W**

A Community Thread Rediscovered: San Gabriel River Corridor Master Plan (2006) integrated 130 independently sponsored enhancement projects that were identified by the 19 cities along the river, Los Angeles County, and participating public agencies and community organizations in order to produce a plan to enhance "habitat, recreation and open space while maintaining and enhancing flood protection, water supply and water quality." Specifically, the plan's purpose is to identify priorities, offer guidance, and coordinate the multiple goals of the many jurisdictions and other stakeholders that share the river. **W R**

The **Los Angeles & San Gabriel River Watershed Council Water Augmentation Study (2010)** recommends implementing decentralized stormwater management practices and expanding recharge using stormwater to advance infiltration in existing and new development. A net average of 15,000 acres of existing public lands are suitable for 'Green Solution Projects' that would involve converting impervious paved areas to pervious lands; retrofitting existing pervious areas to effectively capture, clean and reduce runoff; and creating multi-use sites such as parks, wildlife habitat, and other open space. Future actionable items from the plan include:

- Identify properties near large storm drains or channels that are feasible to retrofit to capture significant stormwater volumes.
- Develop alternative incentive-based retrofit strategies for commercial and industrial properties based on pilot projects.
- Evaluate alternative management strategies such as land leases, retirement of development rights, trading of water quality rights, purchase of easements, and floodplain acquisition.
- Evaluate use of public lands versus private lands for cost effectiveness of stormwater infiltration based on valuation of water supply, water quality, and multiple benefits. **R W**










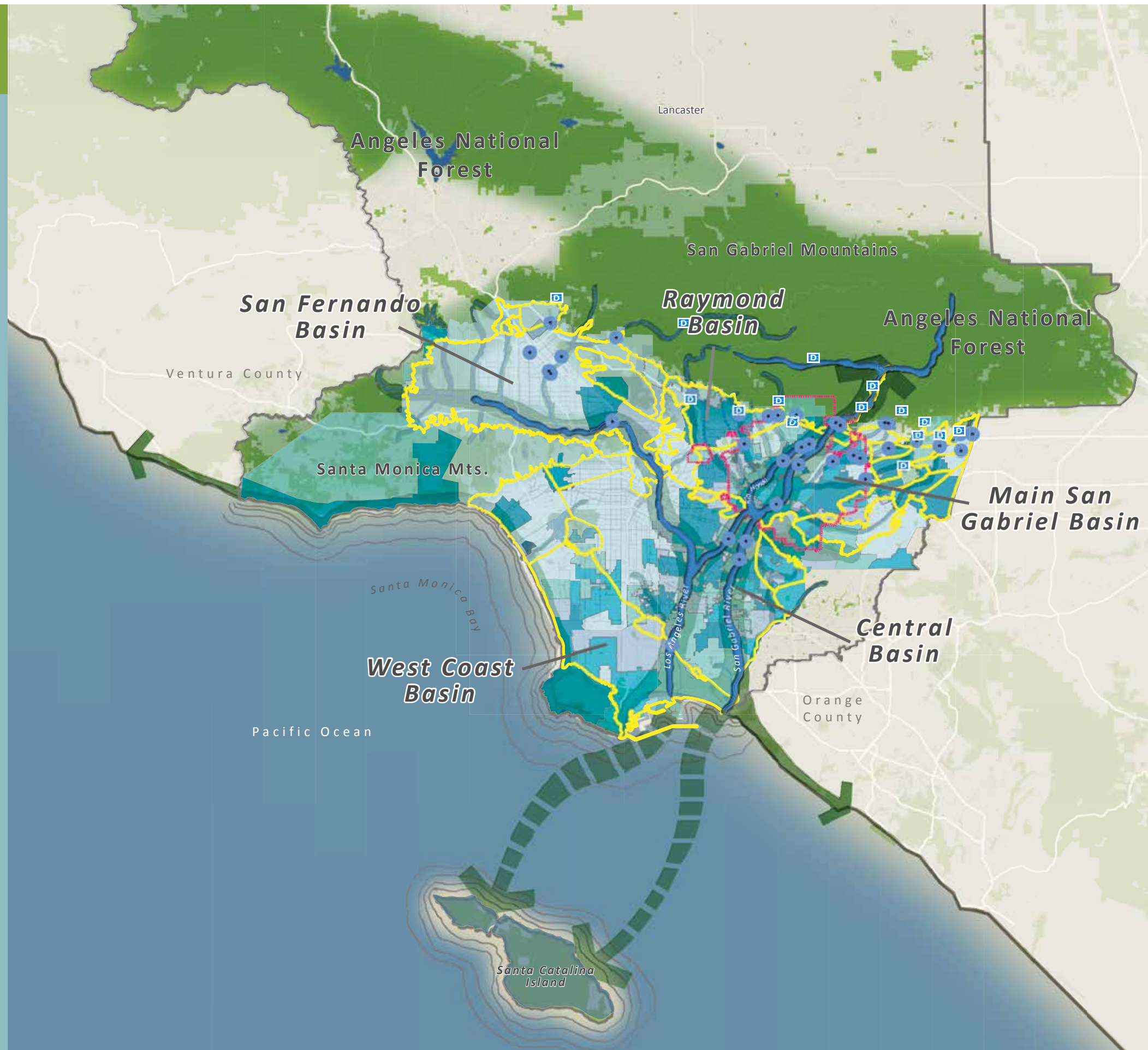
WATER BENEFITS MAP

Water resource management in Los Angeles County is rife with complexity, with a multitude of actors involved in the transportation and distribution of the region's water supply. Of the imported water that supports two-thirds of the county's demand, 40% comes from the Colorado River Aqueduct and 60% comes from the State Water Project.

Recognizing water as a multi-benefit amenity throughout the Expanded Emerald Necklace and implementing the recommendations of the plans captured in this document can result in many positive outcomes, including but not limited to: increased pervious surfaces, increased water recharge, and improved water quality and groundwater infiltration.

LEGEND

-  Emerald Necklace Greenway along Rivers/Washes/Creeks
-  Various Water Purveyors
-  Groundwater Basins
-  Upper San Gabriel Municipal Water District Divisions
-  Beach Trails
-  Spreading Basins
-  Dams



WATER AS A MULTI-BENEFIT AMENITY

4

CONNECTING THE MOUNTAINS TO THE SEA

promote best practice design and access for all



The Elmer Avenue green street project is a key implementation project of the 2006 **City of Los Angeles' Water Integrated Resources Plan (IRP)** that includes an infiltration gallery that captures runoff and recharges it underground. Neighbors embraced the bioswales with drought-tolerant native plants and permeable surfaces that adorn this appealing greenspace.

The South Los Angeles Wetlands Park has also converted an asphalt/concrete rail yard into a 4.5-acre stormwater treatment wetland habitat that captures and treats pollutants and also will include a pocket park.

The IRP also produced a far-reaching Low Impact Development ordinance which has achieved a 20% reduction in water use due to conservation incentives and education. Los Angeles' water consumption today is the same as it was 30 years ago, despite one million more users. **F W**

Sediment Management Strategic Plan, 2012-2032 (2012)

The Flood Control District will continue to work with the U.S. Army Corps of Engineers and local stakeholders to develop a region-wide plan to address sediment as a part of a comprehensive study of how to restore the natural functions of the watershed while retaining the benefits provided by the current flood management system. **C W**



follow best practice case studies

The **Los Angeles Department of Water and Power (LADWP)**, the largest municipally-owned utility in the country, invests in stormwater capturing systems, water main replacement, and federally mandated reservoir covers, aquifer cleanup in the San Fernando Valley, and recycled water projects. LADWP also collaborates with the Los Angeles County Department of Public Works in implementing an Integrated (Water) Resource Plan (IRP) by incorporating wastewater, stormwater and runoff, and recycled water management into a single plan using a watershed approach. In 2011, the City of Los Angeles received a US Water Prize in recognition of the leadership of IRP efforts. **M**

The **San Francisco Public Utilities Commission (SFPUC)**, also a US Water Prize recipient, integrates its water, power, and sewer functions in a manner that is inclusive of environmental and community interests. SFPUC also diversifies its water supply portfolio with new investments in water conservation; groundwater use and management; reuse of effluent, grey, and sump water; rain water harvesting; and stormwater management with green infrastructure. **M**



For 23 consecutive years, the Santa Monica-based nonprofit **Heal the Bay** has produced a "**Beach Report Card**," assigning A-to-F grades for over 600 California beaches where routine water quality monitoring takes place. The report analyzes water quality for dry and wet weather scenarios and examines conditions during the summer and the winter. The report informs beachgoers of conditions so they can avoid the risk of contracting illnesses such as stomach flu, ear infections, and upper respiratory infections. Heal the Bay implemented an interactive Beach Report Card website in 1999 and since the first Beach Report Card was published in 1991, beach water quality analysis as a practice has spread to Washington and Oregon beaches. **S**



Gibson Mariposa Park in El Monte



Grand Opening of splash pad at Gibson Mariposa Park in El Monte



Peck Road Water Conservation Park, a former quarry, in Arcadia



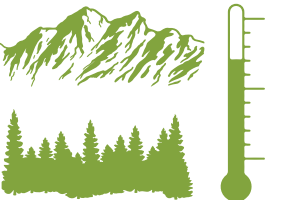
Peck Road Water Conservation Park bioswale and walking trail



WATER AS A MULTI-BENEFIT AMENITY

4





SCALE

- S STATE (AND FEDERAL)
- R REGION
- W WATERSHED
- C COUNTY
- M MUNICIPALITY
- P PROJECT

MCA METROPOLITAN GREENSPACES ALLIANCE

REGIONAL GOAL

Design and Build Resilient Communities that Adapt to and Mitigate the Current and Projected Impacts of Climate Change

COLLABORATIVE PRIORITIES

Strategies to implement the Emerald Necklace Expanded Vision:

- Mitigate climate change impacts through efficient water supply management, local water harvesting, matching water sources and uses, urban forestry, protection of river headwaters, and wetland enhancement and restoration.
- Promote strategies that will help vulnerable and disadvantaged community populations adapt to the potential impacts of climate change and protect them from the adverse public health impacts of climate change, including but not limited to sea-level rise, increased extreme weather events, and urban heat island effect.
- Identify opportunities within the California Cap and Trade Program to build community resiliency.
- Increase the reuse of water from Sanitation Districts to support restoration of sensitive landscapes under stress due to climate change.
- Work with local universities and other scientific institutions to assess the current and projected impacts of climate change to local flora and fauna.
- Support broader use of the Clean Water Act State Revolving Fund for multi-objective implementation projects using Low Impact Development (LID) solutions for improving community quality of life while managing stormwater and protecting water resources.

TOWARDS A COMMON VISION

Communities resilient to changing water supplies, climate extremes, and sea level rise

Regional Goals 1 through 5 prioritize strategic investments in projects with multiple environmental, economic, and social benefits. Sophisticated climate change models show expected increases in the frequency, intensity, and duration of extreme heat events as well as a subsequent decrease in the snowpack available for Los Angeles County’s water supply. More intense rainfall events coupled with sea level rise will expand the need for communities to be resilient to ongoing changes in temperature and precipitation over short and long time horizons.



CONNECTING THE MOUNTAINS TO THE SEA

implement existing plans



Ballona Wetlands Restoration

Most climate experts agree that by 2050, the Los Angeles Basin will experience a half-meter rise in sea level. The Ballona Wetlands is the largest wetland complex in Los Angeles County covering over 600 acres. Led by the California Department of Fish and Game with the assistance of the U.S. Army Corps of Engineers, and the California Coastal Conservancy, design alternatives are being developed that attempt to increase floodplain capacity, retain coastal wetland habitats, and allow habitat shifts over time. **P**

Los Cerritos Wetlands Conceptual Restoration Plan (2012)

"The Los Cerritos Wetlands Complex seeks to restore some 500 acres of salt marsh, seasonal wetlands, other freshwater wetlands, and transitional/upland habitat...The reintroduction of tidal influence to non-tidal wetland areas will allow for Los Cerritos Wetlands to become a self-sustaining urban wetland." **P**

Plan Recommendation:

- Implement opportunities for restoration of pre-settlement coastal wetlands in areas likely to be impacted by sea level rise and target investments in opportunities that attempt to restore historic hydrological conditions.



link across boundaries and scales

California Climate Adaptation Strategy (2009)

The California Natural Resources Agency (CNRA) has taken the lead in developing this adaptation strategy, working through the Climate Action Team (CAT). Seven sector-specific working groups led by 12 state agencies, boards and commissions, and numerous stakeholders were convened for this effort. **S**

Plan Recommendation:

- Explore collaboration with the Los Angeles County Flood Control District on the restoration of sediment pits and other efforts identified in the Sediment Management Strategic Plan.



California Adaptation Planning Guide - Planning for Adaptive Communities (2012)

"Local governments should identify strategies that meet multiple community goals or needs. This will make available a greater number of potential funding mechanisms. For example, many energy efficiency efforts have climate change adaptation benefits. Wetland restoration or low-impact design can reduce flood vulnerability and increase groundwater recharge."

"Local governments should look to partner with other jurisdictions, regional organizations, and agencies to address climate change impacts. Many impacts cross political boundaries and may require collaboration for long-term solutions. Collaboration can result in economic efficiency and additional funding sources."

"Since all state agencies are required to plan for climate change, local governments may find opportunities for jointly funded projects." **S** **M**





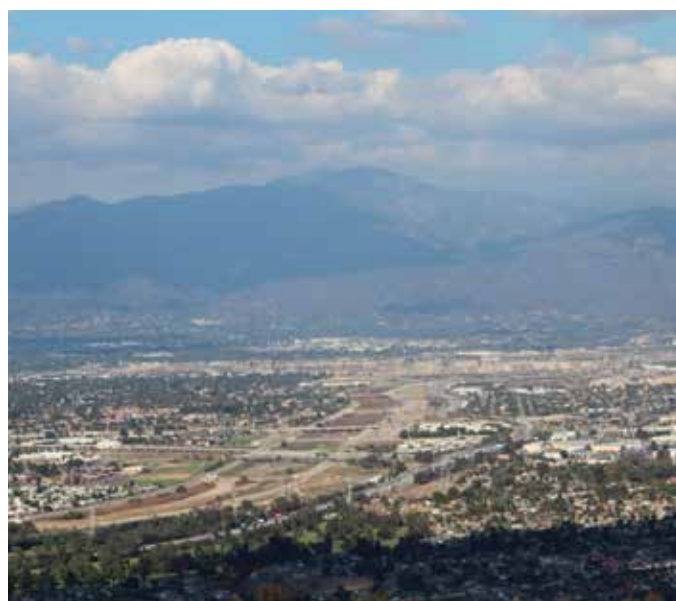
California Climate Adaptation Strategy (2009)

The California Department of Public Health (CDPH) should continue working in collaboration with local health departments, community based organizations (CBOs), and other state and local planning and transportation agencies to improve community planning and design, promote healthy living, and to balance integration of social, economic, and environmental concerns. CDPH should identify mechanisms to institutionalize the consideration of health in local and regional land use and transportation decision-making. For example, local general plans, regional transportation plans, or CEQA guidelines, and Health Impact studies could become standard practice. CDPH should develop guidelines for health impact assessments to be used by local health departments and other agencies.

Wetlands of the L.A. River Watershed: Profiles and Restoration Opportunities

While acknowledging that most historical wetlands in the area cannot be fully restored, the California Coastal Conservancy in 2000 identified important restoration goals for the Los Angeles River Watershed that can be applied across the entire basin:

1. Restore historic hydrological conditions (to the extent possible, or emulate them at specific restoration sites)
2. Restore a functional semblance of the historic distribution of wetland resources
3. Increase the connectivity/decrease the fragmentation of wetland habitats
4. Enhance endangered species populations, but not at the expense of maintaining diverse wetland assemblages (i.e., single- vs. multi-species conservation)
5. Establish effective buffers at existing and restored sites to reduce disturbance levels from adjacent land uses
6. Ensure the landscape-level sustainability of wetland ecosystems (water quality considerations, sediment and nutrient budgets, prevention of excessive flood damage, etc.)



follow best practice case studies

Los Angeles County receives an average of 15 inches of rain per year. The **City of Fullerton**, the **Los Angeles Department of Water and Power (LADWP)**, and the **Upper San Gabriel Valley Municipal Water District/Golden State Water Company** all offer lawn removal rebates. LADWP has offered rebates through its California Friendly® Landscape Incentive Program since 2009, with 848 customers participating, removing 1.55 million square feet of grass. To encourage more participation, LADWP increased its rebate to \$2 per square foot of residential lawn with a \$4,000 limit per customer. In 2013, LADWP offered \$200 rebates on water-based irrigation system controls and \$8 rebates for eco-sprinkler heads. M

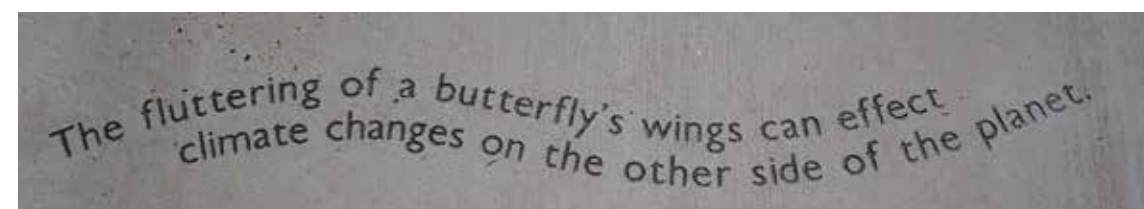
In the **City of Las Vegas**, which receives only 4 inches of rain per year, an ordinance prohibits front yard lawns for new single family homes and limits lawns in side and rear yards to 50 percent of total area, or 100 square feet, whichever is greater. Turf area may not exceed 5,000 square feet. M

The **Napa River Flood Management Plan** has received national recognition for its efforts at using nature-based approaches to flood control. It has restored more than 650 acres of high-value tidal wetlands of the San Francisco Bay Estuary and constructed about 2 miles of floodplain and marsh plain terrace while protecting 2,700 homes, 350 businesses, and over 50 public properties from 100-year flood levels. These efforts resulted in a savings of \$26 million annually in flood damage costs. W

PlaNYC 2050, released in 2007 and updated in 2011, is a comprehensive planning effort that resulted in a report providing recommendations on how New York City could prepare for population increase, strengthen the metropolitan economy, combat climate change, and enhance the quality of life for city residents.

PlaNYC 2050 shows leadership in incorporating climate change adaptation considerations into city-wide planning efforts. Specific initiatives in PlaNYC 2050's Climate Change section that relate to building community resiliency include:

- Initiative 3:** Regularly assess climate change projections
- Initiative 4:** Partner with the Federal Emergency Management Agency (FEMA) to update Flood Insurance Rate Maps
- Initiative 5:** Develop tools to measure the city's current and future climate exposure
- Initiative 8:** Protect New York City's critical infrastructure
- Initiative 9:** Identify and evaluate citywide coastal protective measures
- Initiative 10:** Mitigate urban heat island effect
- Initiative 12:** Integrate climate change projections into emergency management and preparedness
- Initiative 13:** Work with communities to increase their climate resilience M







KEY

- S** STATE (AND FEDERAL)
- R** REGION
- W** WATERSHED
- C** COUNTY
- M** MUNICIPALITY
- P** PROJECT

MGA METROPOLITAN GREENSPACES ALLIANCE

REGIONAL GOAL

Enhance Regional Wildlife and Natural Area Anchors

COLLABORATIVE PRIORITIES

Strategies to implement the Emerald Necklace Expanded Vision:

- Expand regional open space anchors through ecological design, strategic mitigation, and public land management.
- Develop connections between the San Gabriel Mountains/Angeles Forest, the Rim of the Valley and the Santa Monica Mountains National Recreation Area, and the Expanded Emerald Necklace.
- Devote greater resources to ensure that the region’s natural resources are maintained at a high level for both recreational uses as well as for the sustainability of habitat and natural systems.
- Enhance current restoration efforts of the Santa Fe Dam, Peck Park, Puente Hills, the Los Cerritos Wetlands, Whittier Narrows, and spreading basins along the Rio Hondo and San Gabriel River Spreading Basins.
- Ensure that students in the Los Angeles Basin have opportunities to meaningfully engage with regional natural area anchors throughout elementary, middle and high school.
- Support Federal and State Designations that link the San Gabriel Mountains/Angeles Forest, the Rim of the Valley, and the Expanded Emerald Necklace, enhance recreational opportunities, and increase protections along with investments.
- Work with local universities to develop a regional atlas of biodiversity for the Los Angeles Basin and to enhance the level of science and best management practices employed to manage these areas for the benefit of habitat and ecosystem services.

TOWARDS A COMMON VISION

A linked network of open space treasures from the Mountains to the Sea

True to the concept of an “Emerald Necklace” that would link communities and ecosystems via a network of natural and built infrastructure, the Expanded Vision Plan places a focus on the “jewels” of this necklace, recommending that the region’s premiere environmental amenities, such as Whittier Narrows, Griffith Park, and the Seal Beach National Wildlife Refuge be protected and enhanced. Thoughtfully and strategically managing these existing key natural and recreational amenities, in addition to pursuing opportunities to link them with green and built infrastructure, supports Regional Goals 1 through 5 and would increase the multiple benefits and potential of the Expanded Emerald Necklace Vision.



CONNECTING THE MOUNTAINS TO THE SEA

implement existing plans



California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California (2010)

The report from the California Department of Transportation and the California Department of Fish and Wildlife recognizes that roads not only impact species directly through habitat fragmentation and vehicle collisions, but also indirectly through noise impacts (e.g., elevated stress levels, behavior alteration) and the spread of invasive species. Wildlife overpasses, underpasses, bridges, and culverts are proposed and discussed as mitigation measures, but careful analysis of local species, adjacent land uses, and surrounding habitat is recommended. S



Plan Recommendation:

- Complete key projects outlined in the Whittier Narrows Blue Sky Master Plan in partnership with the U.S. Army Corps of Engineers and Los Angeles County Department of Parks and Recreation.

South Coast Missing Linkages: A Wildland Network for South Coast Ecoregion (2008)

The South Coast Missing Linkages Project is a comprehensive plan for a regional network to protect and restore critical habitat linkages for the areas in Los Angeles and San Bernardino in California and Ensenada in Mexico. "The linkages designed by South Coast Missing Linkages stitch together over 18 million acres of our existing conservation investments (national forests, state and national parks, etc.) to form the South Coast Wildland. R



The 2007 Puente Hills Resource Management Plan

serves as a comprehensive, long-term management plan that identifies how best to manage, protect, and enhance the natural resource values of the preserve while providing safe recreational and educational opportunities to the public. Using an adaptive management approach, the major plan objectives are to enhance wildlife habitats, develop vegetation management practices, and provide safe, low-impact recreational opportunities and public access. P

link across boundaries and scales



Common Ground, from the Mountains to the Sea: Watershed and Open Space Plan for the San Gabriel and Los Angeles Rivers (2001)

This report was prepared by the California Resources Agency, San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy (RMC), and the Santa Monica Mountains Conservancy (SMMC) with the intention to develop a coordinated plan for the entire San Gabriel and Los Angeles Rivers watersheds.

The plan endeavors to "Grow a greener Southern California" by creating, expanding and improving access to and connecting public open spaces, while improving habitat quality, quantity, and connectivity. The plan also strives to "Enhance Water and Waterways" by establishing riverfront greenways to cleanse water, hold floodwaters and extend open space, improving the quality of surface water and groundwater, while maintaining and improving flood protection. The plan also emphasizes coordinated planning across jurisdictions and boundaries and with communities to implement multi-objective projects. W R

The **2008 Emerald Horseshoe Concept Plan** promotes regional connectivity as its western tip connects into the 51-mile master planned Los Angeles River. Its eastern end links with the 17-mile Emerald Necklace, opening up the county's eastern half to its own open space opportunities. The region's 150-mile Rim of the Valley Trail Corridor, as well as the 2,650-mile Pacific Crest Trail that runs from Mexico to Canada, are also connected with the Emerald Horseshoe, making this single proposed trail system a key element in future open space planning for Southern California. Other existing regional anchors for people and wildlife include, but are not limited to:

- Duck Farm Concept Site Plan
- Los Cerritos Wetlands Complex
- Rim of the Valley Special Resource Study
- Angeles National Forest
- Santa Monica Mountains National Recreation Area
- Baldwin Hills
- Puente Hills
- Griffith Park
- Palos Verdes P





Santa Fe Dam Flood Control Basin and Recreation Area

ENHANCE REGIONAL ANCHORS MAP

This map depicts the existing natural areas within the Expanded Emerald Necklace. These valuable spaces are connected through the river network, which links these open spaces together and allows wildlife habitat connectivity, making these resources invaluable to Los Angeles County.

LEGEND

-  Emerald Necklace
-  Greenway along Rivers/Washes/Creeks
-  Proposed San Gabriel Watershed & Mountains Permanent Protections
-  Proposed Rim of the Valley Corridor
-  Santa Monica Mountains National Recreation Area
-  Major Regional Anchors
-  Beach Trails
-  Pacific Crest Trail




ENHANCE REGIONAL ANCHORS

6


CONNECTING THE MOUNTAINS TO THE SEA

promote best practice design and access for all

Duck Farm Concept Site Plan (2007)

Led by the **Watershed Conservation Authority**, this project involves developing a 37.5-acre site with passive recreation, improved natural habitat, improved water quality and storm water management, and increased connections between the community and open spaces. 

Advance Mitigation for Infrastructure Investments and Impacts

The **Southern California Association of Governments (SCAG)** is responsible for developing a long-term blueprint for a sustainable transportation system that integrates land use strategies to achieve greenhouse gas emissions reduction targets and implements strategies that reduce impacts where transportation and sensitive natural lands intersect. SCAG's Regional Advance Mitigation Planning (RAMP) is a strategic conservation planning approach that identifies mitigation solutions for infrastructure projects early in the planning process. This strategy, which is becoming standard practice, helps prevent project delays and reduces mitigation costs while more effectively protecting sensitive natural areas. RAMP relies on a collaborative, coordinated approach between regulatory agencies and other stakeholders to best identify, prioritize, and implement strategic mitigation areas. 




Eaton Wash Corridor Plan, Arroyos and Foothills Conservancy (2011)

A key strategic recommendation of the plan is to develop an Eaton Wash Corridor Accord to help gain broad support and coordination among public agencies, nonprofit organizations, and other stakeholder groups regarding management, maintenance, and other responsibilities associated with corridor improvements.





Los Angeles River Ecosystem Restoration Integrated Feasibility Report (2013)



This document examines the feasibility of 20 alternative plans "to restore approximately 11 miles of the Los Angeles River from Griffith Park to downtown Los Angeles by re-establishing riparian strand, freshwater marsh, and aquatic habitat communities, and reconnecting the river to major tributaries, its historic floodplain and the regional habitat zones of the Santa Monica, San Gabriel and Verdugo Mountains at this central nexus of the Los Angeles River Watershed's former and existing ecosystems while maintaining existing levels of flood risk management."

The plan also proposes recreation features that would provide direct and indirect benefits to recreation participants and the surrounding communities. 

Biodiversity and Ecosystem Services

Metropolitan Greenspace Alliance (MGA) members have developed regional biodiversity plans and have attempted to quantify the ecosystem services of its natural areas. The **Chicago Wilderness Biodiversity Recovery Plan (1999)** is an ambitious blueprint for saving and restoring the rare natural communities of the Chicago region. Developed over more than three years by scientists, land managers, conservation advocates, planners, and caring citizens, the Recovery Plan outlines the steps necessary to achieve the Chicago Wilderness Green Infrastructure Vision. The map-based Vision was updated by The Conservation Fund in 2012 with the support of the Chicago Metropolitan Agency for Planning, Chicago Wilderness, the Gaylord and Dorothy Donnelly Foundation, and dozens of local partners.

MGA member organizations Houston Wilderness and Portland's Intertwine have also completed biodiversity surveys and plans for their respective metropolitan areas.  

The Conservation Fund completed the **Green Infrastructure and Ecosystem Services Assessment (2013)** on behalf of Houston Wilderness, the Houston-Galveston Area Council, and local foundations. The report highlights a green infrastructure network that identifies core areas to protect, and landscape hubs and corridors that link these areas and evaluates key natural systems, including identifying areas most important to maintain for economic and environmental benefit. The data from the report is being used to support project-based and long-range transportation planning, regional conservation planning, and growth and redevelopment scenario planning.  

Plan Recommendation:

- Re-establish a San Gabriel Valley Resource Conservation District to support connecting urban residents to nature.



follow best practice case studies



Puente Hills



Whittier Narrows



Baldwin Hills



Griffith Park



ENHANCE REGIONAL ANCHORS

6

green
BIODIVERSITY
Implement Workforce
HERITAGE
RECREATION
OUTREACH
RESTAURACIÓN
LA RESTAURATIONgreen
NATURAL
OUTREACH
ELEMENTS
PRACTICES
NATURAL
WORKFORCE
SPECIES
FORESTS
HABITAT
RESTORATION
WILDLIFE
CONSTITUENCIES
STORMWATER
ENHANCE
IMPACT
BUILD
GREATER
URBAN

green
BIODIVERSITY
Implement Workforce
HERITAGE
RECREATION
OUTREACH
RESTAURACIÓN
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greater
cultural awareness
HABITAT
STEWARDSHIP
CIVILICALLY
RESIDENTS
TRAINING
IMPACT
SUPPORT
CULTIVATION
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HABI
STEWARDSHIP

SCALE

- S** STATE (AND FEDERAL)
- R** REGION
- W** WATERSHED
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 METROPOLITAN
GREENSPACES
ALLIANCE

REGIONAL GOAL

Celebrate Culture and Foster Environmental Awareness Through Education, Outreach, and Workforce Training

COLLABORATIVE PRIORITIES

Strategies to implement the Emerald Necklace Expanded Vision:

- Create a world-class network of public parks and open spaces of great meaning, beauty, and utility as an expression of the diverse citizenry of the entire Los Angeles Basin and our shared civic values.
- Implement programs to cultivate and promote a greater ethic of stewardship from area residents to enhance the region's natural areas and open space corridors and build local constituencies that take an active role in enhancing urban wildlife habitat and healthy forests.
- Build awareness among residents of the region regarding the impact of stormwater practices and discharge of pollutants on native plant systems, animal species, and the quality of habitat areas.
- Work with communities to design and build a network of meaningful interpretive trails and greenways that articulate each culture's special beliefs and relationship as a way to celebrate the Basin's diverse cultural heritage.
- Create partnerships with local museums and cultural institutions to develop innovative outdoor learning and research opportunities related to the Emerald Necklace.
- Promote intergenerational opportunities for exploring the natural world and for transferring knowledge and memories of natural and cultural landscapes between generations.
- Foster a civic culture where government agencies effectively collaborate with community stewards to protect and enhance to region's shares resources.
- Convene an annual meeting of organizations within the Expanded Emerald Necklace Vision area to leverage resources and foster collaboration.

TOWARDS A COMMON VISION

A network of culturally aware and civically involved communities that support conservation, restoration, and recreation.

Over the past ten years, Amigos de Los Rios has consistently stressed the crucial importance of community involvement as a means to not only produce better projects, but also to cultivate an appreciation of natural amenities and resources and to build local constituencies that can take active roles in promoting healthy human and natural communities. A vision as broad as the Expanded Emerald Necklace can only be achieved with community buy-in and a broadened recognition of the diverse ways natural amenities can improve the region's communities and economies.



EDUCATION, ENGAGEMENT, AND HERITAGE

7

CONNECTING THE MOUNTAINS TO THE SEA

implement existing plans



San Gabriel Watershed and Mountains: Special Resource Study and Environmental Assessment (2003, Authorized Sept. 2011)

Themes mentioned across all the alternatives include: (1) emphasis on educational opportunities through green infrastructure; (2) use of a collaborative management style that incorporates federal, state and local government agencies, nonprofit organizations, and area landowners; (3) continuation of current U.S. Forest Service management and ownership of Angeles National Forest lands; (4) creation of a national recreation area without the establishment of additional regulatory or land use authorities; (5) maintenance of existing water and property rights; and (6) fire protection remains the responsibility of relevant, existing agencies. W R

Azusa River Wilderness Park Plan (2007)

The Azusa River Wilderness Park is planned to be used for recreation and watershed protection, connecting a multitude of projects along the San Gabriel River, the Rio Hondo and the Los Angeles Rivers, and will include local trails and other recreation opportunities.

The park will also function as a regional center for research and education; and it will require integrative management and sustainable design elements. P



link across boundaries and scales



The **Land Management Plan Amendment for Angeles National Forest (2005)** addresses all interpretive services, visitor center management, interpretive media, in-forest concessions management, fee collection, community outreach, visitor safety, and law enforcement services. The plan emphasizes providing balanced, environmentally sustainable recreation opportunities, particularly for day use, to meet the needs of a growing urban and culturally diverse population. R



Municipal Separate Storm Sewer System (MS4) Permit (2012)

The permit requires the Los Angeles County Flood Control District to implement a Public Information and Participation Program, which includes outreach to residents about watershed-specific pollutants. For the Los Angeles River, target pollutants for outreach are trash, nutrients (nitrogen), indicator bacteria, metals, pesticides, and polycyclic aromatic hydrocarbons (PAHs). For the San Gabriel River, trash, nutrients (nitrogen), indicator bacteria, and metals are listed. C



According to the **2008 California Outdoors Recreation Plan**, the top outdoor recreation activities included walking, biking on paved surfaces, and wildlife viewing/bird watching/viewing natural scenery. S



Plan Recommendations:

- Explore job training programs to develop a locally-based, skilled workforce to take advantage of emerging industries that support a greener future.
- Emphasize greening efforts in local schools, both as a means of enhancing the design of school sites and as a tool to support environmental education.
- Support establishment of Friends of the National Forest and National Forest community outreach program.
- Engage, increase, and solidify Emerald Necklace Coalition members and educate and involve partners and community members in the importance of increasing tree cover.
- Cultivate an appreciation of protected natural areas as a source of cultural, social, and psychological well-being.
- Establish local merchant programs for employee driven grants and volunteer labor days.
- Acknowledge the important heritage of the Los Angeles Basin's diverse First Peoples throughout the network.



follow best practice case studies



Working with Local Merchants: Voluntary Surcharge

Across the country, conservationists are working with local merchants to raise funds for land conservation through voluntary charges on sales. One popular technique is a 1% charge based on the total sale at a particular store. When a customer reaches the checkout, the store clerk provides a bill and explains the 1% charge and asks if the customer would like to make the contribution based on that calculation. At this time, the customer has the ability to opt out of the charge or continue with the transaction.

Since 2008, **The Land Trust for Tennessee** has partnered with The Hermitage Hotel located in Nashville, Tennessee, giving guests the opportunity to voluntarily contribute two dollars for each night spent at the hotel. So far over \$200,000 has been raised for land conservation across the state from this effort. The relationship has blossomed further as the historic hotel has planted an heirloom garden on the Land Trust's iconic property called Glen Leven Farm. The relationship has garnered national attention for both The Land Trust and The Hermitage Hotel, and in 2013, the hotel added a third dollar to its guest giving program in support of The Land Trust's work at Glen Leven Farm. This multi-layered, for-profit/non-profit partnership is a strong example of the value of collaboration. P

Mona Shield in *Climate Change and the Future of Southern California* (2009)

"California is renowned as a green issues trend-setter... Leading the way is the Los Angeles Community College District (LACCD) which serves approximately 36 cities in LA County and covers more than 882 miles... In 2002, after voters approved bond funding to renovate and build new campus facilities, the LACCD Board of Trustees adopted a sustainability policy, which required "green" buildings... As a result, LACCD is undergoing one of the largest public sector sustainable building efforts in the nation."

"In order to promote a sustainability curriculum, LACCD launched a Green College Initiative & Curriculum program. The curriculum covers workforce development programs such as architecture, solar installation, alternative fuels, water supply, waste water, and sustainable construction." M





REGIONAL GOAL

Foster a Green Economy that Creates Jobs and Spurs Investment in Local Multi-Benefit Projects

COLLABORATIVE PRIORITIES

Strategies to implement the Emerald Necklace Expanded Vision:

- Foster innovative, job-creating opportunities that directly support the social and natural functionality of the Emerald Necklace network.
- Ensure that economically disadvantaged communities have access to new green collar job opportunities by providing training and resources.
- Apply economic analyses that account for and value ecosystem services while factoring environmental externalities into investment decision-making.
- Develop local sources of funding for green infrastructure implementation related to parks and stormwater management.
- Support youth conservation corps involvement in urban forestry and green infrastructure development.
- Identify and pursue economic opportunities and public-private partnerships to develop recreational opportunities and improve access to open space throughout the region.
- Identify novel funding streams and mechanisms to promote the Emerald Necklace as an economic incubator for the next generation of social ventures, helping community-based groups and non-profit organizations build capacity and scale up urban greening solutions.

TOWARDS A COMMON VISION

A robust, inclusive, and sustainable local economy that produces new economic opportunities around green infrastructure

Implementing the vision outlined in the Expanded Vision Plan can not only produce environmental, social, and public health benefits, but also can stimulate the growth of the economic “pie,” as novel products and processes emerge from innovative approaches to some of Los Angeles County’s long-standing challenges. Economic analysis and financial practices that take into account the true environmental cost of landscape interventions and appeal to system based thinking are integral to engendering these novel opportunities in the green economy. Applying what has been termed the “Triple Bottom Line” approach, which combines economic growth, environmental health, and social equity to measure the region’s prosperity, can help identify external costs and encourage collaboration and creativity in developing new, locally sensitive, and regionally scalable solutions.

KEY

- S** STATE (AND FEDERAL)
- R** REGION
- W** WATERSHED
- C** COUNTY
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- P** PROJECT

 METROPOLITAN GREENSPACES ALLIANCE



FOSTER A GREEN ECONOMY

CONNECTING THE MOUNTAINS TO THE SEA

implement existing plans

City of Los Angeles General Plan: Transportation Element and Bicycle Plan (2010)

To facilitate economic development and project approval, the Transportation Element calls for the development of local accessibility plans (LAPs) for selected areas, which would expedite approvals of new development applications that take into account access goals for transit, bicyclists, pedestrians, and vehicles, as well as a menu of potential traffic mitigation measures. M



Los Angeles River Ecosystem Restoration Integrated Feasibility Report (2013)

The report analyzes the regional economic development impacts of the proposed Los Angeles River Restoration alternatives. It determined that the proposed alternatives would create between 2,200 to 14,100 construction related jobs that could generate labor income ranging from \$138 million to \$860 million. Regional economic activity from construction is expected to increase by \$260 million to nearly \$1.5 billion taking into account ecosystem restoration, recreation, and redevelopment construction work. Finally, the report estimates that between 630 and 2,700 permanent jobs will be created with total labor income from these employment opportunities estimated between \$900 million and \$4 billion. W R

The multi-agency **America's Great Outdoors Initiative (2010)** was created in response to concerns that Americans are becoming increasingly disconnected from the natural environment. With a focus on the country's youth, input was garnered during 51 listening sessions that attracted 10,000 participants and solicited 105,000 comments.

The top priority that emerged from this input was to connect, or reconnect with the outdoors by "Providing Quality Jobs, Career Pathways and Service Opportunities."

The America's Great Outdoors Initiative Report specifically recommends establishing a "**21st-Century Conservation Service Corps**" to "develop quality conservation jobs and service opportunities that protect and restore America's natural and cultural resources." S



link across boundaries and scales

SCAG Regional Comprehensive Plan (2008)

The first goal in the Regional Comprehensive Plan's (RCP) Economy section, "Achieve economic development while being consistent with the region's sustainability goals for land use, air quality, and other resources," explicitly links economic growth to environmental quality. The RCP also identifies multiple benefits of its Economy policies, examples of which include:

Air Quality - A comprehensive economic program would recognize potential environmental and social externalities and help distribute the costs and benefits in a way that reduces the negative air quality impacts of more economic activity and an expanded surface transportation system.

Land Use and Housing - A strong and diverse economy provides jobs and affordable housing necessary for our growing, changing population.

Public Health - A strong economy supports community investments in infrastructure and programs that directly or indirectly promote public health improvements, such as community parks and after-school programs.

Environmental Justice - Effective environmental policies must address environmental justice by investing in cleaner technologies that reduce exposure to harmful pollutants as well as creating sustainable employment opportunities.

Climate Change - Future economic growth must be done in ways that don't increase the region's contribution to global climate change. International accords demonstrate the win-win potential to pursue economic growth while reducing greenhouse gases. R



Water Augmentation Study: Research, Strategy, and Implementation Report (2010)

Stormwater infiltration projects typically provide multiple benefits. These benefits almost always include water supply, water quality, and flood protection. There are many other benefits, however, that may or may not be associated with a particular project. More research is needed to estimate additional benefits, typically termed "ecosystem values" or "nature services," which go beyond easily monetized values. Additional values to be evaluated include, but are not limited to:

- Flood protection
- Water quality
- Transportation improvements
- Greenhouse gas emissions
- Ecosystem restoration
- Heat island effect
- Energy use
- Air quality
- Recreation spaces
- Habitat function
- Carbon sequestration

Each of these benefits requires considerable research to develop monetized values. However, if truly multi-beneficial projects are to continue, the individual beneficiaries need to fund the costs proportionally to the accrued benefits. W

Water Use Efficiency and Jobs (2011)

This report estimates the economic and job creation impacts resulting from investments in water use efficiency in Los Angeles, taking into account a broad range of projects that include: stormwater capture and treatment infrastructure, grey water systems for homes, ecosystem restoration, groundwater treatment and recharge equipment, and more. The report outlines two tiers of businesses related to water use efficiency and examines economic data from over 50 diverse projects in Los Angeles to estimate that each \$1 million invested in these types of water use efficiency projects results in 12.6 to 16.6 jobs in Los Angeles' economy and \$1.91-2.09 million in total sales. It adds that water conservation projects in particular carry many local benefits and offer higher multiplier effects for local manufacturing, professional services, utilities and wholesaling establishments, along with local environmental organizations, recreation sites, museums, and parks.

The report concludes that, in contrast with large construction projects that divert water to Southern California from the Sacramento-San Joaquin River Delta, decentralized local investments associated with water use efficiency would be far preferable because they would have a lighter environmental footprint, link any impacts to the point of consumption, and distribute economic benefits throughout the state. C

Mazmanian, Pisano, Little & Linder in Climate Change and the Future of Southern California (2009)

"Transformation of existing governance and financing structures will be an essential part of meeting the region's challenges, with lasting benefits in the provision of major infrastructure and public service projects for decades to come. In moving the region forward, it will be essential that a "Triple Bottom Line" (TBL) approach be adopted that combines economic growth, environmental and health safeguards, and an improved quality of life for all the people of the region into the ultimate gauge of the region's prosperity... Accomplishing TBL in practice is the challenge. Thinking as a region, working cooperatively, taking risks, and being creative in the face of countless uncertainties are necessary ingredients in the transformation required to undertake new strategies and new investments." R

The Greater Los Angeles County Open Space Plan for Habitat and Recreation (IRWMP Update 2012)

"Evaluation of habitat and recreation benefits only as they are related to water management practices results in an isolated perspective that does not nearly demonstrate the full integration of societal benefits attributable to open space. Additionally, the physical benefits of open space are complemented with economic benefits that open space lands add to entire communities. There are numerous models and studies that have demonstrated the economic values of open space preservation. The justification for the preservation and maintenance of open space, therefore, cannot be solely related to any single benefit but should be viewed as the cumulative effects of many benefits, the management of water resources being only one of them." C



Golden Road Brewing - Greenway 2020 IPA

Popular Los Angeles craft brewery Golden Road Brewing debuted its 2020 IPA beer in 2014. This new variety was created in partnership with the Los Angeles River Revitalization Corporation NGO to support the Greenway 2020 initiative's goal to "realize a new vision for the Los Angeles River by 2020," and revitalize the Los Angeles River to enhance ecosystem restoration and economic development while connecting communities along the river with a 51-mile greenway. The design of the brew's can label features renderings of a revitalized LA River, and profits of sales directly benefit the Los Angeles River Corp. W



Groundwork USA is a nonprofit organization focused on urban greening. It functions primarily as a network of independent, not-for-profit, environmental groups known as "Groundwork Trusts," 20 of which are located in cities across the United States. The Groundwork USA national office provides technical assistance, program development and staff training, and other services, to build the capacity of local trusts to reclaim derelict urban land for conservation, recreation, and economic development; return brownfields to economically productive economic use; and engage businesses, governments, and other non-profits. M



Sustainable South Bronx (SSBx) is a New York City non-profit, founded in 2001, which works to "address economic and environmental issues in the South Bronx - and throughout New York City - through a combination of green job training, community greening programs, and social enterprise."

SSBx's flagship program, The Bronx Environmental Stewardship Academy (BEST), addresses the community's environmental and economic needs by recruiting unemployed individuals aged 18 to 40 for an intensive 17-week training program. The program prepares them for full-time employment in green industries and teaches skills related to environmental protection, urban green space restoration, and green building retrofits. More than 500 people have graduated from BEST Academy since its creation in 2003. M



THE FIERCE URGENCY OF COLLABORATION

Starting with the 1930 Olmsted-Bartholomew Plan's vision as an inspiration, the Emerald Necklace Expanded Vision Plan built upon Amigos de los Rios' 10 years of experience working on the original Emerald Necklace in Los Angeles County's San Gabriel Valley to take a comprehensive look at the vast county as a whole, tapping into existing initiatives and stakeholders working to make Los Angeles County a more livable, sustainable, and healthy place. Amigos de los Rios historically has been effective in working with public and private stakeholders in Emerald Necklace communities to create a series of parks interconnected by green infrastructure, bringing the original vision to life in the context of the marginalized urban spaces and underserved communities surrounding some of the region's most significant waterways. Amigos de los Rios' knowledge of existing stakeholders and public plans grew over the years, and the organization expanded its capacity to conceive, orchestrate, and implement projects using collaborative approaches.

As the original Emerald Necklace network matured and new parks were created and community access to open spaces improved, it quickly became apparent that an even broader network, one that connects the top of the watershed in the mountains to its bottom at the Pacific Ocean, would have a significant regional benefit and improve the livability of Los Angeles County as a whole. Further, a countywide Emerald Necklace, as articulated in this report, would better connect communities on the east and west sides of the county, helping break down longstanding physical and social divisions between the City of Los Angeles and the myriad of municipalities that make up the rest of the county.

Throughout the successes and challenges of Amigos de los Rios' decade of work, the most important lesson learned was that purposeful collaboration among public agencies, community leaders, elected representatives, and other stakeholders was crucial to engendering understanding of a common vision and producing successful projects. Amigos de los Rios kept this lesson close to heart when embarking on the Expanded Emerald Necklace visioning process. After examining and synthesizing a wealth of planning and policy documents and GIS data, as well as performing community outreach, this report concludes with a clarion call for even more meaningful collaboration among the diverse stakeholders encompassed in this plan and others, so as to build off of the work that is being done across the county and further maximize benefits and efficiencies.

As shown throughout this report, a diverse array of government agencies, NGOs, and community organizations in Los Angeles County work to address the interlinked issues of access to recreation and active transportation opportunities, water resource management, open space conservation, and climate change resiliency that the original Emerald Necklace network focused on. Amigos de los Rios and The Conservation Fund took a three-pronged approach to preparing the Emerald Necklace Expanded Vision Plan, starting with the collection and synthesis of over 60 planning, research, and visioning documents related to green infrastructure in Los Angeles County. After thorough synthesis of the documents, we organized and orchestrated them to shape and forge the eight Regional Goals based on the common threads in the plans. The plans emphasized utilizing multi-objective frameworks that lead to habitat protection and recreational opportunities, habitat protection as a safeguard for climate change, stormwater management with water quality issues in mind, green way and bicycle pathway utilization to promote regional interconnectivity and address a lack of open space in urban areas, and environmental awareness promotion and public education. The process confirmed that while some of the GIS and mapping data used in the plans was readily available and usable, other data was more difficult to access. Amigos de los Rios encountered gaps in data that inhibited the ability to produce meaningful and useful maps. Since the goal of the Emerald Necklace Expanded Vision Plan was to be comprehensive at the county level, Amigos de los Rios reached out to an existing network of partners and beyond to call for data to fill those gaps and request input as the Expanded Vision framework took shape.

Amigos de los Rios ultimately culled more than 100 GIS datasets for Los Angeles County in order to quantify and visualize green infrastructure conditions and opportunities and to create the maps included in the plan. Amigos de los Rios started by

gathering all publicly available datasets while the plans were being analyzed. Amigos de los Rios reached out to the groups that created the plans being analyzed to obtain any potential, additional datasets from those planning efforts. As gaps in data appeared, Amigos de los Rios also asked stakeholders who were involved in the Expanded Vision plan-making process to provide datasets to which they had access. Datasets were broken down into categories including hydrology, land use, transportation, and socioeconomic information.

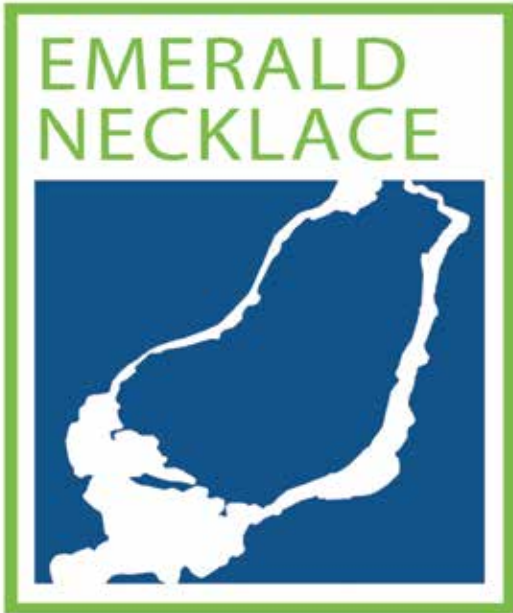
Beyond reading and analyzing existing plans, Amigos de los Rios and The Conservation Fund reached out to a diverse body of stakeholders in the collaborative spirit that infuses all of Amigos de los Rios' work. These stakeholders included city- and county-level government agencies, political offices, water districts, nonprofits large and small, school districts, private sector firms, and the general public. Outreach was performed in two primary ways; Amigos de los Rios convened a series of three meetings that provided Amigos de los Rios and The Conservation Fund with candid feedback on the draft plan as well as data and technical assistance to fill in gaps and make the document more useful. The stakeholder meetings were an integral part of the planning process in that stakeholders helped identify important work and/or novel opportunities that had not been identified previously in the plan synthesis process. In addition to meetings and frequent email contact with stakeholders who had attended the meetings and with those who had not, Amigos de los Rios discussed the in-progress plan during regularly scheduled weekend volunteer events, soliciting input from the general public. The final plan benefitted greatly from these public perspectives in that the exchanges spoke to a community-based vision for Los Angeles County, communities which the Emerald Necklace Expanded Vision ultimately seeks to serve.

It is no surprise that the most important lesson coming out of the process of gathering and synthesizing plans and data, and then multiple revisions of the plan, was that collaborative action is urgently necessary if a significant investment in green infrastructure that will provide for multiple benefits across Los Angeles County is to be achieved. Even as Amigos de los Rios continues to strive to be as inclusive and collaborative as possible in its work, it was encouraging to find other groups utilizing innovative partnership models in the Expanded Vision Plan process. We found that meaningful collaboration often resulted in the best results on the ground, whether it was city and county agencies partnering with water management agencies, grassroots nonprofits and federal agencies sharing on the ground observations so as to guide public investment towards high-impact, low-cost projects (as was the case for the Elmer Avenue green street project that was a part of the City of Los Angeles' Water Integrated Resources plan), or nonprofits with a nationwide footprint partnering with local community groups and local and national elected representatives to conserve vast swaths of open land, (as is the case with the San Gabriel Mountains Forever initiative).

With over 4,000 square miles of land, 10 million residents, and 88 municipalities in Los Angeles County, the need for collaboration is necessary and urgent if the goals outlined in this plan are to be accomplished. This plan, with all the effort, hours, and people dedicated to it, also reaches beyond necessity alone and boldly aspires to establish collaboration as the default mode of operation for the Expanded Emerald Necklace stakeholders working towards the common vision of a more livable Los Angeles County. This vision of greater active transportation and recreation opportunities, more communities that are resilient to the impacts of climate change, better water management practices, and more economic opportunities around sustainable products and practices is shared by all of us. To conclude with the idea of French philosopher Michel Serres; environmental action of the present and future must seek to link disparate realities. High-level, purposeful collaboration among diverse agents in novel and creative coalitions must exist if the physical and cultural interventions proposed in this plan, which blend the concerns of county planners, technocrats, and businesses with the concerns of parents across the region who worry about the welfare and safety of their children, are to come to fruition.

EMERALD NECKLACE COALITION

Coalition Members



Coalition Member Agencies

- Azusa
- Baldwin Park
- Duarte
- El Monte
- Irwindale
- Montebello
- South El Monte
- Whittier
- Monrovia
- La Puente
- Bell
- South Gate
- San Gabriel
- Downey

Gateway Authority

- Bell Gardens
- Commerce
- Compton
- Cudahy
- Huntington Park
- Long Beach
- Lynwood
- Maywood
- Paramount
- Signal Hill
- Pico Rivera

County Agencies

- Los Angeles County Board of Supervisors

State Agencies

- State Rivers and Mountains Conservancy

Unincorporated Areas

- Hacienda Heights Homeowners Assoc.
- Workman Mills Road Homeowners Assoc.
- Park El Monte Improvement Assoc.

Environmental Organizations

- Charro Equestrian Joint Council
- Sierra Club

School Districts

- Garvey School District
- El Rancho Unified School District
- Mountain View Unified School District
- El Monte Union School District
- El Monte City School District
- West Covina Unified School District

The Emerald Necklace concept in the San Gabriel Valley was formalized with the **2005 Emerald Necklace Accord**, a legal document which has been signed by 38 member agencies, listed here, who have committed themselves to collaboration in planning for and implementing projects identified in the original Emerald Necklace case study area. The Emerald Necklace Accord encourages its signatories, cumulatively known as **The Emerald Necklace Coalition**, to work at the watershed scale, looking beyond political boundaries to acknowledge the multiple benefits of protecting and preserving the region's rivers and tributaries, providing greater access to open space and recreation opportunities, increased native habitat conservation and restoration, water quality protection and conservation, and educational initiatives around the original Emerald Necklace. It commits Coalition members to collaboration, resource-sharing, and consensus building without creating new financial obligations in working towards continuing to develop the original Emerald Necklace.

We hope that this innovative collaborative model will serve as a best practice example as agencies and organizations across Los Angeles County work to implement the Emerald Necklace Expanded Vision throughout Los Angeles County and its waterways.



Top 10 Emerald Necklace Funders 2011-2014

- California Natural Resources Agency
- Los Angeles County Regional Parks & Open Space District - Prop A
- First 5 Los Angeles
- State of California Department of Recreation & Parks
- California Department of Transportation Environmental Enhancement & Mitigation Program
- La Plaza de Cultura y Artes
- Annenberg Foundation
- Wild Spaces
- National Fish & Wildlife Foundation
- Recreational Equipment, Inc. (REI)

THE HUMAN FACE OF LOS ANGELES COUNTY'S GREEN INFRASTRUCTURE

Cultural Symbols for water



Selection of plants indigenous to the Los Angeles region

Emerald Necklace Projects Completed to Date

- San Gabriel Canyon Gateway – *Park and Interpretive Center Development*
- Santa Fe Dam – *Park Tree Planting*
- Peck Water Conservation Park – *Park Improvements*
- Rio Hondo Park – *Trail Improvements*
- Rio Vista Park – *Park and Trail Development*
- Gibson Mariposa Park – *Park Development*
- Veterans Memorial Park – *Park Development*
- Valley Boulevard Tree Power Interpretive Project – *Tree Planting Project*
- Columbia School, Wilkerson School, & Willard Payne School – *Trail Development and Tree Planting*
- Lashbrook Park – *Park Development*
- El Bosque del Rio Hondo – *Interpretive Signage Kiosk*
- Durfee Thompson School Nature Park – *Park Development*
- La Primera School Greening – *San Gabriel River Greenway*
- Twin Lakes School Greening – *San Gabriel River Greenway*
- Madrid School Greening – *Nature Exercise Trail Development*
- Mountain View High School Greening – *San Gabriel River Greenway*
- Arrow Highway Bike Stop – *Interpretive Signage*
- Thienes Emerald Necklace – *Tree Planting and Signage*
- Hollydale Park – *Nature Trail Development and Park Improvements*
- Circle Park – *Nature Trail Development*
- Los Angeles County & USC Wellness Center – *Park and Fitness Trail Development*
- Pixley Park - *Nature Trails for Tots*
- Riverfront Park - *Nature Trails for Tots*
- Mini Center - *Nature Trails for Tots*
- Pasadena Unified School District – *Tree Planting*
- San Gabriel Valley Schools – *Tree Planting*
- Emerald Necklace Cities – *Tree Planting*

AMIGOS DE LOS RIOS

PLAN SYNTHESIS LIST

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Lead support for the Emerald Necklace Expanded Vision Plan was provided by the California Strategic Growth Council. The Strategic Growth Council's mission is to help make the state's communities more sustainable. In keeping with its broad membership, the Council defines sustainability holistically:

- Reduce greenhouse gas emissions
- Improve air and water quality
- Improve protection of natural resources and agricultural lands
- Increase the availability of affordable housing
- Improve public health
- Improve transportation
- Encourage sustainable land use plans and greater infill development
- Revitalize urban and community centers in a sustainable manner

To accomplish this mission, the Council adopted four strategies that are closely based on its enabling statute:

1. Coordinate State Programs to Achieve Sustainability Objectives
2. Provide Local Assistance
3. Fund and Distribute Data & Information
4. Recommend Policies Advancing Sustainable Communities



METROPOLITAN GREENSPACES ALLIANCE

More people live in metropolitan regions today than ever before, and while conserving nature in these regions is increasingly challenging, it also offers great opportunities. We must think about cities and the human-built environment as not being separate from, but rather interconnected with, the natural environment, and what that implies for people and nature in urban areas.

Amigos de los Rios is a leading member of the Metropolitan Greenspaces Alliance (MGA), a national group of conservation coalitions currently working across the country. Amigos de los Rios helped form MGA in 2010, which initially represented a network of over 550 organizations that served urban regions comprised of more than 30 million people. Collectively, MGA coalitions address many critical issues facing metropolitan regions across the United States today. MGA members work across complex landscapes that are ecologically, culturally, and economically diverse in order to:

- Help residents become more active and healthy through outdoor recreation and nature exploration
- Clean our air and protect our water supplies
- Restore nature and conserve biodiversity
- Provide safe places for children to play in nature
- Find “green” solutions to our infrastructure challenges
- Reduce and mitigate the effects of climate change
- Create non-motorized travel options that reduce transportation costs and dependence on foreign oil
- Engage diverse communities in environmental stewardship



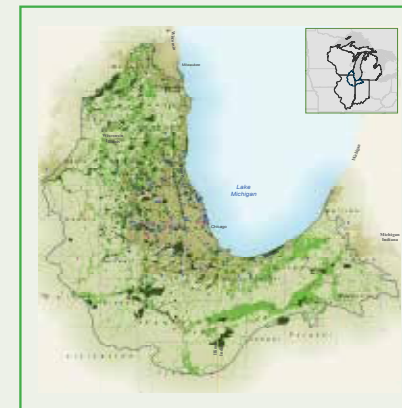
NINE URBAN AREAS ACHIEVING ENVIRONMENTAL, TRANSPORTATION, HEALTH, EQUITY, AND LIVABILITY OBJECTIVES

Metropolitan conservation coalitions serve as “Best Practice” for investments in urban parks, trails and natural Areas. Nature doesn’t start or stop at geopolitical boundaries. Metropolitan conservation coalitions are large public/private/nonprofit partnerships that work across extensive natural landscapes. These alliances are adept at navigating both the complex ecosystem challenges as well as the complex organizational environments of metropolitan regions.

Current coalitions, in aggregate, comprise over 550 private, nonprofit and public organizations, and our regions contain thirty million people. The Metropolitan Greenspaces Alliance includes Chicago, Cleveland, Houston, Los Angeles, Milwaukee, Portland, Oregon, San Francisco, St. Louis and Kansas City, Missouri. Because so many organizations have been brought together, investments are leveraged many times over.

Metropolitan conservation coalitions strike at the heart of many of the major issues facing our nation today. Metropolitan conservation coalitions help residents become more active, leading to lower rates of obesity, heart disease, and diabetes. They create non-motorized travel options that reduce transportation costs and our dependence on foreign oil. They help keep the air clean and protect our water supplies. They provide safe places for children to play in nature and educate residents about nature. They develop green solutions to infrastructure challenges and reduce and mitigate the effects of climate change. They work to address equity issues and to create green jobs. Further, they leverage precious funding and increase the impact and efficiency of investments in the urban environment.

Chicago



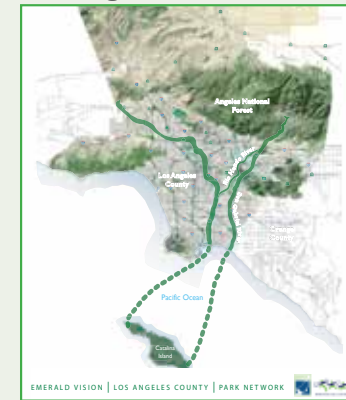
Houston



Cleveland



Los Angeles



Portland



Milwaukee



San Francisco Bay Area

