

# New Frontiers in Land Conservation: Green Infrastructure for Urban Vacant and Underutilized Lands

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**Director of Strategic Conservation Planning**

THE  
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**Special thanks to**

**Claire Robinson & Loretta Quach at Amigos de los Rios  
Mark Eischeid, Edinburgh School of Architecture & Landscape Architecture  
Shrinking Cities | Expanding Landscapes Conference – November 2013**

# Talk Agenda

1. Define/discuss vacant and underutilized lands
2. Green infrastructure framework for urban lands
3. Revitalization case study: Amigos de los Rios Emerald Necklace in East Los Angeles County
4. Regional planning case study: Forest to Ocean Expanded Vision Plan for Los Angeles County



# Vacant and Underutilized Urban Lands

- **SHRINKING CITIES** - According to the 2010 Census, almost 3 dozen U.S. cities that had populations over 100,000 in 1950 have lost at least 20% of their residents (Krohe, 2011)
- **GROWING CITIES** - “Expanding cities [accumulate] non-productive space more rapidly than fixed cities...This [results in a] fragmented urban core...dotted with disconnected, small, irregularly spaced parcels of non-productive space, or Urban Shrapnel (Newman, 2013)
- **PLANNING FOR VACANT/UNDERUTILIZED URBAN LANDS**
  - Youngstown, Ohio (2005), Cleveland (2008), Detroit (2012)
  - Conceptual strategy for ‘right sizing’ with green infrastructure (Schilling and Logan, 2008)
  - Green uses for surplus land, including urban agriculture, community green spaces, and alternative energy (LaCroix (2011); Krohe (2011); Morley (2010); Bonfiglio (2009)



# Expanding Green Infrastructure in Cities

1. Use suitability analysis to 'right-size'
  - Re-adjust built environment to match current and projected population and development trends
2. Identify opportunities for income generating uses
  - Agriculture
  - Aquaponics / Greenhouse
  - Carbon Bank
3. Fulfill regulatory requirements
  - Stormwater (US EPA MS-4/CSO)
4. Reduce gray infrastructure costs
  - Water treatment

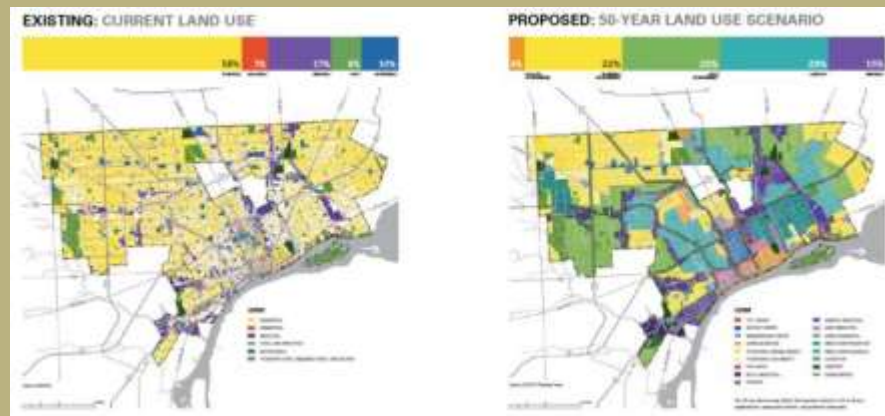


# Green Infrastructure Framework for Vacant and Underutilized Urban Lands

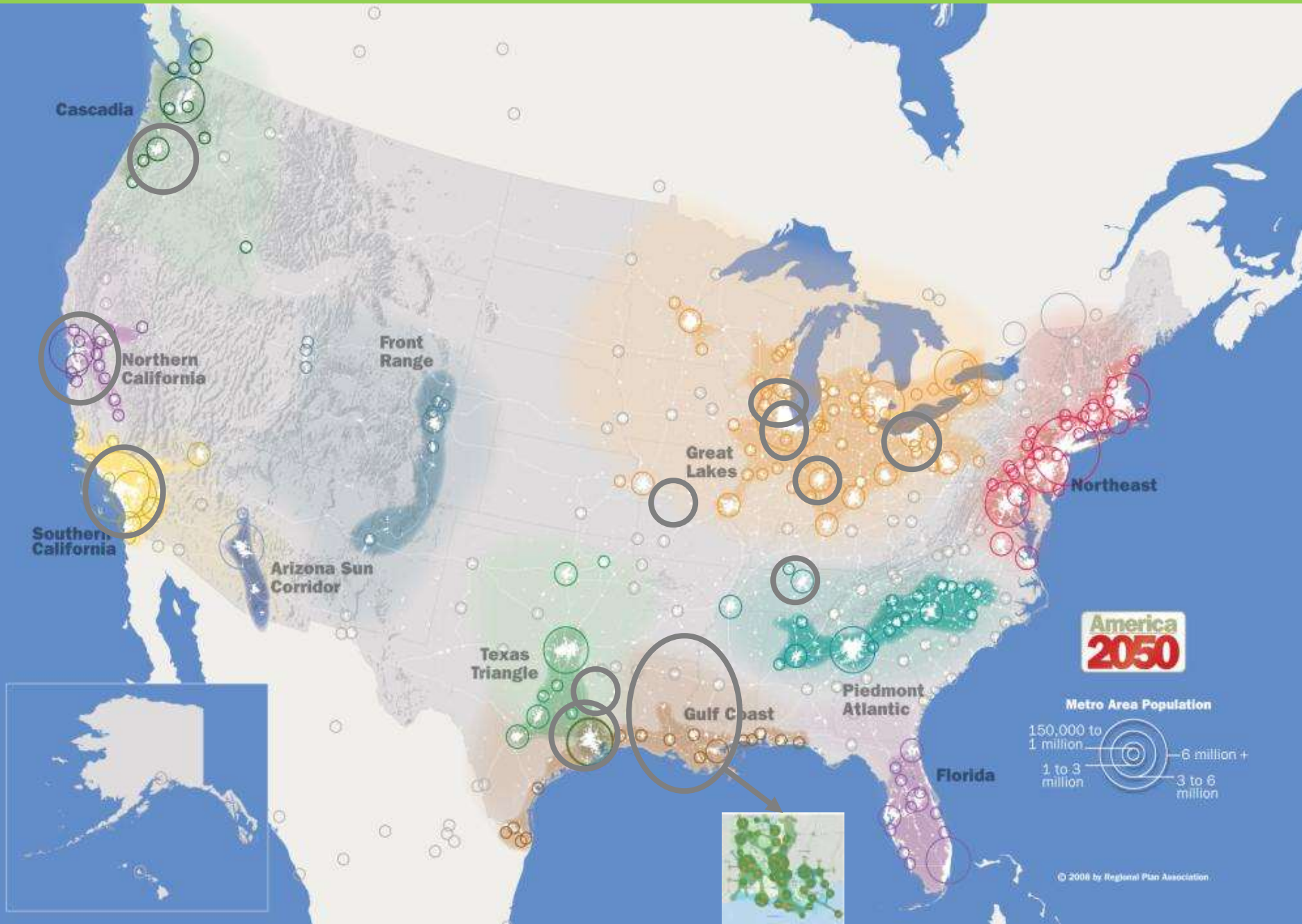
1. Landscape/regional context
2. Community engagement
3. Green infrastructure typology
4. Project selection criteria
5. Optimize project investment portfolio



Detroit Future City Land Use Framework:  
A Green City where landscapes contribute to health



# I. Analyze landscape and regional context





## 2. Engage the community



Pretty vacants: Urban communities fill empty lots with gardens, skate parks, and creative possibility

By Christopher Weber

In 2011, videogame developer Tami Johnson, then 29, wanted to create an outdoor community space for her neighborhood in Brooklyn. In search of just the right spot, Johnson found an unusual website that mapped all the borough's vacant lots. It was like a Zillow for perfectly good land obscured by urban blight.



A Small Green Patch  
It's harvest party time at A Small Green Patch in Brooklyn.

- New York City
  - 596 Acres
- Philadelphia
  - Possible City
  - Grounded in Philly
- New Orleans
  - Living Lots



# 3. Define green infrastructure typologies

## ➤ **Income Generating**

- Urban Forest / Carbon Bank
- Native Tree/Plant Nursery
- Urban Agriculture
- Greenhouse / Aquaponics
- Alternative Energy



## ➤ **Compliance/Regulatory**

- Stream/Riparian Restoration
- Constructed Wetland / Stormwater Park / Rain Garden
- Phytoremediation
- Impervious Surface Removal



## ➤ **Community Benefit**

- Pocket Park/Playground/Ball Courts
- Recreational Trail Linkage
- Native Plant / Habitat Garden
- Community Garden





# 4. Project Selection Criteria

## I Green Infrastructure for Vacant and Underutilized Urban Lands

### II Community Support

### I2 Feasibility

Redevelopment Suitability

Neighborhood Stabilization

Ownership Status

Demolition/Remediation

### I3 Opportunity

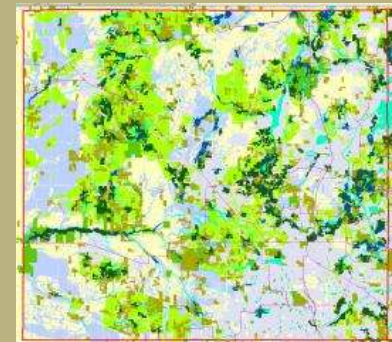
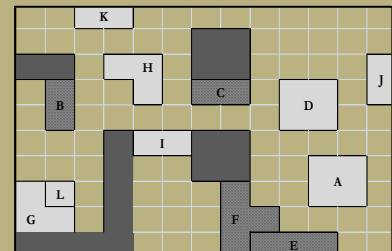
Property Size/Configuration

Strategic Location

### I4 Resource Value

Site Characteristics

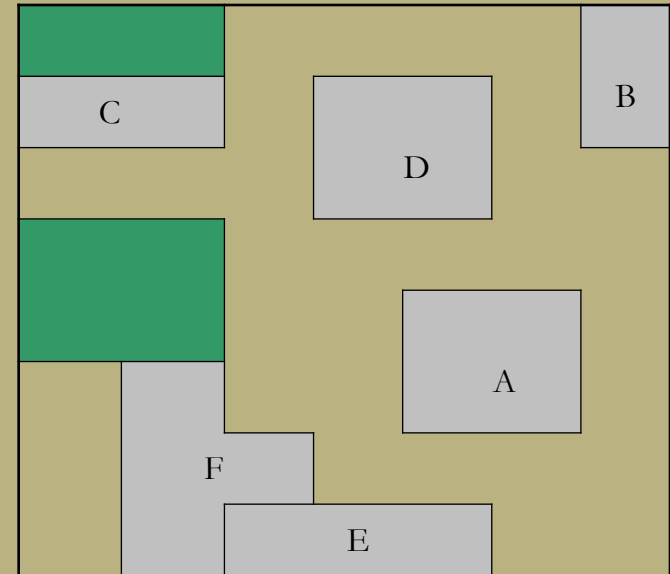
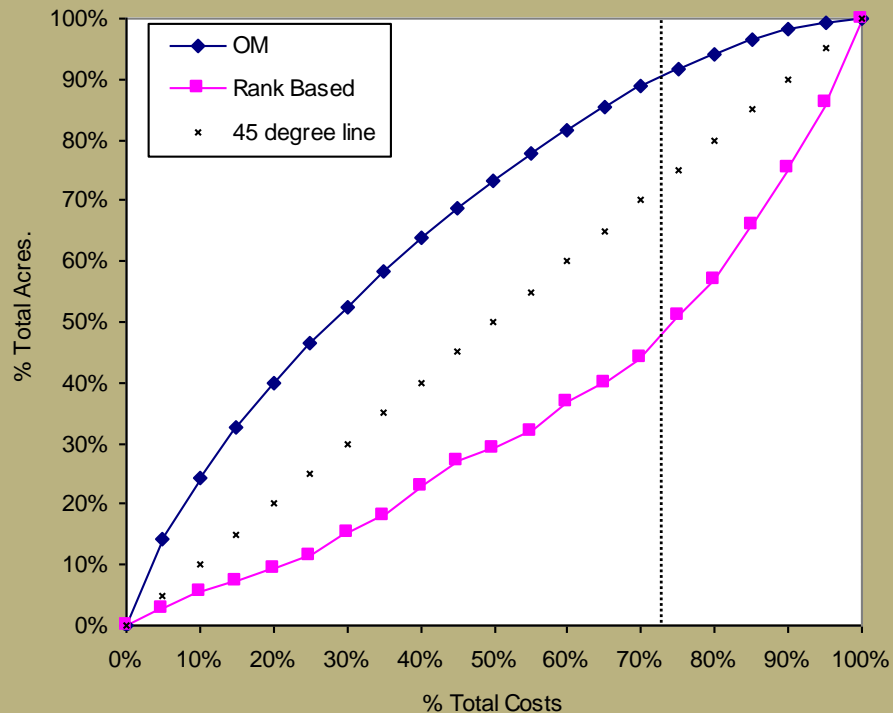
Functional Connectivity



# 5. Optimize Conservation Portfolio -> ODST

✓ LSP scores generated for potential projects

✓ Use optimization tools to select best portfolio of projects based on budget

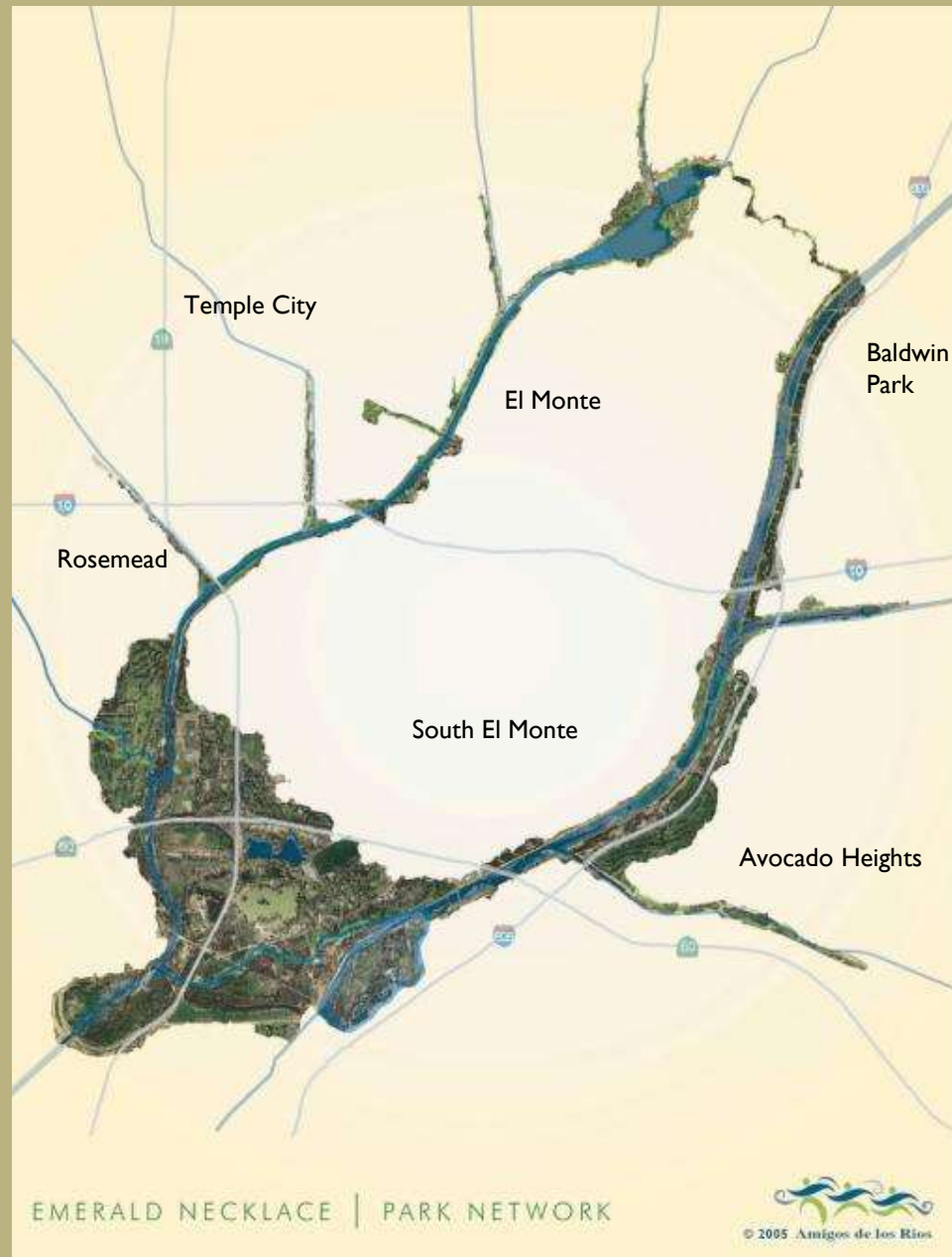


Parcel ID	Ecological Score	Cost	Parcel Selected
A	2	\$6	
B	5	\$3	
C	4	\$2	
D	6	\$6	
E	2	\$3	
F	9	\$4	

Total:

# Amigos de los Rios Initial Case Study Area

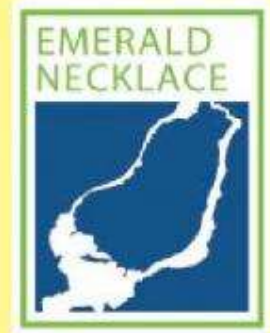
The Emerald Necklace is a vision for a 17-mile loop of parks and greenways connecting 16 cities and over 500,000 residents along the Río Hondo and San Gabriel Rivers and their tributaries.





# Amigos de los Rios Initial Case Study Area

Emerald Necklace Green Infrastructure | Los Angeles County



## MULTI-BENEFIT PROJECTS



[www.amigosdelosrios.org](http://www.amigosdelosrios.org) | 3244 Santa Anita Ave | Altadena, CA 91001 | t: [626] 676.5027 | f: [626] 798.2835



- > Joint Use Park Projects
- > Park Retrofits
- > River Trail Enhancements
- > Pocket Parks
- > Restoration Feasibility Studies
- > New Parks
- > Urban Forestry
- > Regional Trail Entrances
- > Public Transportation Corridors

# benefits & opportunities

# Amigos de los Rios Initial Case Study Area

## Green Infrastructure

- Urban biodiversity
- Native habitat restoration
- Groundwater infiltration
- Climate change / urban heat island mitigation
- Community forestry

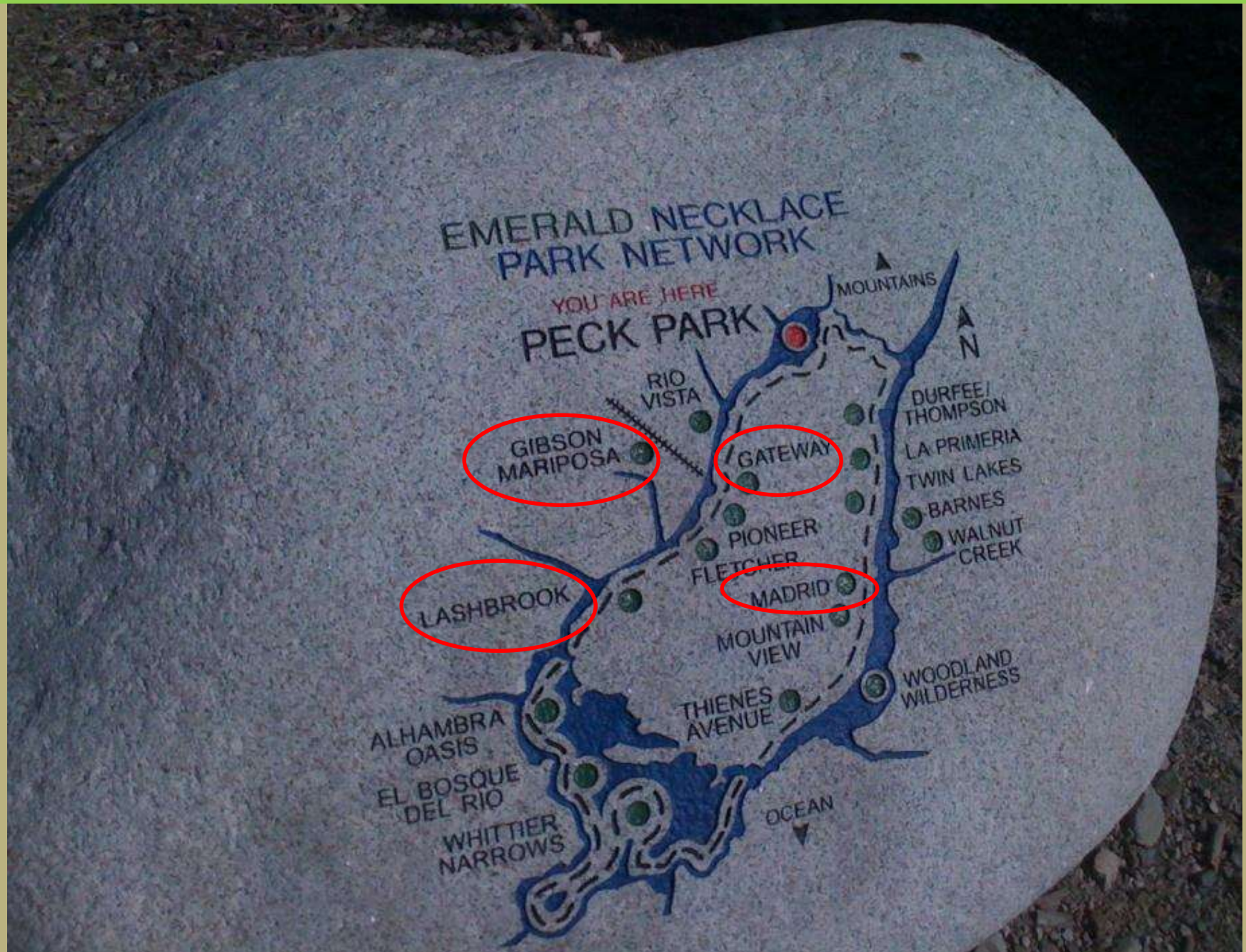
## Public Health

- Active living / recreation
- Alternative transportation corridors
- Access to nature & outdoor classrooms
- Youth job training
- Natural & cultural heritage
- Way finding & interpretive signage





# Amigos de los Rios Initial Case Study Area





# AMIGOS DE LOS RIOS - EMERALD NECKLACE GROUP

BEFORE

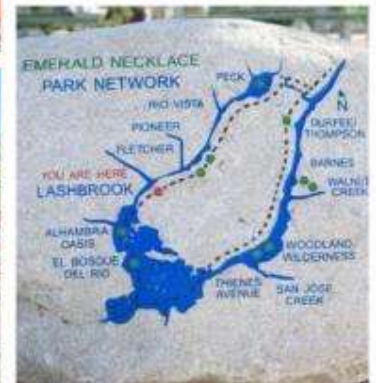


GIBSON MARIPOSA PARK



# AMIGOS DE LOS RIOS - EMERALD NECKLACE GROUP

BEFORE



## LASHBROOK PARK





# AMIGOS DE LOS RIOS - EMERALD NECKLACE GROUP

BEFORE

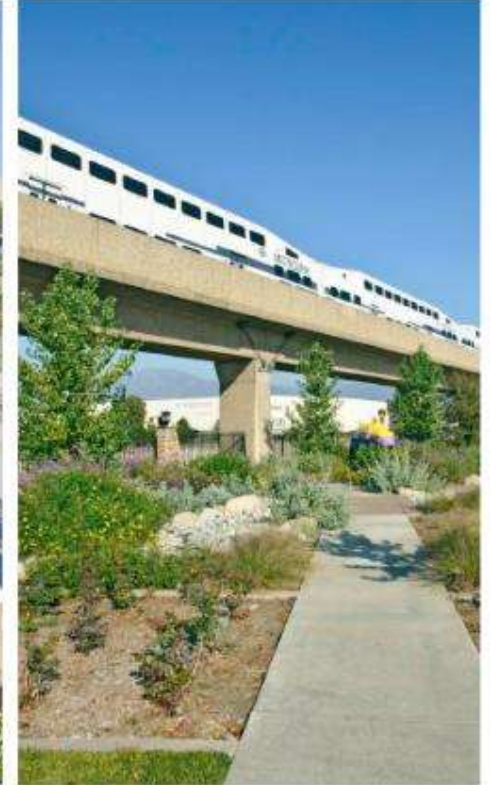


MADRID MIDDLE SCHOOL EXERCISE TRAIL



# AMIGOS DE LOS RIOS - EMERALD NECKLACE GROUP

BEFORE



VETERANS MEMORIAL PARK



# AMIGOS DE LOS RIOS - EMERALD NECKLACE GROUP

## Emerald Necklace Coalition / Accord Member Agencies

### Emerald Necklace Region



### Local Cities

- City of Azusa
- City of Bell
- City of Downey
- City of Duarte
- City of Irwindale
- City of Baldwin Park
- City of El Monte
- City of South El Monte
- City of San Gabriel
- City of South Gate
- City of Whittier
- City of Monrovia
- City of Montebello
- City of La Puente
- Gateway Authority:  
– 20 Cities

### Unincorporated Areas

- Hacienda Heights  
Homeowners' Association
- Workman Mill Road  
Homeowners' Association

### State & County Agencies

- Rivers & Mountains  
Conservancy
- Los Angeles County  
Board of Supervisors

### Community Based Organizations

- Charro Equestrian Joint  
Council
- Park El Monte Improvement  
Association

### School Districts

- El Rancho Unified - Pico  
Rivera
- El Monte Union
- El Monte City
- Rosemead
- Mountain View





# Los Angeles County: From the Mountains to the Sea, Forest to Ocean



**San Gabriel Mountains**



**Angeles National Forest**



**Whittier Narrows**



**Catalina Island**



# Los Angeles County: From the Mountains to the Sea, Forest to Ocean

*“Throughout a century and a half of urban growth, LA and the surrounding region have exhibited a love-hate relationship with nature.” Planning Los Angeles*

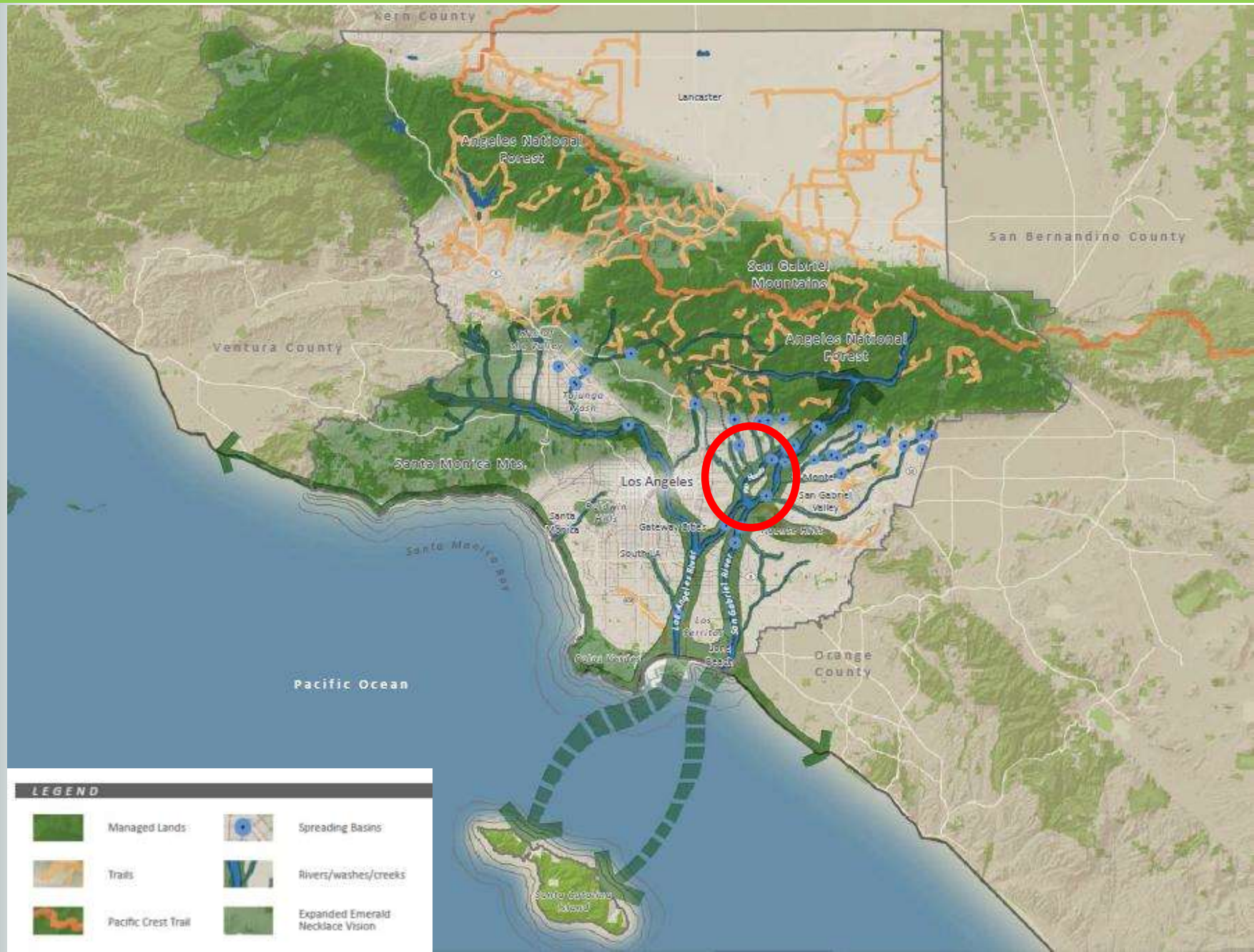


1930 OLMSTED-BARTHOLOMEW PARKS PLAN FOR LOS ANGELES COUNTY

Commissioned by Citizens' Committee on Parks, Playgrounds and Beaches



# Expanded Vision Plan Area



# Expanded Vision Plan Approach

- Define Regional Goals and Collaborative Priorities
  - Convene Focus Group Meetings (8/2012, 2/2013)
  - Synthesize Existing/Adopted Plans (60+)
- Identify Regional Scale Spatial Priorities in Vision Plan
  - Analyze Priorities from Olmstead 1930 Plan
  - Collect, Organize, and Assess Current GIS Mapping Layers and Supporting Resources (100+)
- Common Vision Plan Strategies
  - Implement Existing Plan Recommendations
  - Promote Best Practices in Design for All
  - Link Across Boundaries and Scales
  - Document Best Practice Case Studies



# Expanded Vision Plan - Regional Goals

- 
- A map of Southern California, specifically the Los Angeles basin and surrounding areas, serves as the background for the list. The map shows the Pacific Ocean to the west, the San Gabriel Mountains to the east, and the Los Angeles River flowing through the city. Various counties are labeled, including Ventura, San Bernardino, and Orange. The map also shows the Angeles National Forest and the San Gabriel Valley. The list of goals is overlaid on the map, with each goal corresponding to a specific area or feature on the map.
1. Promote Active Transportation – Walking, Biking, and Alternative Commute 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 Multi-Benefit Amenity
  5. Design and Build Communities Resilient to the Current and Projected Impacts of Climate Change
  6. Enhance Regional Anchors for People and Wildlife
  7. Support Environmental Awareness and Civic Engagement through Education, Outreach, and Cultural Heritage
  8. Foster a Green Economy that Creates Jobs and Spurs Investment in Local Multi-Benefit Projects

# New Frontiers in Land Conservation: Green Infrastructure for Urban Vacant and Underutilized Lands



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