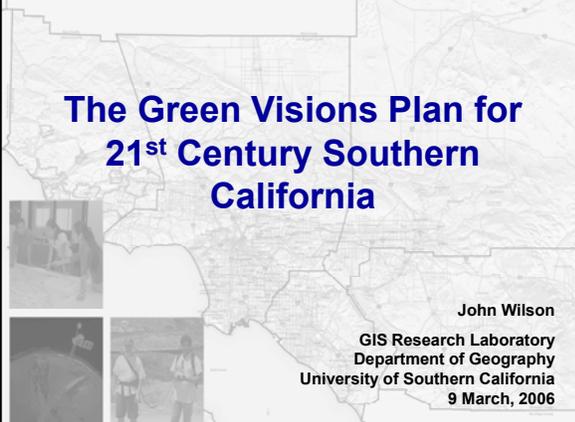# Slide 1

The Green Visions Plan for 21st Century Southern California

John Wilson

GIS Research Laboratory
Department of Geography
University of Southern California
9 March, 2006

Slide 2

Green Visions / Outline

- Background
- Hydrologic Function
- Habitat Conservation
- Parks / Open Space
- Decision Support Tools
- What Follows …

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Slide 3

Green Visions Plan

- Population growth
- Legacy of piecemeal planning
- Regulatory / government context
- Land use / wildlife conflicts
- Public health challenges
- Environmental justice considerations
- Funding opportunities

THE GREEN VISIONS PLAN
for 21st century southern california

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Slide 4

Green Visions Plan Area

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Slide 5

Project Goals

- Identify and assess opportunities for:
  - Promotion / restoration of watershed function
  - Habitat conservation / restoration
  - Park / open space acquisition
- Create web-based decision support tools and geospatial data sets

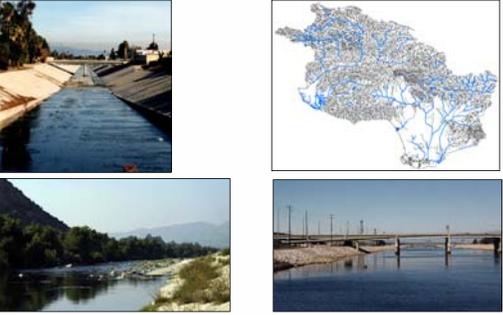John Wilson
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Slide 6

Multiple Use

- The best sites will simultaneously …
  - Treat and infiltrate storm water
  - Restore and conserve ecosystems
  - Provide recreation and open space opportunities

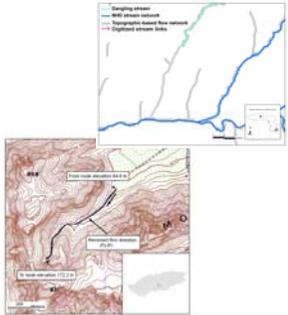Broadus School, Sun Valley
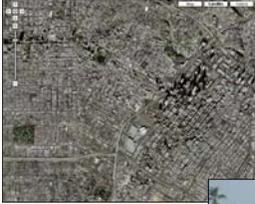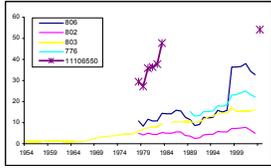
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Hydrologic Function / NHD

NHD Problems

- Duplicate stream segments
- Flow divergences
- Missing stream segments (reaches)
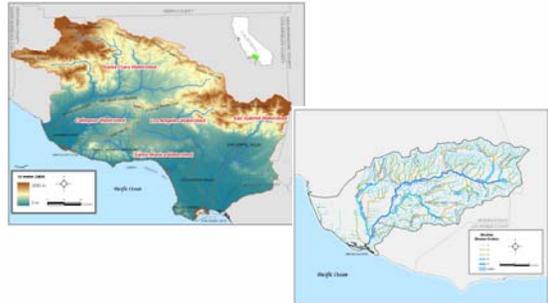- Missing or erroneous attributes

Mean Annual Daily Discharge

Calleguas Creek

Habitat Conservation

- Multiple species approach
- Chose 30-40 focal species
  - Broad taxonomic and life history coverage
  - Includes rare and endangered species
  - Includes indicators of sensitive habitats
- Developed natural history profile and geographic incidence information
- Will prioritize restoration and conservation areas based focal species

Urban Matrix

- Identify opportunities to create local nature parks
  - Target migratory birds and other mobile organisms
  - Build a series of wildlife corridors and linkages across urban landscape
- Urban Twist
  - Delineate connectivity for lower trophic levels
  - It's the little things that count

Missing Linkages

- Suitable habitat (reserves)
- Connectivity (corridors)

CALVEG

Umbrella Species - Coyote

Loggerhead Shrike

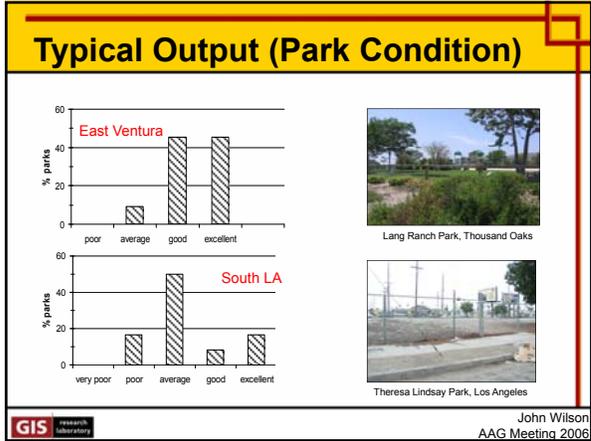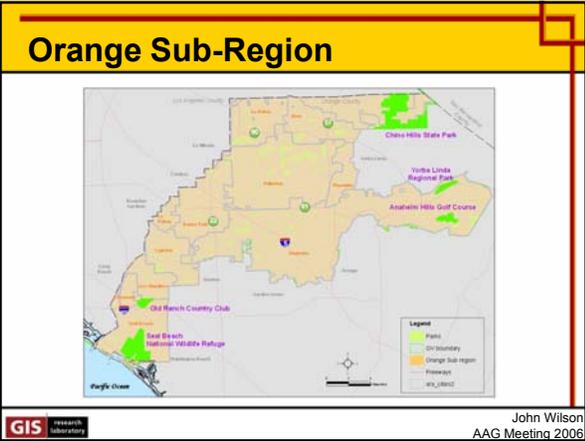## MCE Analysis

MCE result for acorn woodpecker

Parks / Open Space

- Compiled polygon layer containing 1,797 parks
  - LA – 1,364 parks
  - Ventura – 231 parks
  - Orange – 202 parks
- Conducted 1,797 web audits (attributes)
- Conducted 250 field audits – sampled 15% of parks using stratified random design

Park Planning Sub-Regions

Orange Sub-Region

Typical Output (Park Condition)

Lang Ranch Park, Thousand Oaks

Theresa Lindsay Park, Los Angeles

Map Equity Analysis

- Characterize mismatch between park supply and park need (demand)
  - Park congestion – demand for parks assuming everyone uses nearest park at some uniform rate
  - Park service areas – network variant of map equity approach adopted by Wolch et al. (2005)

Decision Support Tools

Park / Open Space Tools

City Terrace County Park

4

ArcIMS / Google Earth
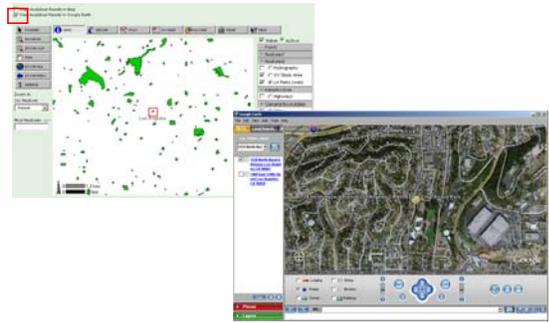
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Collaborative Research

- Joseph Devinny, Travis Longcore, Jennifer Swift, and Jennifer Wolch

- Jason Byrne, Christine Lam, Alison Linder, Diego Martino, Thao Nguyen, Jaime Sayre, Mona Seymour, Jingfen Sheng, and Chona Sister

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