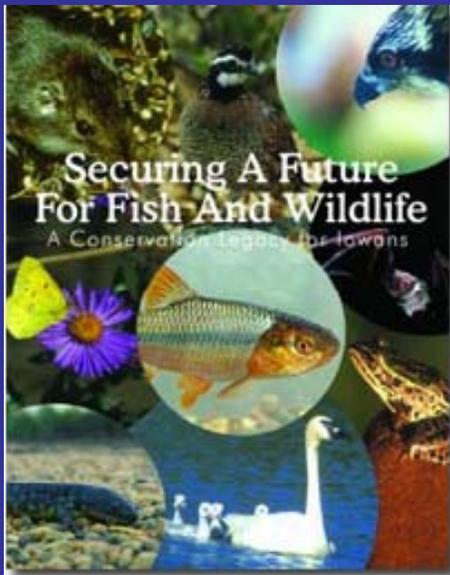
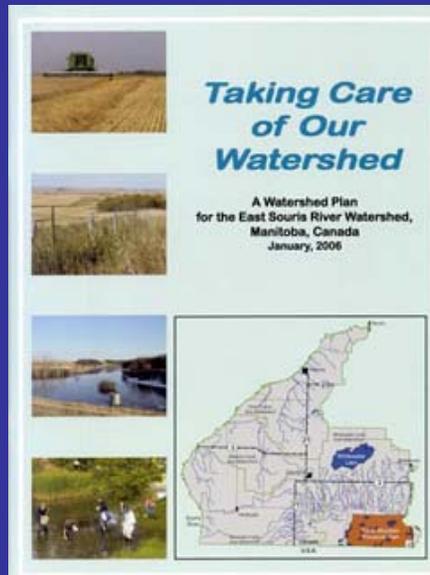


# Data and Information Sharing

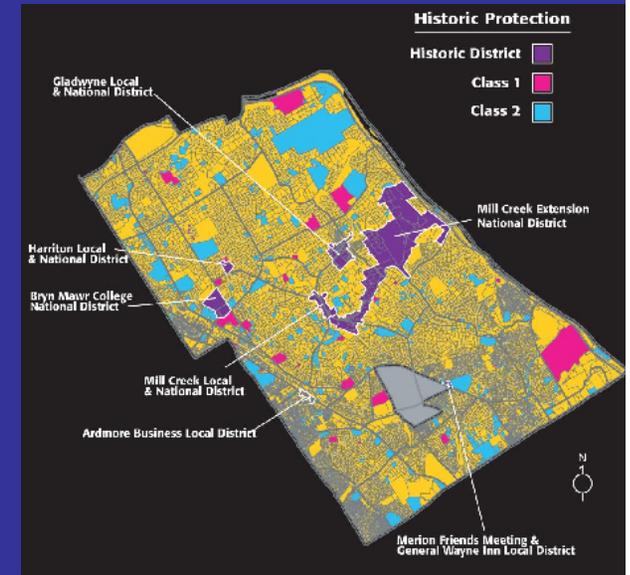
- Basis for early consideration of the effects of alternative transportation solutions on environmental, community, and cultural resources
- Resource agency outputs relevant to transportation planning include:



State Wildlife Action Plans



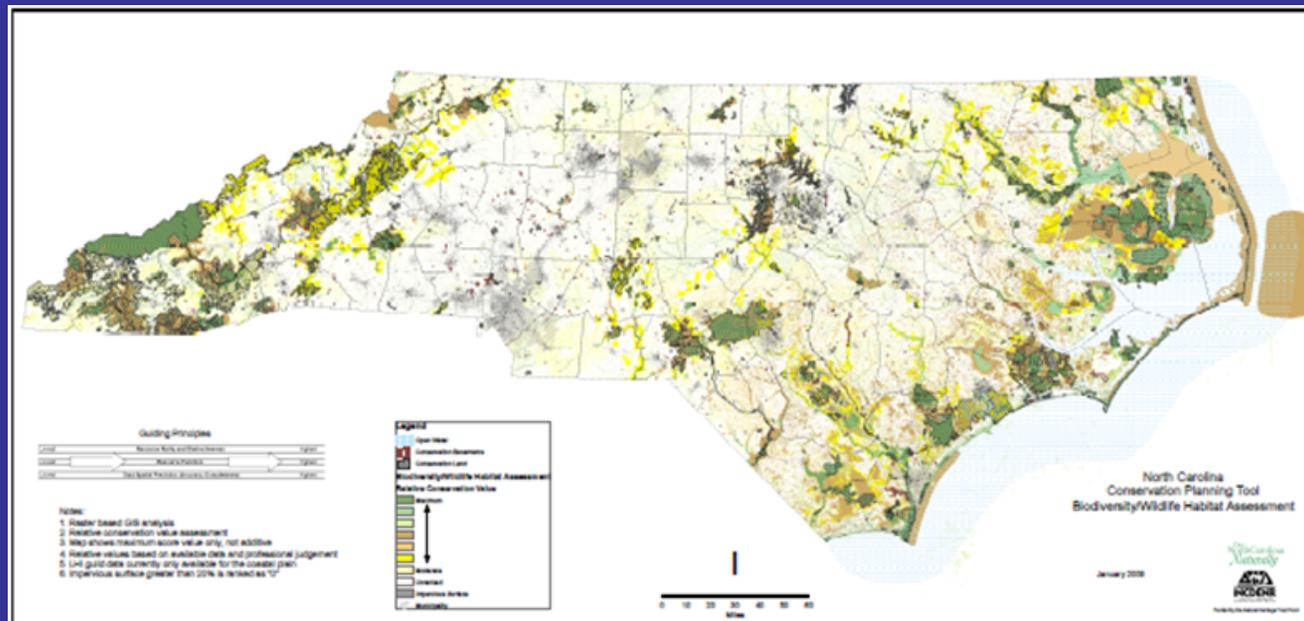
Watershed Management Plans



Historic Resource Inventories

# Data and Information Sharing Example

## North Carolina's Conservation Planning Tool



# Interactive Map



**Map Features** **Legend**

Redraw Map ↻

Regulated sites

- Multi-activities
- Superfund
- Toxic releases
- Water dischargers
- Air emissions
- Hazardous waste

Places

- Cities
- Schools
- Churches
- Hospitals

Transportation

NonAttainment Area

Water features

Political boundaries

Water Monitors

Remote Images [EXIT EPA](#)

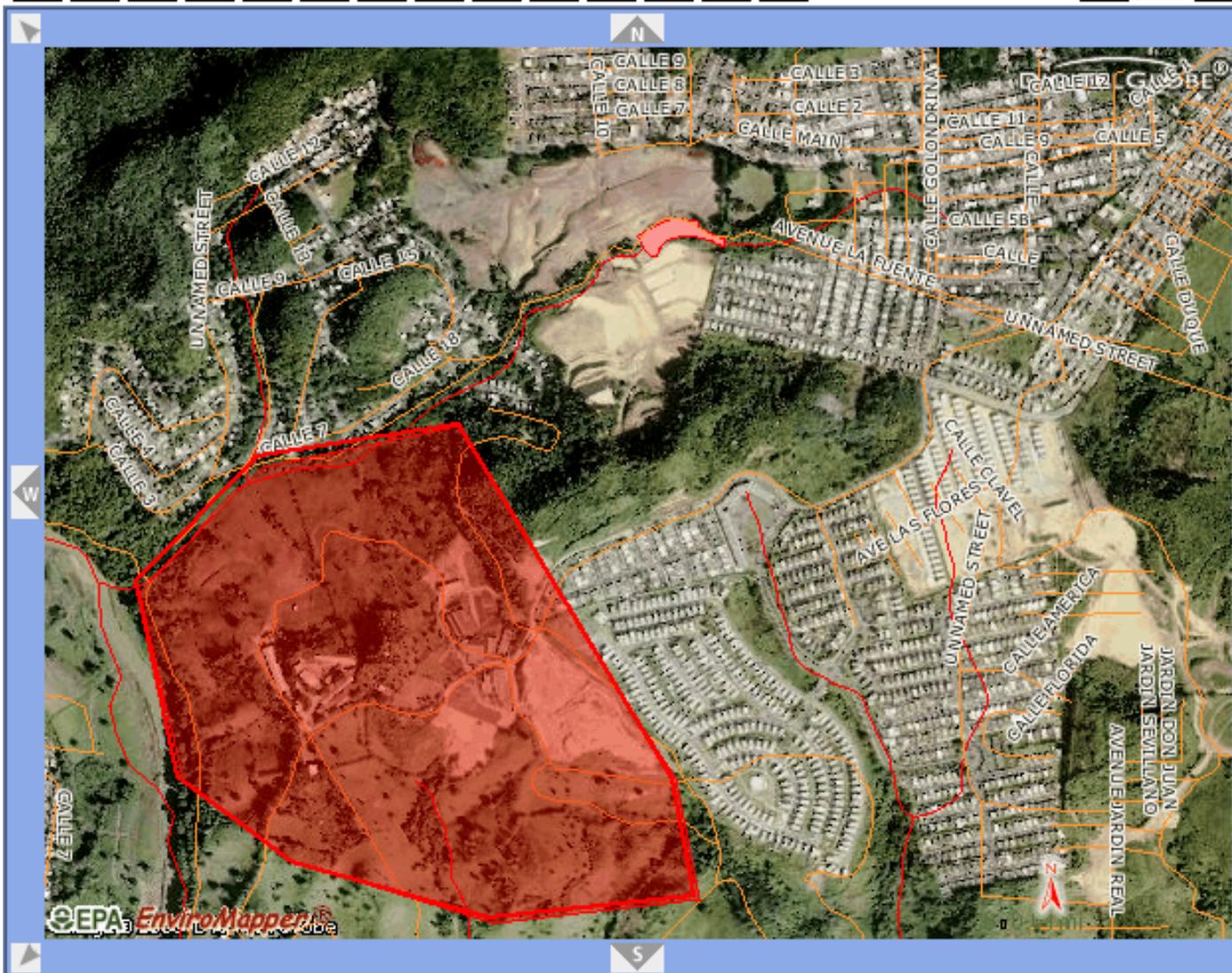
- TerraServer Photo
- TerraServer Topo
- GlobeExplorer Image
- National Land Cover Data(1992)

FEMA Flood [EXIT EPA](#)

- Shaded Relief [EXIT EPA](#)
- NMI Wetlands [EXIT EPA](#)

Redraw Map ↻

# Digitize Project Location



Map Features Legend

Redraw Map ↻

**Choose a digitize option:**

- Polygon
- Line
- Point

**Coordinates:**

-

66.238052, 18.3975

73, -

66.234097, 18.3910

17, -

Area: 0.2861 mile<sup>2</sup> (7.976e+6 ft<sup>2</sup>)

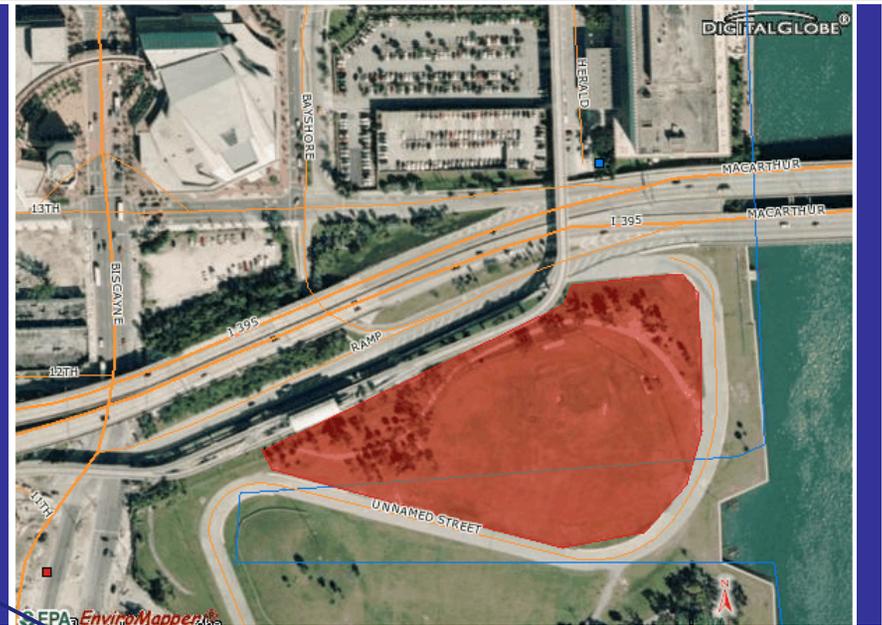
NEPA analysis Cancel

Redraw Map ↻

# Data Drill Downs

Sites	
Within 400 meters of a school?	<u>yes</u>
Within 400 meters of a hospital?	<u>no</u>
Within 400 meters of a port?	<u>yes</u>
Nonattainment	
Within 400 meters of a SOx nonattainment area?	<u>no</u>
Within 400 meters of a lead nonattainment area?	<u>no</u>
Within 400 meters of a CO nonattainment area?	<u>no</u>
Within 400 meters of an ozone nonattainment area?	<u>yes</u>
EcoSystem	
Within 400 meters of an area of level 4 ecoregions?	<u>yes</u>
Within 400 meters of a designated sole source aquifer?	<u>yes</u>
Within 400 meters of a designated priority watershed?	<u>no</u>
Within 400 meters of a major river?	<u>yes</u>
Within 400 meters of a designated 100-year FEMA floodplain?	<u>yes</u>
Within 400 meters of a National, State, or Local forest or park?	<u>no</u>
Within 400 meters of a National wildlife refuge?	<u>no</u>
Within 400 meters of a managed land/conservation area?	<u>no</u>
Within 400 meters of a wild and scenic river?	<u>no</u>
Within 400 meters of a designated AL NWM wetlands area?	<u>no</u>
Within 400 meters of a designated FL NWM wetlands area?	<u>yes</u>
Within 400 meters of a designated GA NWM wetlands area?	<u>no</u>

Name	Distance	Units
Casino Princesa Mooring.	0	meters
City of Miami, Miamarina at Bayside Outer Wall Mooring.	50.44	meters
Marine Spill Response Corp., Bays 201 to 204.	250.65	meters
DuPont Plaza Hotel Wharf.	257.86	meters
City of Miami, Miamarina at Bayside Basin.	260.08	meters



Name	Distance	Units
Biscayne NP	11.07	kilometers
Thompson Park	28.46	kilometers
Everglades NP	31.21	kilometers
South Beach Park	37.76	kilometers
Holiday Park	39.43	kilometers
Hugh Taylor Birch State Park	40.70	kilometers
John Pennekamp Coral Reef Stat	47.87	kilometers

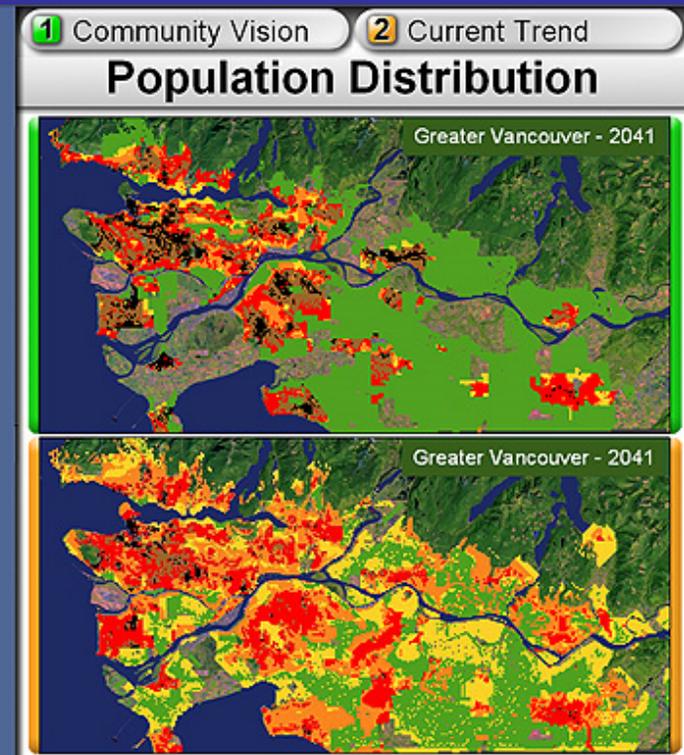
# Analysis and Decision Support Tools

Software or web-based systems designed to improve effectiveness of decision-making

## Examples:

- Leverage existing software tools, i.e. GIS
- CommunityViz
- NatureServe Vista
- CorPlan
- MetroQuest
- PLACE<sup>3</sup>S
- Paint the Town

Population Location  
Job Location  
Development Density  
Transit Plan  
Transportation Options  
Energy & Air Quality  
Reduce & Recycle  
Water Conservation  
Population Growth  
Economic Growth



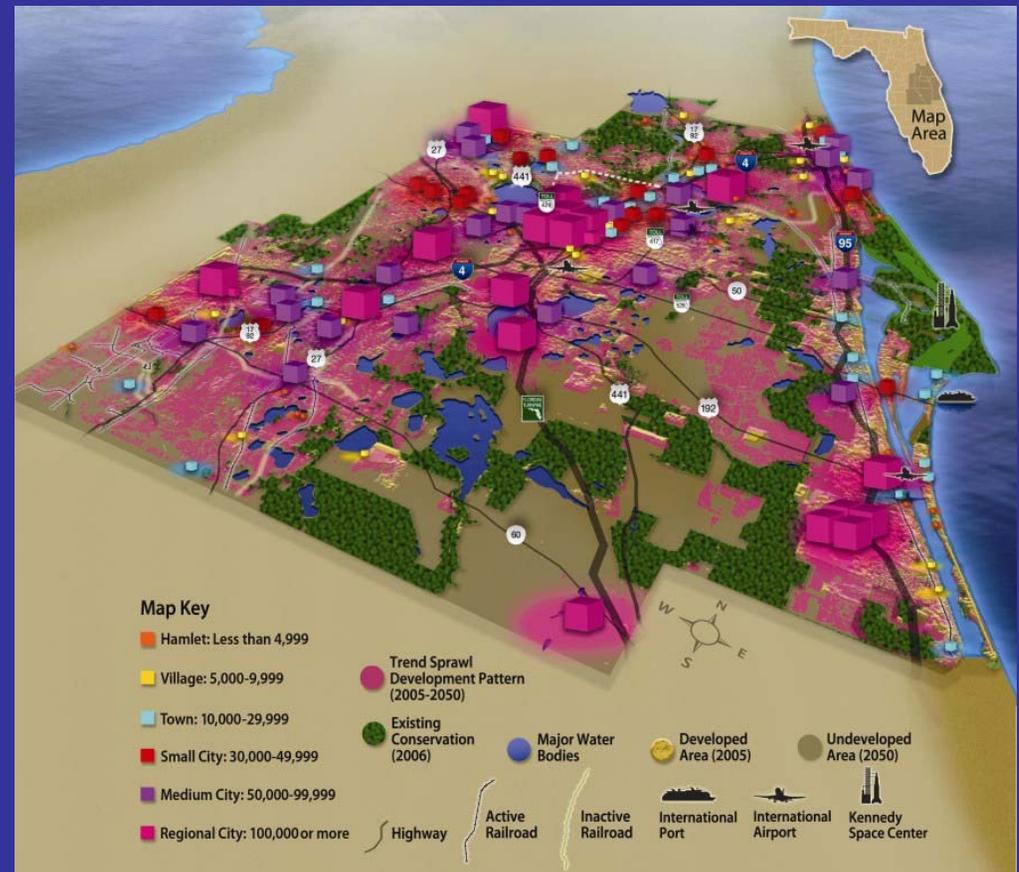
\*\* FHWA does not specifically endorse any of the tools listed

Scenario visualization

*Metroquest*

# Joint Scenario Planning

- Framework for developing a shared vision for the future
- Tool to analyze various forces that affect growth: transportation, land use, the economy



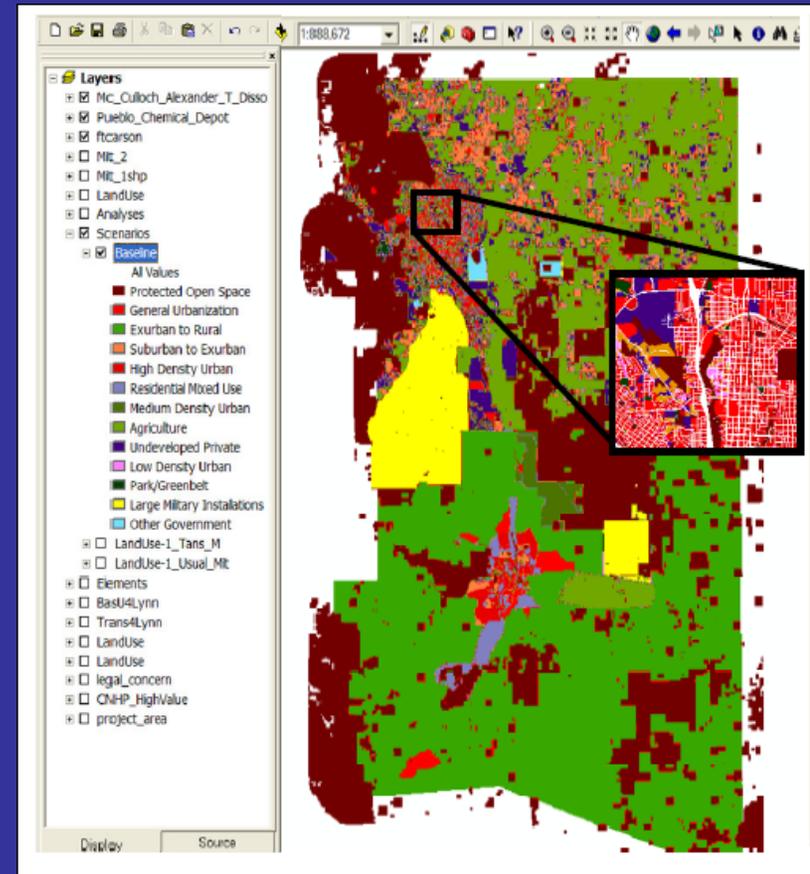
Regional Vision Illustrative Map  
[MyRegion.org](http://MyRegion.org)

# Analysis Support Tools – An Example

## Pikes Peak and Pueblo Councils of Government

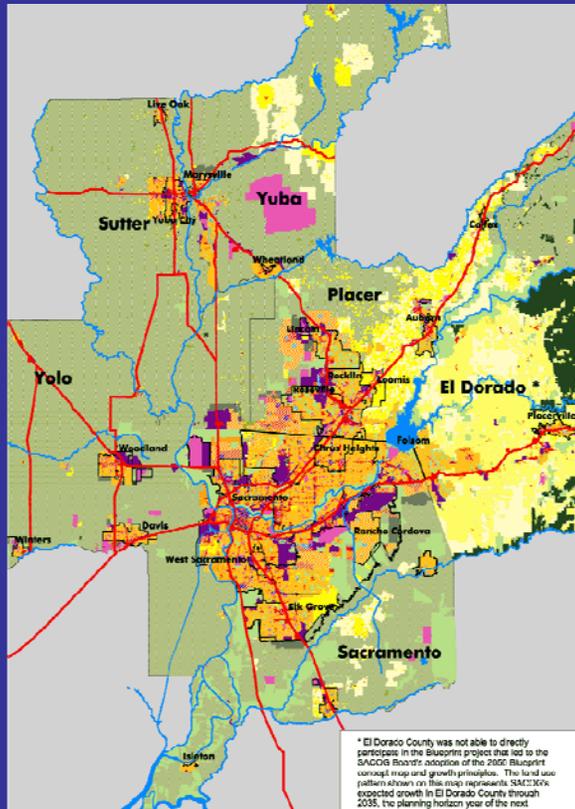
### Outcomes:

Analysis incorporated as appendix to Long Range Transportation Plan

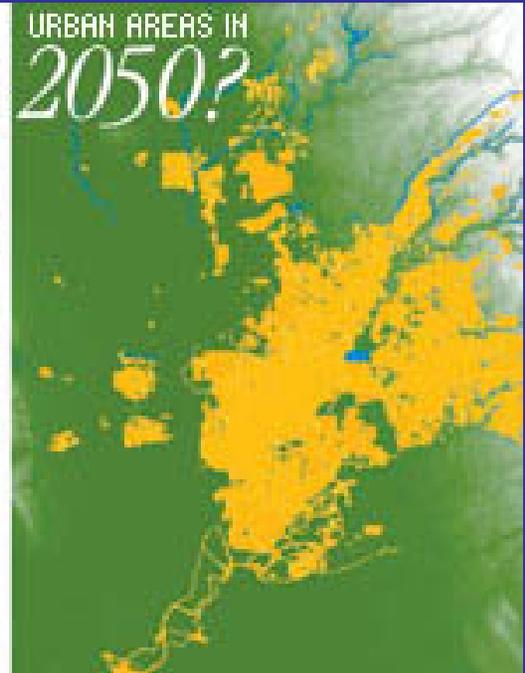
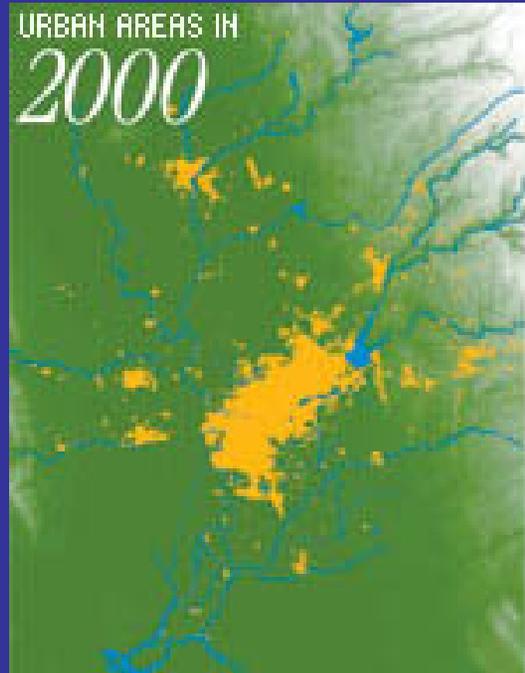


# Joint Scenario Planning – An Example

## Sacramento Blueprint



\* El Dorado County was not able to directly participate in the Blueprint project that led to the SACOG Board's adoption of the 2000 Blueprint concept map and growth principles. The land use patterns shown on this map represents SACOG's expected growth in El Dorado County through 2035, the planning horizon year of the next Metropolitan Transportation Plan. For the other 6 counties in the SACOG region this map represents Blueprint growth through 2060.

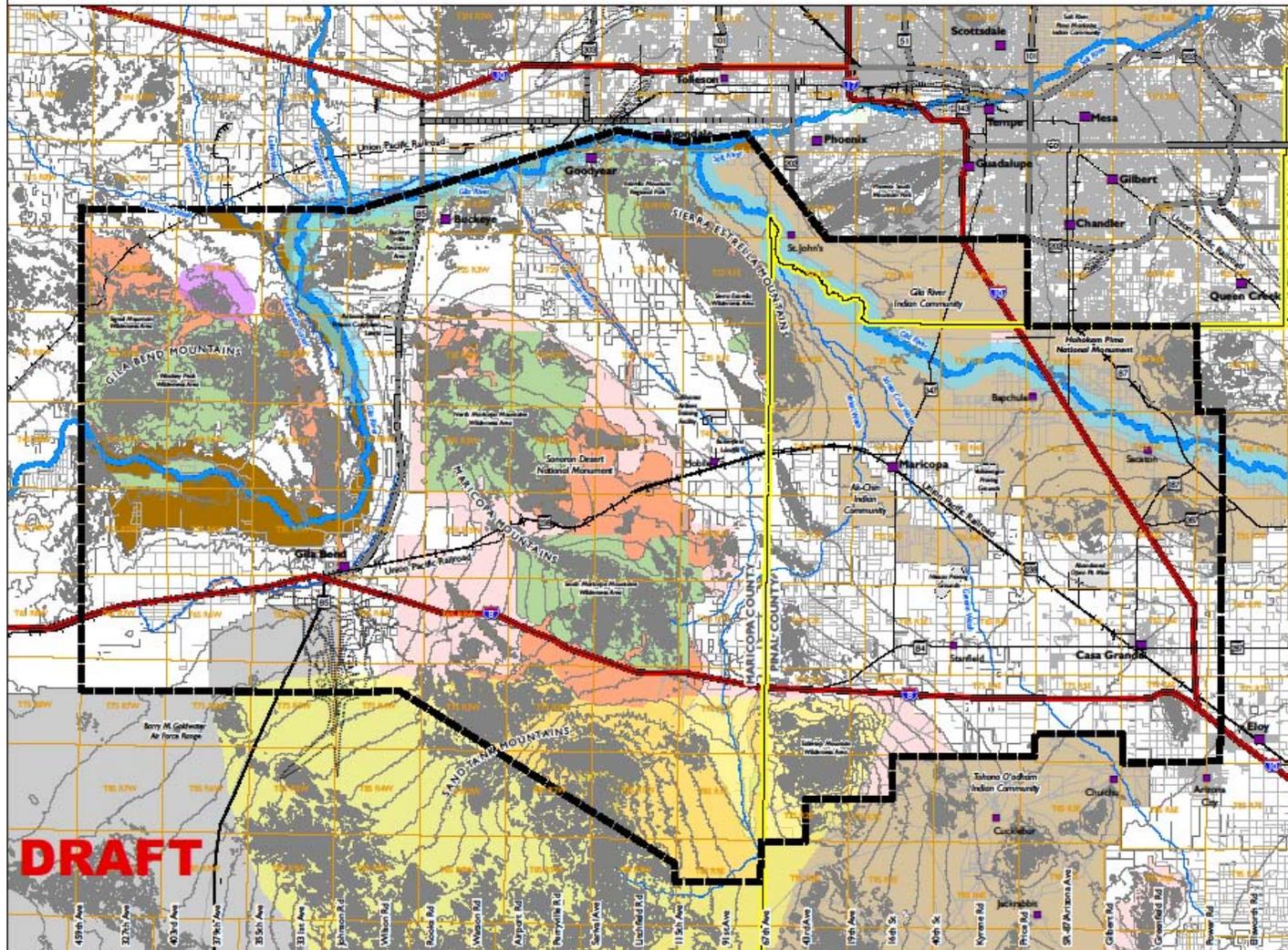




The Arizona Department of Transportation (ADOT) wants to understand **What Moves You Arizona** as we embark on the development of the Long Range Transportation Plan. Following are some questions that will assist us in understanding your lifestyle and the choices you make on a daily basis.



# I-8/I-10 Hidden Valley Roadway Framework Study



## Conservation Areas

### Legend

- Cities/Towns
  - Unincorporated Communities
  - Railroads
  - Roads
  - Highways
  - Metro Phoenix Freeway System
  - Proposed Freeways
  - Interstates
  - Rivers/Washes
  - Canals
  - Township/Range
  - County Boundary
  - Wilderness Area
  - National Monument
  - Indian Communities
  - Military
  - Noise Contours
  - Study Area Boundary
- TNC Conservation Areas**
- Buckeye Copper Mine
  - Sand Tank Mountains
  - Upper Gila River
- MAG Desert Spaces Plan**
- Conservation Areas
  - Retention Areas
  - Secured Open Spaces

**DRAFT**

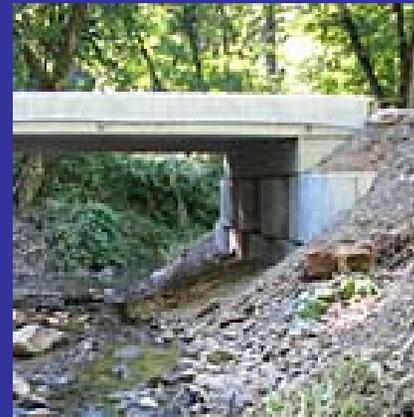


Sources: MAG GIS 2007, ALRIS 2006, The Nature Conservancy 2007, MAG Desert Spaces Plan 1995

# StreamBank – A Web Tool that Works



# StreamBank Pilot Projects



# esafhwa.org

Browser toolbar: ? A↑ Enlarge A↓ Shrink A↺ Reset No CSS

National ESA FHWA Site >

U.S. Department of Transportation  
Federal Highway Administration

**ESA Section 7 Consultation**



Today is Tuesday, August 18, 2009

## FHWA's Nationwide Web BA Tool

Welcome to the ESA-FHWA Website!

The ESA-FHWA Website is an online tool to streamline the process for preparing and submitting complete Biological Assessments (BAs) under Section 7 of the Federal Endangered Species Act for projects where the Federal Highway Administration (FHWA) is lead federal action agency.

The ESA-FHWA Website is a tool for you. It contains many resources designed to "demystify" the BA development and review process, including library, glossary and FAQ resources, a downloadable National Biological Assessment Template with context sensitive instructions, region-specific contacts and resources, and online file cabinets for BA documentation and collaboration.

To start, click on your state below and you will be redirected to the home page for the ESA-FHWA Area (Northern, Southern, or Western) where your state is located. From there you can begin by downloading the National BA template, reviewing the resources available to you, and setting up online file cabinets.

As a tool, we want to know how well the ESA-FHWA Website is working for you and how it can be improved. You can use the "Contact Us" feature located below in the footer to this page to share your thoughts or take our survey. By knowing what you think; together we can make this the best tool that it can be.



# Information Sources

National ESA FHWA Site >

U.S. Department of Transportation  
Federal Highway Administration

## ESA Section 7 Consultation



Today is Tuesday, August 18, 2009

**Northern Area**   **National BA Template**   **Online File Cabinets**

About  
Library  
Glossary  
Search  
FAQs  
Contact Us  
Site Map

### Introduction

The following are offered as links to additional information to help you in your efforts to better understand and develop BAs under the federal Endangered Species Act. These links are intended to take you to practical references and tools that can help to "demystify" the BA process. If you have other links or other materials that you think would be good to include in this library please let us know. You can let us know of additional helpful sites or materials by using this site's **Feedback Form** located below under the "Contact Us" footer at the bottom of this page. Thank you.

### Library Contents

Look through this resource library to find information to help you through the BA writing processes. Information falls under the following sections:

1. [Key Assistance Resources](#)
2. [Role of FHWA in the Consultation Process](#)
3. [Example Biological Opinions \(BO\)](#)
4. [Laws and Regulations](#)

## 1. Key Assistance Resources

The following key resources are particularly helpful for preparing accurate and effective BA documents.

-  [USFWS Environmental Conservation Online System \(ECOS\)](#)
-  [USFWS BMP Search Database](#)
-  [NOAA Fisheries Critical Habitat Maps](#)
-  [NOAA Fisheries Essential Fish Habitat Mapper](#)
-  [FHWA National BA Template](#)
-  [FHWA National BA Template Instructions](#)
-  [BA and No Effect Checklist](#)
-  [USEPA NEPAassist](#)
-  [NatureServe Explorer](#)
-  [StreamNet](#)

## 2. Role of FHWA in the Consultation Process

- [FHWA Memo Regarding Joint Agency Agreement On ESA's Formal Consultation Process](#)
- [Chart of FHWA Roles and Responsibilities](#)
- [Formal Consultation Process](#)
- [Example Letter by the Action Agency for Request of Formal Consultation with the Services](#)

# Project-Specific Archiving

BA Status Report											
Filter by Area: North ▾											
Title	Date Submitted	Type*	State	Area**	1	2	3	4	5	6	7
8006.82 Route 17 Upgrade to I-86: Exits 122A to 126	10/24/2008	i	NY	N	✓	✓	✓	✓			
8006.84 Rte 17 to I-86 Conversion Exit 131, Town of Monroe, Orange County	1/22/2009	i	NY	N	✓	✓	✓	278			
8177.41 Route 209 over Neversink River	9/21/2009	i	NY	N	✓	✓	36	36			
8463.15 Slope Failure, Ulster County, Rosendale, NY	7/1/2009	i	NY	N	✓	✓	✓	118			
Fort Drum Connector	11/1/2007	f	NY	N	✓	✓	✓	✓			
Fort Drum Connector PIN 7804.26	NA	f	NY	N							
north	NA	f	NY	N							
Ocean State Parkway Bikeway -- Jones Island, NY	10/1/2005	i	NY	N	✓	✓	✓	✓	✓		
PIN 72779 Sarah's Bridge	NA	f	NY	N	✓						
PIN 980541	NA	i	NY	N							
Road_Kill	NA	f	NY	N							
Roadkill	NA	i	NY	N	✓	✓	✓	✓	✓	✓	✓
Robert Moses Causeway -- Fire Island Inlet Bridge Replacement	NA	i	NY	N	299						



# Creating Quality Places

*Successful Communities by Design*



### Search for Tools

Implementation of the Creating Quality Places principles requires collaboration among public, private and civic interests. Local governments can support quality developments through appropriate tools that consider new growth as well as the redevelopment and adaptive reuse of older, established residential and business areas. Search our database of tools to view policies, regulations and incentives that can be used to adapt the Creating Quality Places principles to your community's needs.

• [Case Studies](#)

• [Tools](#)

• [Related Projects](#)

• [Glossary](#)

• [Contacts](#)

### Add to our database

Have a tool you'd like us to consider adding to the database?

## Neighborhoods

Choice

Linkages

Reinvestment

Identity

Pedestrian Friendly

## Commercial

Mixed Use

Scale

Durability

Walkability

Parking

Live/Work



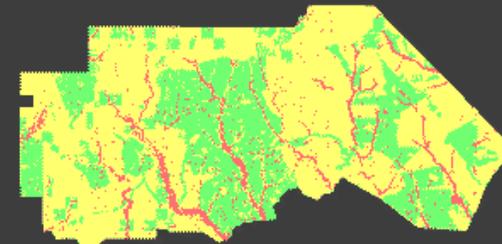
# Integrating Planning and Decisions for **Multiple Benefits**



**Infrastructure,  
Transportation  
Decisions  
& Projects**

**Wildlife, Fish,  
Ecology, Wetlands,  
Floodplains,  
Soil, Water,  
Natural Resources**

**Community Values,  
Socio-Economics,  
Agriculture,  
Land Use**



**Informed Decisions,  
Integrated  
Outcomes/Benefits,  
Quality of Life**

**Contaminants,  
Haz Waste**

**Agency  
Coordination,  
Public  
Participation**

**Air Quality,  
Noise,  
and Other Issues**

**Cultural, Historic,  
& Tribal,  
4(f), Public &  
Private Lands**

