

Partnership for Integrated Planning



U-PLAN

Land Use Forecast Model

What is U-PLAN?

- GIS-based urban growth model
- Overlays multiple geographic data layers to allocate future land use in the most attractive areas with the least amount of impact.
- Land use is allocated according to existing General Plans, however alternative land use scenarios are possible.
- Maps and data are generated to analyze impacts to resources.

What U-PLAN is not

- **Does not replace Local Land Use Planning**
 - Land Use allocations are based on existing Local General Plans
 - Scenarios are for Transportation Planning, not Land Use Planning
- **Does not replace the need for ground surveys**
- **Does not give information for designing a project**

Uses for U-PLAN

- To improve the EIR/more data
- Evaluates criteria for Transportation Projects
- Models Land Use effects on Transportation
- Models Transportation effects on Land Use

How U-PLAN works

■ Input

- Area-wide growth in population/employment categories
- Attraction Layers (GIS)
- Discouragements/Mask Layers
- General Plan (County/City)

■ Output

- Land Use Allocation
- Maps & Data Tables of Impacts

U-PLAN Participating Agencies

- US EPA
- Local Jurisdictions
- Caltrans
- CA Dept. of Fish & Game
- CA Dept. of Conservation
- State Office of Historic Preservation
- US Fish & Wildlife
- US Army Corps of Engineers
- FEMA
- The Nature Conservancy
- Ducks Unlimited
- Endangered Species Recovery Program

U-PLAN Inputs

■ Data

- General Plans
- Environmental
- Agricultural

■ Assumptions

- Scale, source, availability
- Some data not geographic

■ Feedback

Environmental Data

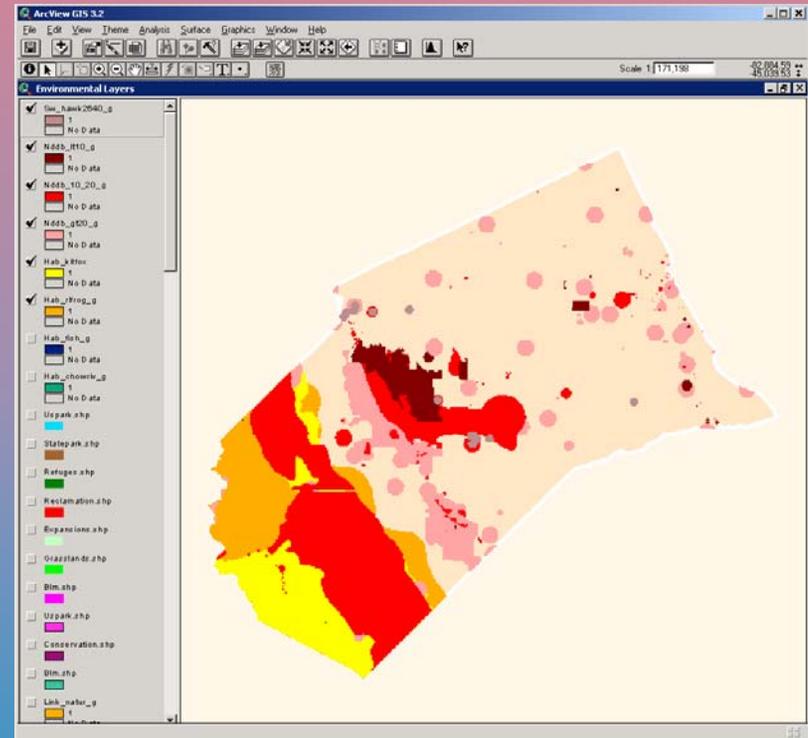
- Rivers & Streams
- Habitat Conservation
- Rare & Endangered Species
- Vernal Pools
- Habitat Linkages
- Government Lands
- Conservation Easements

Other Discouragement Data

- **Statewide Important Farmlands**
- **FEMA Flood Zones**
- **Foothills**
- **Dairies**
- **Landfills**
- **Wastewater Treatment Facilities**
- **Airport Safety Zones**

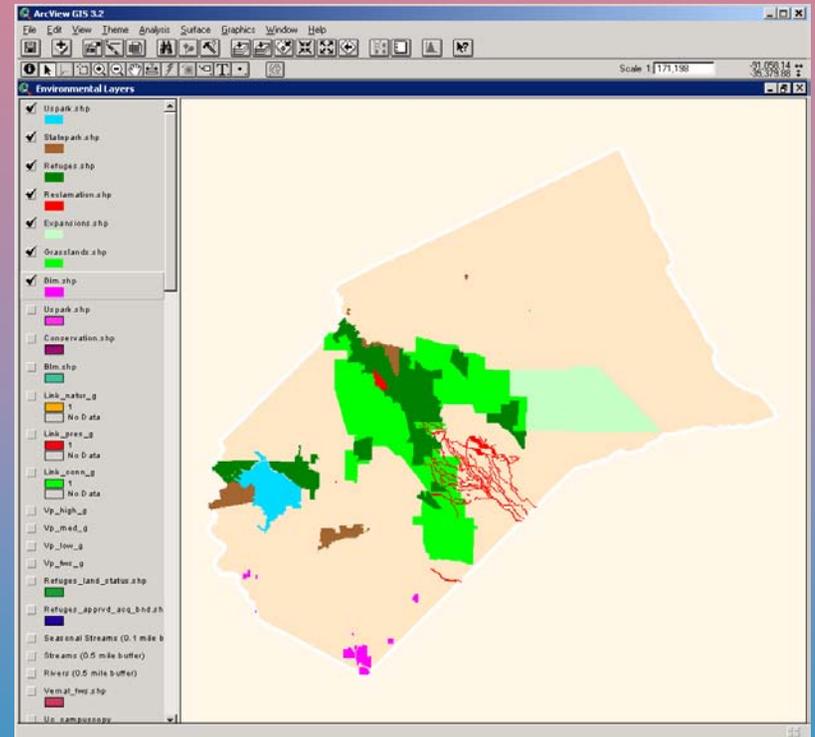
Map of Habitats & Species

- Kit Fox Habitat
- Red Legged Frog Habitat
- Giant Garter Snake Habitat
- Swainson Hawk nests
- Endangered plants
- CNDDDB
 - Less than 10 years
 - 10-20 years
 - Greater than 20 years



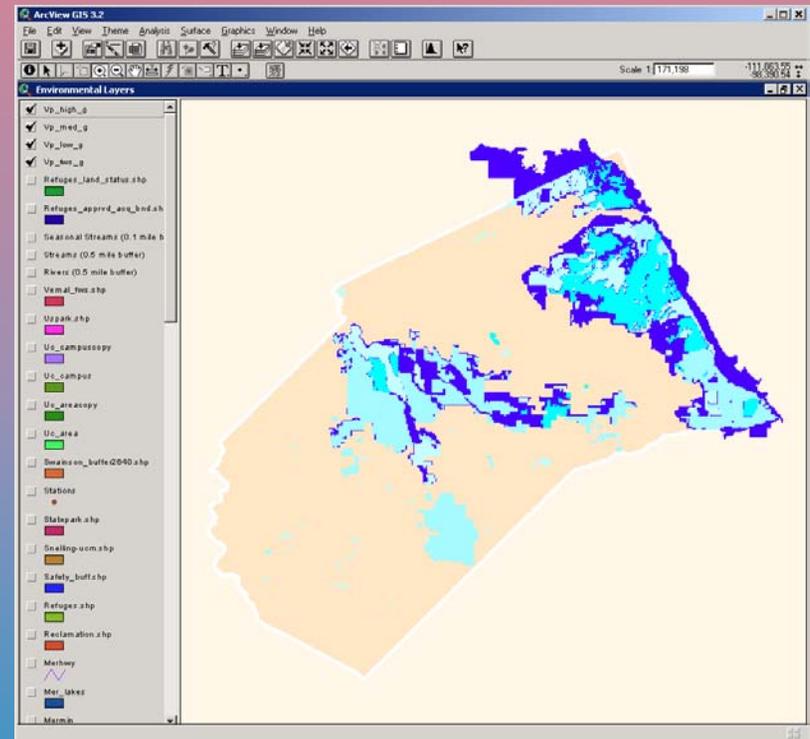
Map of Protected Lands

- Federal & State Parks
- Wildlife Refuges
- Bureau of Reclamation
- Bureau of Land Management
- Existing & Proposed Conservation Lands



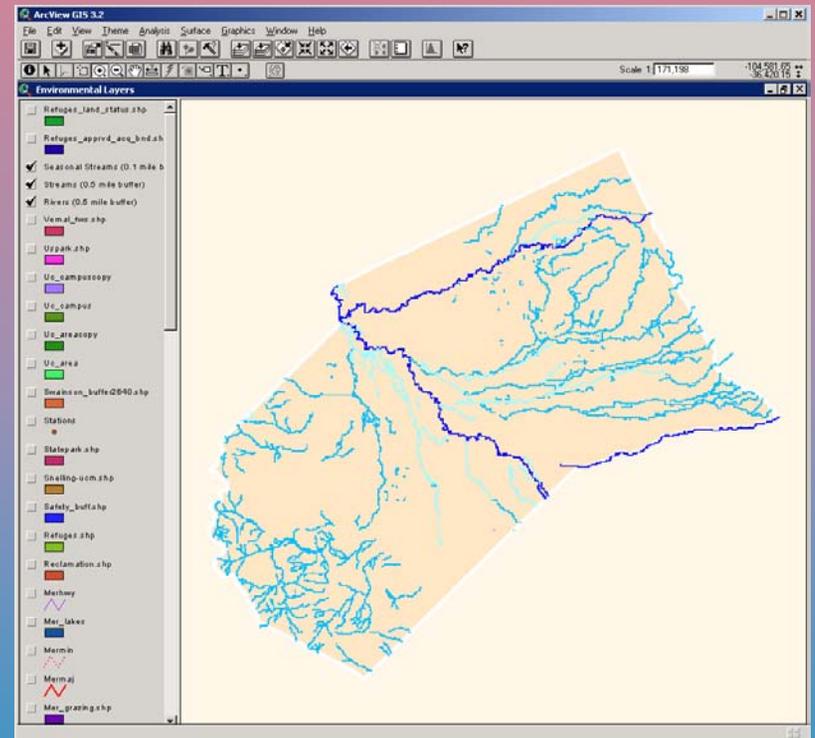
Map of Vernal Pools

- Vernal Pool Complex (USF&WS)
- Vernal Pools – High, Medium & Low Density



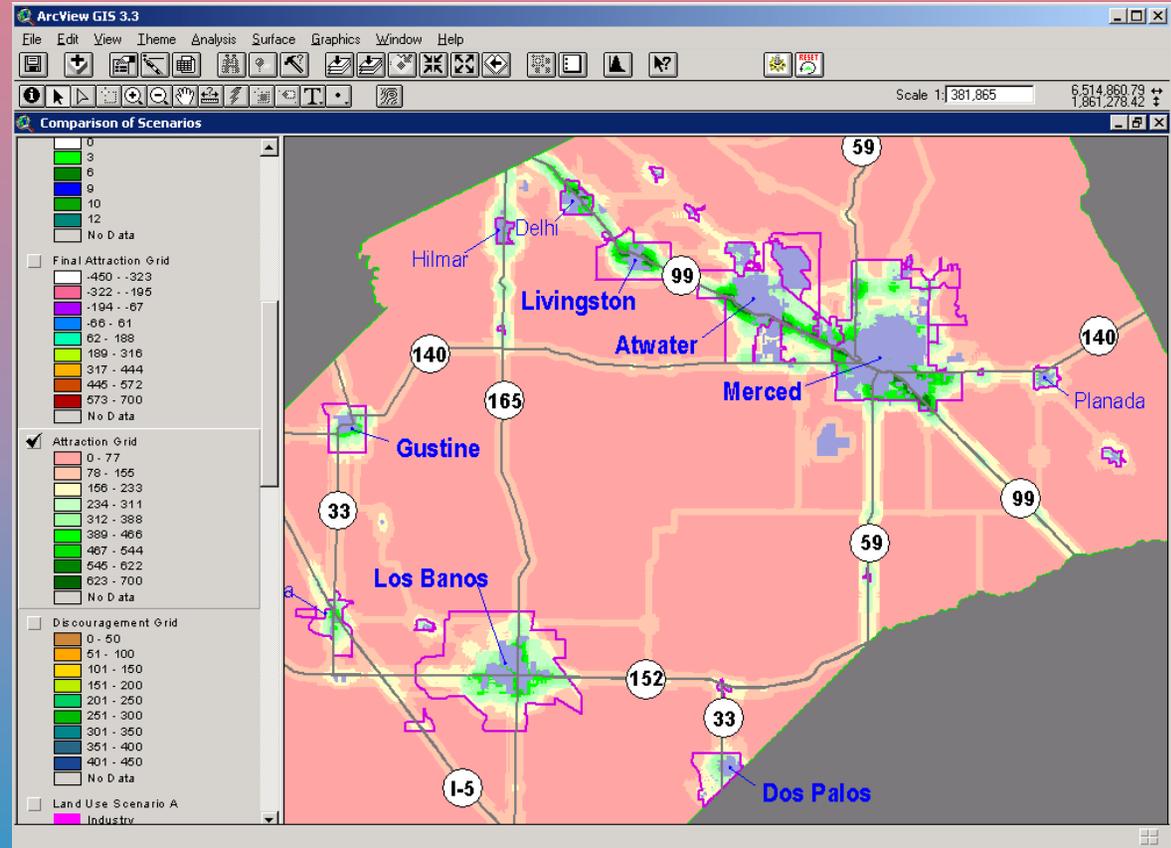
Map of Waterways

- Rivers
- Streams
- Seasonal Streams



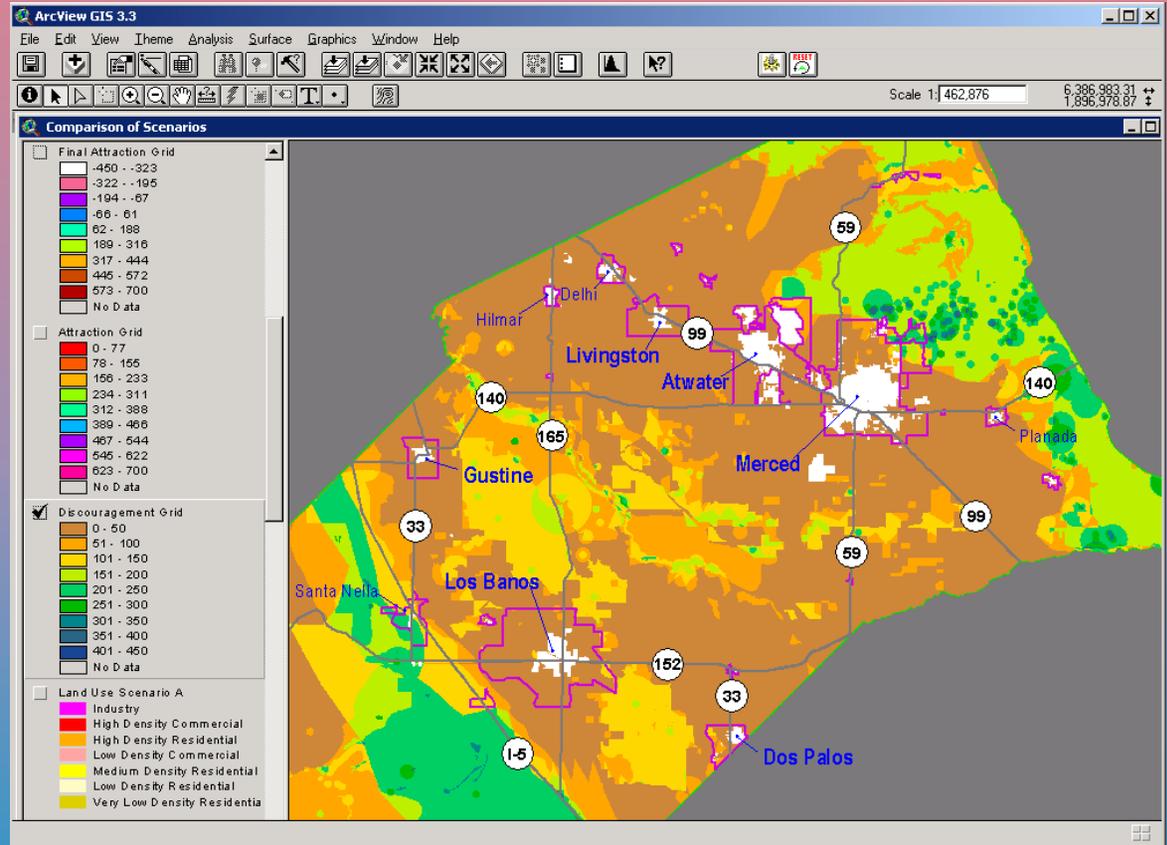
Map of Attractions

- Encourages growth by proximity



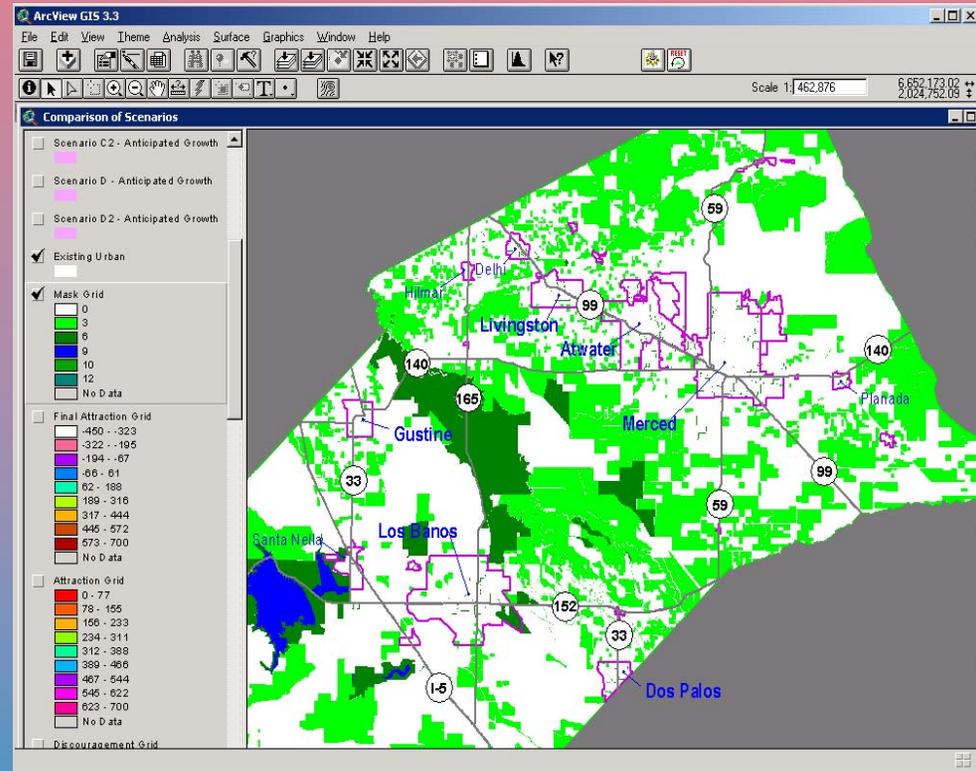
Map of Discouragements

- Limits and discourages growth

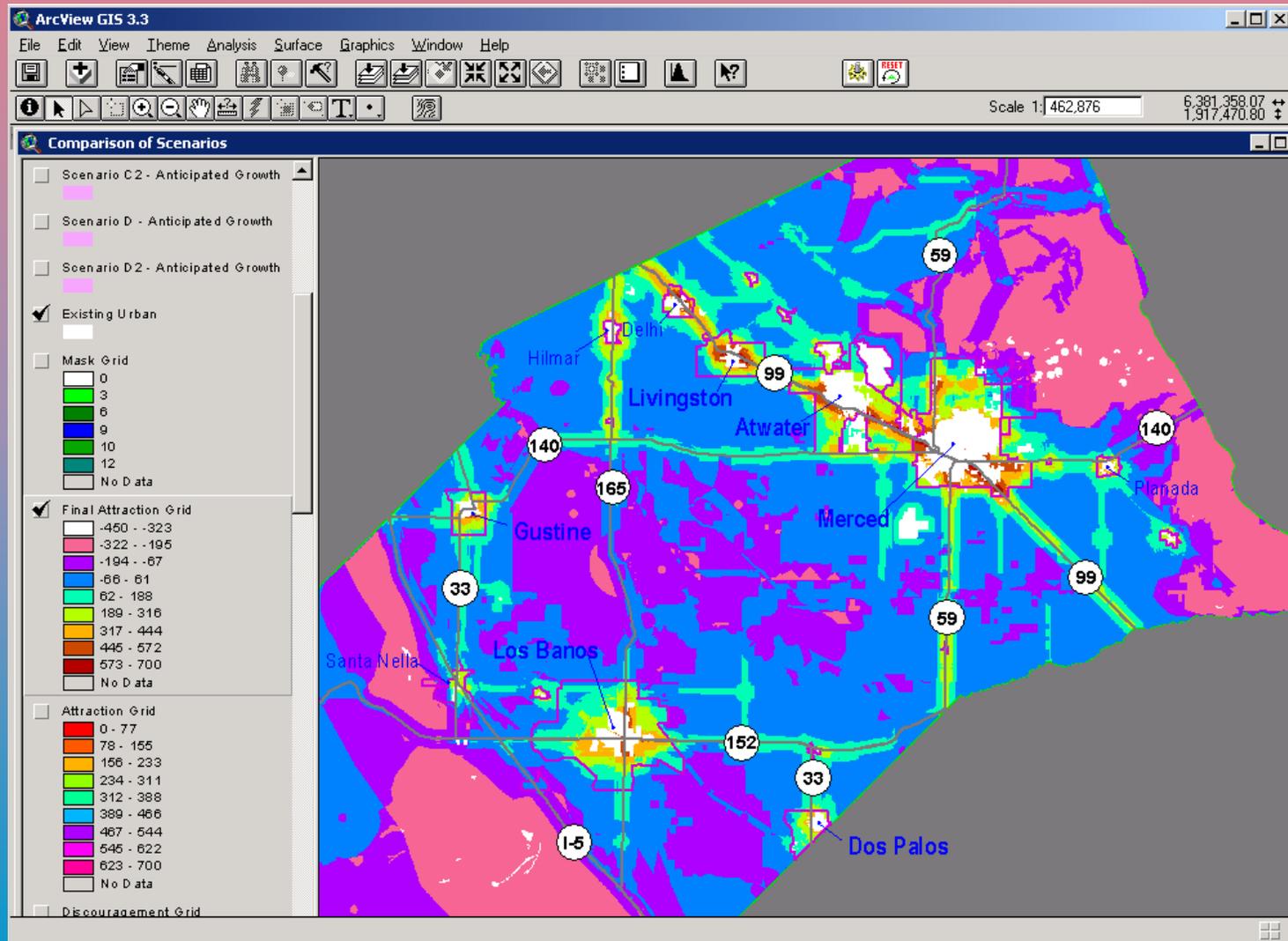


Map of Masks

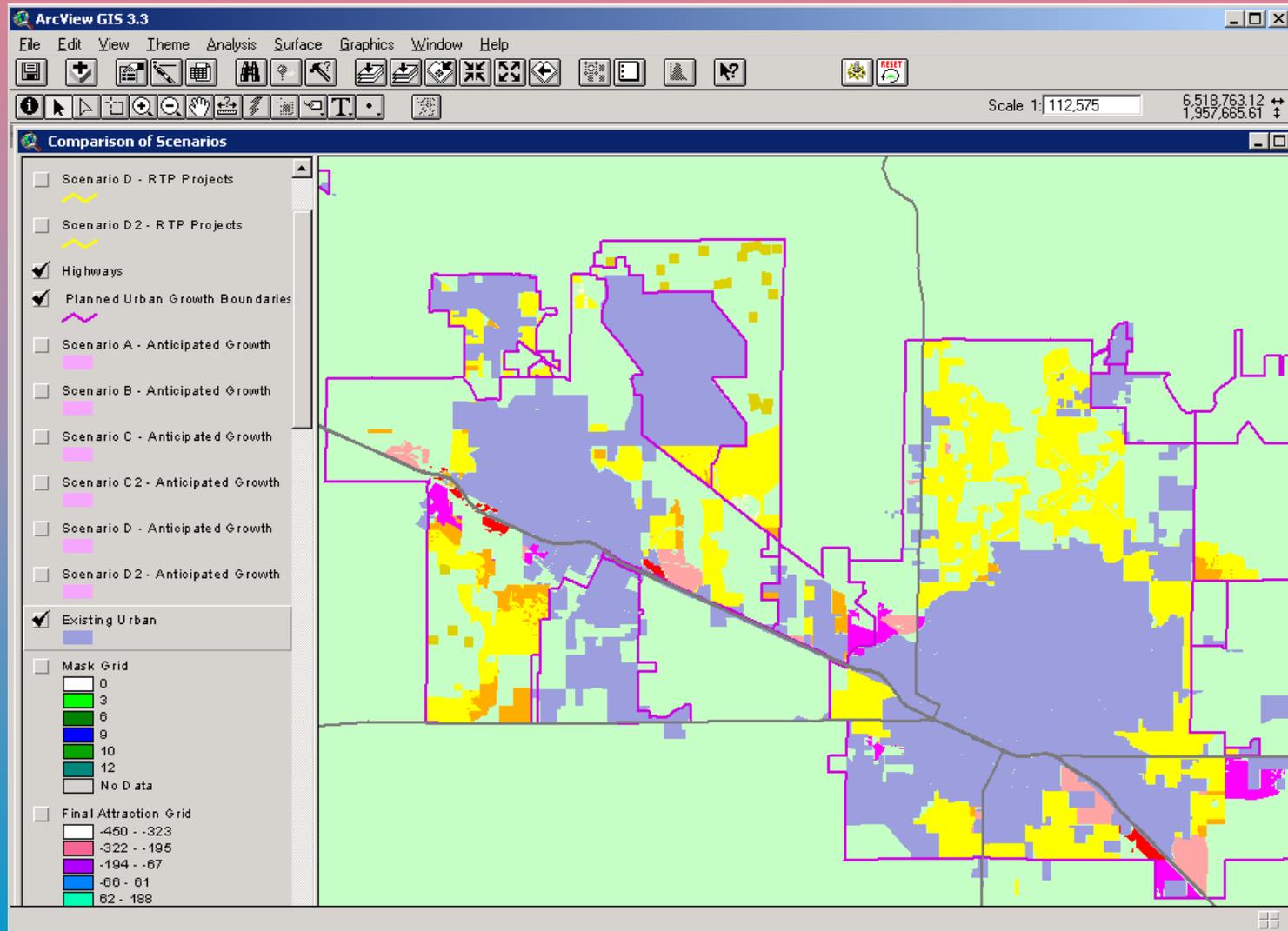
- Land that can not be developed
- Prohibits any projected growth
- Possible Masks
 - Existing Urban
 - Water bodies
 - Wetlands
 - Public Lands



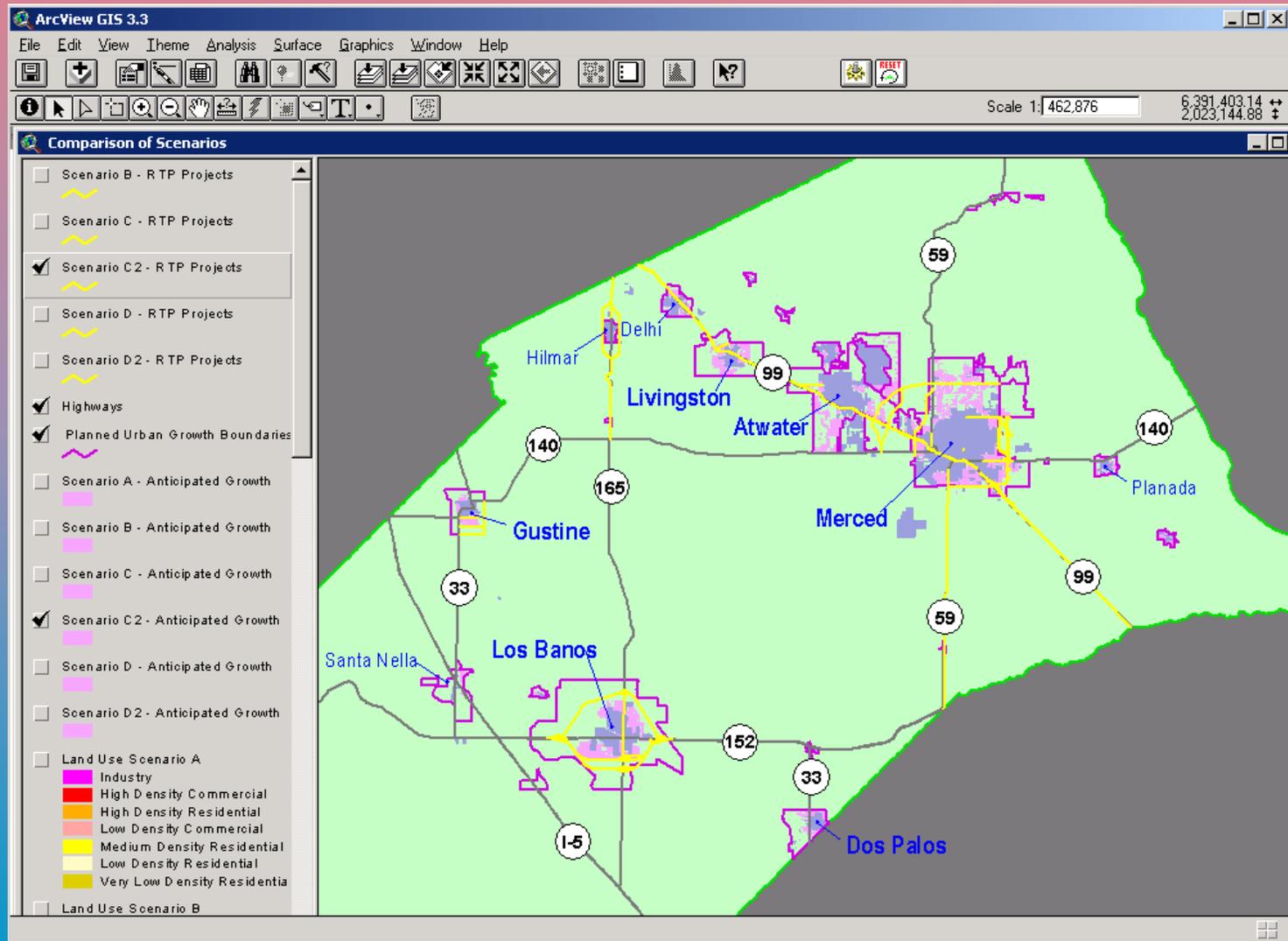
Combined Attractions, Discouragements and Masks



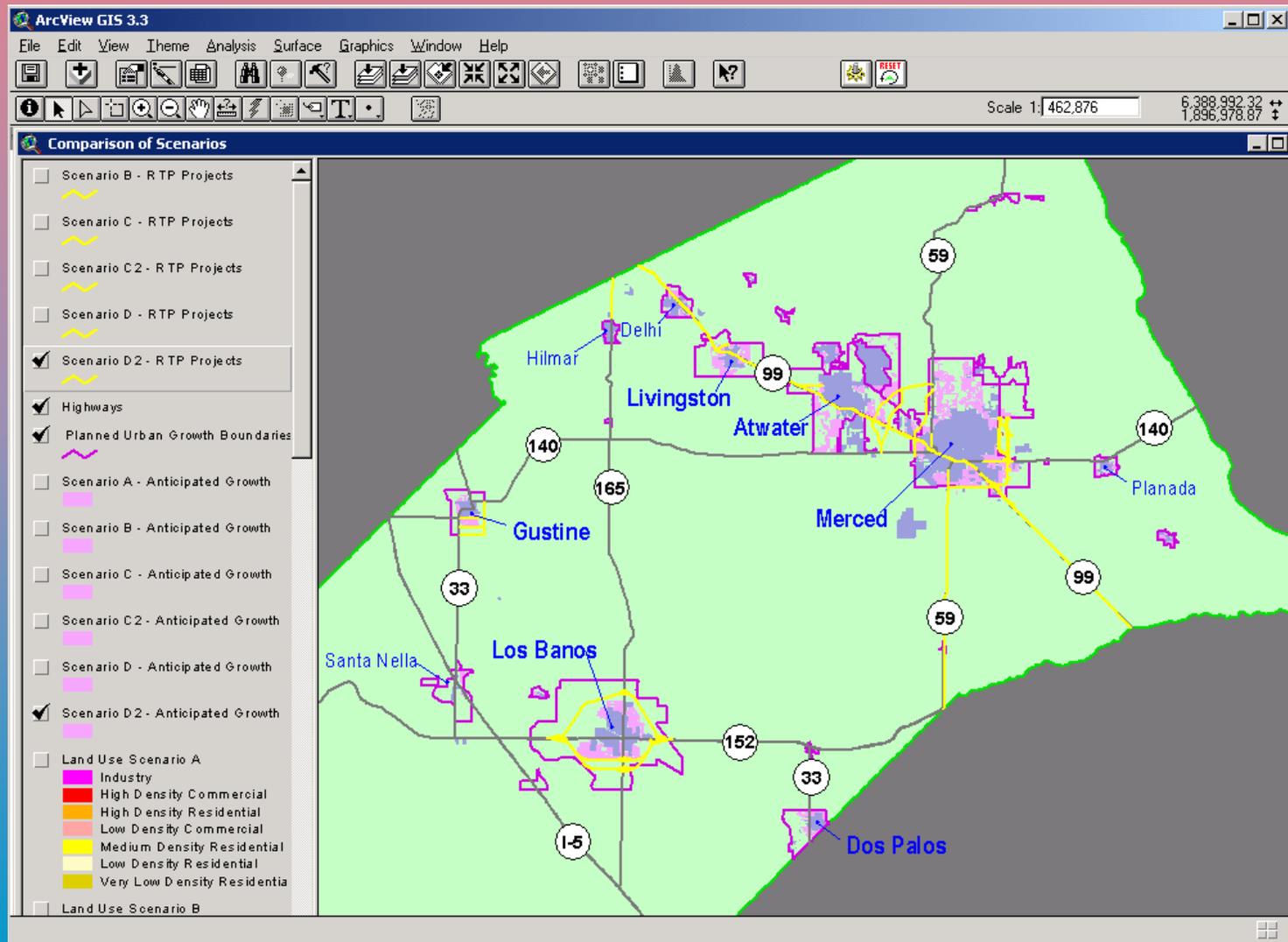
Allocated Land Use Forecast



Land Use Scenario – C2

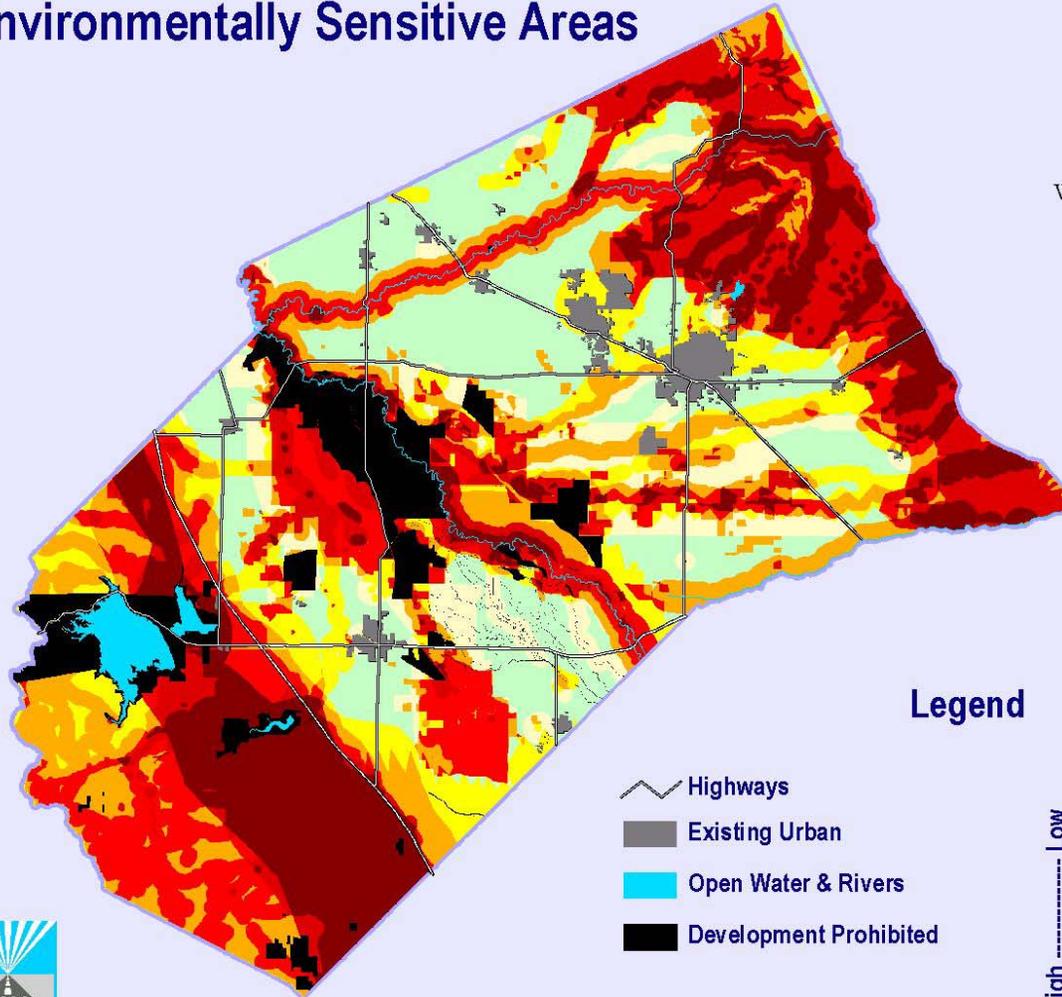


Land Use Scenario – D2



Environmental Hotspots

Environmentally Sensitive Areas



Legend

- Highways
- Existing Urban
- Open Water & Rivers
- Development Prohibited

Sensitivity Score	
Low	0
	1 - 49
	50 - 99
	100 - 149
	150 - 199
High	200 - 249
	250 +



Questions?



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