

Ventura County Habitat Connectivity & Wildlife Movement Corridors Program Board of Supervisors Hearing

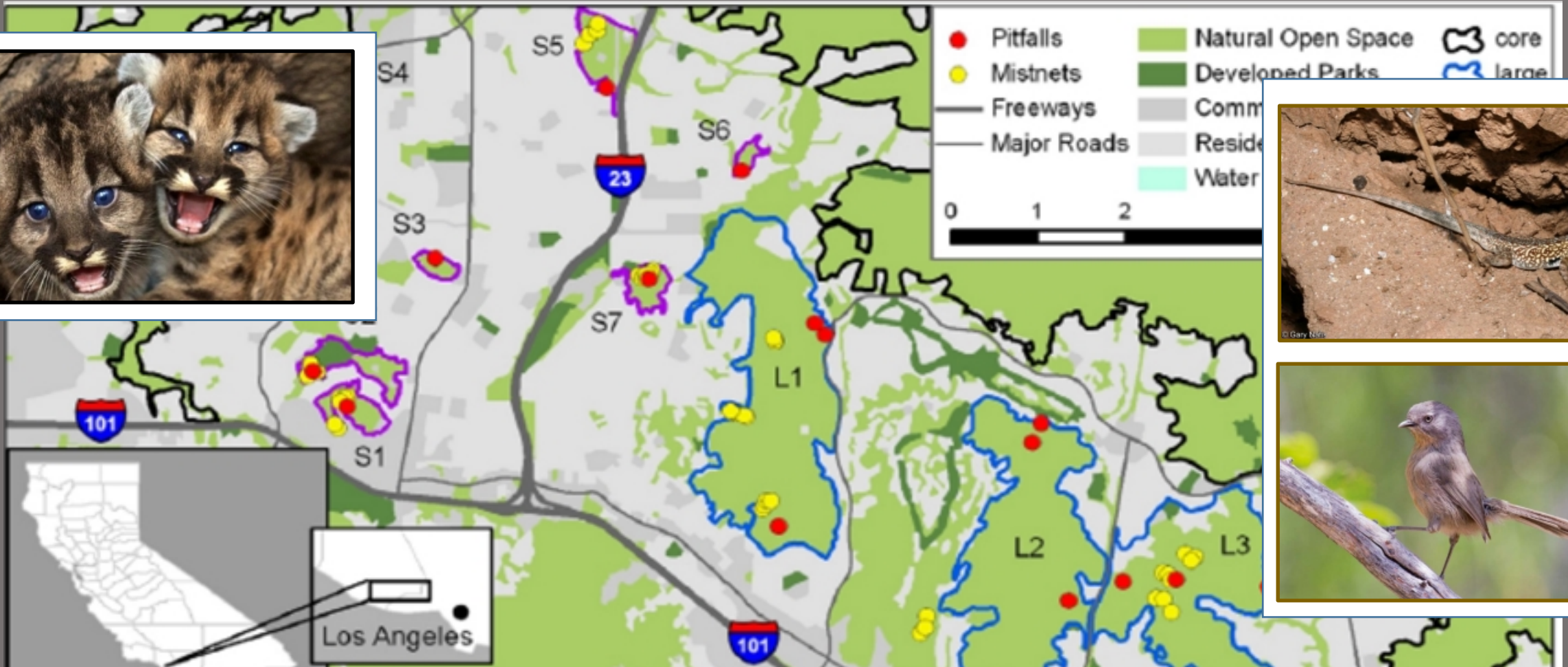


Mark Ogonowski
U.S. Fish and Wildlife Service
12 March 2019

Ventura County holds large areas of intact habitat, but connectivity between these areas needs protection



Connectivity is important for **all** species: Gene flow study



“...all four showed similar and significant reductions in gene flow over relatively short geographic and temporal scales. For all four species, the greatest genetic divergence was found where development was oldest and most intensive. All four animals also showed significant reduction in gene flow associated with intervening roads and freeways, the degree of patch isolation, and the time since isolation. —*Delaney, Riley & Fisher, 2010*

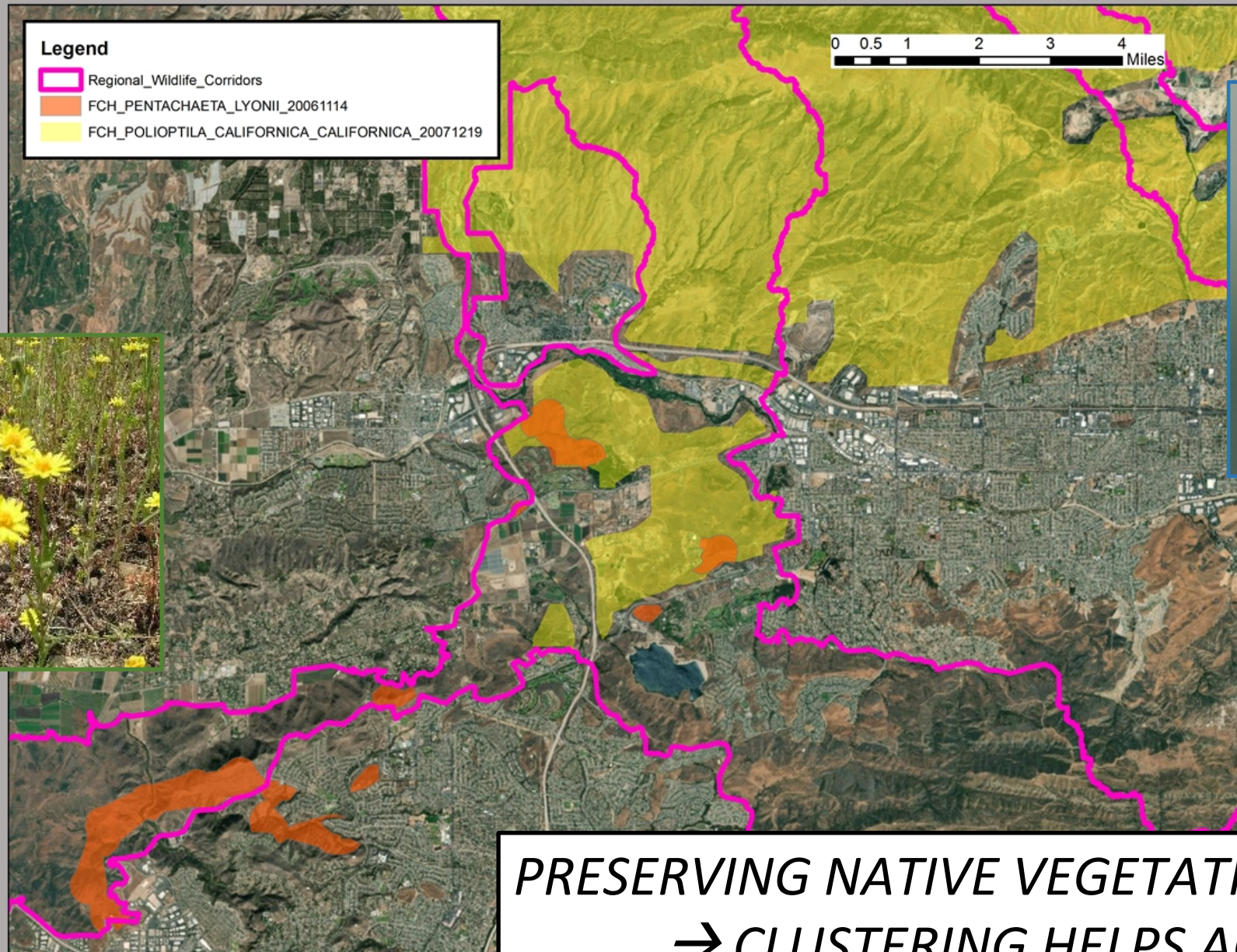
Overlay Zone area supports Federally listed species

- Braunton's milkvetch
- California gnatcatcher*
- California red-legged frog*
- Conejo dudleya
- Least bell's vireo*
- Lyon's pentachaeta*
- Riverside fairy shrimp
- Southwestern willow flycatcher*
- Tidewater goby*



** Designated critical habitat occurs in Overlay Zone*

Tierra Rejada Valley – Retain as CWWA



*PRESERVING NATIVE VEGETATION IS CRITICAL
→ CLUSTERING HELPS ACHIEVE THAT*

Buffers: How wide is wide enough?



ARGENTINE ANTS: Have been found > **1000 feet** into native habitat from the urban edge.

- *Conservation Biology Institute, 2000*

"PHANTOM ROAD" EXPERIMENT:

Birds counted within **160 feet**.

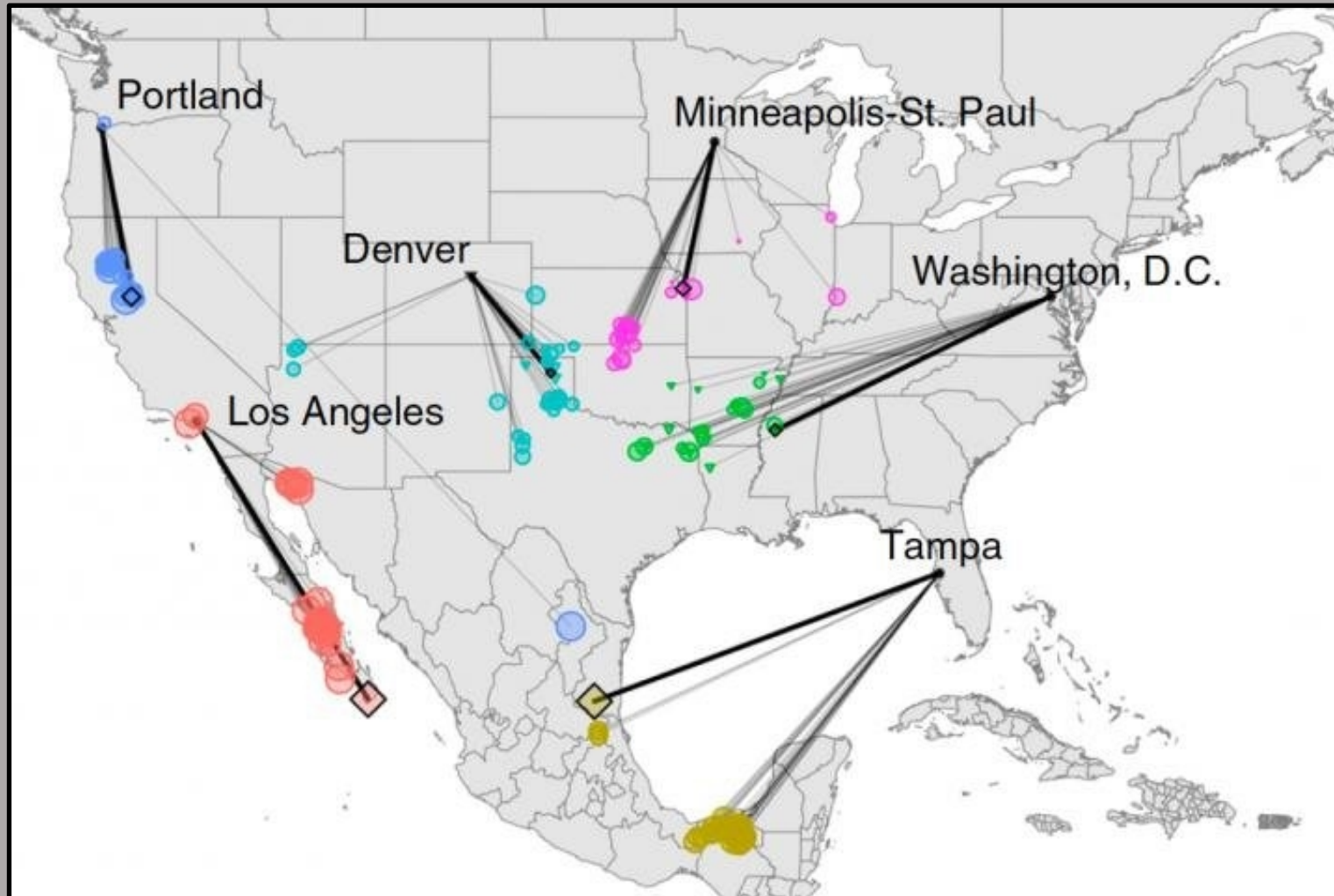
"We document over a one-quarter decline in bird abundance and almost complete avoidance by some species between noise-on and noise-off periods along the phantom road and no such effects at control sites.

-*McClure et al. 2013*



Issue is complex, but BIGGER BUFFERS ARE BETTER

Climate change: Species will need to move...



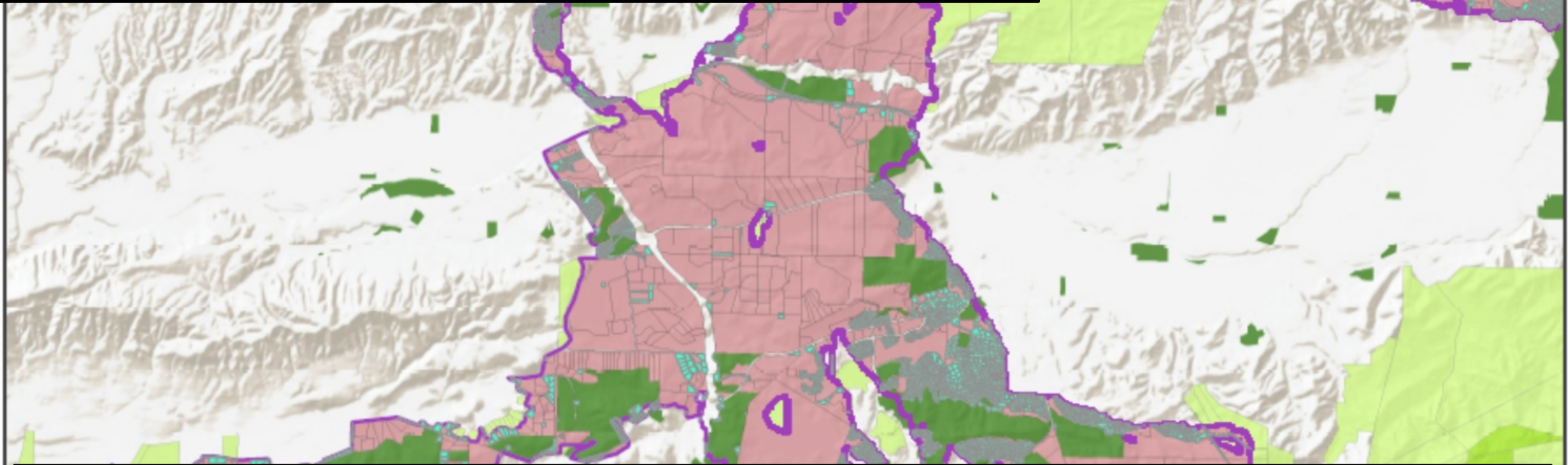
Lines connect to areas with climates expected for each U.S. city in 2080.

Vegetation types and suitable wildlife habitats will also shift.


-University of Maryland Center for Environmental Science, 2019

...and habitat connectivity will be essential to facilitate migration of many species.

Also needed: Habitat preservation



- Identify key areas within Overlay Zone, e.g. “chokepoints”
- Incentivize preservation by landowners – conservation banking, transfer of development rights
- Purchase lands or conservation easements from willing sellers
- Collaborate with regional open space districts, land trusts, NGOs

A cougar is walking through a rocky, wooded area with fallen leaves. The cougar is in the lower left foreground, looking down. The background shows a steep, rocky hillside with sparse vegetation and trees.

“To keep every cog and wheel is the first precaution of intelligent tinkering.”

- *Aldo Leopold*