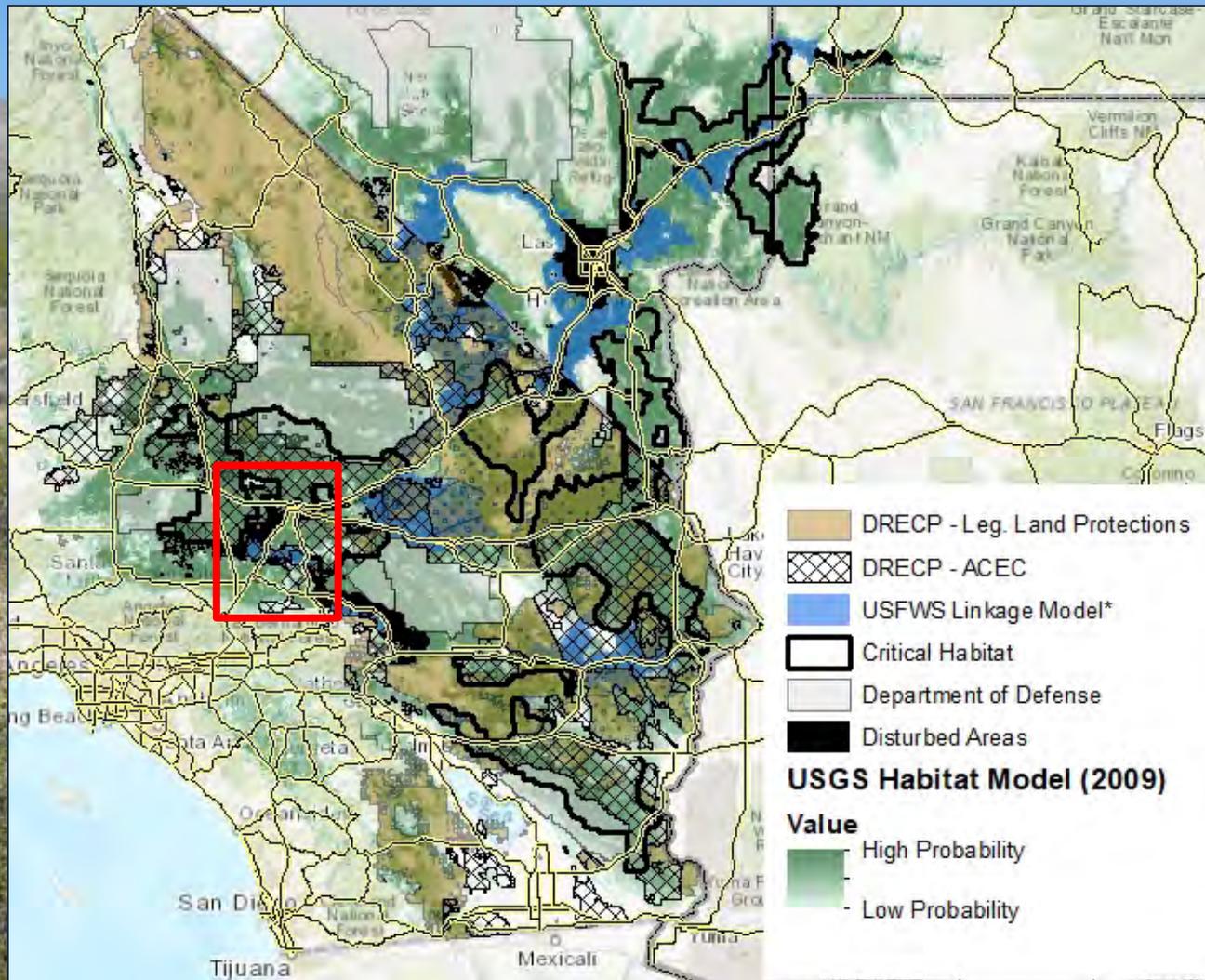
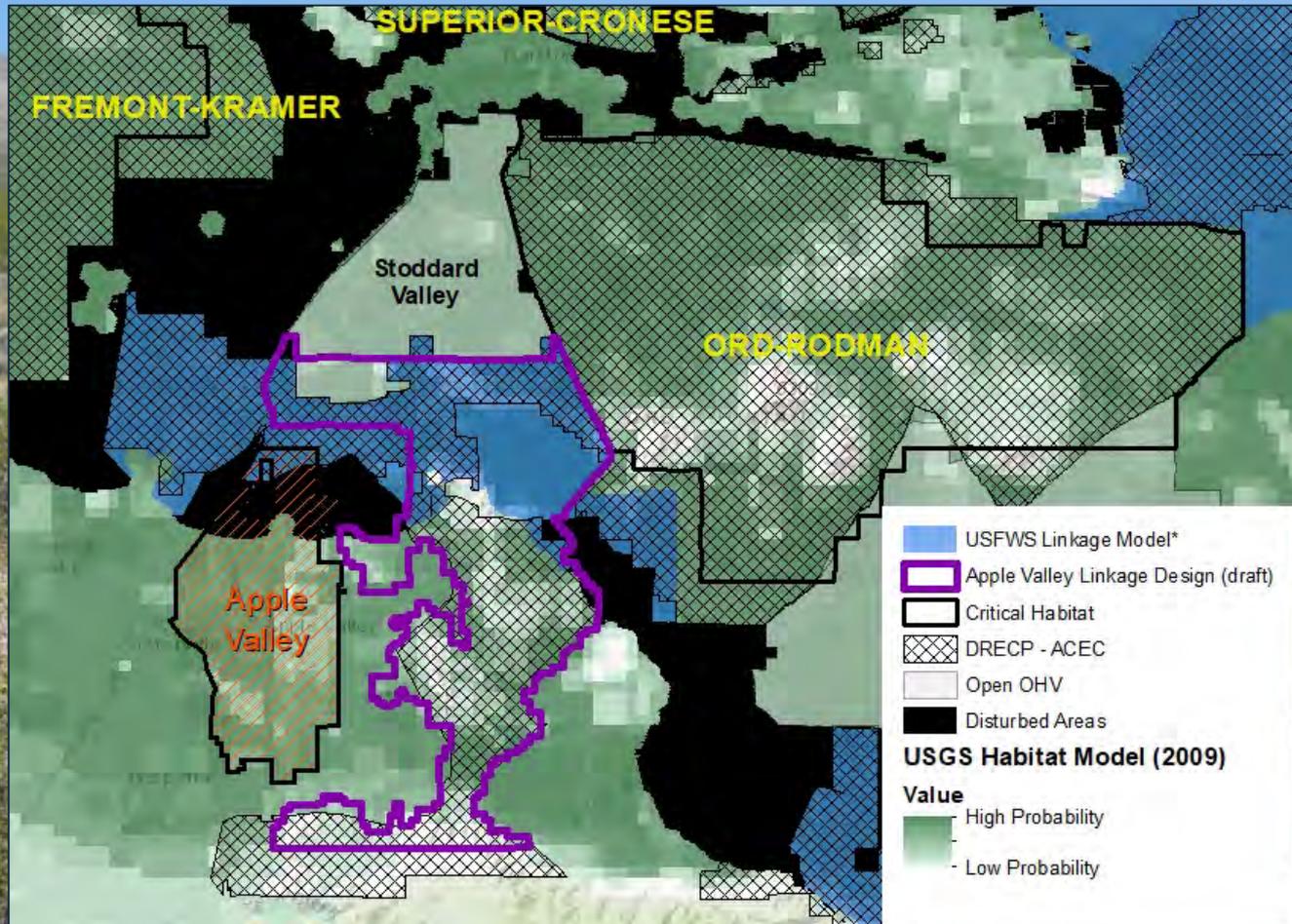


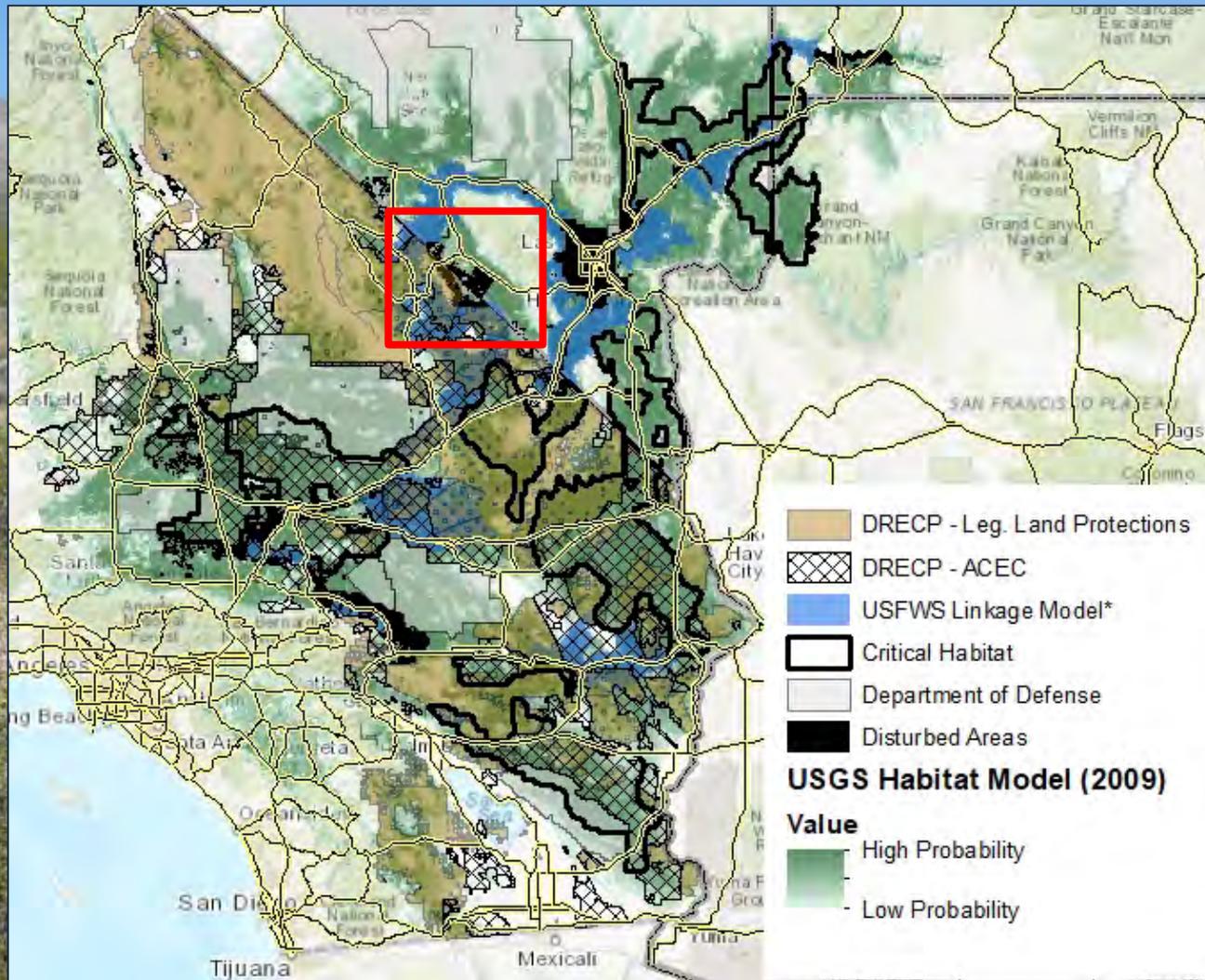
The DRECP conserves almost all FWS model linkages



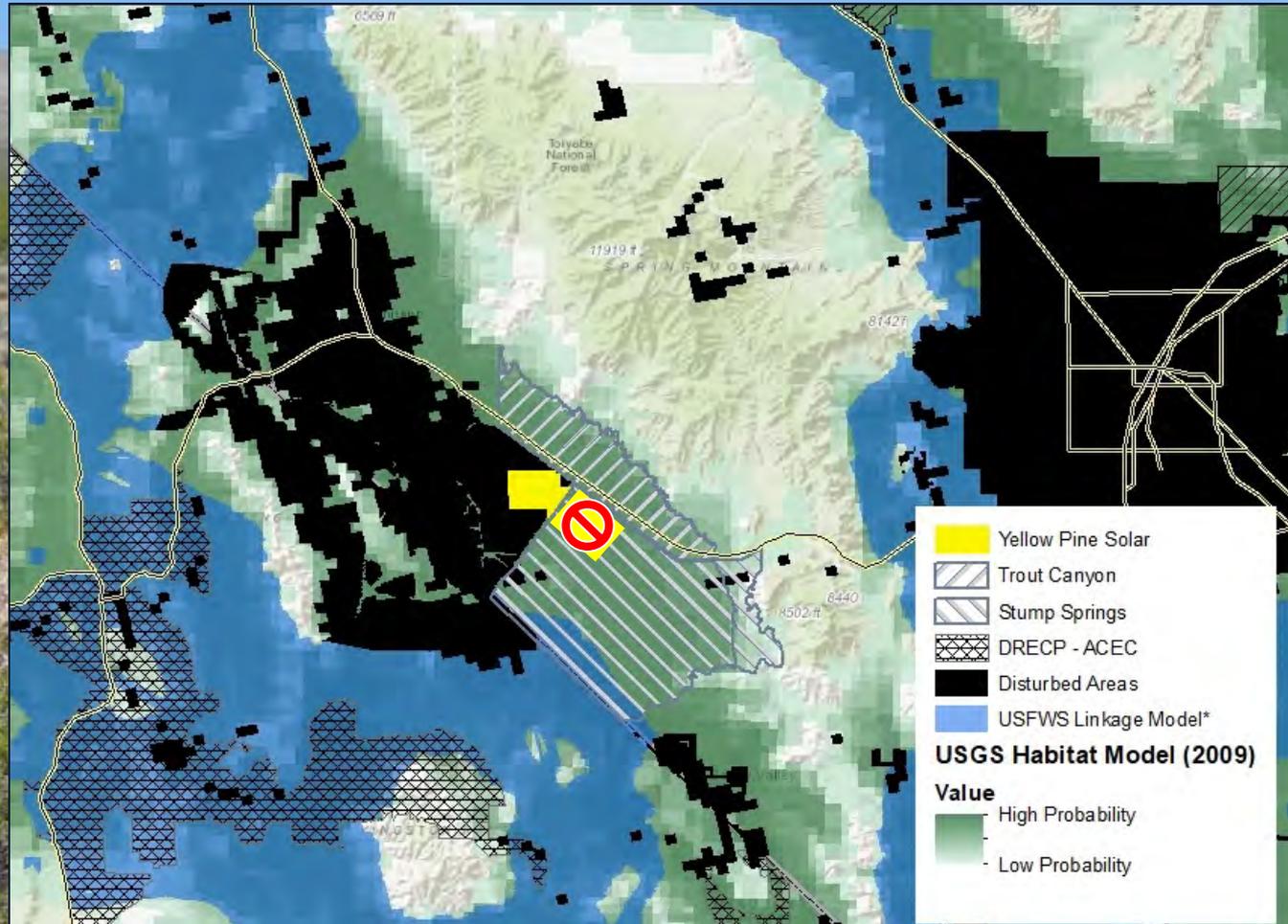
Apple Valley is focusing on landscape-level linkages as part of its draft HCP



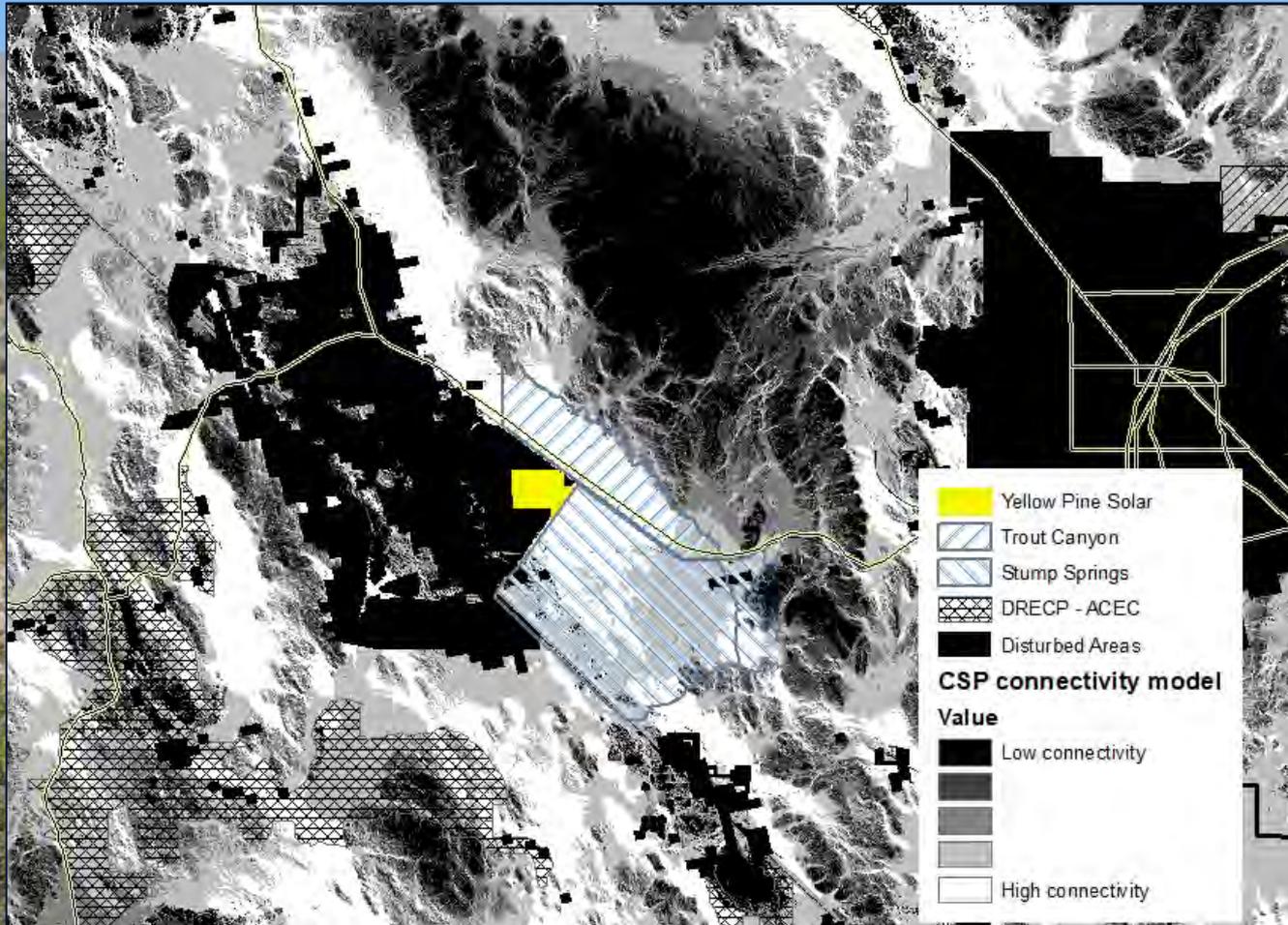
Identifying alternative linkages in lieu of heavily impacted areas



Protecting augmentation sites around disturbed linkage



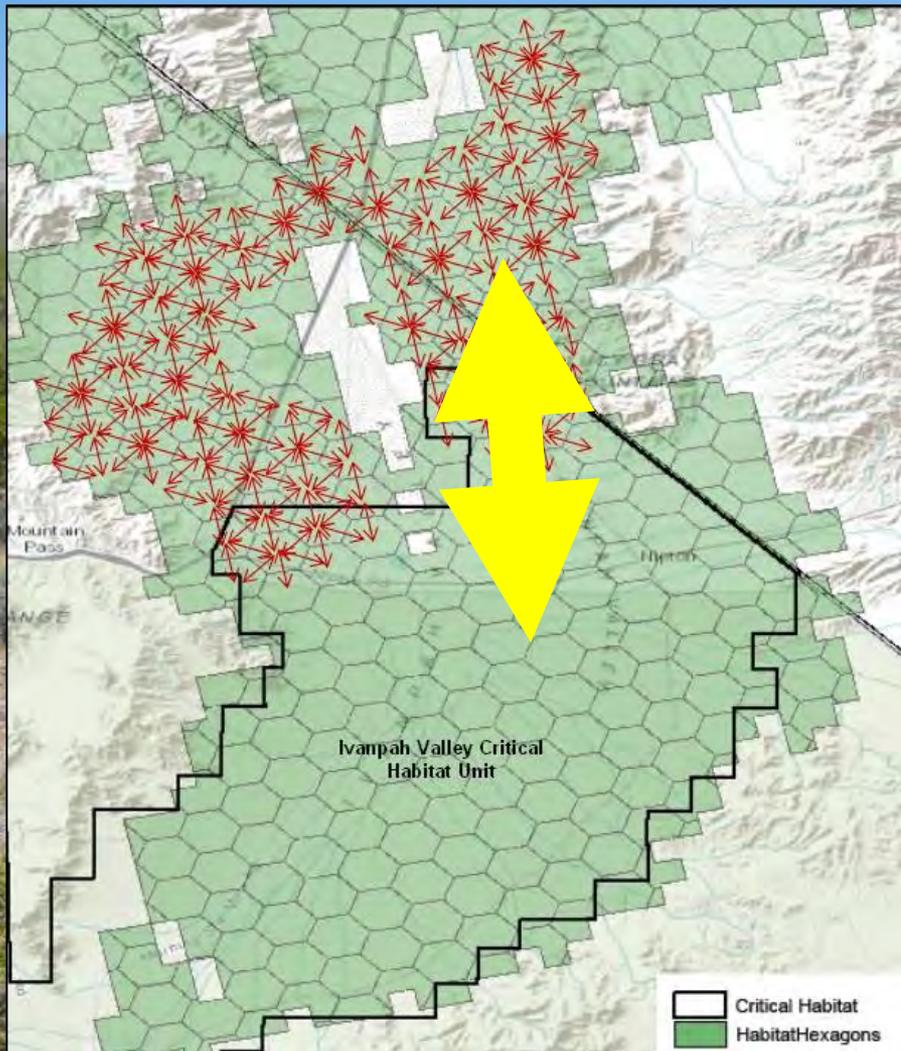
Alternative linkage coincides with high omnidirectional connectivity



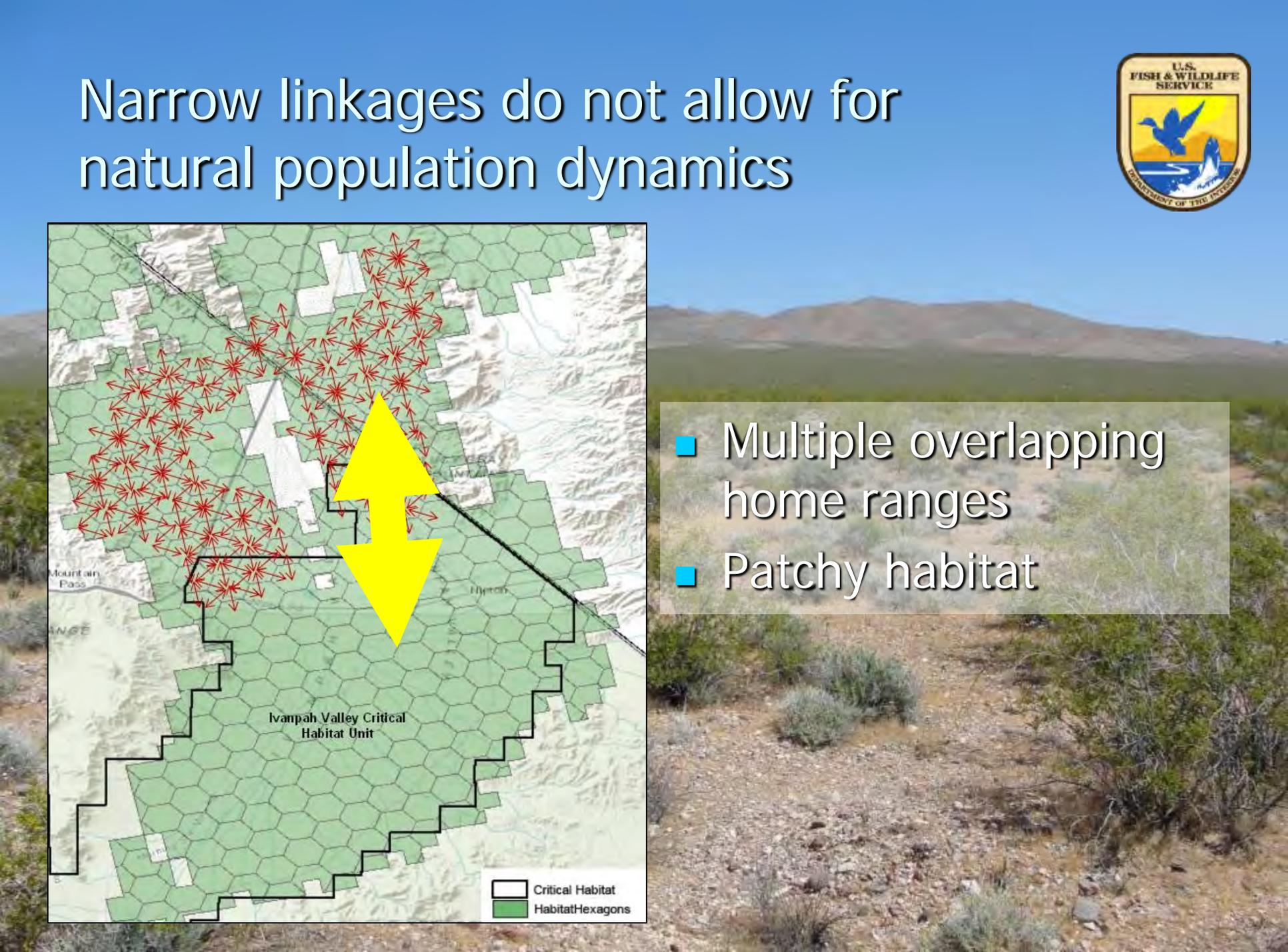
What are the vulnerabilities to connectivity?



Narrow linkages do not allow for natural population dynamics

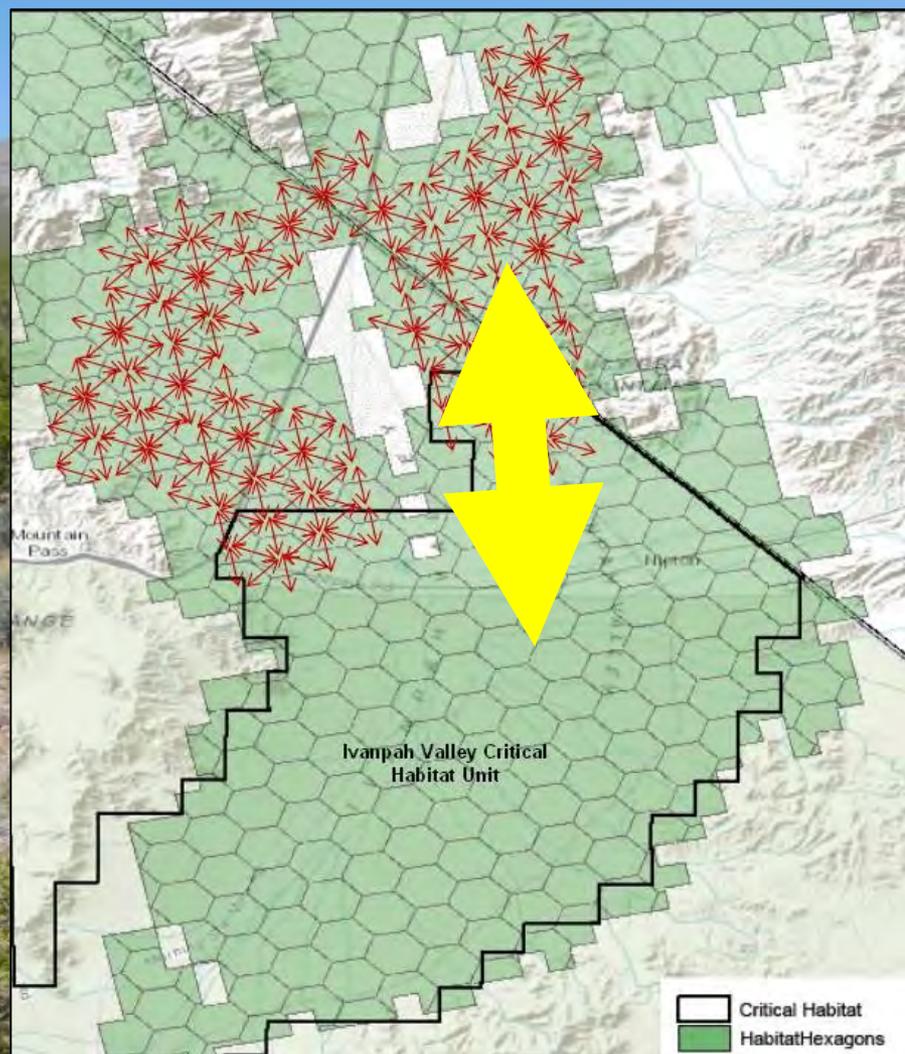


- Multiple overlapping home ranges
- Patchy habitat





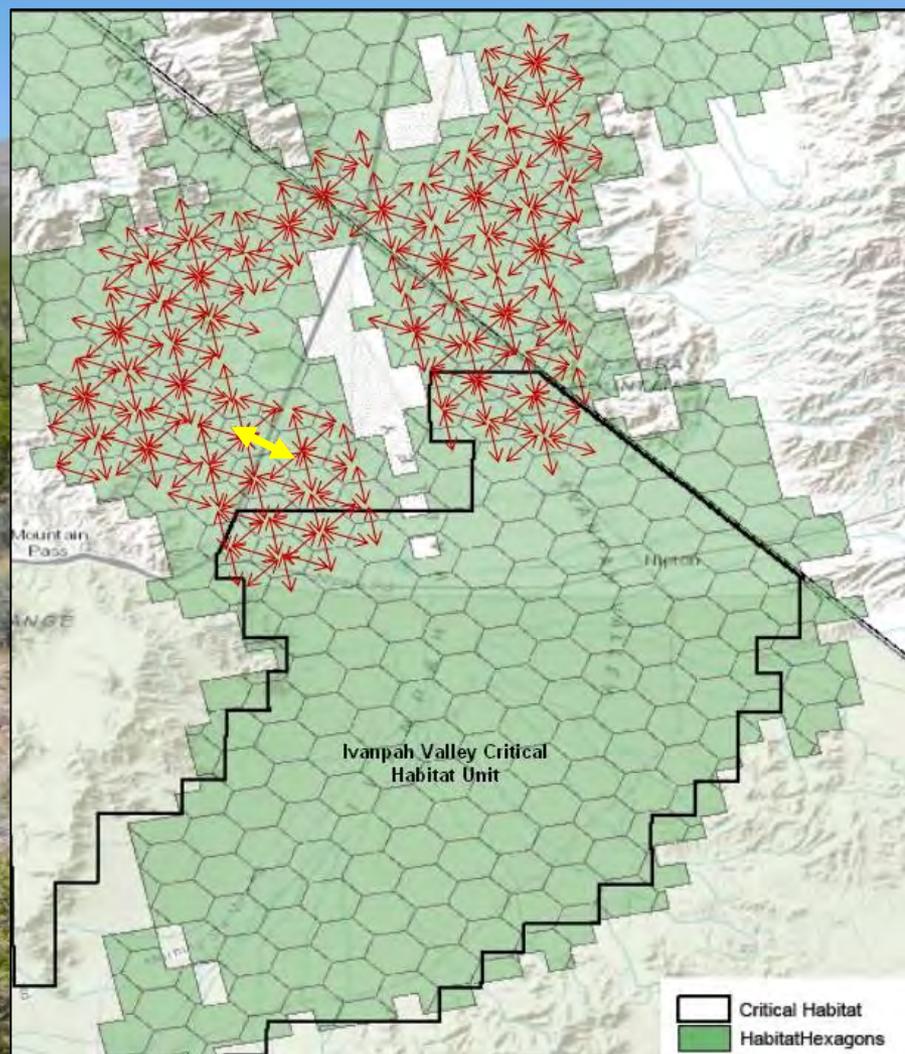
Edge effects impact populations



- ≥ 300 -m buffer along disturbed or developed habitat to minimize edge effects
- Greater distances adjacent to high-volume roads

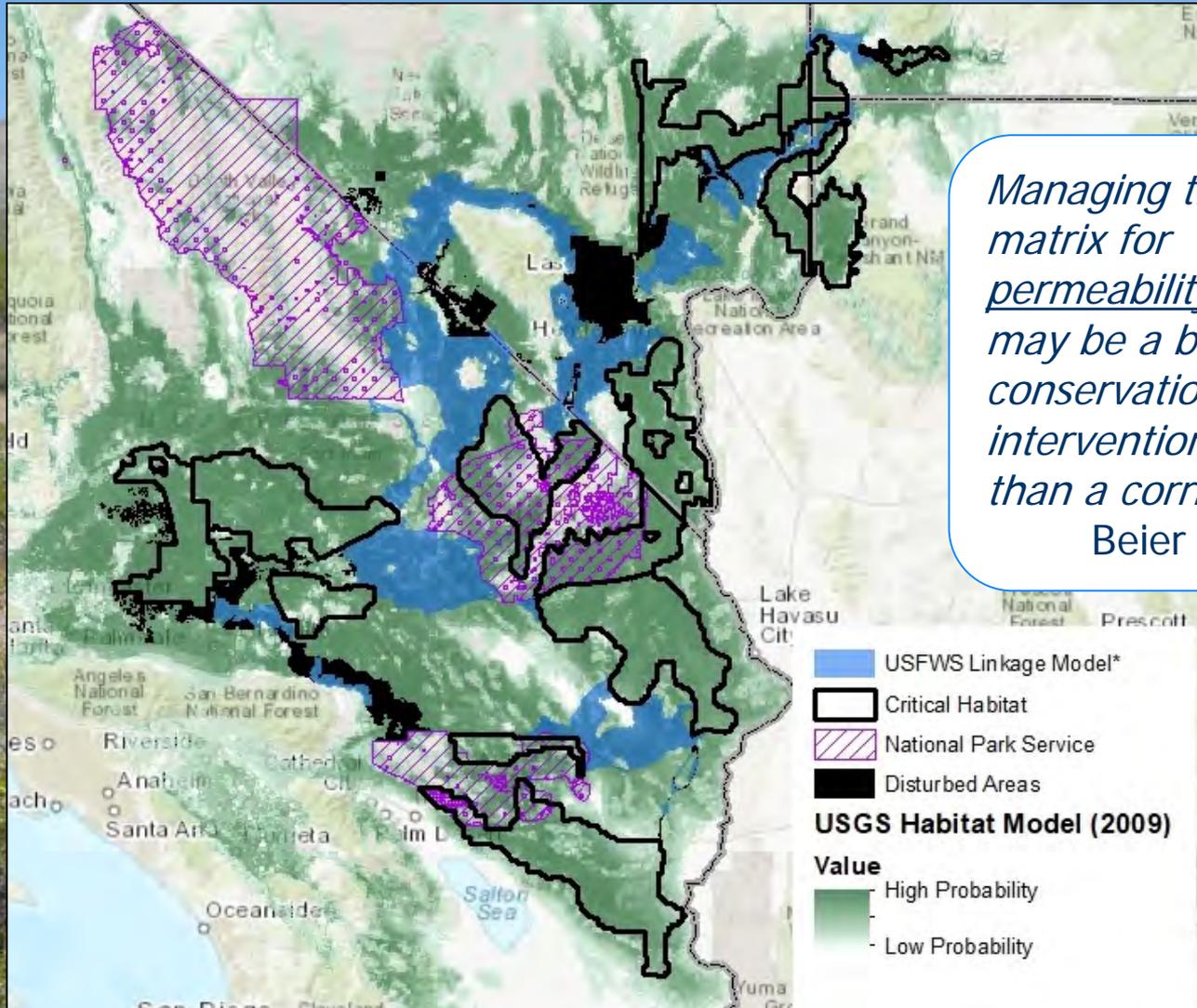


Bottlenecks constrict movement



- No more than 10% of corridor length
- Mitigate by widening other parts of the corridor

What are compatible uses within linkages?



Managing the matrix for permeability may be a better conservation intervention than a corridor
Beier 2018

Incorporate permeable, “tortoise-friendly” development



What about “heat island” effects, hydrological changes, vegetation?

What are the critical linkages that need to be protected?

