

Mapping Perennial Water on Pima County Property

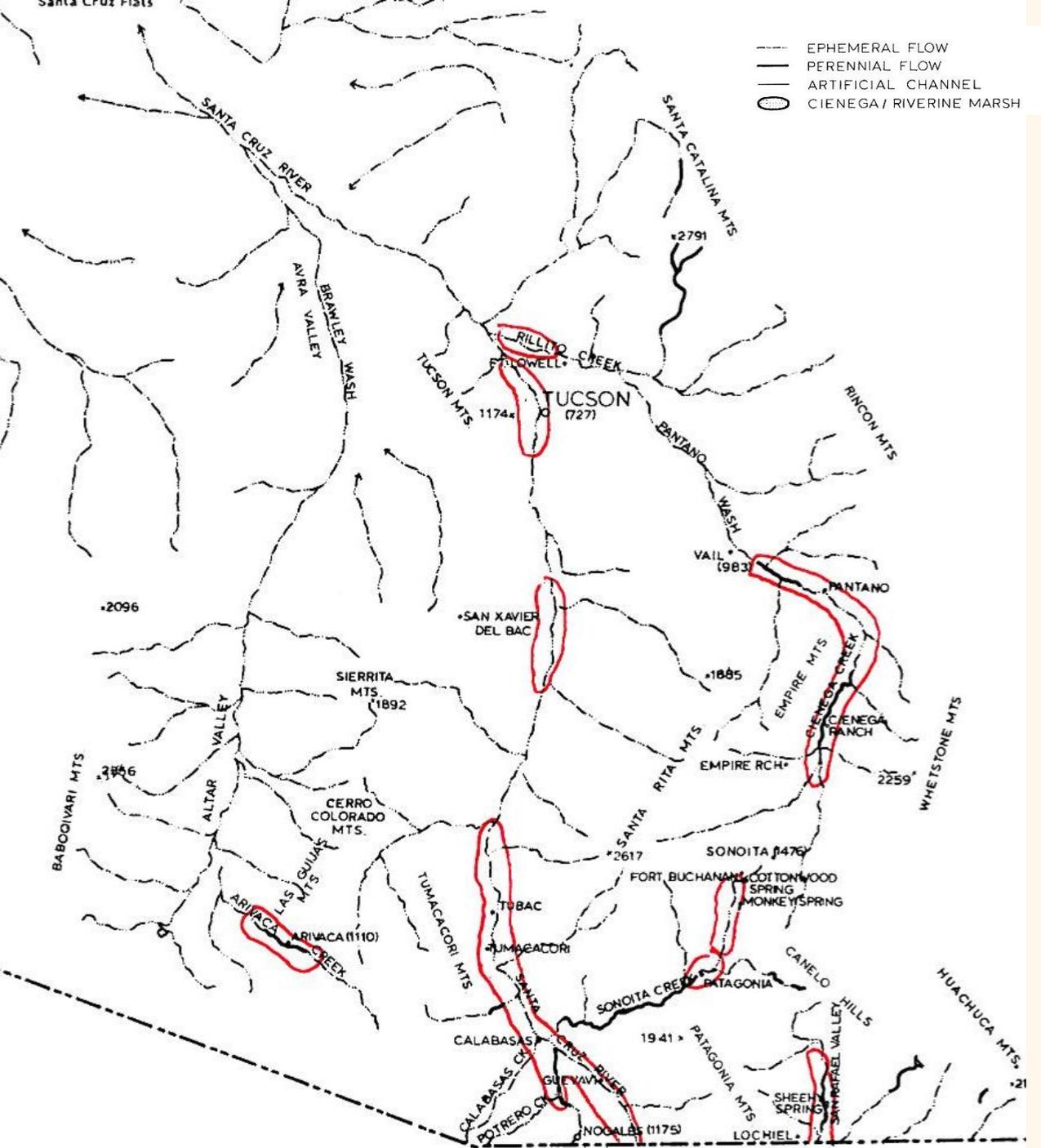


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Pima County Office of Conservation Science

Benefits of Perennial Water

- Biodiversity
- Natural processes and ecosystem services, e.g.:
 - Recharge
 - Air temperature regulation
- Recreation and human quality of life



Historical loss of wetlands

Ecological
change:
Aquatic areas

“A” Mountain



1904

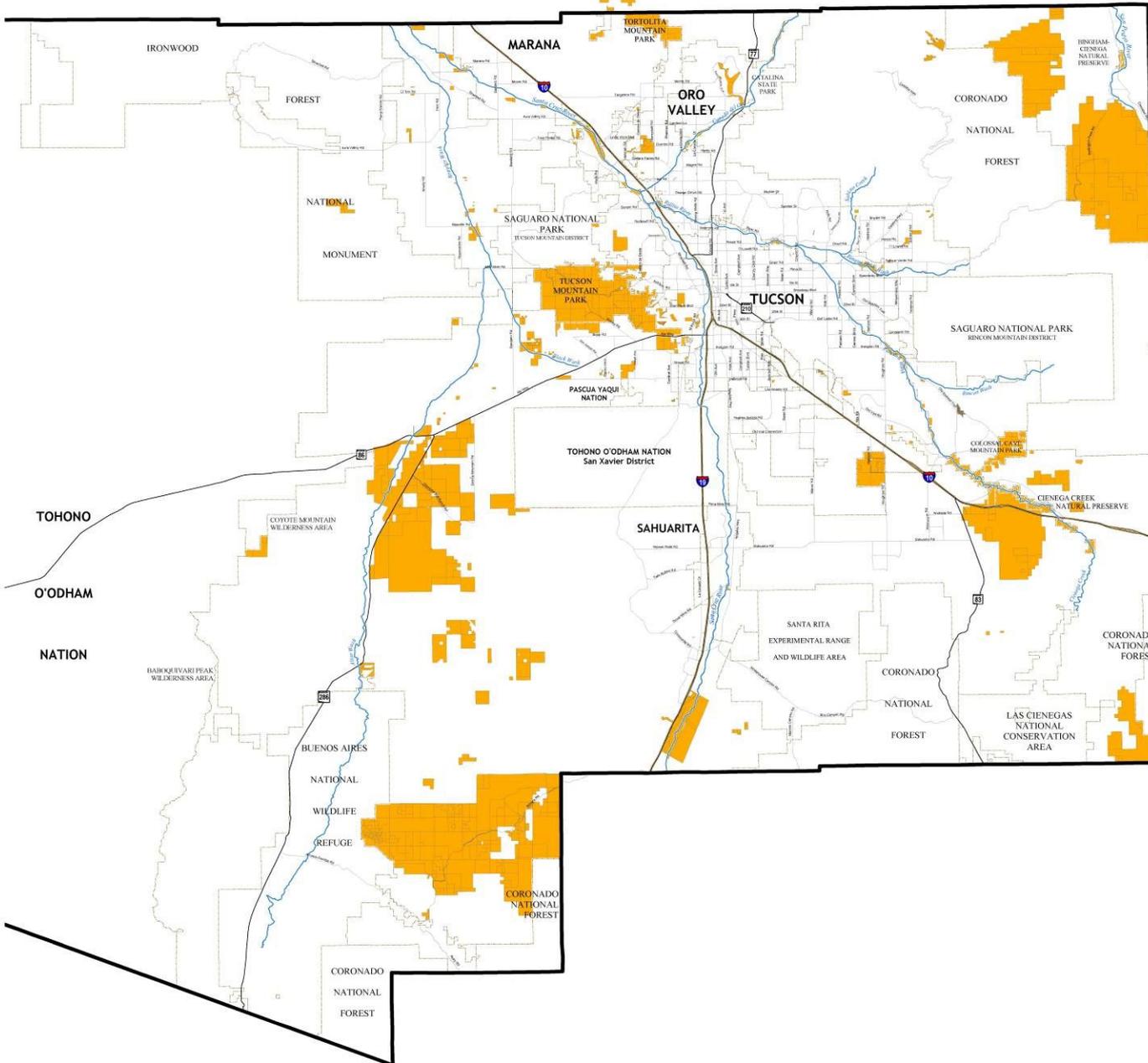


1982

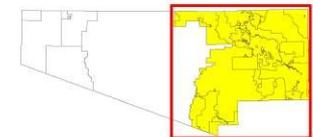


COUNTY MANAGED CONSERVATION LANDS

 Pima County Managed Lands (~229,800 acres)



Pima County Index Map



Index Map Scale 1:1,500,000

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PIMA COUNTY DOT Geographic Information Services

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Scale 1:150,000



04/20/2009

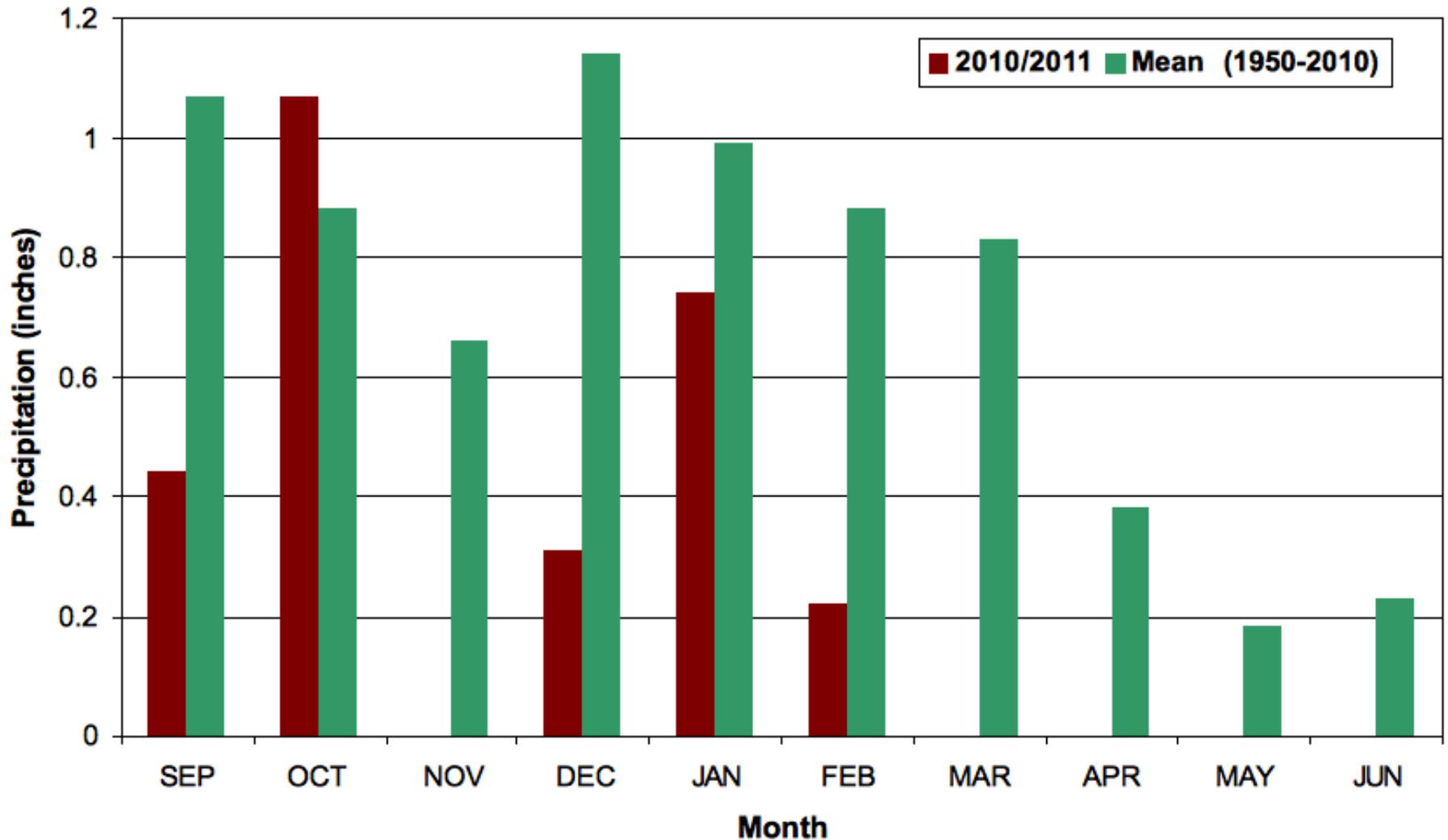
Project Goals

- Identify all permanent, unsupplemented water sources on County open-space properties
- Protect the County's water rights to those sites

Project Methods

- Identify sites that might contain permanent and unsupplemented water on County-owned and leased lands;
- Visit sites as close to the start of the monsoons as possible to determine status.

2010/11 Drought



Results

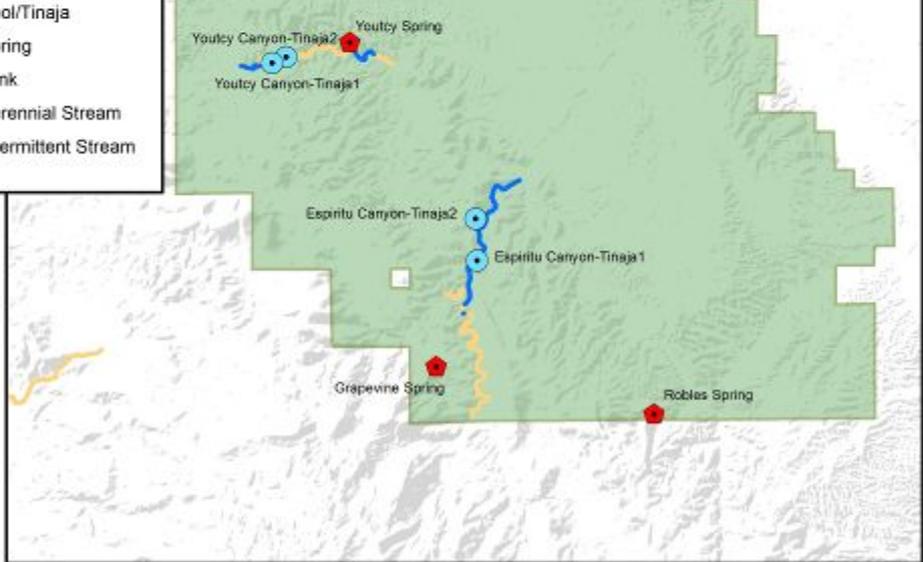
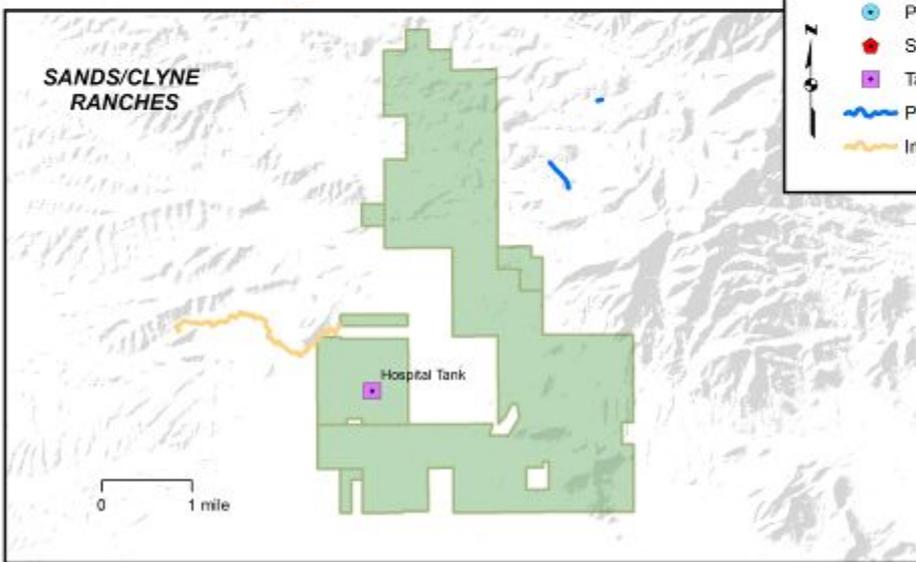
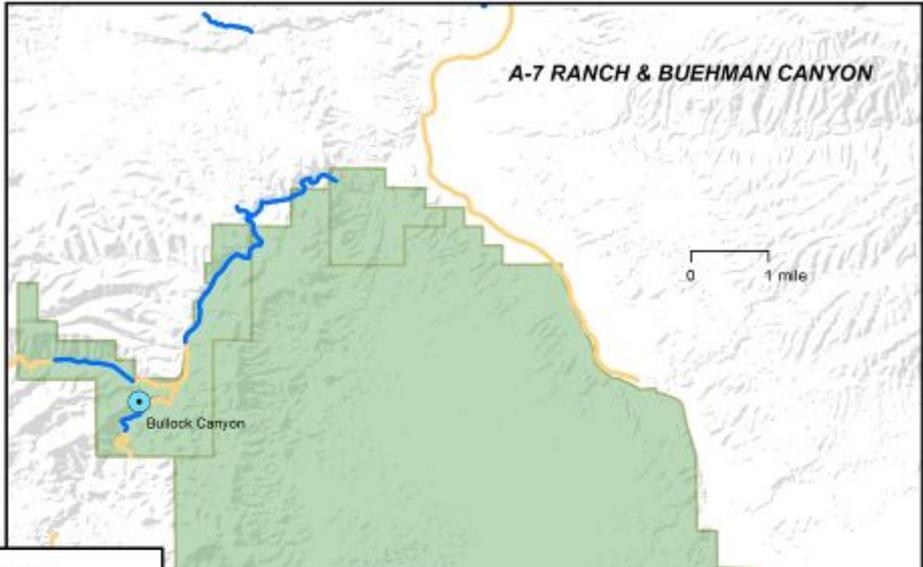
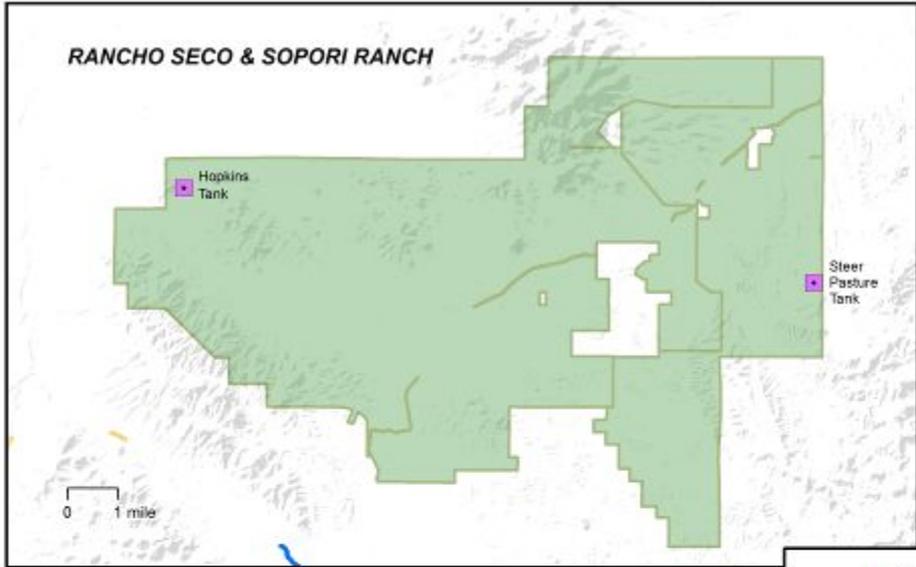




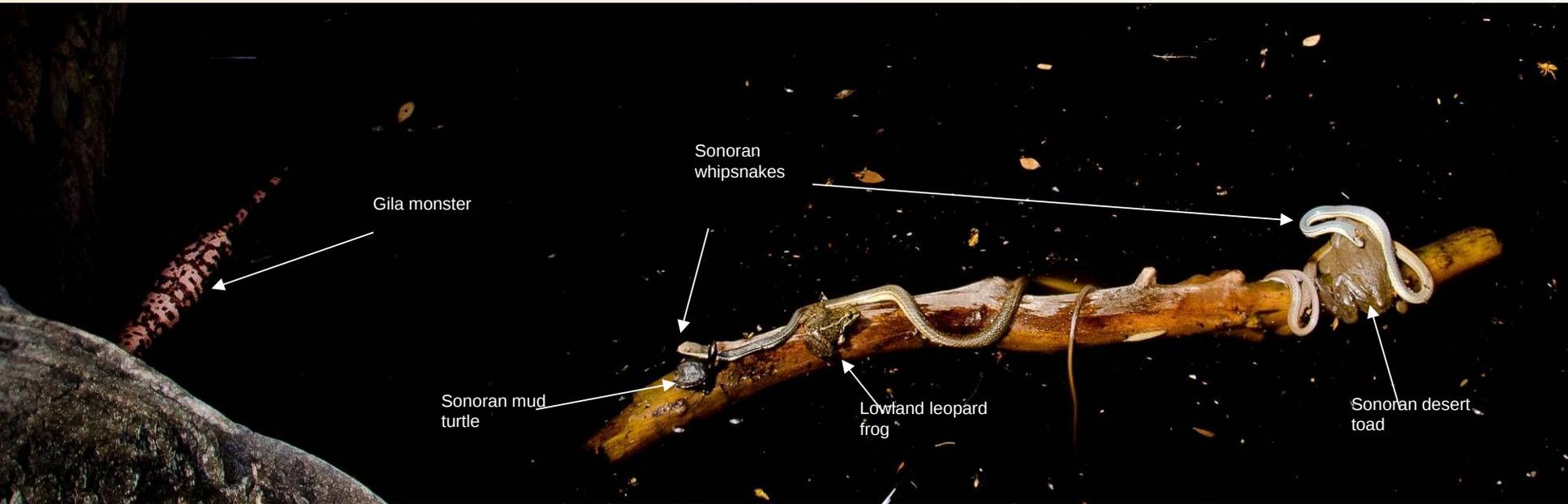












Gila monster

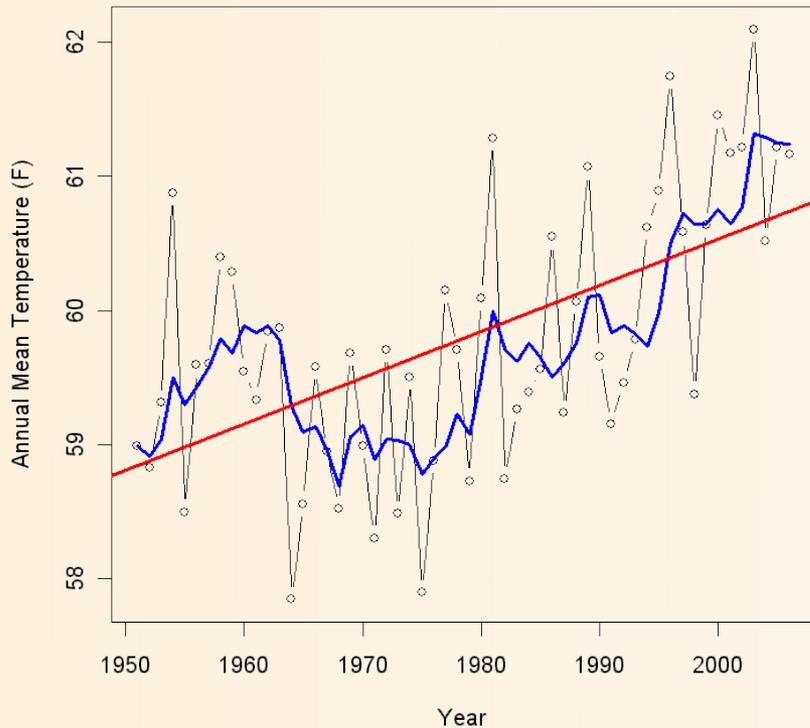
Sonoran whipsnakes

Sonoran mud turtle

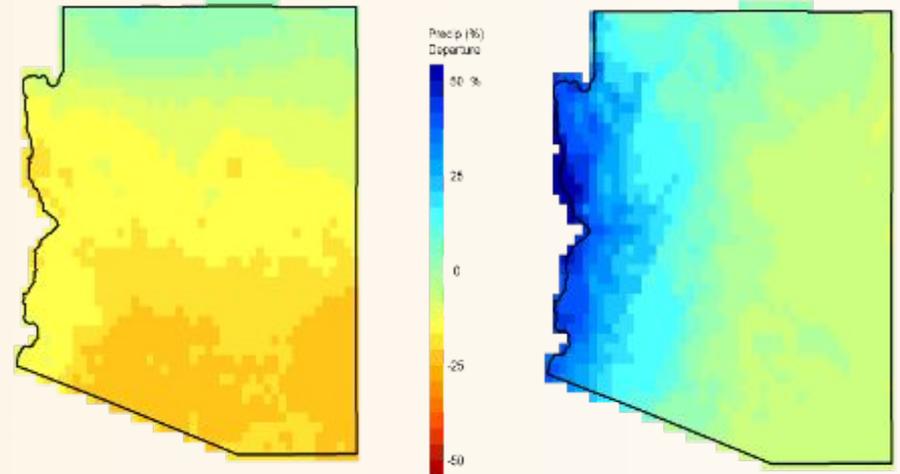
Lowland leopard frog

Sonoran desert toad

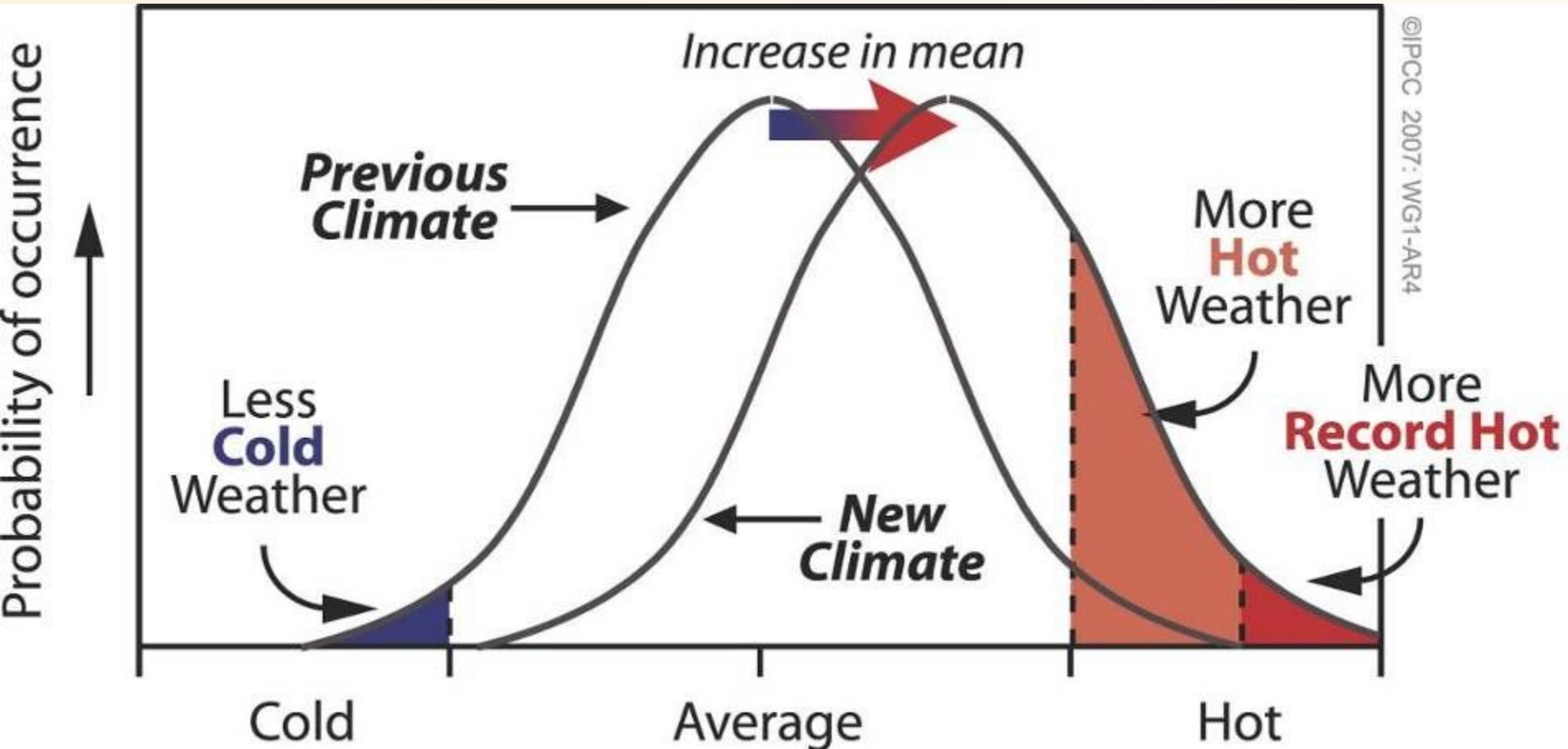
The Climate-change Future is Now



Temperature



More Drought is Projected



What to Do?

- Protect existing water sources
- Reduce non-climate stressors
- Conservation
- Develop artificial water sources for wildlife?