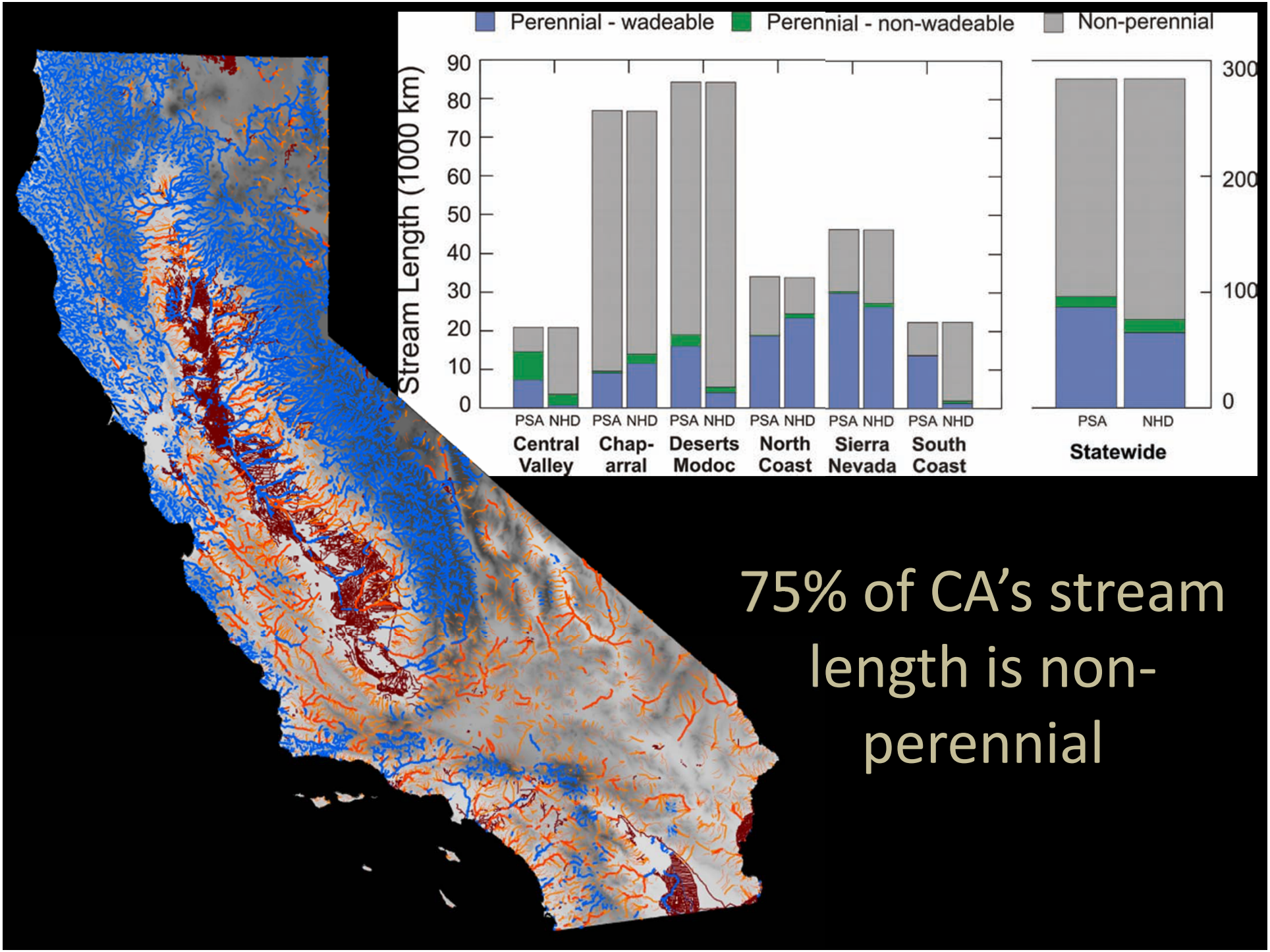
Special Session:
Ecological assessment of non-perennial Streams

Beyond bio-objectives

current priorities

1. Multiple indicators of ecological condition (e.g., algae, CRAM, habitat)
2. Better tools for causal analysis (e.g., nutrients, flow alteration, temperature)
3. Healthy streams/ watersheds
4. Beyond wadeable/perennial streams


Perennial - wadeable
Perennial - non-wadeable
Non-perennial
Stream Length (1000 km)
90
80
70
60
50
40
30
20
10
0
300
200
100
0
PSA NHD
Central Valley
Chap-arral
Deserts Modoc
North Coast
Sierra Nevada
South Coast
PSA
NHD
Statewide
75% of CA's stream length is non-perennial

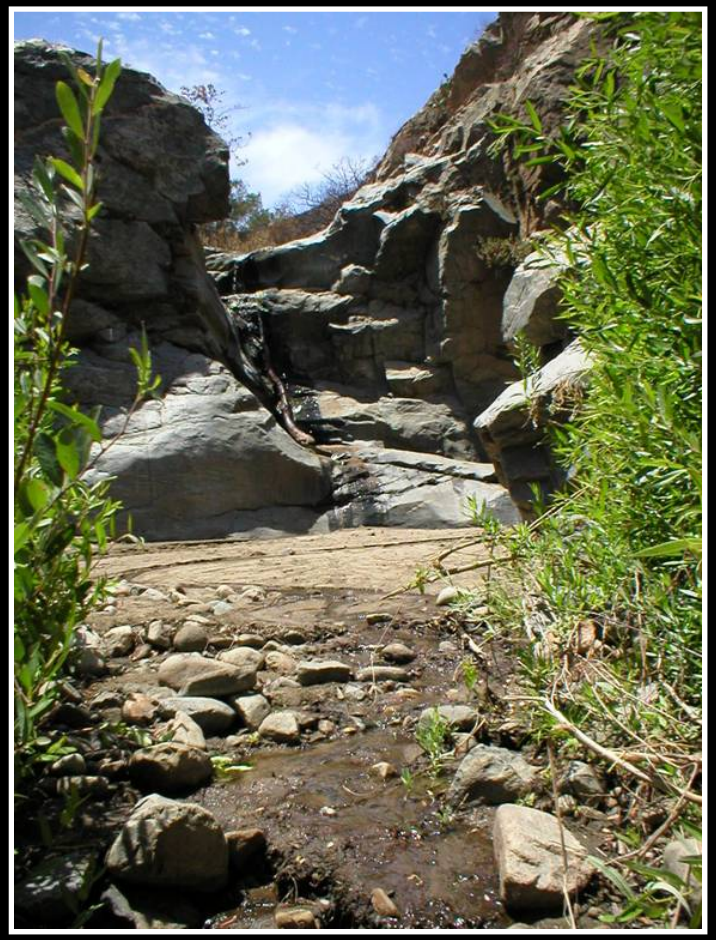
Why monitor biology in non-perennial streams?

Biodiversity/conservation value

Interface between landscape activities and perennial streams

Potential improvements in linking causal factors and stream health

Landscape – hydrology connection fosters inter-agency coordination (complementary authorities)



- Ongoing CA studies in San Diego Region, Imperial Valley Region and Bay Area (mostly SWAMP)
- Complementary work in AZ and NV
- Special session at Society for Freshwater Science in Portland (Raphael Mazor, chair)

What does flow permanence mean to the biota?

"How does flow permanence affect biodiversity?"

"How does flow permanence affect bioassessment?"

Flow permanence as a continuum rather than categories (perennial/ intermittent/ ephemeral)