

What if the drought persists in California

Josué Medellín-Azuara

Richard E. Howitt, Duncan MacEwan, Jay R. Lund and Daniel Sumner,



PPIC

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PPIC WATER POLICY CENTER

What If California's Drought Continues?

Ellen Hanak | Jeffrey Mount | Caitrin Chappelle | Jay Lund | Josué Medellín-Azuara | Peter Moyle |
Nathaniel Seavy

Research support from Emma Freeman, Jelena Jedzimirowic, Henry McCann, and Adam Soliman

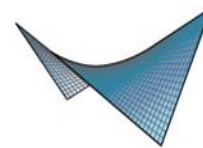
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Workshop on Migration of Agriculture a One
Path to Sustainability
Boulder, Colorado, October 22, 2015



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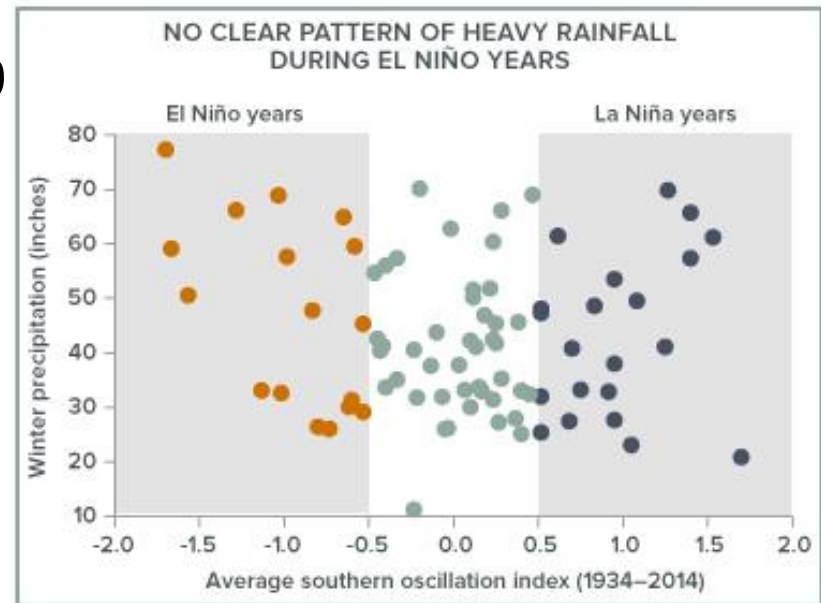
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Water Availability, El Niño and La Niña

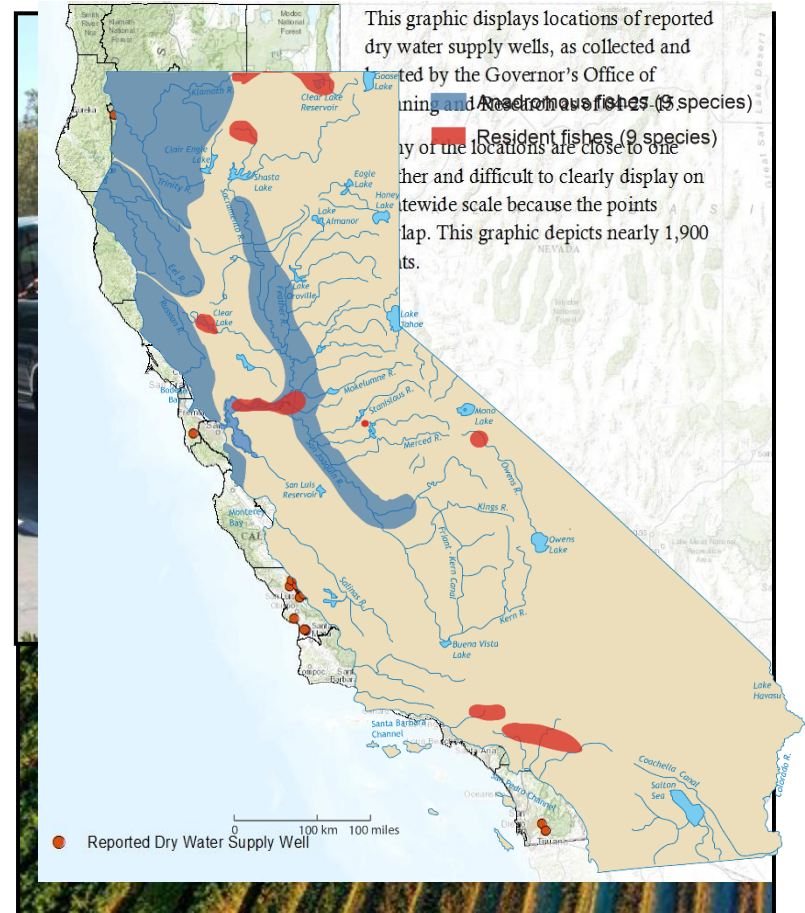
- Reduced runoff (25-40% of avg) and storage (50% of avg)
- Surface water cut for farms (8.5-9 maf/yr) and cities (2-2.5 maf/yr)
- Extensive curtailments of water rights
- Extra groundwater pumping (6 maf/yr for farms)
- Reduced hydropower (50% of avg) raises electricity costs by ~2%
- Decreased water quality (temperature, salinity, etc.)



Source: Hanak et al. 2015

Areas of Concern

- Cities
- Agriculture
- Ecosystems
- Rural Communities



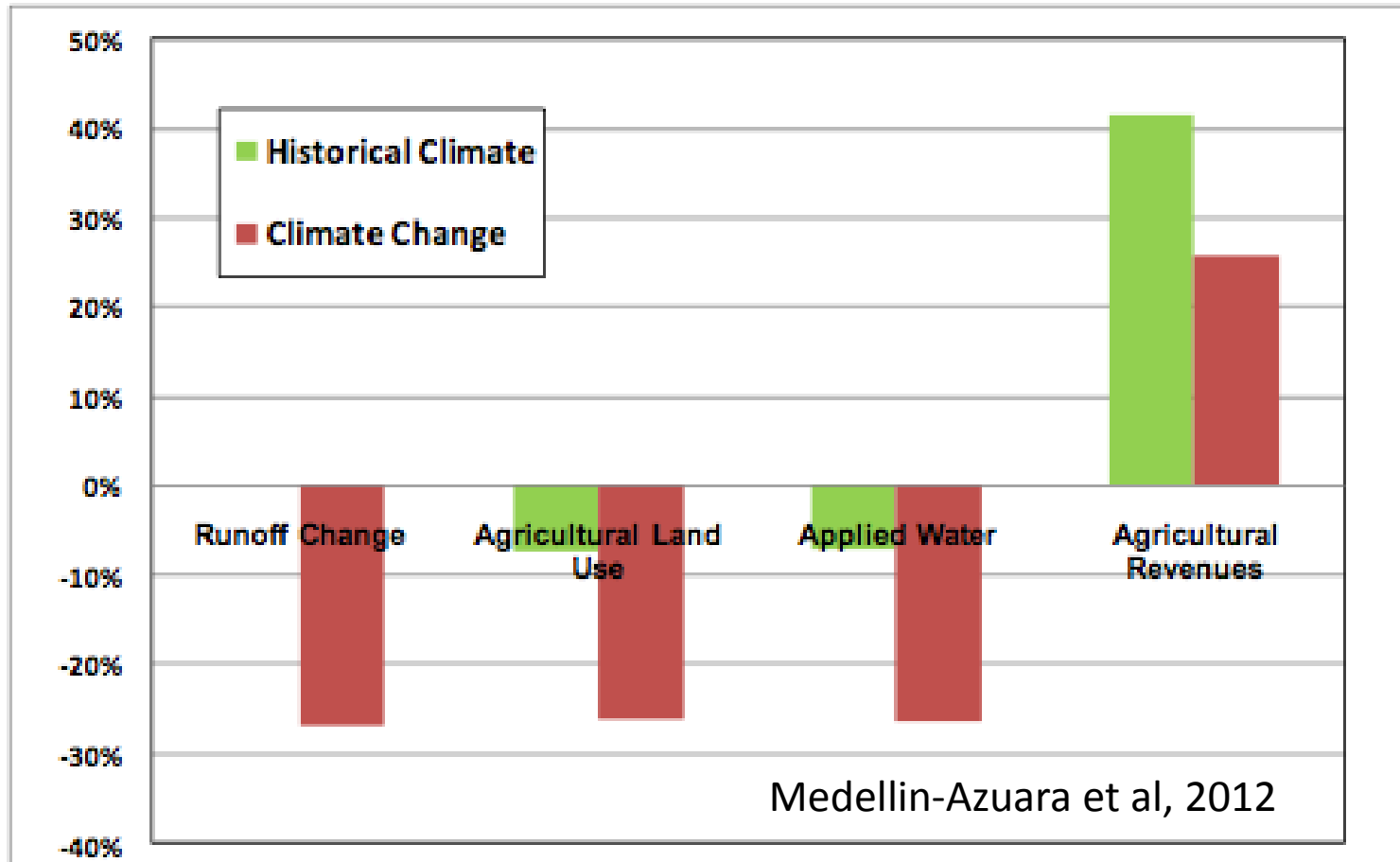
Building drought resilience

Difficult work ahead

- Improving curtailment process
- Modernizing water information
- Managing forests
- Managing surface water trade-offs
- Avoiding extinctions
- (Re)building environmental resilience



2050 California Agriculture with Respect to Current Conditions



Change in agricultural revenues does not necessarily follow changes in land and water use