An Overview of California Water Transfers

Presentation to The State Board Of Agriculture
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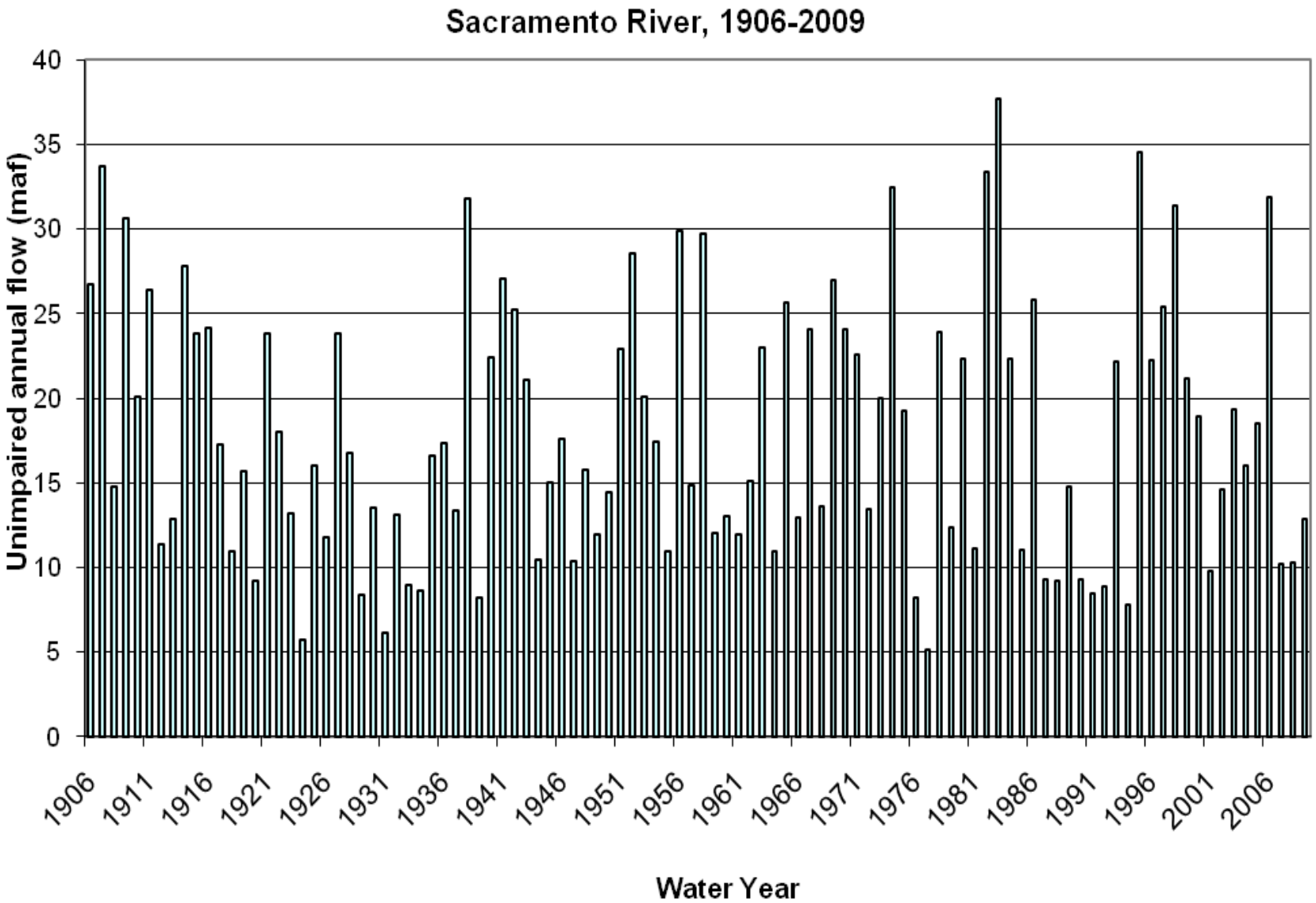
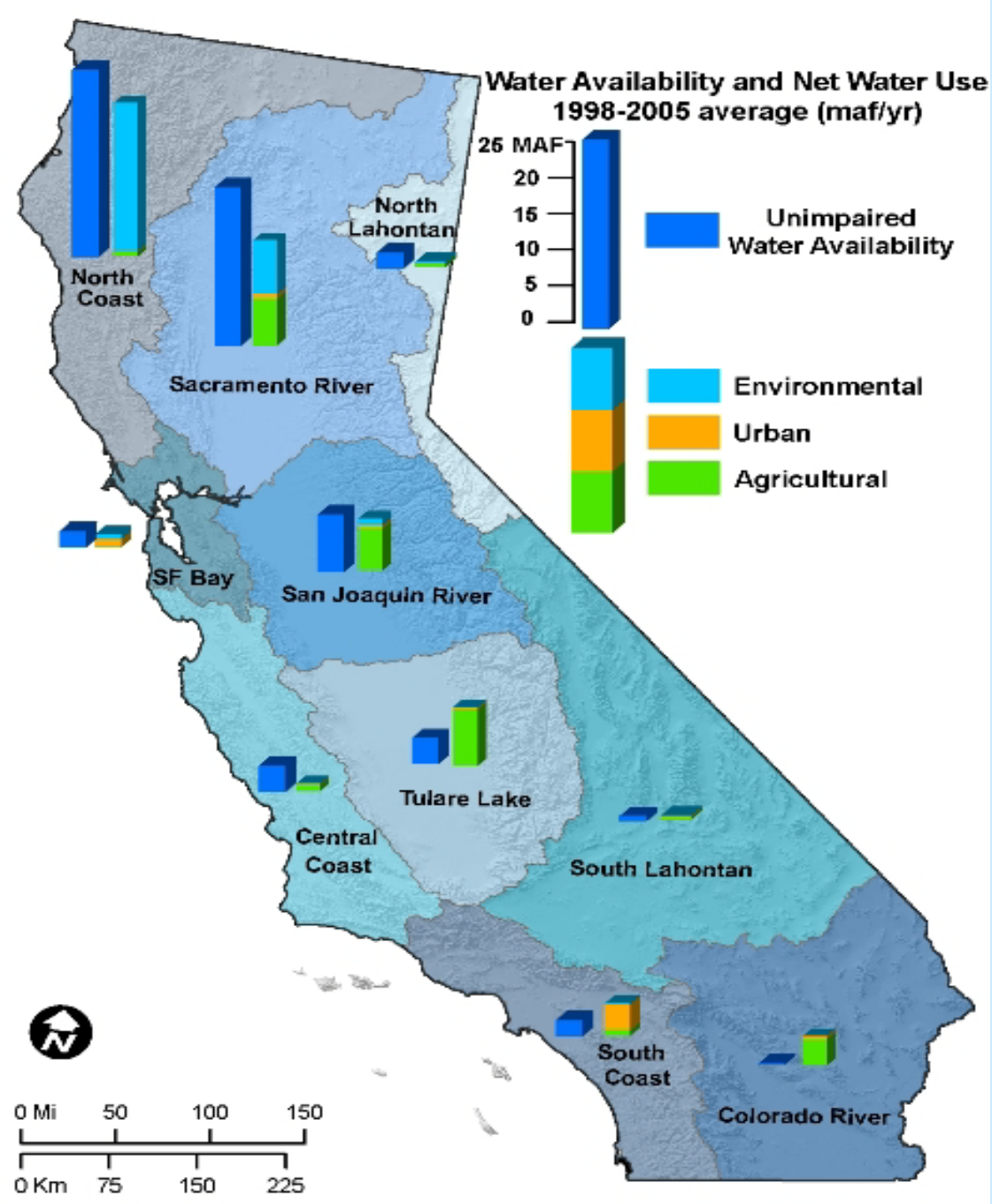
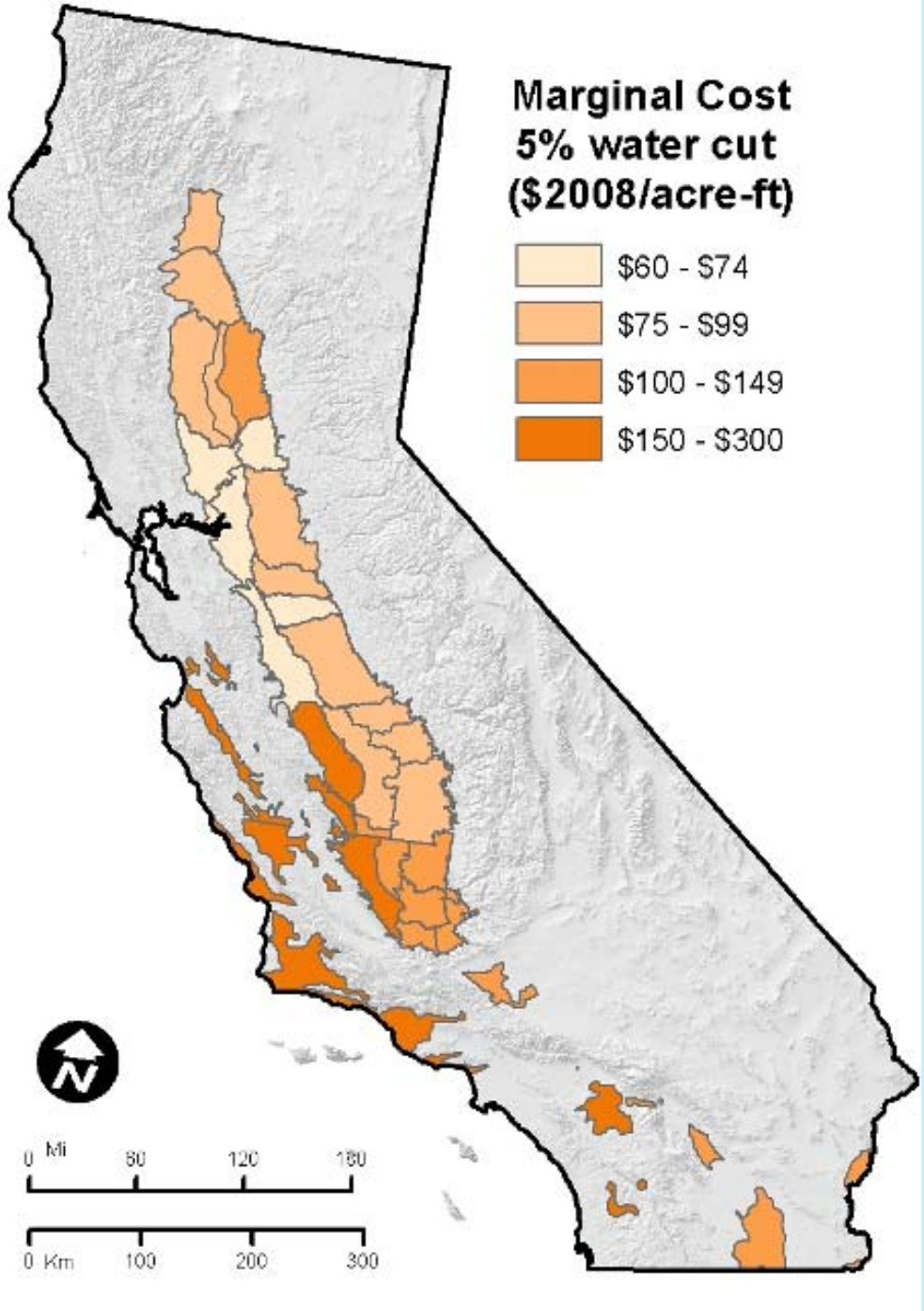
Richard Howitt

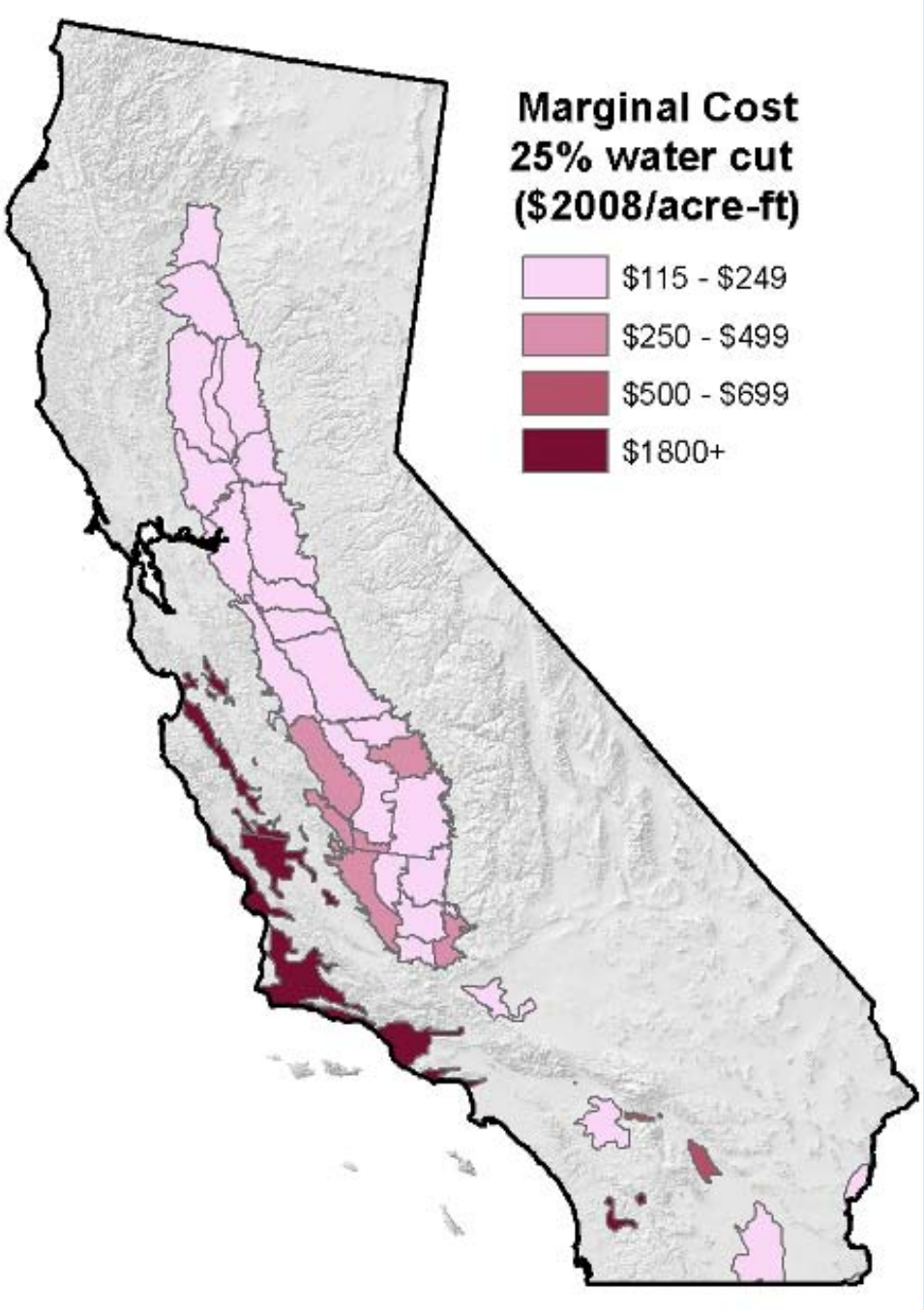
UC Davis Center for Watershed Sciences &
Department of Agricultural & Resource Economics


Sacramento River, 1906-2009
Unimpaired annual flow (maf)
0
5
10
15
20
25
30
35
40
1906
1911
1916
1921
1926
1931
1936
1941
1946
1951
1956
1961
1966
1971
1976
1981
1986
1991
1996
2001
2006
Water Year

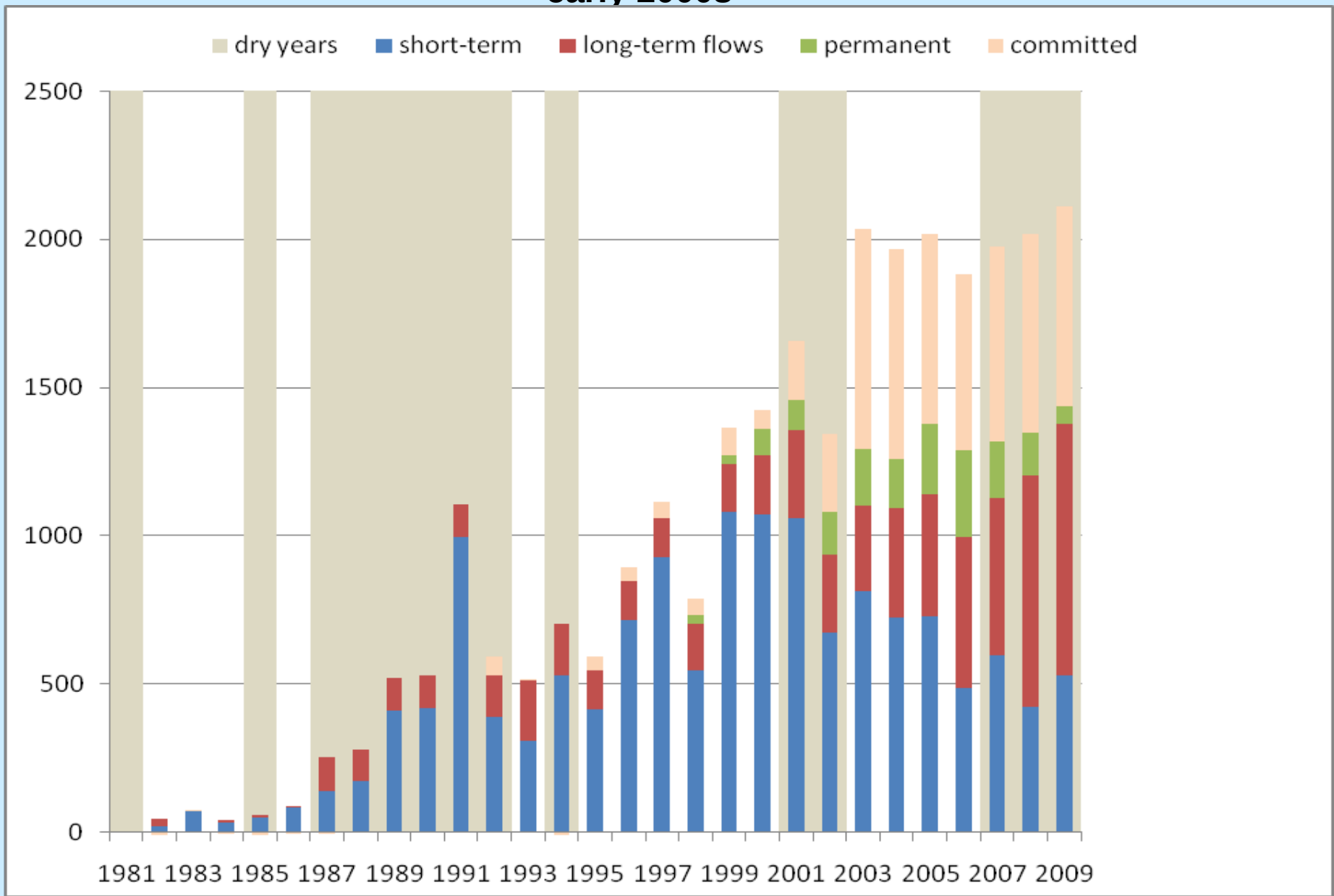
Net water use far exceeds local supplies in the southern half of the state



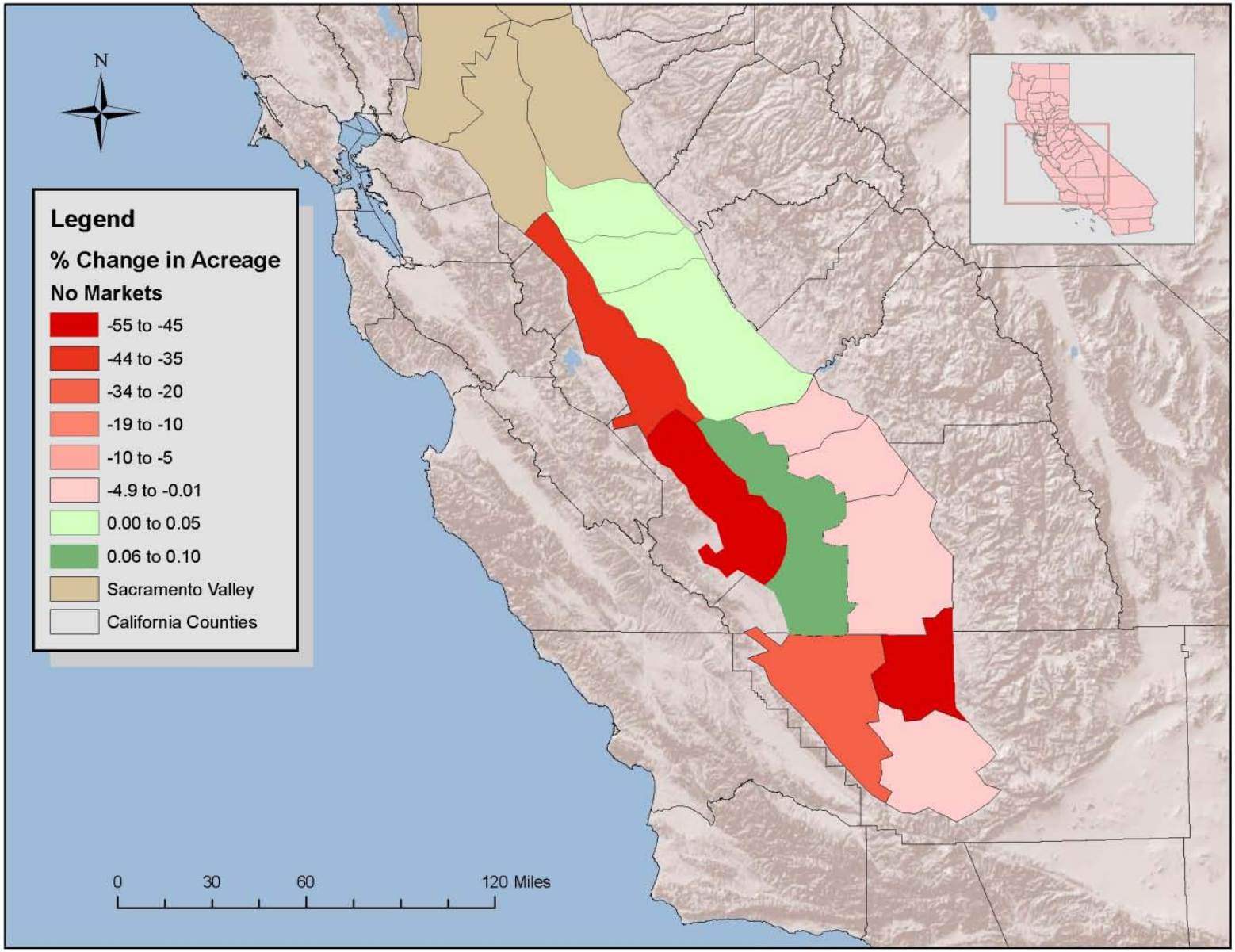

Marginal Cost
5% water cut
($2008/acre-ft)
$60 - $74
$75 - $99
$100 - $149
$150 - $300
N
0 Mi 60 120 180
0 Km 100 200 300


Marginal Cost
25% water cut
($2008/acre-ft)
$115 - $249
$250 - $499
$500 - $699
$1800+

California's water market grew in the 1990s, but has flattened since the early 2000s



2009 Change in Crop Acres with No Markets



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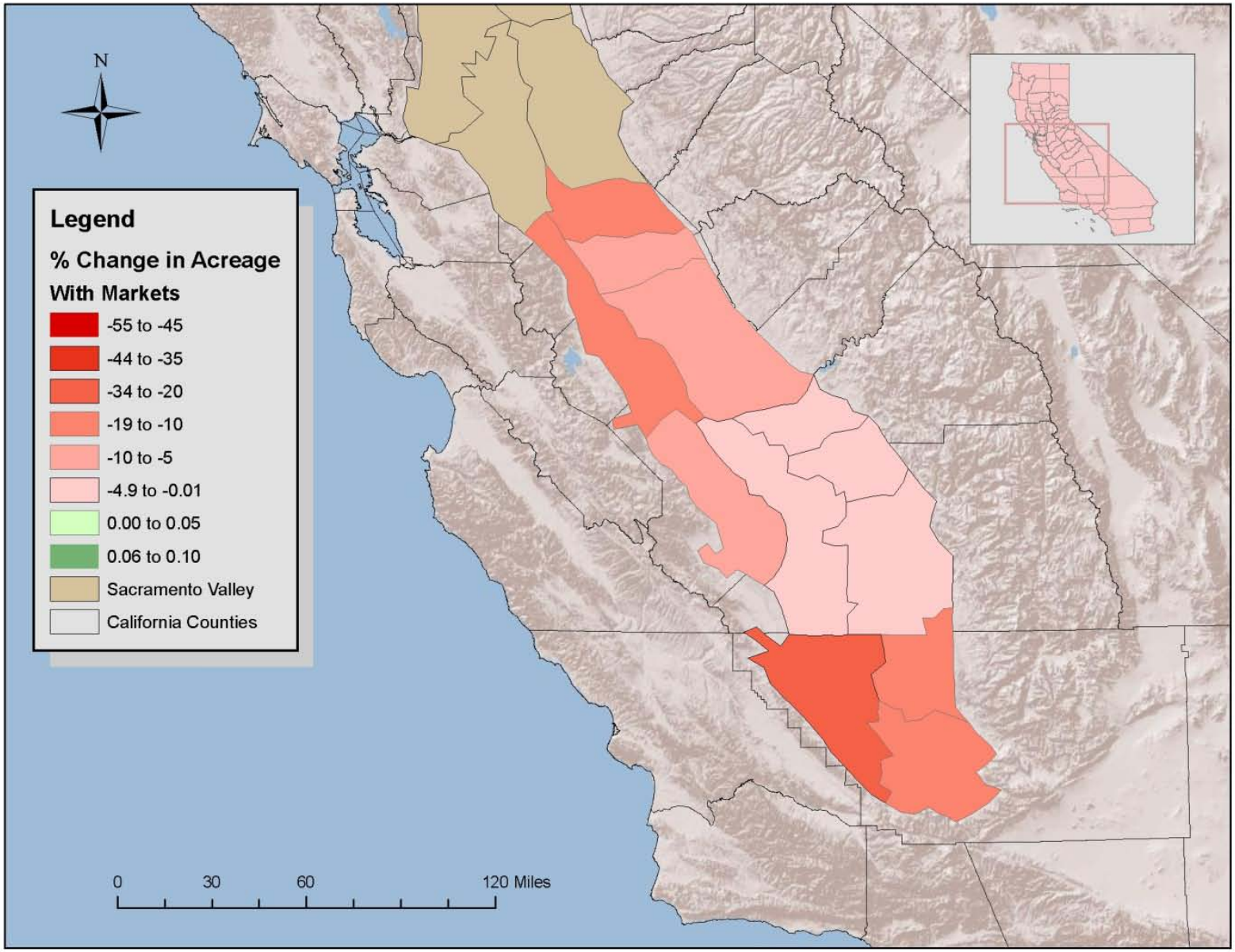

Conclusions

- Water Transfers are a practical and useful way to adapt to changing water scarcity
- Economic pressure for transfers within agriculture and between sectors will continue to grow
- Growth in short run water trades has slowed in recent years
- The State Water bank did not work as well in the 2009 drought as it did in the 1991-92 drought.
- A Programmatic Environmental Impact System will enable short term trades
- Access to wheeling capacity at its unit cost through an ISO system will ease trades.