

Potomac River at Goose Creek

Two Case Studies of Water Transfers in California: The Lower Yuba River Accord and the Kern Water Bank

Prepared for ICPRB by
Susan Burke, Ph.D. Sr. Consultant/Economist Cardno
Paul Leonard, VP Water Resources, Cardno
January 7, 2016

DRAFT for internal discussion purposes



Water Market Topics

- What do California water markets look like?
- How did they get started?
- Who benefits?
- How do you know if a market will work?
- **Case Studies**
- Literature
-



Water Market Topics – January Topics

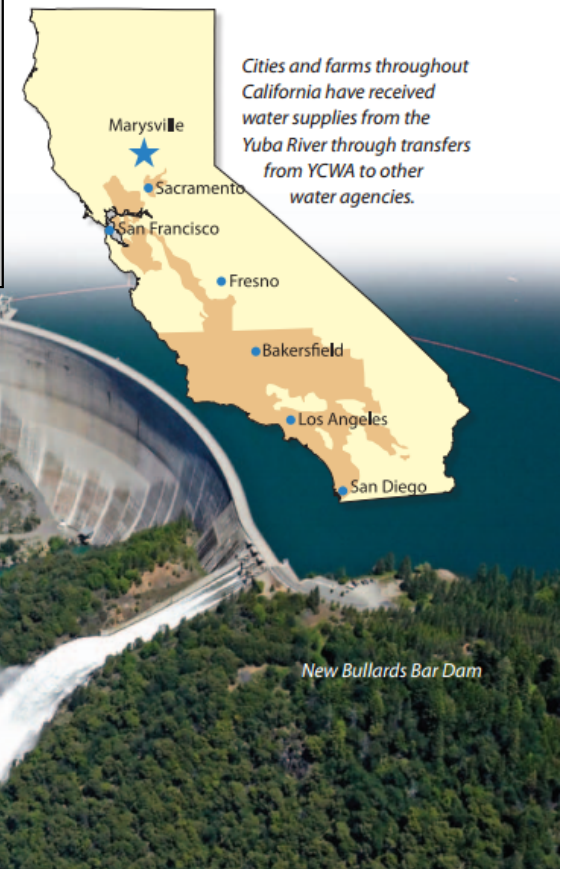
- **Case Studies:**
 - Lower Yuba River Accord
 - Kern Water Bank



The Lower Yuba Accord

The impressive Lower Yuba River Accord illustrates the importance of three key elements of effective restoration. They include collaboration, the imagination of motivated parties and a commitment to science.

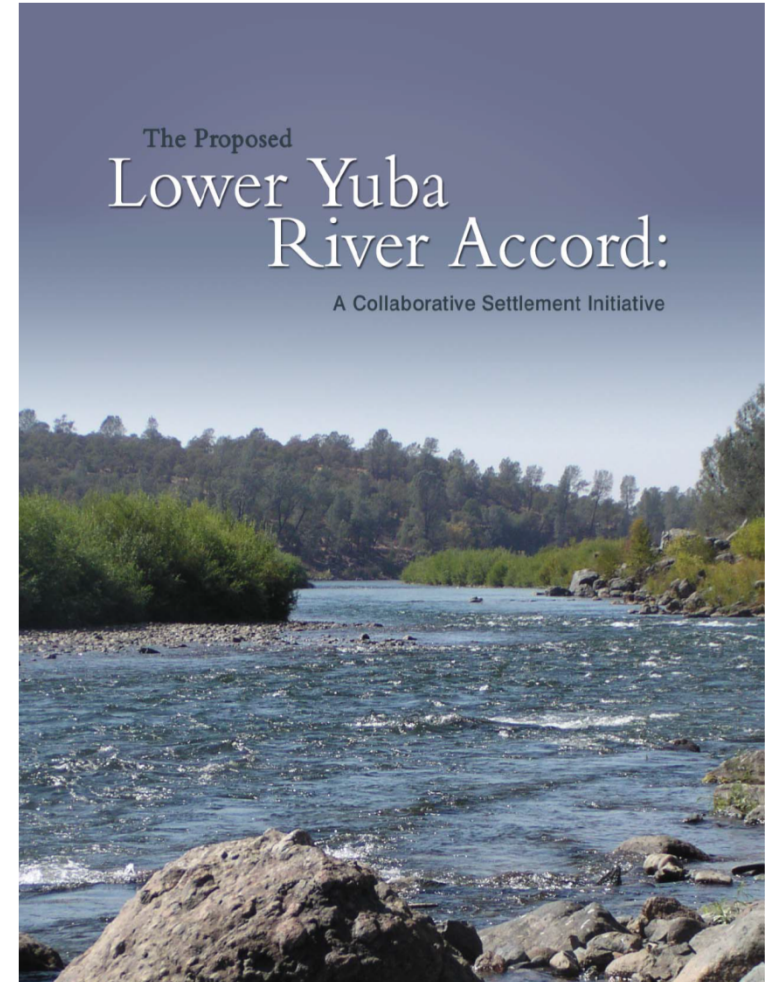
- Charles R. Hoppin, Chair of the State Water Resources Control Board (As published in the Sacramento Bee, July 28, 2011)





Water Market Two Case Studies Yuba Accord

- 1980s – 1990 YCWA at the forefront of CA water transfers
- 1990 – State proposes significant increase to in-stream flows for fish
- 2005 – a preliminary framework agreement announced, fisheries, water purchase, conjunctive use, power.
- 2006 & 2007 – pilot transfers
- 2008 approval
- 2009 receive the Governor's Environmental and Economic Leadership Award.
- 2014 updating the payment provision, price for water may double.

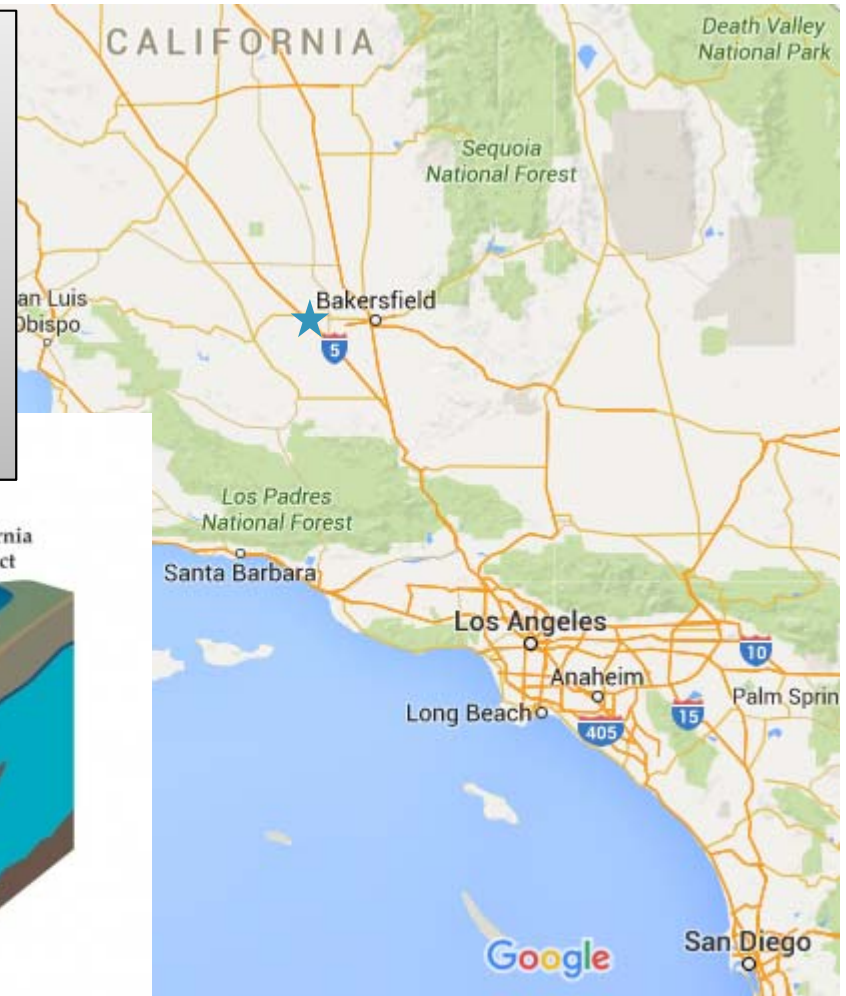
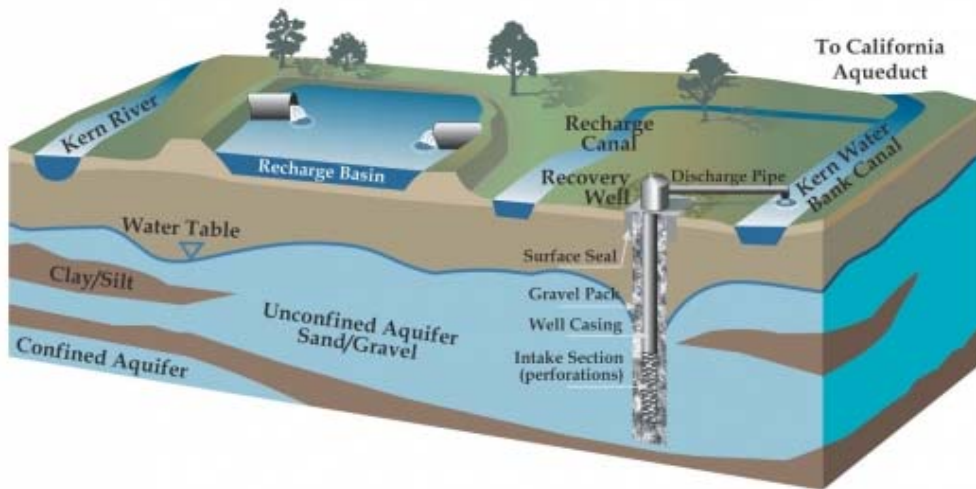


Source: YCWA web page



Kern Water Bank

- *“the most effective groundwater storage program in the U.S., probably the whole world”*
- - then U.S. Sect Interior Bruce Babbitt upon visiting the Bank in 2002





Kern Water Bank

- 1988 State DWR attempt unsuccessful
- 1994 Taken over by locals (6 local agencies)
- 1998 Awarded Clair A. Hill Award for excellence in water mgmt. in CA
- 1999 Construction of 6-mile canal, 72,000 ft of pipe and 40 wells
- 2011 KWB has recharged over 1.7 MAF and recovered nearly 0.9MAF
- 2010-14 An environmental group challenged the CEQA compliance of the Bank. In 2014 a California judge issued a writ commanding DWR to recertify the current EIR and commence the remedial review.





Water Marketing Topics – data dissemination

The Water Education Foundation keeps information flowing. Data dissemination contributes to the development of the 'market'
Source: Water Education Foundation.

<http://www.watereducation.org/topic-water-transfers>

WATER TOPICS

- > Agriculture
- > Background Information
- > Bay-Delta
- > Dams, Reservoirs and Water Projects
- > Environmental Issues
- > Regions
- > Rivers
- > Water Issues
- > Water Quality
- ✓ Water Supply and Management
 - Acre Foot
 - Aquifers
 - California Water Plan
 - Conjunctive Use
 - Desalination
 - Gray water
 - Groundwater
 - Integrated Regional Water Management
 - Recreation
 - Surface Water

WATER TRANSFERS

Water marketing is the transfer or sale of water or water rights from one user to another, typically from an agricultural to an urban water agency, often without investing in new infrastructure

[AQUAFORNIA NEWS](#) [VIDEOS](#) [PRODUCTS](#) [MAPS & POSTERS](#) [PUBLICATIONS](#)

[AQUAPEDIA BACKGROUND](#) [WESTERN WATER MAGAZINE](#)

November 6, 2015 | Bloomberg News

The water barons of California's Imperial Valley

Imperial Valley farmers know their water is precious and understand that to preserve a way of life that runs back a century they have to grapple with the needs of a drought-stricken state. ... In 2003, the Imperial Irrigation District, under pressure from Senator Dianne Feinstein and other federal and state officials, controversially agreed to sell as much as 280,000 acre-feet a year to San Diego.

[ORIGINAL ARTICLE](#)

October 27, 2015 | The Modesto Bee

Tuesday's Top of the Scroll: Grower says Oakdale Irrigation District broke state law with secret water sale

Irrigation leaders illegally agreed to sell Stanislaus River water to outsiders, an Oakdale Irrigation District customer alleges in a formal complaint. ... The district has explained the deal in meetings, a news release and an Oct. 18 advertisement in The Modesto Bee.



Literature cited

- California's Water Market, By the Numbers, Update 2012, Ellen Hanak and Elizabeth Stryjewski, PPIC. <http://www.ppic.org/main/publication.asp?i=1041>
- California's 1991 Drought Water Bank. http://www.rand.org/pubs/monograph_reports/MR301.html
- NPR interview with MacKenzie Funk, Why Water Markets Might Work in California.
- Reuters article about the 2009 Emergency Drought Water Bank: Read more at Reuters <http://www.reuters.com/article/2008/09/04/us-economy-california-water-idUSN0457395520080904#47its7hgGJK7CB6L.99>
- Latimes article on 1991 bank: http://articles.latimes.com/1991-03-21/news/mn-662_1_water-bank
- MWD web page describing Exchanges and Water Banking. <http://www.mwdh2o.com/AboutYourWater/Sources%20Of%20Supply/Pages/Imported.aspx>
- The Lower Yuba River Accord, from Controversy to Consensus, <http://www.ycwa.com/documents/622>
- Appeal Democrat article about increasing prices. http://www.appeal-democrat.com/news/deal-would-bring-m-to-yuba-county-water-agency/article_bbb4e5b8-4930-11e4-9e24-001a4bcf6878.html.
- Kern Water Bank Web page: <http://www.kwb.org/index.cfm/fuseaction/Pages.Page/id/330>

QUESTIONS?

Susan.burke@cardno.com

paul.leonard@cardno.com