

Aquifer Storage and Recovery Legal Issues

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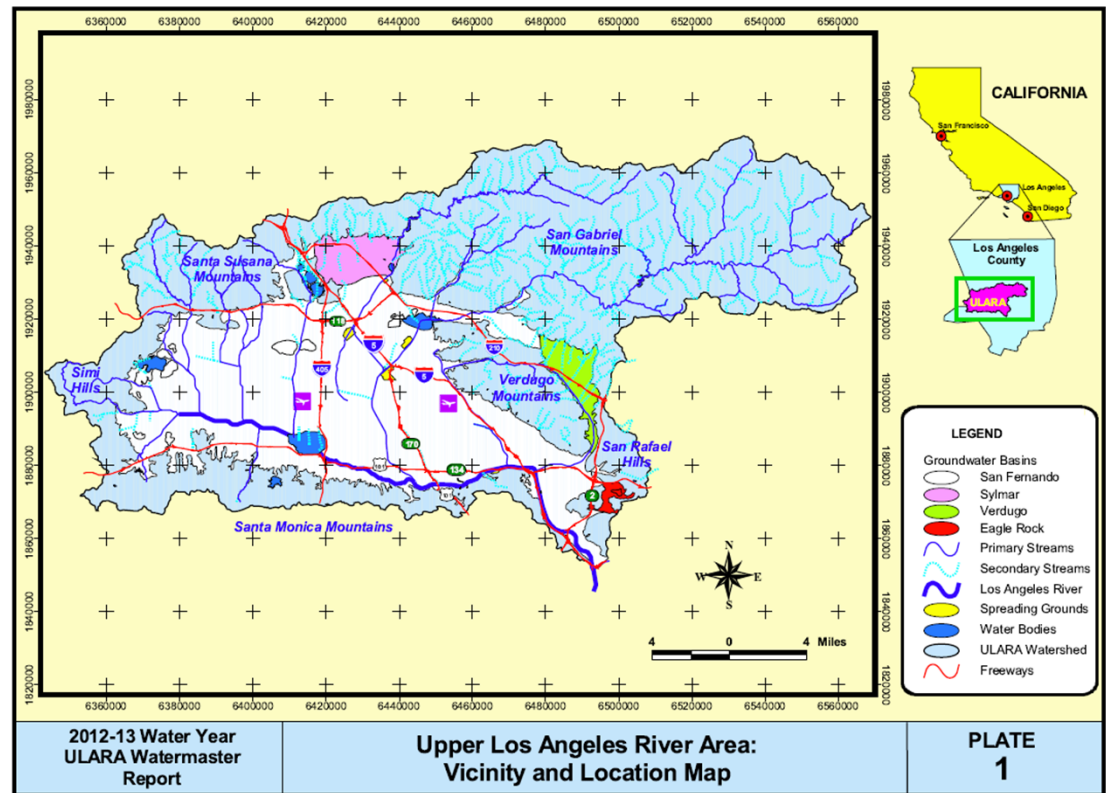
Bartkiewicz, Kronick & Shanahan
A Professional Corporation

Four Key Issues

- Recovery of Stored Water
- Rights to Source Water
- Right to Use Storage Space
- Permit to Inject

Recovery of Stored Water

- Clear law: city that augments groundwater with new supply has right to recover amount of augmentation
- Depends on technical analysis to show amount of augmentation



City of Los Angeles v. City of San Fernando (1975) 14 Cal.3d 199, 260 (citing Water Code § 7075.)

Rights to Source Water

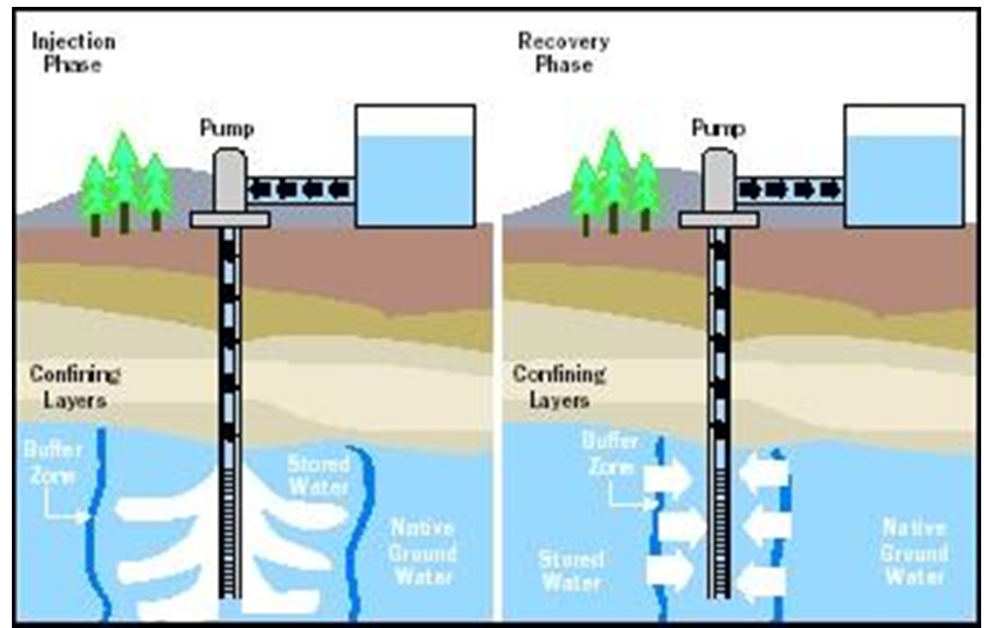
- City has several “appropriative” surface-water rights
- Appropriative rights are defined by amounts, seasons, purposes and places of use
- Appropriative rights can be modified if no more water would be diverted and no injury to others would occur
 - Pre-1914 rights: City can change as long as no injury to others occurs
 - Post-1914 rights: State Water Resources Control Board (SWRCB) must approve change
- New appropriative right would be necessary to increase diversion
 - New right requires application to, and approval by, SWRCB

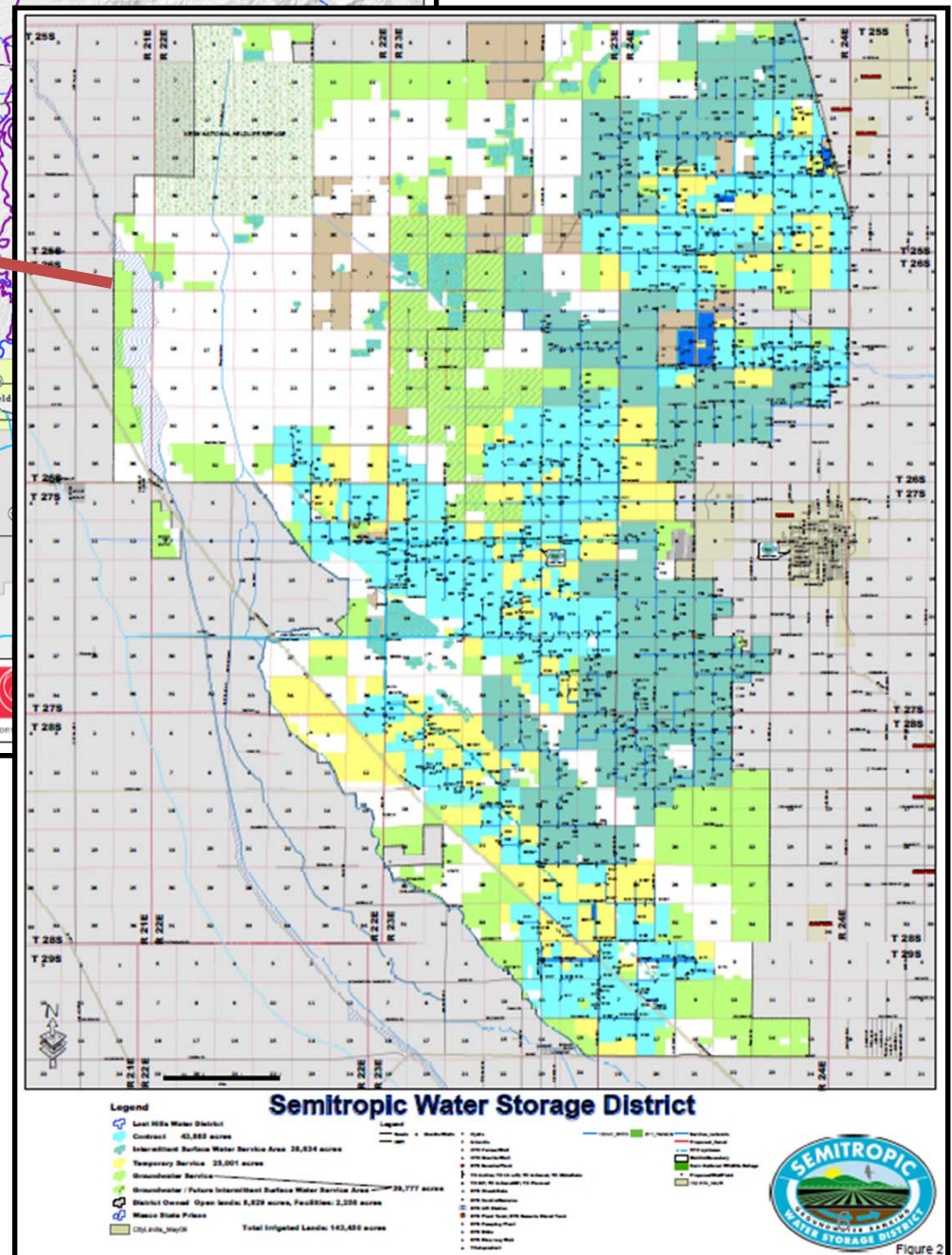
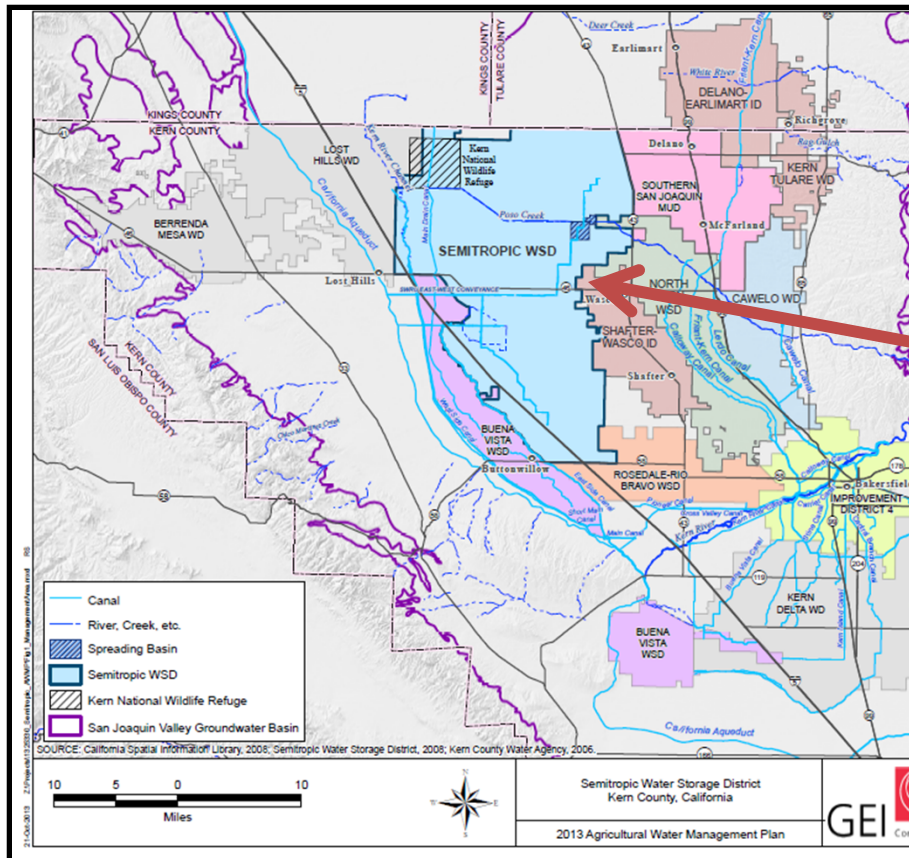


Where Your Water Comes From

Rights to Use Storage Space

- Not much law
 - Treated as water resources subject to “reasonable use” requirement
 - No clear allocation
- Agreements with overlying entities
 - Important to Kern County groundwater banks





Rights to Use Storage Space (con't)

Semitropic Bank Kern County

Rights to Use Storage Space (con't)

- SGMA = 2014 Sustainable Groundwater Management Act
- SGMA requires basins to have “groundwater sustainability plans” (GSPs)
- A GSP must address groundwater storage (Water Code § 10727.4)

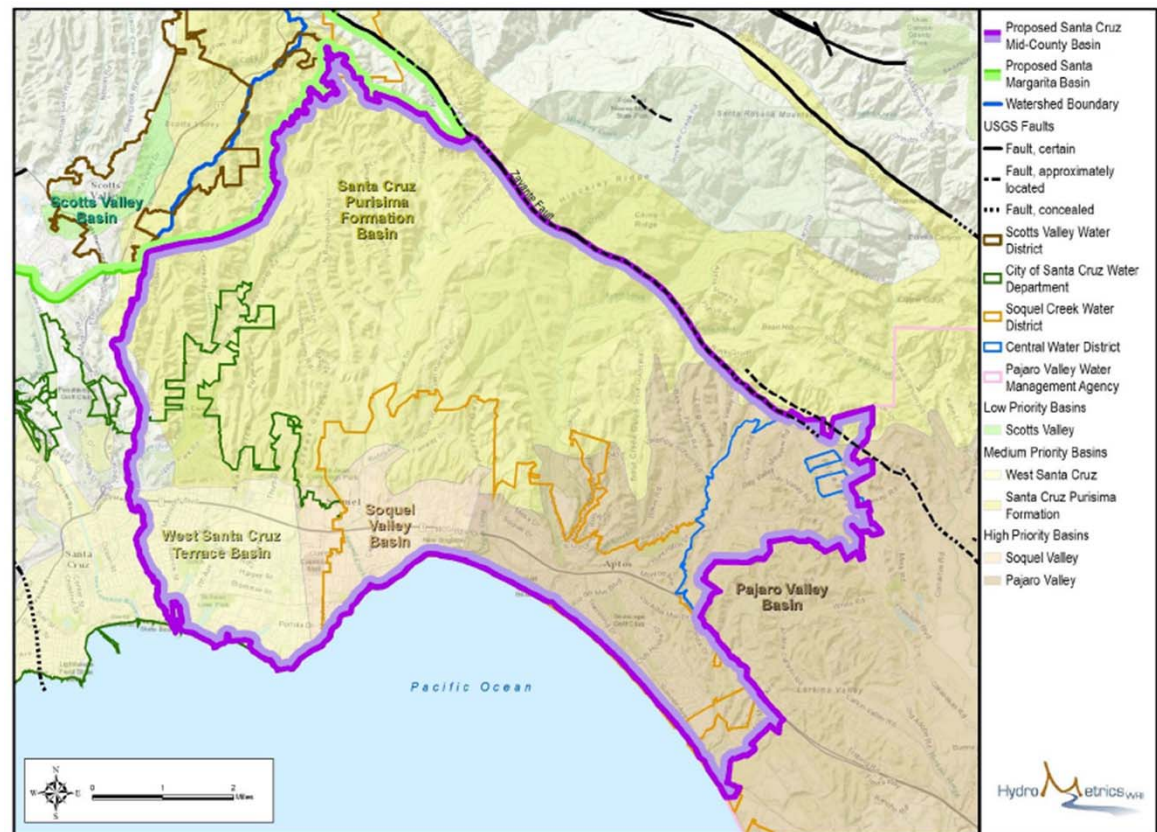


Figure 1: Proposed Santa Cruz Mid-County Basin Boundary Modification

Permit to Inject

- Statewide permit managed by regional water quality control boards
- Authorizes injection of treated drinking water
- Depends largely on technical analysis of constituents in source water and possible interactions in groundwater aquifer

STATE WATER RESOURCES CONTROL BOARD
WATER QUALITY ORDER 2012-0010
GENERAL WASTE DISCHARGE REQUIREMENTS FOR
AQUIFER STORAGE AND RECOVERY PROJECTS
THAT INJECT DRINKING WATER INTO GROUNDWATER

The State Water Resources Control Board (State Water Board) finds that:

1. A stable supply of high quality water is critical to the continued welfare, wellbeing, and economic development of California. According to the California Department of Water Resources (DWR), the demand on groundwater will continue to increase as California's population grows from 37 million (2005 estimate) to a projected 60 million by 2050 based on current trends.
2. Groundwater is an important water source for municipal water supply, agriculture, and individual water users across California. According to the DWR 2009 Water Plan:
 - a. In 1995, an estimated 13 million Californians, nearly 43 percent of the state's population, were served by groundwater. Many small to moderate-sized towns and cities (e.g., Fresno, Davis, Lodi) rely solely on groundwater for their drinking water supplies. California public water supply systems use more than 16,000 wells to supply water to the public.
 - b. Groundwater has played a leading role in transforming California into the nation's top agricultural producer, most populous state, and the seventh largest economy in the world.
 - c. With the growing limitations on available surface water exported through the Sacramento-San Joaquin Delta and the potential impacts of climate change, reliance on groundwater through conjunctive management (i.e., coordinated and planned use and management of surface water and groundwater resources together to maximize the availability and reliability of water supplies) will become increasingly important in meeting the state's future water needs.
 - d. In some areas of the state, groundwater has been overdrafted, resulting in lowered groundwater elevations and reduced groundwater storage. A comprehensive assessment of overdraft in the state's groundwater basins has not been conducted since the 2003 update of DWR Bulletin 118-80, but it is estimated that overdraft is between 1 million and 2 million acre-feet annually.
 - e. Other basins may be subject to overdraft in the future if current water management practices are continued. Overdraft can result in increased water production costs, land subsidence, water quality impairment, and environmental degradation.

Aquifer Storage and Recovery (ASR) projects will improve statewide water management by increasing local storage that will be responsive to the needs of local communities and environmental resources. Statewide implementation of ASR projects will help California fulfill its vast conjunctive use potential. This is particularly true in the Central Valley, which possesses not only the state's largest sources of surface water, but also by far the state's largest aquifer.

3. According to DWR Bulletin 118-80, a basin is subject to critical conditions of overdraft when present water management practices would probably result in significant adverse overdraft-related environmental, social, or economic impacts. The following eleven basins were identified as being in a critical condition of overdraft:

Pajaro Basin	Cuyama Valley Basin	Eastern San Joaquin County Basin
Kern County Basin	Chowchilla Basin	Madera Basin
Kings Basin	Kaweah Basin	Tulare Lake Basin
Tule Basin	Ventura Central Basin	