THE ROLE OF GROUNDWATER IN CALIFORNIA

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In an average year, groundwater meets about 40% of the State’s water demand.

In drought conditions groundwater provides more of California’s water supply.

In 2014, groundwater was estimated to provide nearly 70% of the State’s need.
Increased water demand will cause additional reliance on groundwater

Altered precipitation patterns will also likely cause increased reliance

Population expected to grow to 50 Million by 2050 (12 Million increase)
IT IS A COMPLICATED SYSTEM IN CALIFORNIA
PRESSURES ON GROUNDWATER

- Significant Groundwater overdraft (State DWR estimates 1.233 Billion to 2.5 Billion Cubic Meters)
- Saltwater intrusion along coastal aquifers
- Land subsidence
- Increased energy consumption and facility costs
OVERDRAFT EXISTS STATEWIDE
GROUNDWATER HAS BEEN LARGELY UNREGULATED

- Dual System of overlying rights and appropriative rights
- Complicated by percolating groundwater and subterranean streams
- Surface water/groundwater interconnection
- Occasional adjudication in the Courts (long-time and very costly)
SUSTAINABLE GROUNDWATER MANAGEMENT ACT OF 2014

- Fundamental Change
  - Provides for local/regional management of groundwater basins
  - Requires the development of sustainability plans
  - Requires implementation
  - Provides for State monitoring of performance and intervention in certain cases
AVOID “UNDESIREABLE RESULTS”

- Chronic lowering of groundwater levels
- Significant reduction of groundwater storage capability
- Significant seawater intrusion
- Significant degradation of groundwater quality
- Significant land subsidence
- Surface water depletions that have a unreasonable adverse impact on beneficial uses
GROUNDWATER BASINS COVERED

- Applies to all medium and high priority basins as determined by DWR
- 127 basins in total (all of the orange and yellow on the map)
• Local Groundwater agencies must be designated by June 30, 2017
• Plans must be developed by January 31, 2020 for basins in a critical overdraft condition and by January 31, 2022 for all others
• Plans must provide for achieving sustainability within 20 years
PLAN REQUIREMENTS AND AUTHORITIES

- Establish a sustainability goal
- Include measurable objectives
- Coordination among and between local agencies overlying the basin
- Authorizes allocation of pumping rights
- Authorizes imposition of pumping taxes
- Authorizes construction of facilities to recharge basins
Most significant water legislation in California in 100 years

Ambitious goal – “manage groundwater sustainably within 20 years”

Will avoid mining of groundwater

Will provoke more efficient water use and some contraction of uses

Will create markets for groundwater