

Groundwater Panel

Delta Stewardship Council Meeting

November 20, 2014

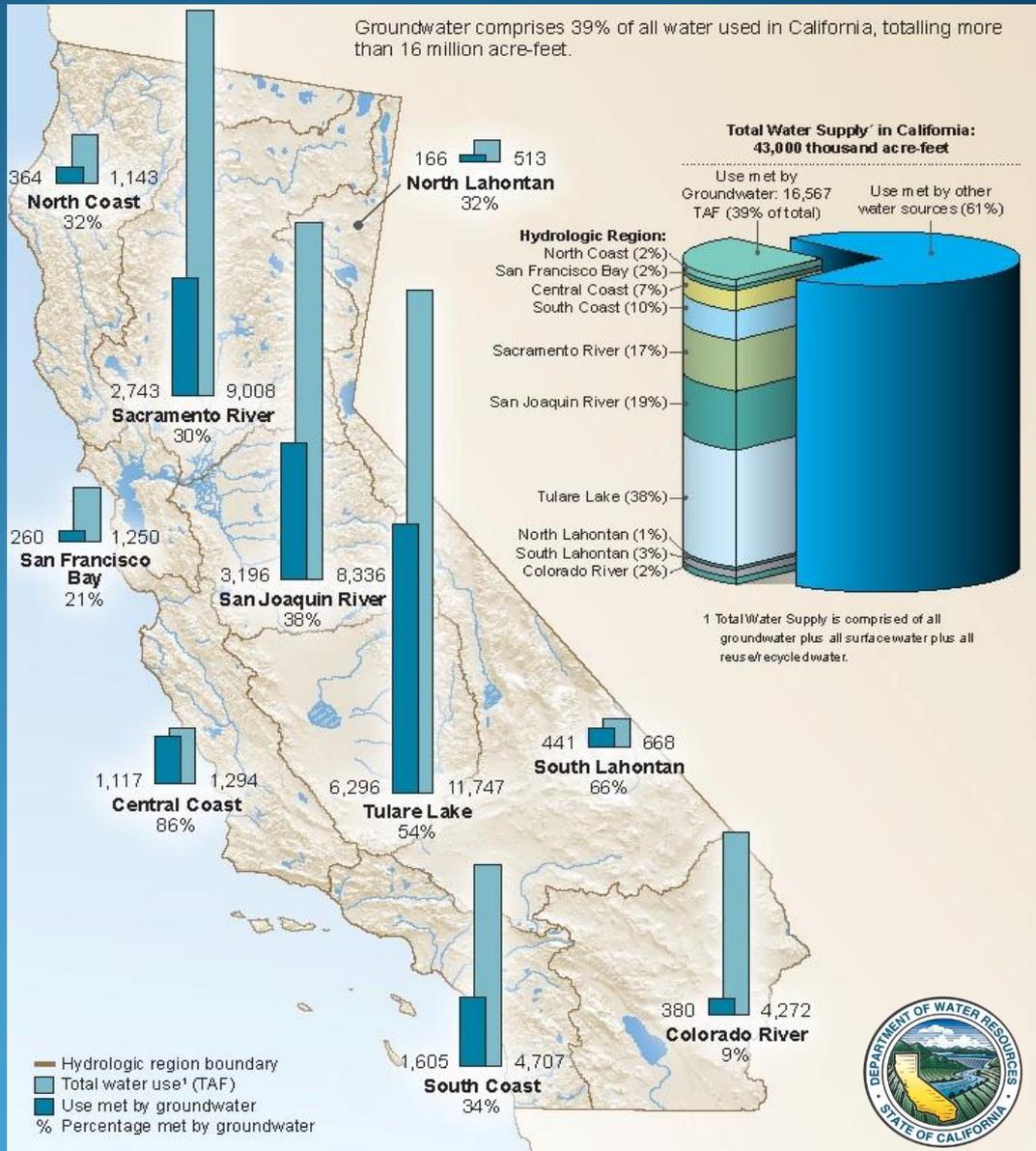
Mary Scruggs
Supervising Engineering Geologist
Department of Water Resources



Groundwater Use in California

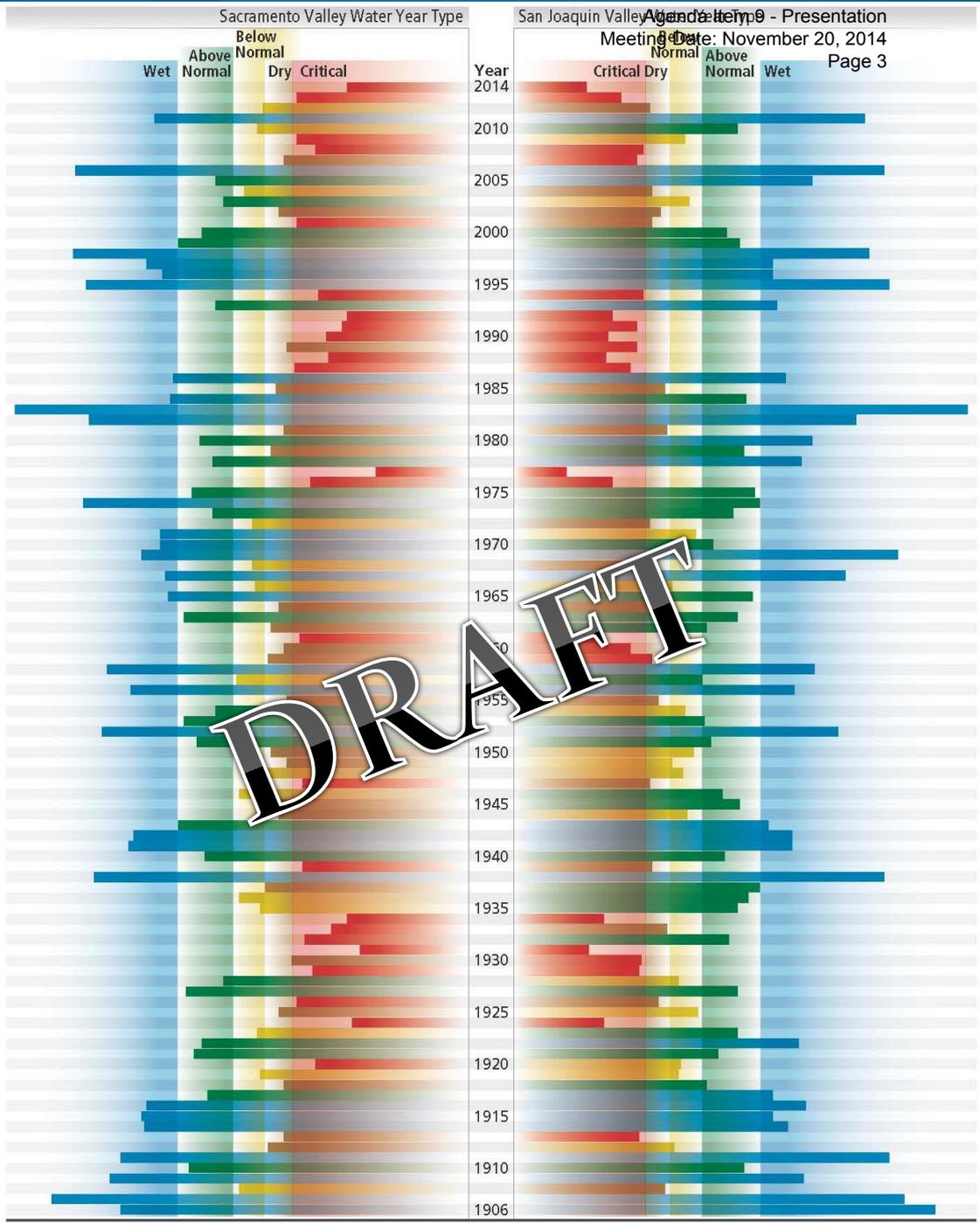
Groundwater accounts for almost 40% of CA water supply

Average annual groundwater use 16.5 Million acre-feet (2005 – 2010)

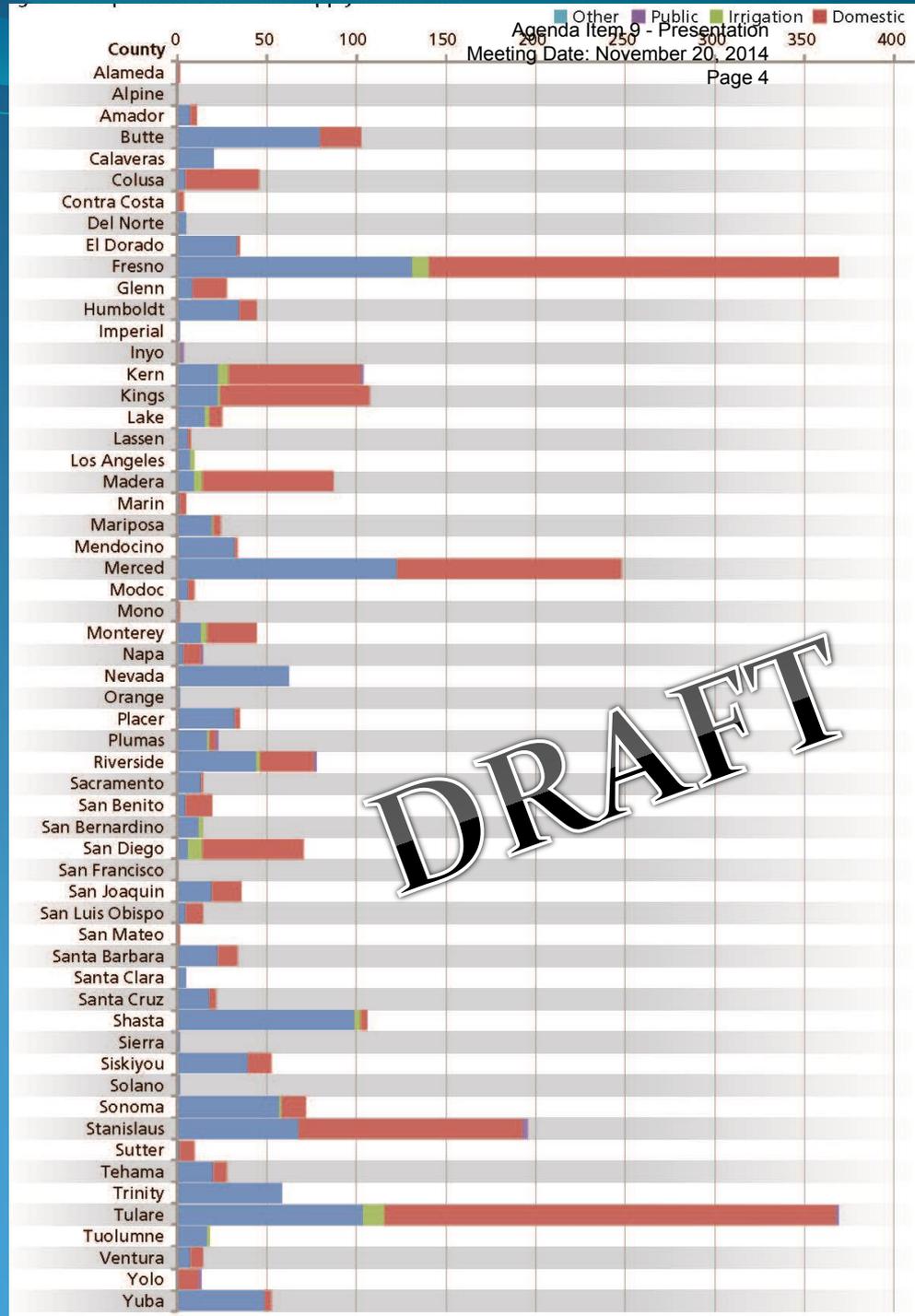


Water Year Type

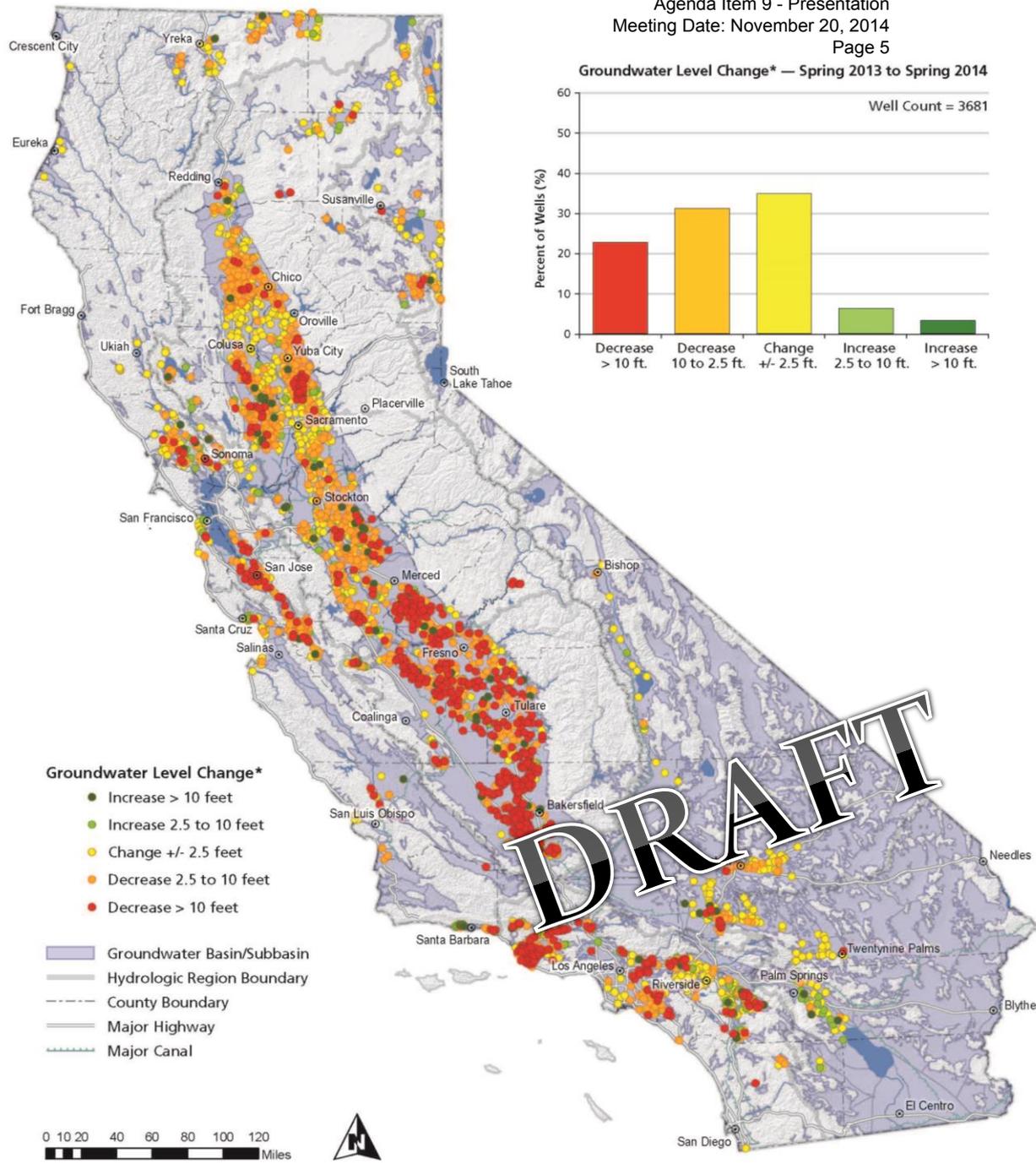
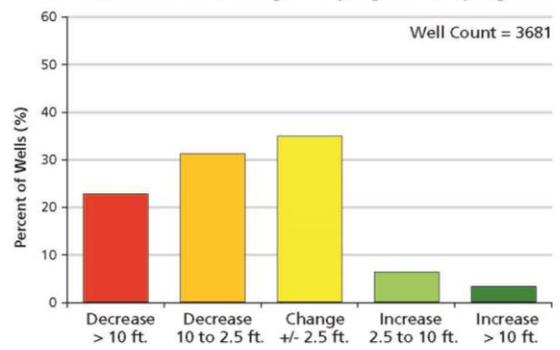
Sacramento and San Joaquin Valleys



New Wells Drilled in 2014



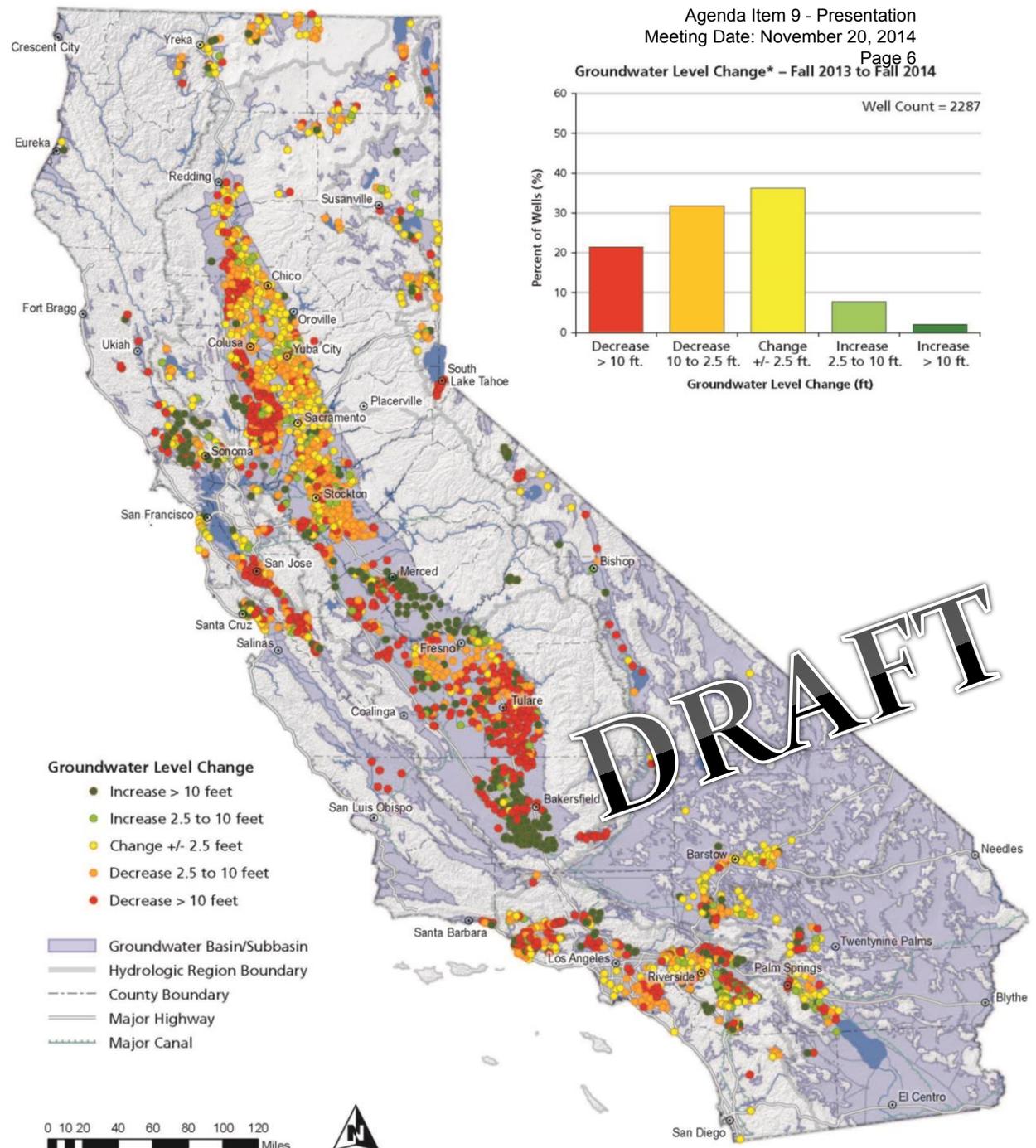
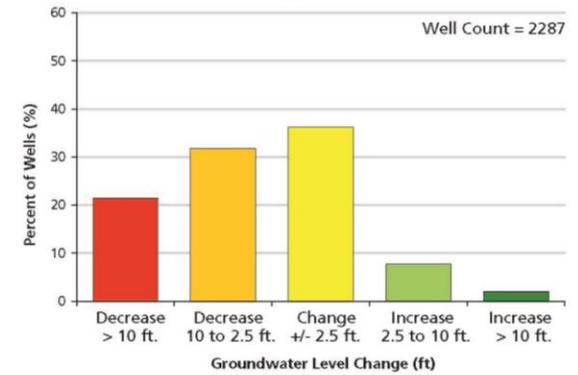
Groundwater Level Change* — Spring 2013 to Spring 2014



Groundwater Level Change

Spring 2013 to Spring 2014

Groundwater Level Change* - Fall 2013 to Fall 2014



Groundwater Level Change

Fall 2013 to Fall 2014

Status of CASGEM Monitoring in High and Medium Priority Basins (as of October 7, 2014)

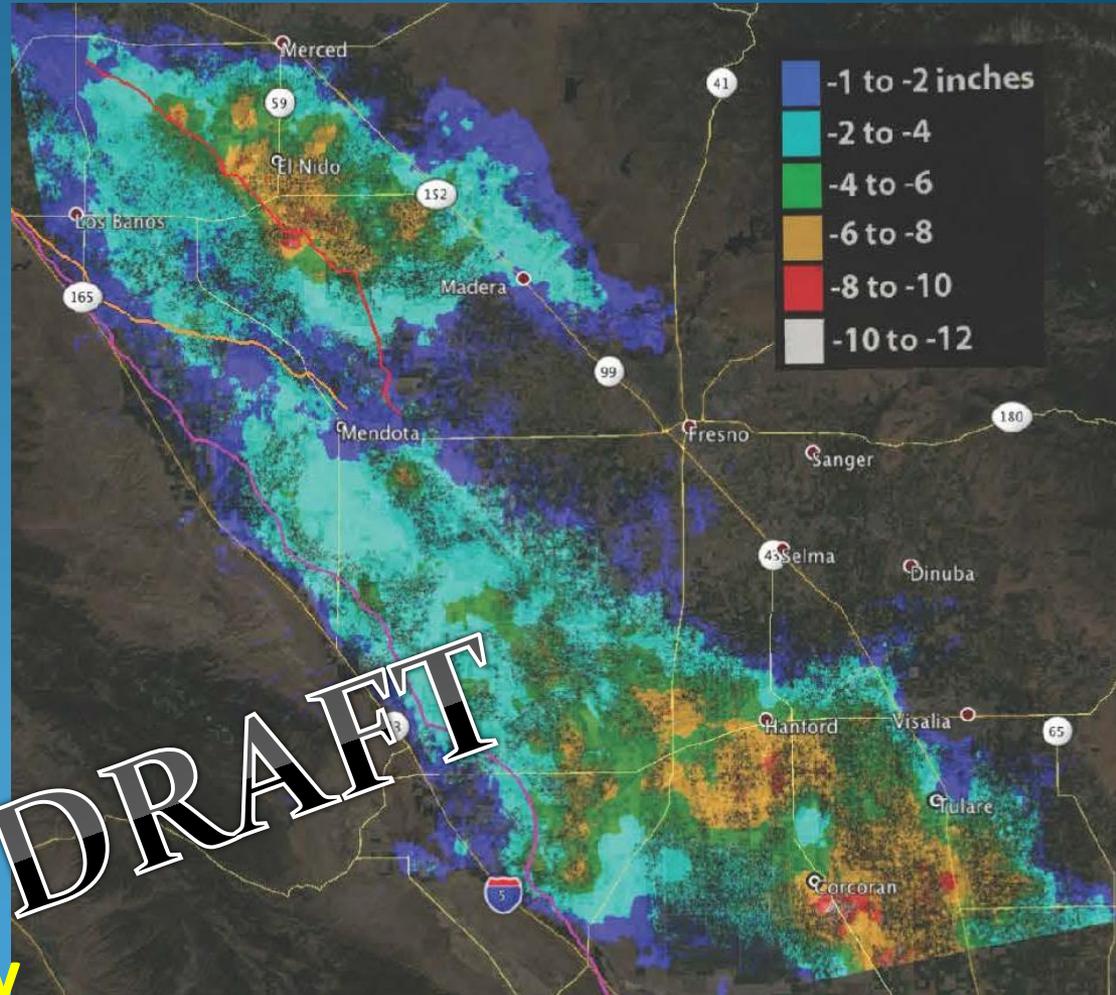


Preliminary image of relative land surface displacement, San Joaquin Valley

May 2014 to October 2014

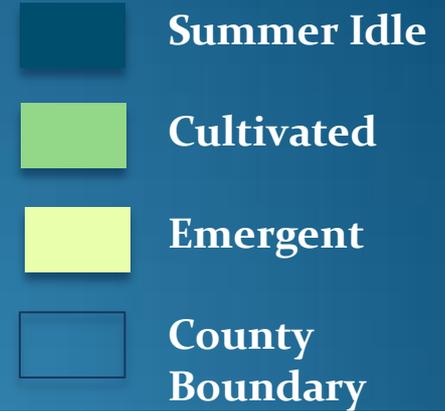
Subsidence, May 3 - October 18, 2014

Measured by Radarsat-2
Processed by
Jet Propulsion Laboratory



July 27, 2014 Central Valley Summer Conditions (June 1 – July 27)

DRAFT

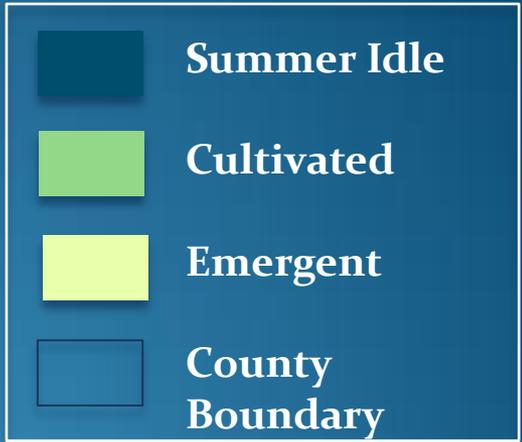


Data source: NASA /
CSU Monterey Bay.
Map derived from
data from Landsat 7,
Landsat 8, Terra and
Aqua satellites.
Satellite observations
for ~200,000 fields
obtained every 8
days.

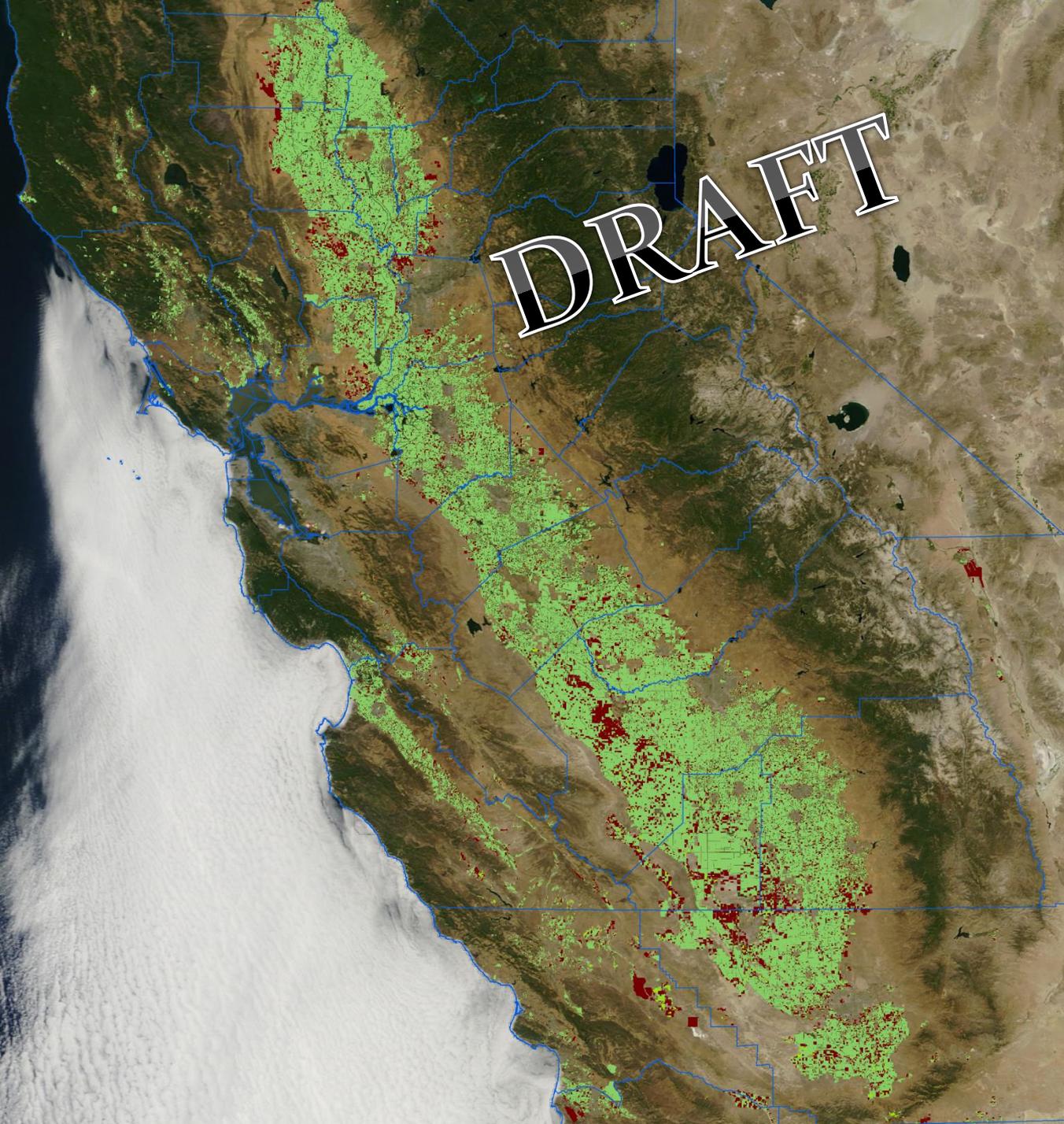
July 27, 2011

Central Valley Summer Conditions (June 1 – July 27)

DRAFT



**Data source: NASA /
CSU Monterey Bay.**
**Map derived from
data from Landsat 7,
Landsat 8, Terra and
Aqua satellites.**
**Satellite observations
for ~200,000 fields
obtained every 8
days.**



Central Valley Idle Acreage Summary

(updated July 27, 2014)

Year	Summer Idled (Acres)
2014	1,706,038
2011	1,013,233
2014 - 2011	692,805

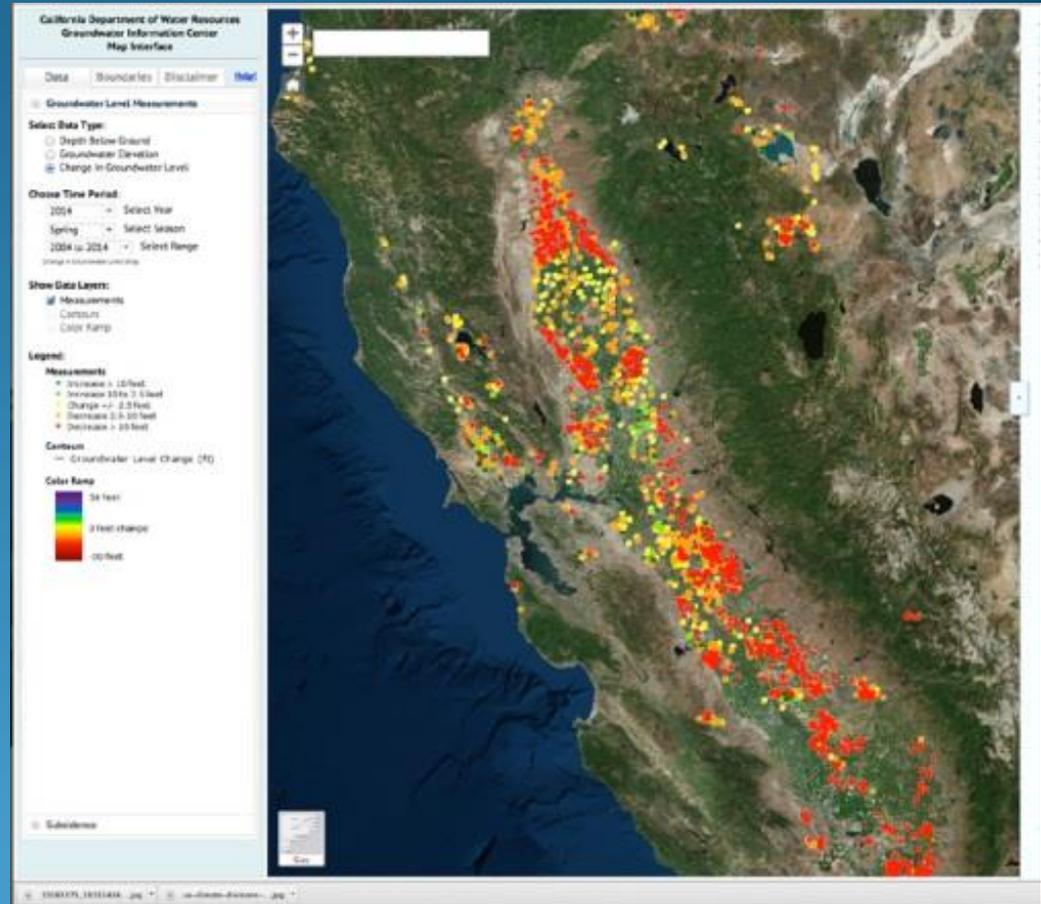
Notes:

- **Summer Idle: No crop detected since June 1**
- **“2014-2011” is the difference in idle acreage between 2014 and 2011**
- **Data source: NASA Ames Research Center / CSU Monterey Bay**
- **Accuracy for the estimates from NASA is +/- 16%, based on comparisons with monthly field observations collected across the Central Valley from April-July, 2014.**
- **Data provided for current year (2014), previous year (2013), and most recent year with average or above average precip during winter (2011)**

Groundwater Information Center

Interactive map application

- Groundwater elevations
- Subsidence data and stations
- Allows download of data



http://water.ca.gov/groundwater/GIC_MapApp_Intro.cfm

2014 Sustainable GW Management Legislation

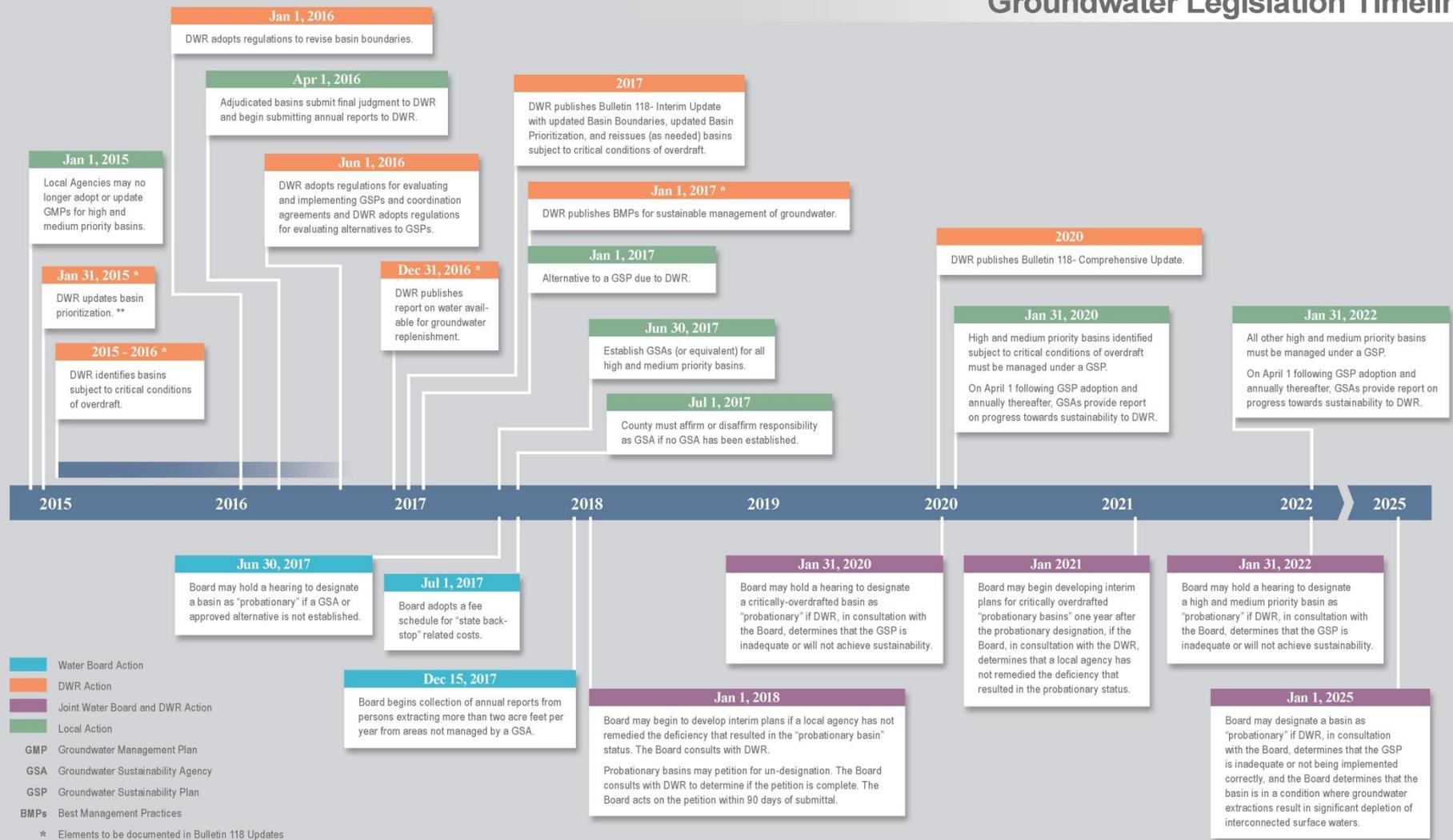
Summary:

- Establishes new state policy for sustainable management of groundwater resources
- Requires sustainable groundwater management for High & Medium priority basins
- Establishes basic requirements for Groundwater Sustainability Plans
- Empowers local agencies to manage their basins sustainably
- Does not alter or determine any surface water rights
- Does not alter the State Water Resources existing authority under current law
- Provides for temporary State intervention in limited circumstances



2014 Sustainable GWM Expanded Timeline

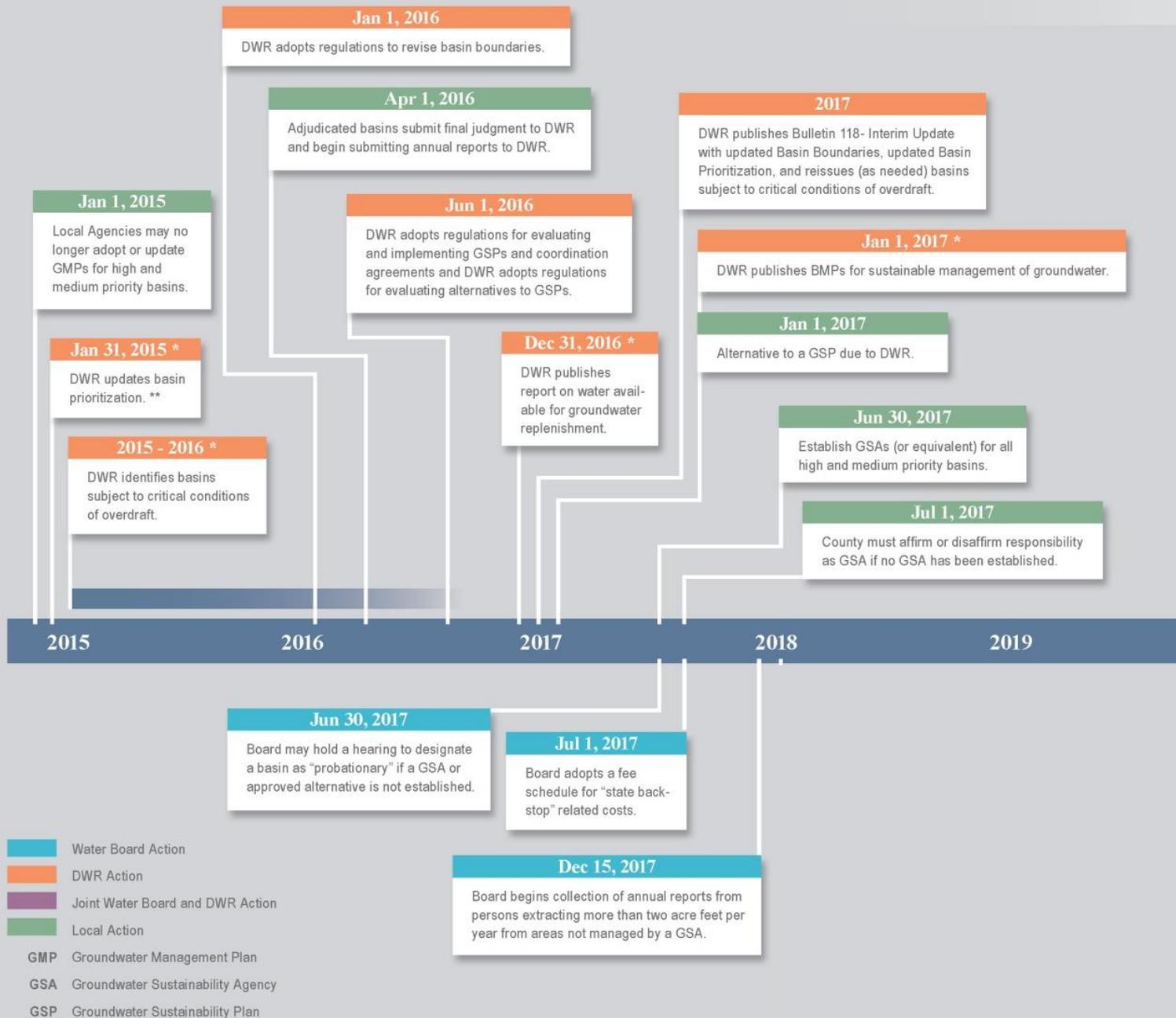
Groundwater Legislation Timeline



- Water Board Action
- DWR Action
- Joint Water Board and DWR Action
- Local Action
- GMP Groundwater Management Plan
- GSA Groundwater Sustainability Agency
- GSP Groundwater Sustainability Plan
- BMPs Best Management Practices
- * Elements to be documented in Bulletin 118 Updates
- ** Basin prioritization will be updated prior to each Bulletin 118 Update (estimated to be every 5 years)



2014 Sustainable GWM Near-Term Timeline



Major Mandated DWR Actions

- Update basin prioritization
- Identifies basins subject to critical conditions of overdraft
- Adopts regulations to revise basin boundaries
- Adopts regulations for evaluating and implementing GSPs and coordination agreements and adopts regulations for evaluating alternatives to GSPs
- Publishes report on water available for groundwater replenishment
- Publishes 2017 - B118 – Interim Update
- Publishes BMPs for sustainable management of groundwater
- Publishes 2020 - B118 – comprehensive Update



Questions?



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