

THE STATE WATER BOARD'S ROLE IN SUSTAINABLE GROUNDWATER MANAGEMENT

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Updates

- Background: What got us to the Sustainable Groundwater Management Act (SGMA)
- SGMA Overview
- SWRCB, DWR activities and coordination
- Other Program work

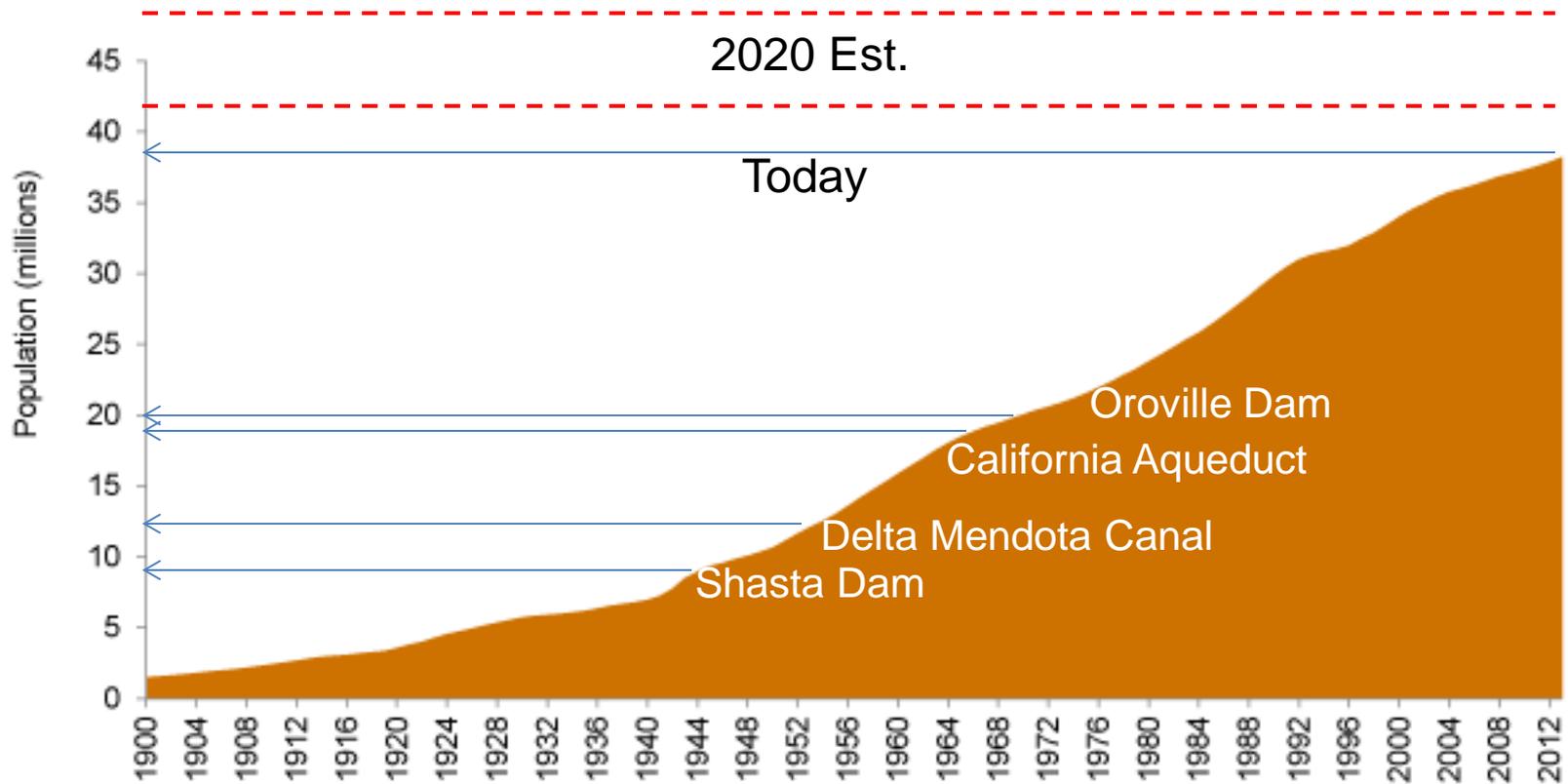


2014



2015

California has experienced rapid population growth

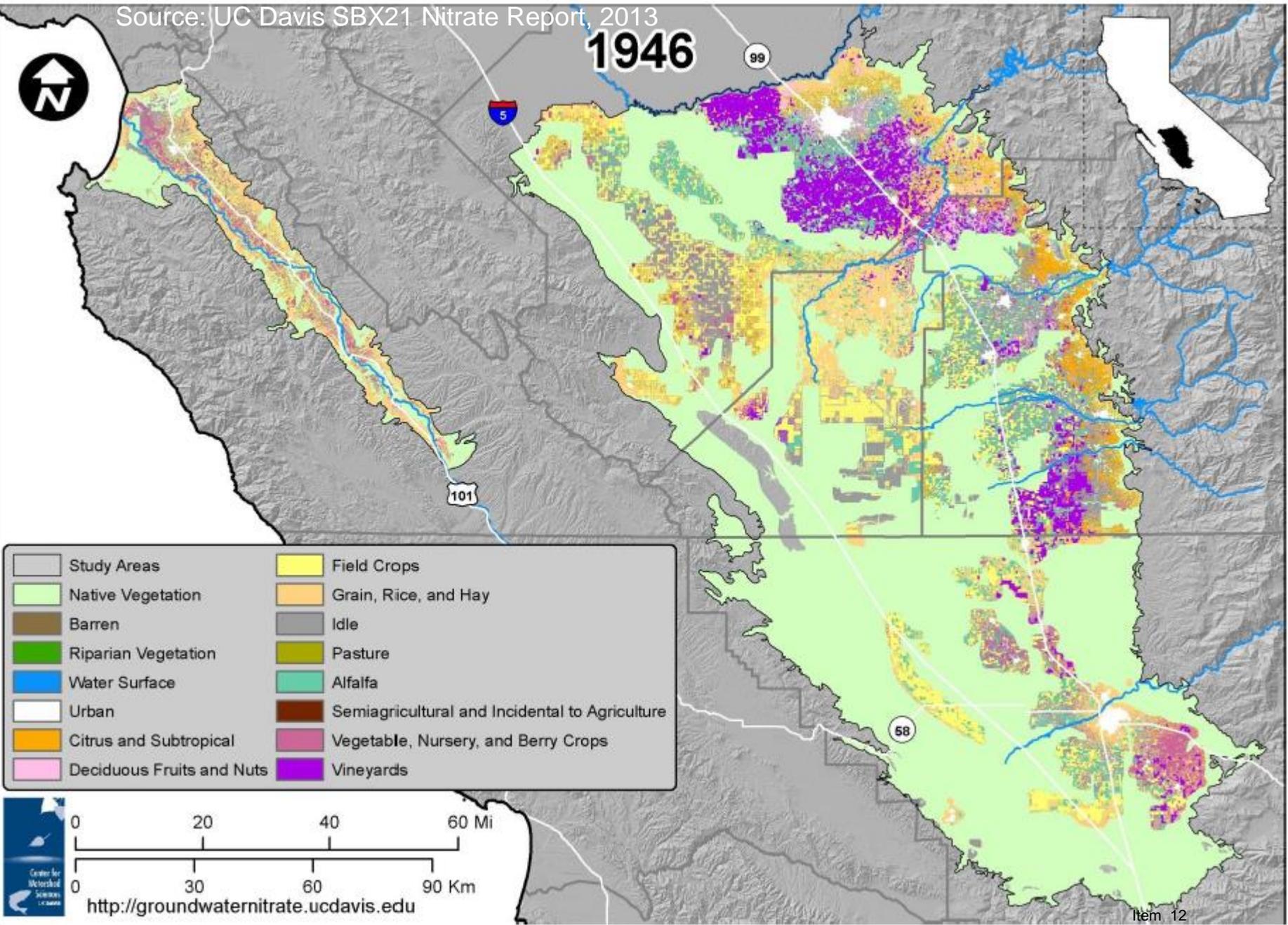


Source: California Department of Finance estimates.

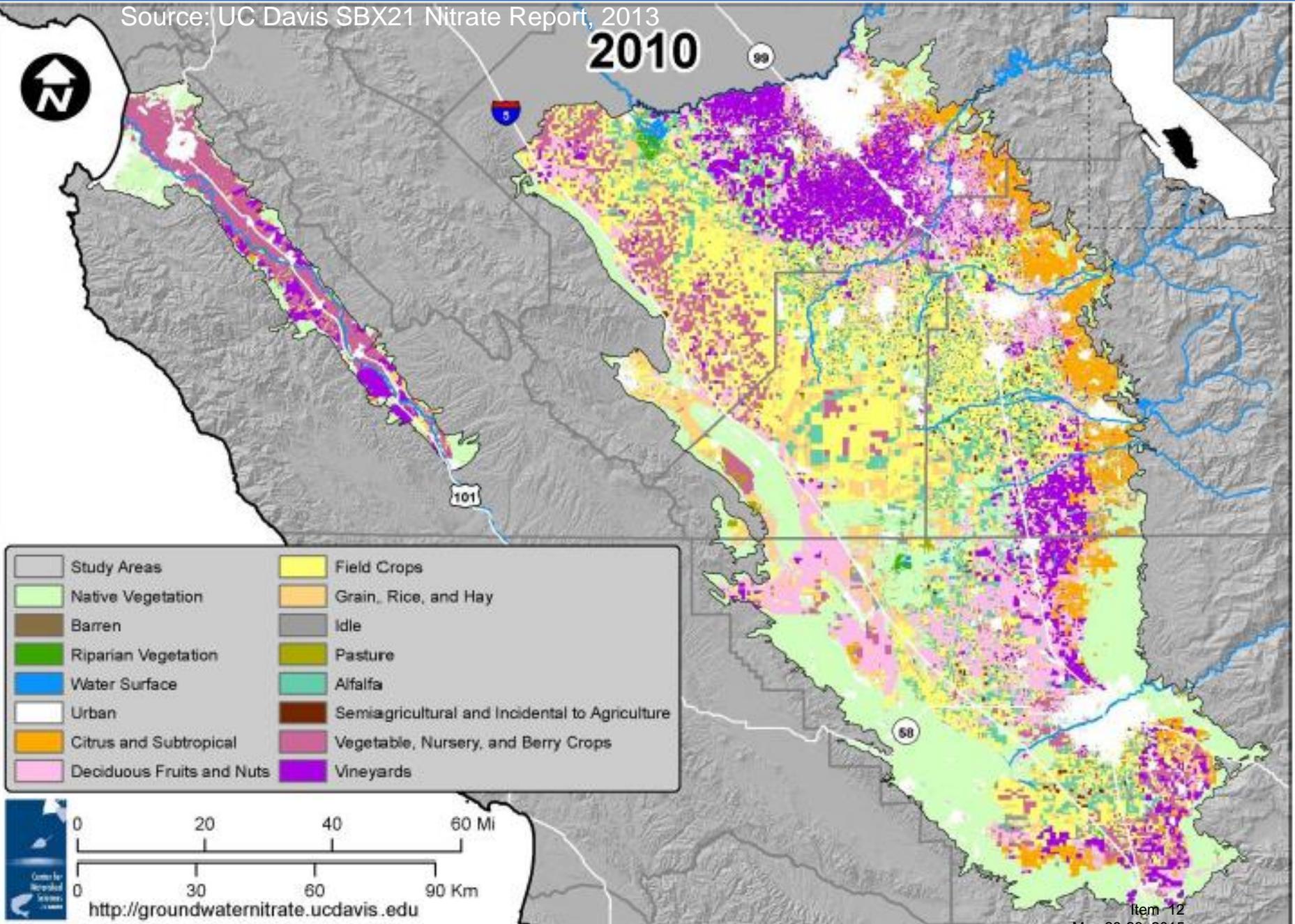
From: Just the Facts: California's Population, PPIC, 2014.

Source: UC Davis SBX21 Nitrate Report, 2013

1946

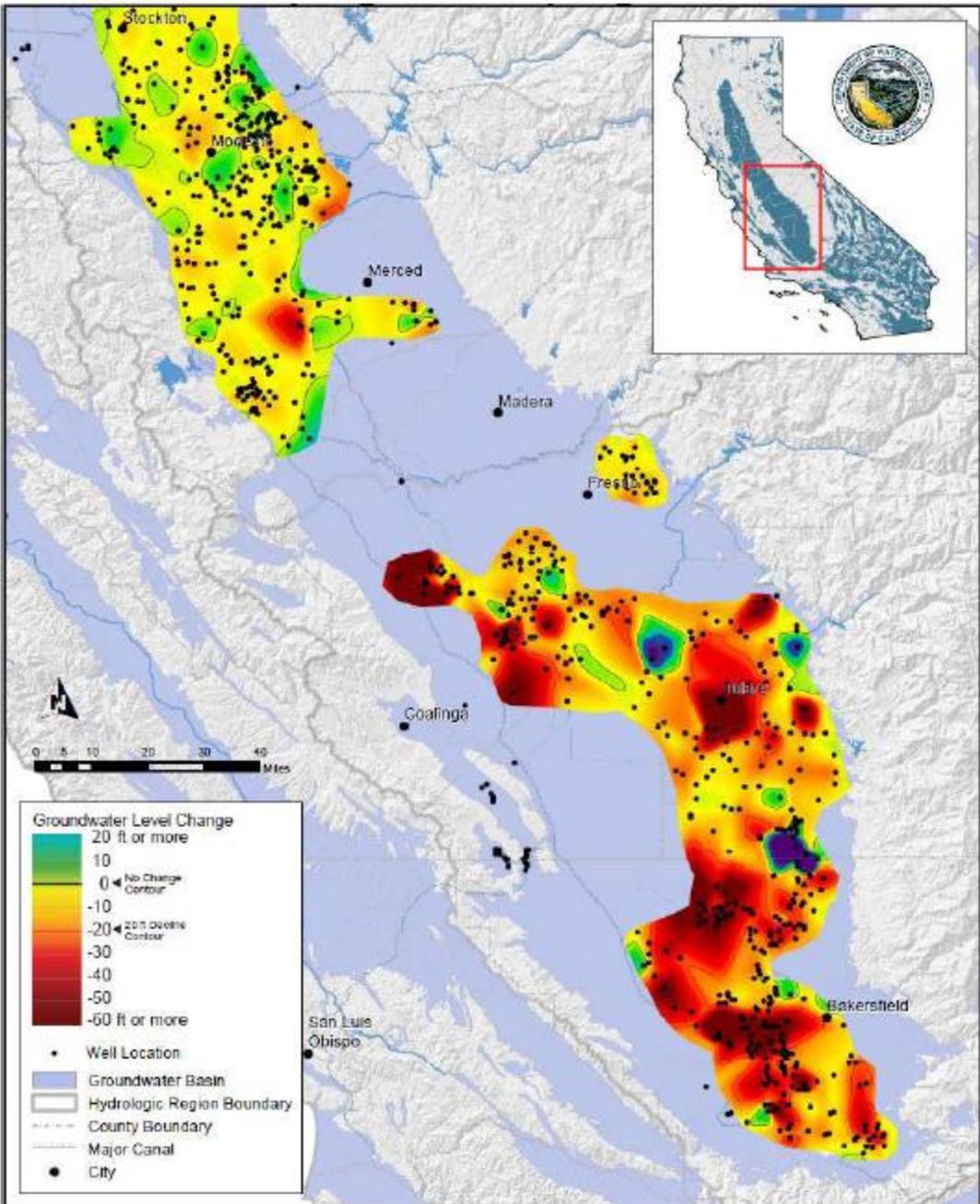


2010



Groundwater Elevation Change

Spring 2013 to Spring 2014



Depth to groundwater determined from water level measurements in wells. Map and chart based on available data from the DWR Water Data Library as of 04/16/2014. Document Name: S2013toS2014_SCV_20140416 Updated: 04/21/2014 Data subject to change without notice.

SGMA

Signed by Governor on September 16, 2014

- AB 1739 (Dickinson)
- SB 1168 (Pavley)
- SB 1319 (Pavley)
- Effective January 1, 2015



“A central feature of these bills is the recognition that groundwater management in California is best accomplished locally.”

- Governor Edmund G. Brown Jr., in signing statement accompanying SGMA groundwater legislation.

The Basics

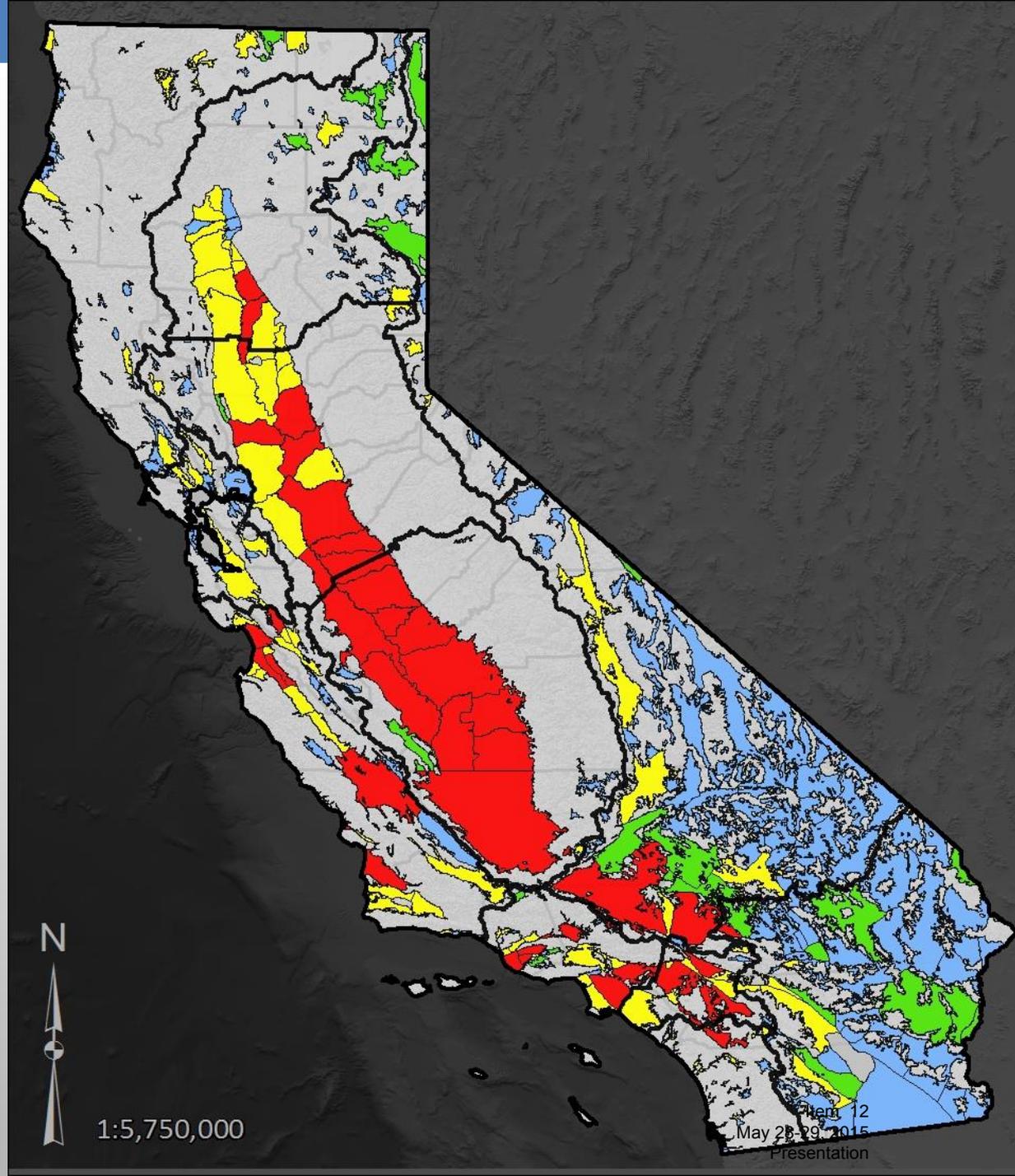
- Requires formation of sustainability agencies and development of sustainability plans
 - 127 High and medium priority basins
- Authorizes management tools for local agencies
- Defines timeframe for accomplishing goals
- Provides alternative if users can show basin is sustainable
- Creates state “backstop”

STATEWIDE CASGEM PRIORITIZATION

Basins displayed by priority:

- 43 High Priority (R)
- 84 Medium Priority (Y)
- 27 Low Priority (G)
- 361 Very Low Priority (B)

Calculation involves:
Population & Pop. Growth
Irrigated acreage
Public supply well distribution
And other variables



Key SGMA Requirements

- Groundwater Sustainability Agencies (GSAs) (2017)
 - One or more agencies
 - If more than one agency per basin, GSAs must coordinate
- GSAs Prepare Groundwater Sustainability Plans (GSPs) (2020/2022)
 - Measurable objectives
 - Implementation milestones
 - Annual reports (water use, extraction, change in storage)
- Achieve Sustainability 20 years after plan adoption, prevent “undesirable results”

Sustainable groundwater management

Management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results.

Undesirable results

- Chronic lowering of groundwater levels (not including overdraft during a drought, if a basin is otherwise managed)
- Significant and unreasonable:
 - reductions in groundwater storage
 - seawater intrusion
 - degradation of water quality
 - Significant and unreasonable land subsidence
 - Surface water depletions adversely impacting on beneficial uses

Backstop Basics

In every circumstance, State Board can only step in when local efforts fail

Timing and role of State Board intervention depends on how locals fail

Numerous off-ramps for locals to avoid management by the state

The “Backstop” State Board Intervention

After	Intervention Trigger
June 30, 2017	Areas without a GSA begin reporting well locations and extraction data to SWRCB; can begin probationary basin designation 180 days later.
Jan. 31, 2020	Can begin probationary basin designation in critically overdrafted basins with no GSP or where GSP is inadequate
Jan. 31, 2022	Can begin probationary basin designation in other high/medium priority basins without a GSP or inadequate GSP and basin is in long-term overdraft
Jan. 31, 2025	Probationary basin designations where GSP is inadequate and significant depletions of interconnected surface waters

In all triggering events, intervention is the result of failure by locals to create a GSA or adopt and implement a GSP

State Water Board Roles

- The State Backstop
 - Data Manager
 - Basin Manager

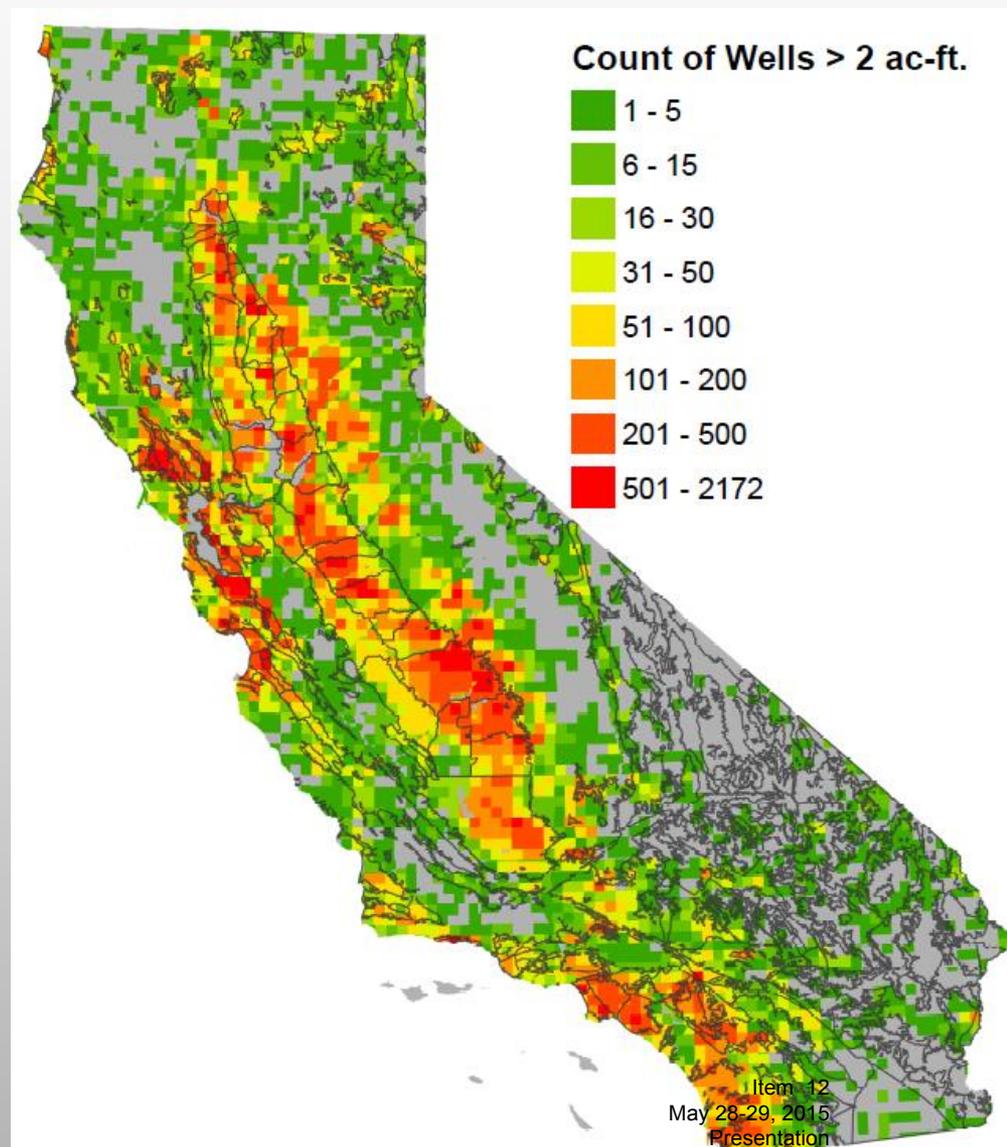
- Coordination with DWR
 - Communication
 - Outreach
 - Regulation development
 - Implementation of the backstop

Role as Data Manager: Potentially Un-Managed Areas (PUMAs)

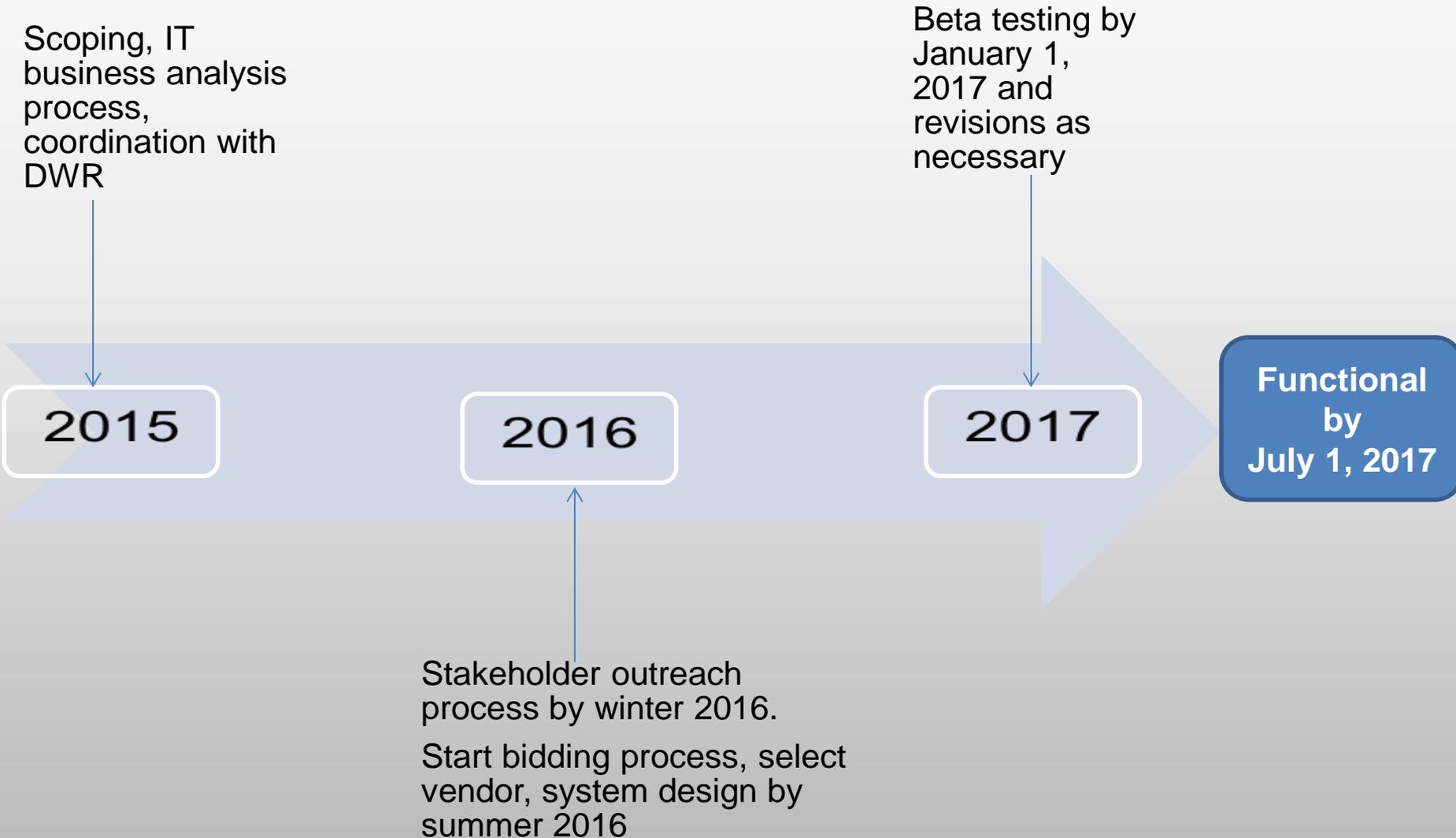
- First backstop role for Board is data collection (July 1, 2017)
- Groundwater users in PUMAs report to State Board (Water Code §5203)
 - Place of extraction
 - Monthly records of volume of extractions
 - Purpose of use
 - Place of use
 - *Any other info required to designate a basin as probationary and write interim plans*

Reporting System Needs

- Electronic reporting system to collect PUMA data
- Data need for interim plans
- Track fees
- Public interface



Data System Development



Role as Basin Manager

Develop fees to support basin management

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graph TD; A[Develop fees to support basin management] --> B[Designate probationary basins]; B --> C[Probationary basins lead to interim sustainability plans]; C --> D[Interim plans manage basins until local efforts come up to speed];
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Designate probationary basins

Probationary basins lead to interim sustainability plans

Interim plans manage basins until local efforts come up to speed

Fees

- Cover all costs related to backstop
 - Facilitation, investigation, monitoring, hearings, enforcement, administration
 - PUMA reporting and participation in Board hearings
- Fees need to be in place with data reporting system



2015

Scoping and Review
of other states

2016 (winter)

Stakeholder
outreach, facilitation,
workshops, and
public process

2017 (late spring)

Fees adopted by
emergency
regulation

July 1, 2017

Fees in place

DWR Key Activities

- Basin Boundary Revision Regulations
- Identification of Basins in Critical Overdraft
- Update Basin Priorities
- **Regulations for Sustainability Plans and how those plans will be reviewed**
- Communication and Outreach
- Proposition 1 Grant Guidelines and Funding Criteria

SWRCB & DWR Coordination

- Coordination Teams
- DWR responsible for evaluating and accepting GSPs; Board is responsible for implementing backstop, identifying probationary basins, writing interim basin management plans
- Board can request that DWR conduct investigations and provide technical assistance
- In some cases, the Board cannot designate probationary basins without first “consulting with DWR”

Local Challenges: Region 3

- Basin priorities and Critical overdraft
- Complexity of management
 - Example 1: Pajaro Basin
 - Example 2: Los Osos Basin

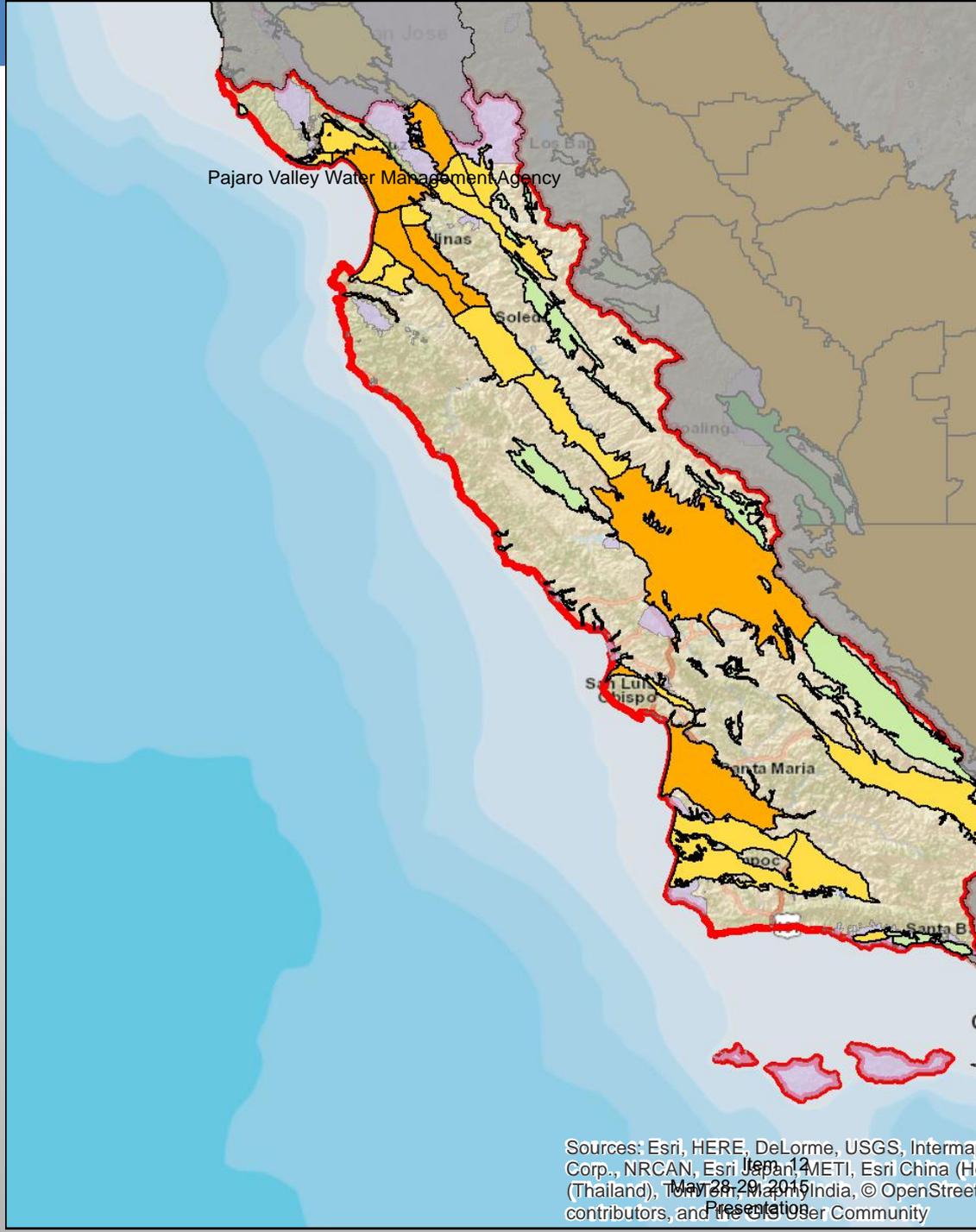
REGION 3

CASGEM BASIN

CLASSIFICATIONS

Basins displayed by priority:

- 28 Very Low (G)
- 15 Medium (Y)
- 9 High (O)



Sources: Esri, HERE, DeLorme, USGS, Intermap, Inc., Swisstopo, Esri Japan, METI, Esri China (Hong Kong), Swisstopo, Swisstopo, Esri India, © OpenStreetMap contributors, and the GIS User Community
Jan 12
May 28, 2015
Presentations

REGION 3

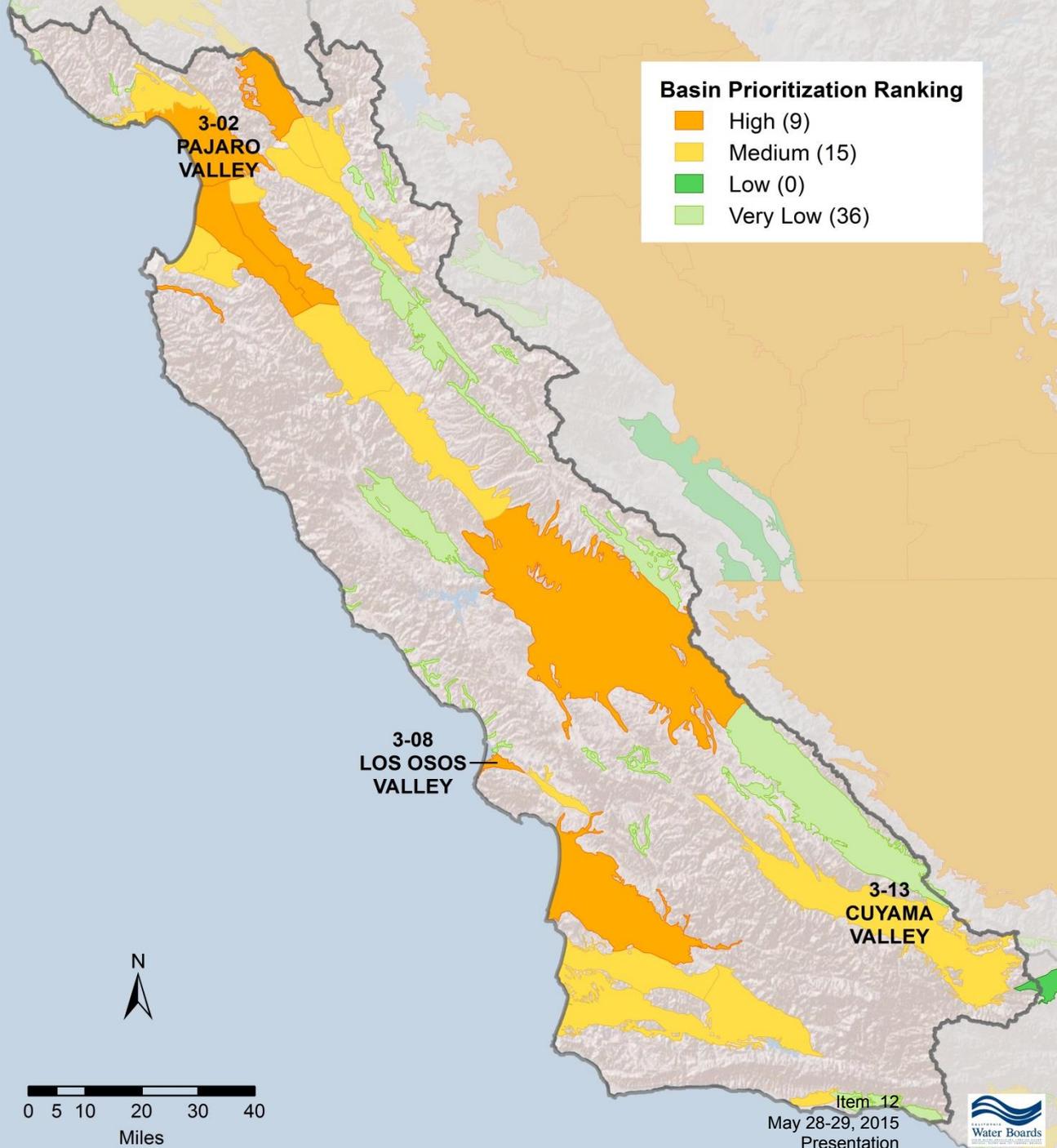
Basins of Interest

Critical overdraft

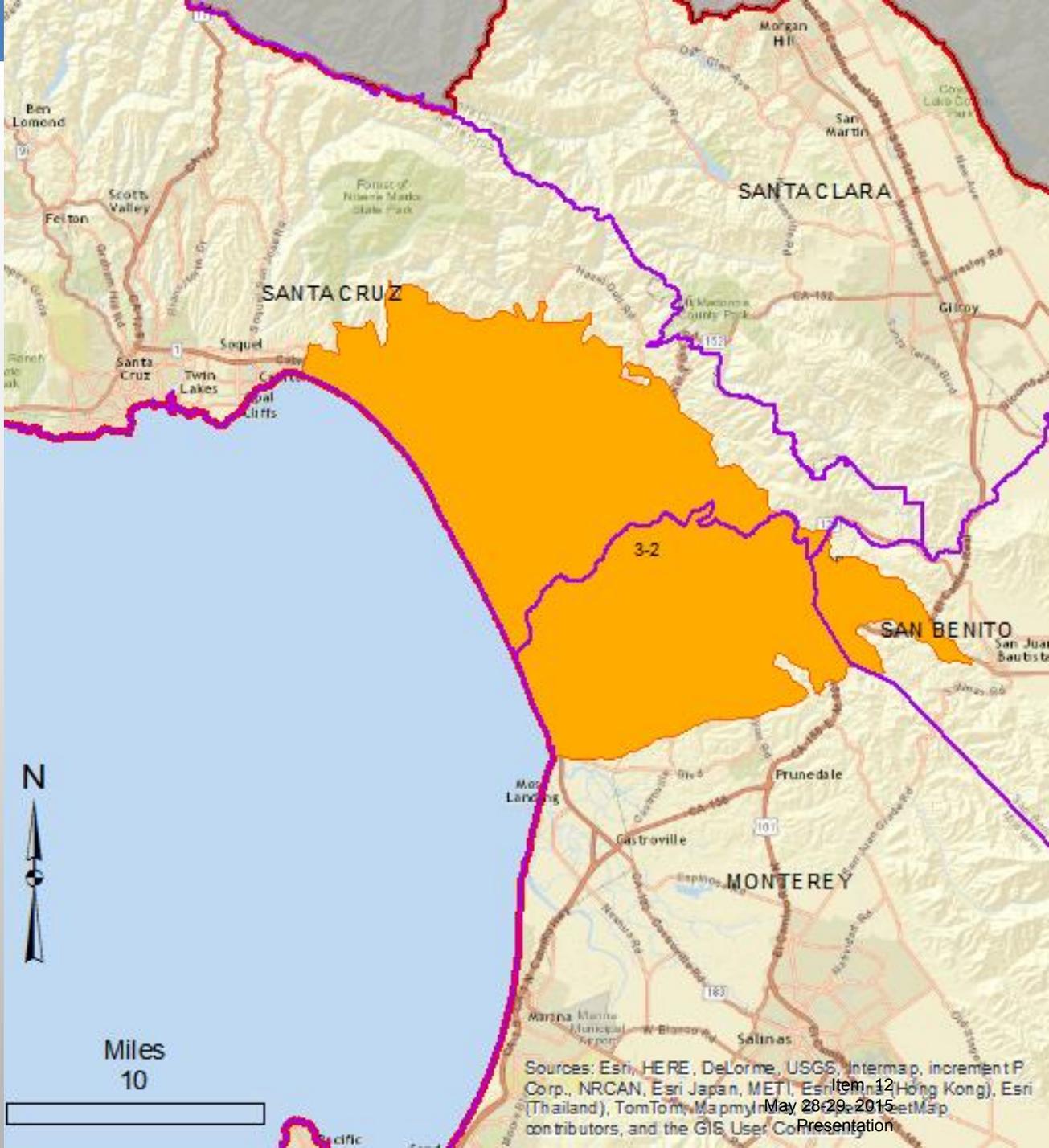
- Pajaro
- Cuyama Valley

Adjudication

- Los Osos Basin

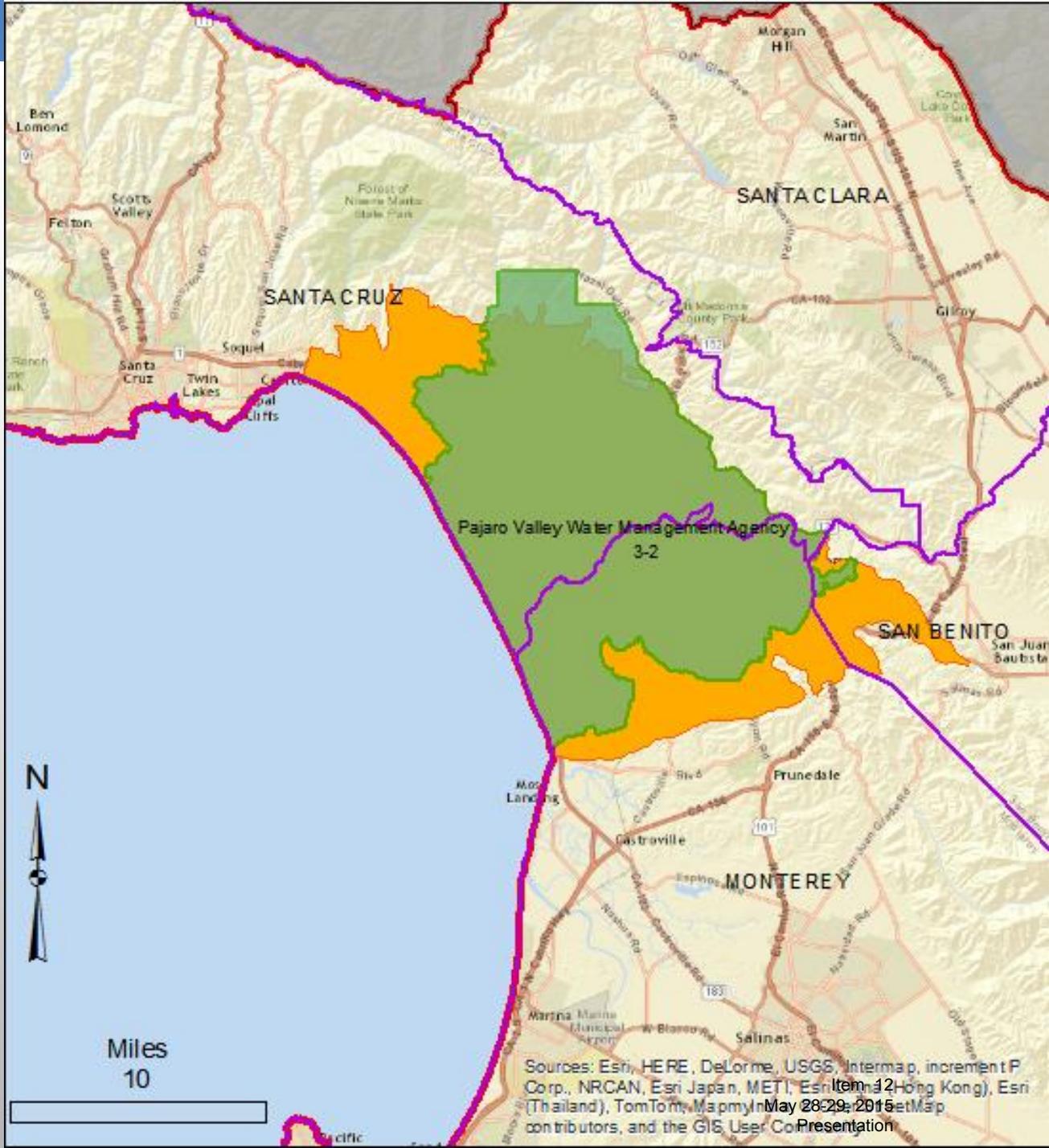


PAJARO VALLEY BASIN



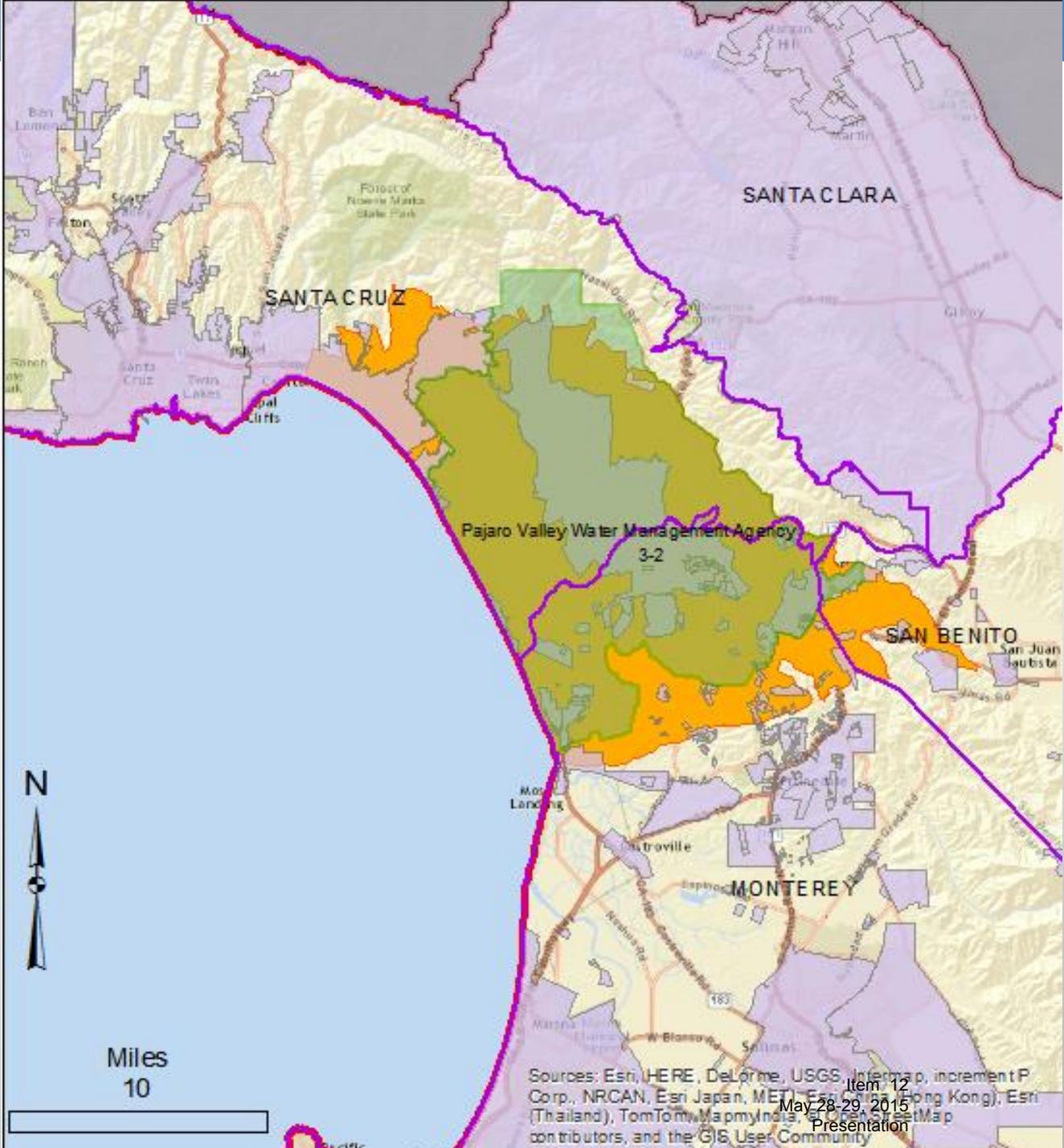
Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri (The Map User Contribution), TomTom, MapmyIndia, © 2015, Swatch, © 2014, Mapbox, OpenStreetMap contributors, and the GIS User Community

PAJARO VALLEY BASIN



Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri (from Hong Kong), Esri (Thailand), TomTom, MapmyIndia, Mapbox, OpenStreetMap contributors, and the GIS User Community

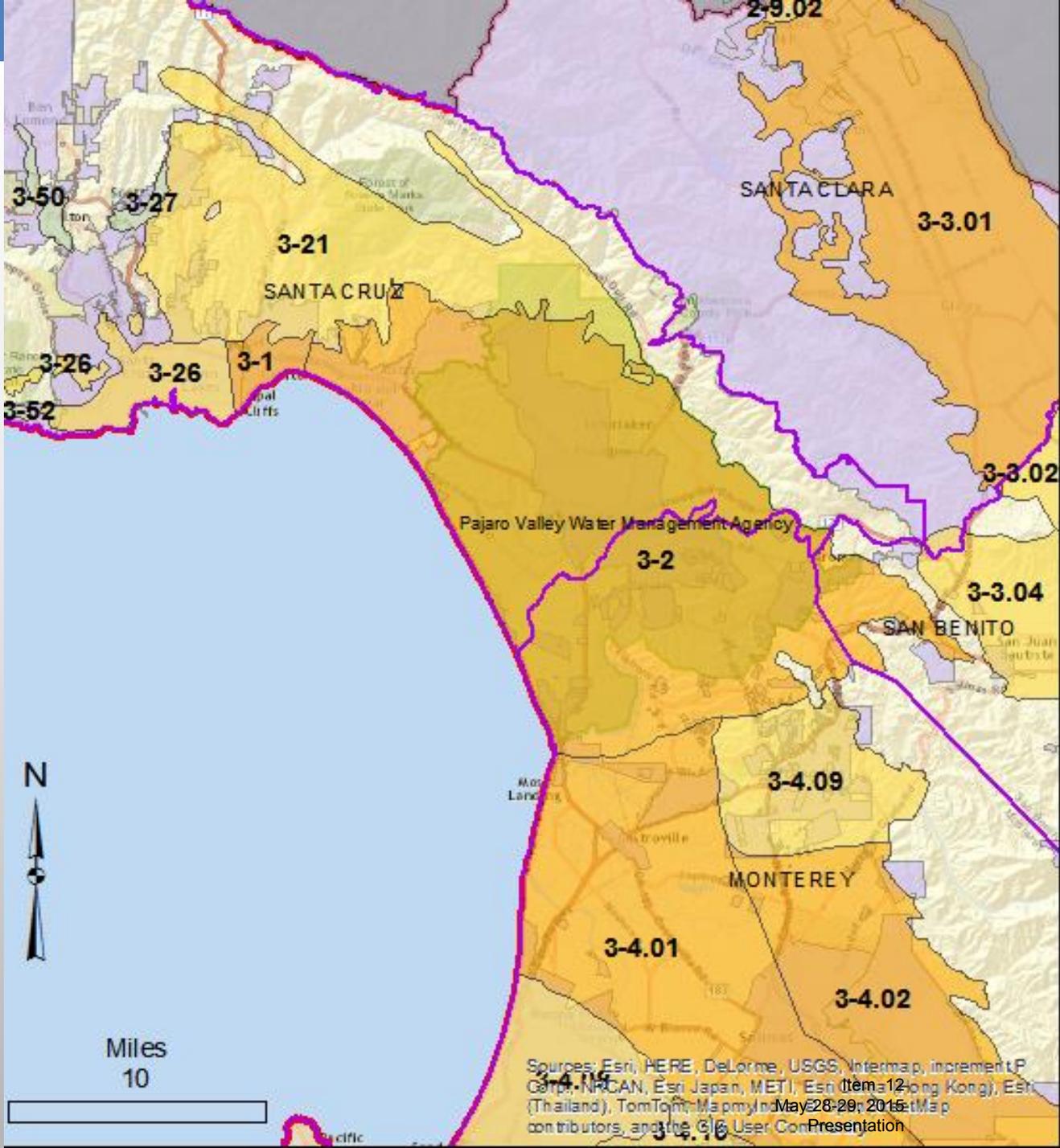
PAJARO VALLEY BASIN EXAMPLE



Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri (from Hong Kong), Esri (Thailand), TomTom, MapmyIndia, © 2015 DeLorme, StreetMap contributors, and the GIS User Community

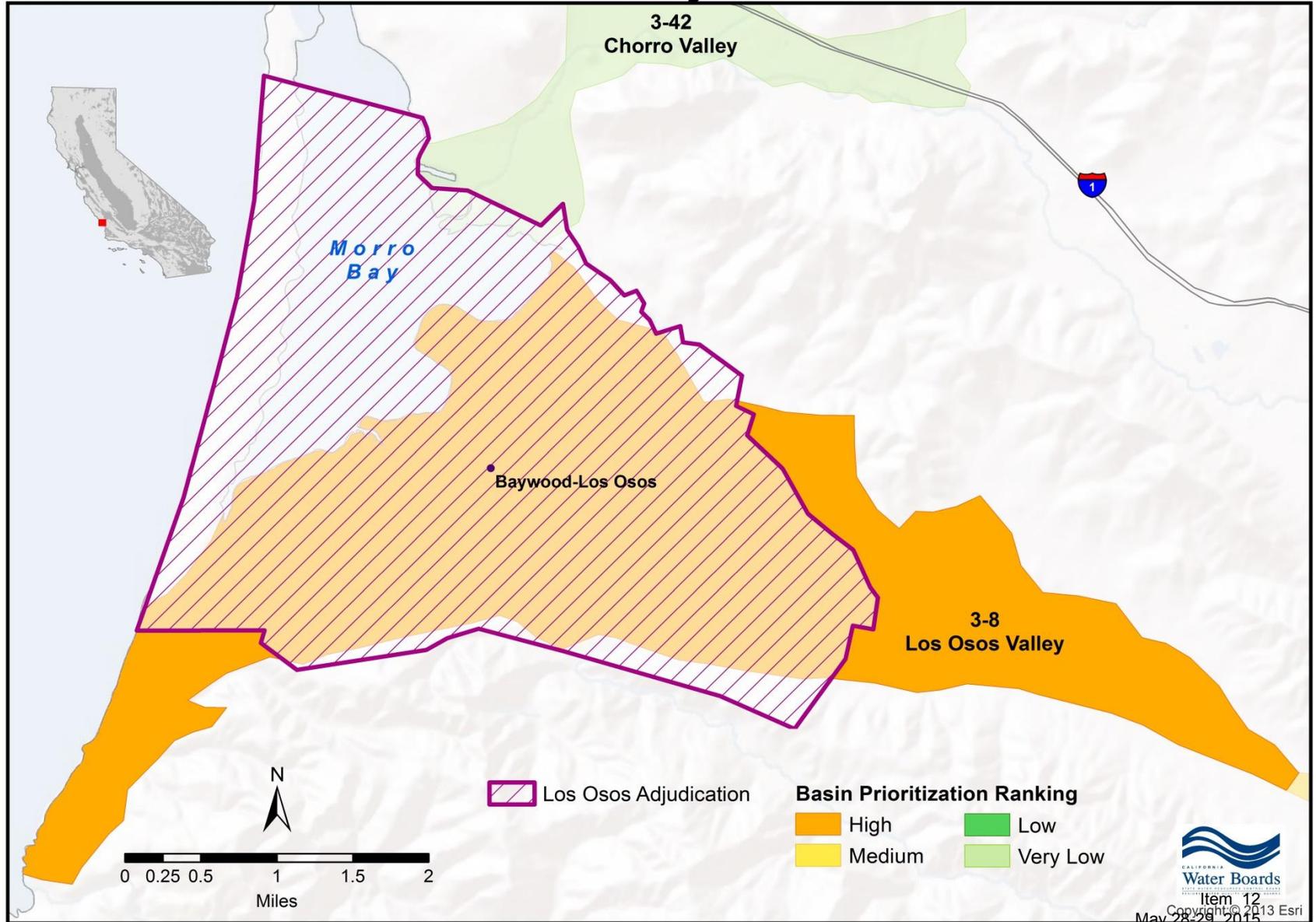
Item 12
May 28-29, 2015
Presentation

PAJARO VALLEY BASIN



Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri (from Hong Kong), Swisstopo, TomTom, Mapbox, and the GIS User Community

Los Osos Adjudication



Other Focus Areas

- Cleanup legislation
 - One bill at present (SB 13, Pavley); at least 10 other bills pending
- Groundwater recharge as a beneficial use
- Adjudication reform
 - Two bills presently, could be more

Summary: State Board Approach

- Focus on existing authorities
 - Waste and Unreasonable Use
 - Public Trust Doctrine
 - Water Code Section 2100
 - Subterranean Streams
- Support DWR in early years
- Support areas that want the help in early years
- Know the field, be prepared to step in strategically
- Develop ability to use tools sparingly
- Be judicious, strategic, and effective when acting
- Lightest touch possible, with goal of local success

Thank You!

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Additional Information:

www.groundwater.ca.gov

DWR – www.water.ca.gov/groundwater

State Board –

http://www.waterboards.ca.gov/water_issues/programs/gmp/index.shtml

Lyris email alert list:

http://www.swrcb.ca.gov/resources/email_subscriptions/swrcb_subscribe.shtml

