

State Water Board Groundwater Concept Paper



February 27, 2014

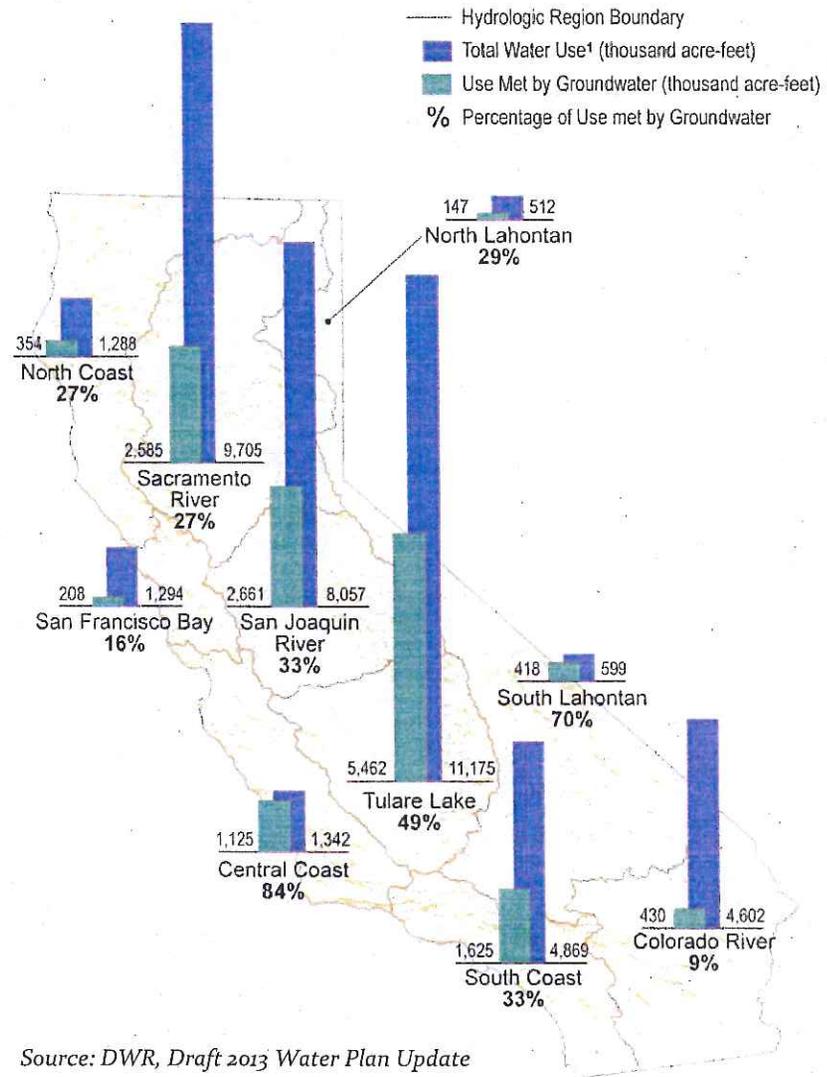
STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

A Critical and Growing Portion of State Water Supply

30-40% of water supply depending on type of year

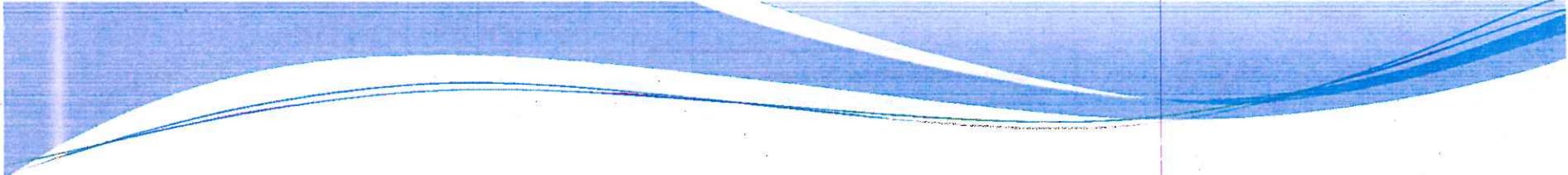
Factors affecting future demand

- Population growth
- Climate change
- Drought
- Reduced surface water availability



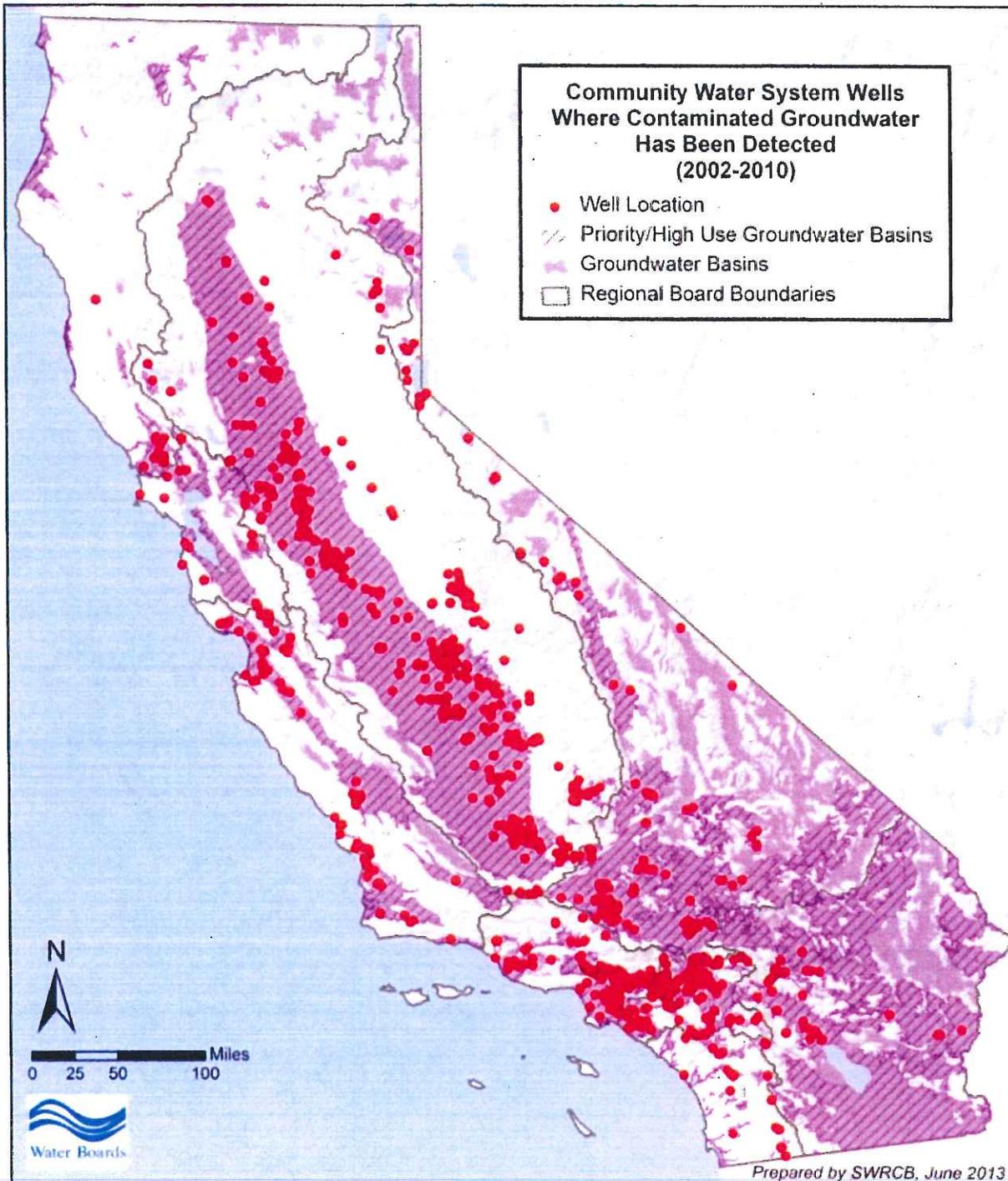
Source: DWR, Draft 2013 Water Plan Update

1. Total Water Use is defined as the sum of water uses for agricultural, urban, and managed wetlands.



Challenges

- Quality
 - Nitrates and other salts
 - Industrial chemicals
 - Naturally occurring contaminants
- Quantity
 - Overdraft
 - Subsidence
 - Affects on surface water/ecosystems

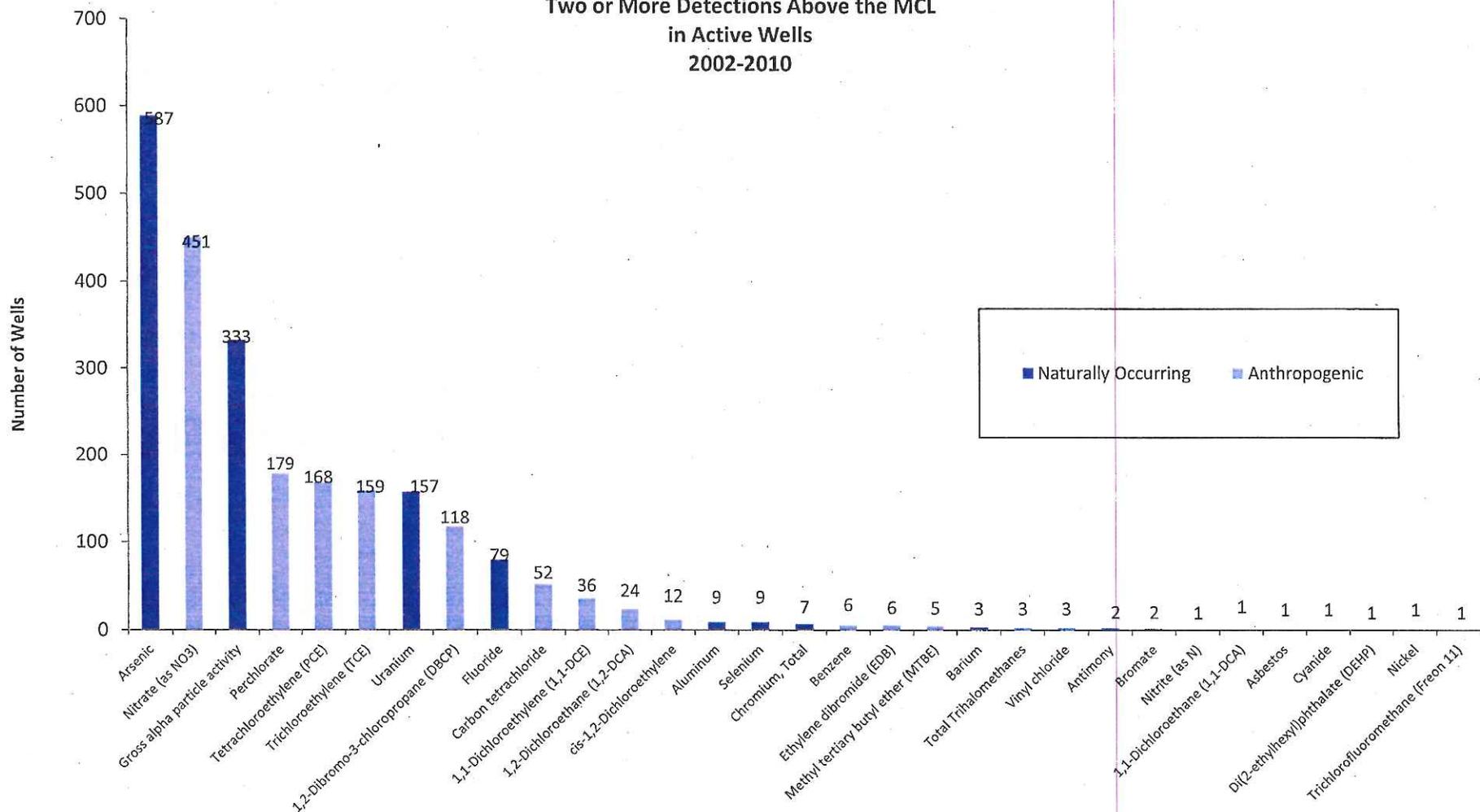


Report to the
Legislature:

Communities relying on
contaminated
groundwater

Community Water Systems with Principal Contaminants Detected

Principal Contaminant Detections: Wells
Two or More Detections Above the MCL
in Active Wells
2002-2010





Groundwater Concept Paper

- The Water Boards are preparing a work plan to identify and prioritize groundwater protection actions that will be carried out over the next five years.
- The goal is to ensure that the Water Boards effectively use their authorities and resources to address the State's most pressing groundwater challenges and to compliment groundwater management efforts occurring at the local level.
- Concept Paper Released September 2013 and workshop held January 2014



Key Concepts

- Water Boards are only part of the solution
- Local and regional agencies have many of the tools and authorities needed for effective management and our often successful
- Where local and regional efforts are successful State should play a supporting role
- Focus on high use areas where problems exist and local management is insufficient



Our Vision: Regional Leadership

We envision a future where well-equipped local and regional groundwater management entities use monitoring information and thresholds to manage and maintain groundwater of sufficient quality at sustainable levels over the long-term; and where local and regional management efforts are backed-up by State support and oversight, where needed.



CA Water Action Plan

The administration will take steps, including sponsoring legislation, if necessary, to define local and regional responsibilities and to give local and regional agencies the authority to manage groundwater sustainably and ensure no groundwater basin is in danger of being permanently damaged by over drafting.

When a basin is at risk of permanent damage, and local and regional entities have not made sufficient progress to correct the problem, the state should protect the basin and its users until an adequate local program is in place.



What's Needed

1. **Thresholds** for water level drawdown and water quality for impacted, vulnerable, and high-use basins;
2. Water quality and water level **monitoring** data and data management systems capable of determining if thresholds are being met and evaluating trends;
3. A governance structure with the planning, assessment, and **governance** mechanisms needed to prevent impacts before they occur, clean up contamination where it has occurred, and effectively **manage** groundwater at the basin scale to ensure drawdown and water quality thresholds are attained; and
4. **Funding** to support management, monitoring, oversight.
5. **Oversight** and **enforcement** in basins where ongoing management and control efforts are not protecting groundwater.



Key Comments on Concept Paper

- General support for vision and framework including five key management elements
- Need more emphasis on the connection between groundwater and surface water
- Support for local management with accountability and triggers for action
- Thresholds should be set to protect surface water flows, not just to achieve safe yield (but thresholds for quantity need to be flexible and recognize that groundwater basins are “exercised”)
- Focus should be on unmanaged basins/but we also heard focusing only on problem areas will not protect basins currently in good condition
- State’s role needs to be defined, but highly variable perspectives on the degree to which the state should have a role in addressing quantity
- Many others



Last Thoughts:

- Groundwater is effectively managed in some areas, but quality degradation and overdraft is still occurring in some basins
- Local and regional entities are best positioned to monitor and manage basins
- State should provide support and oversight when needed
- Monitoring will inform local and regional management and guide state level actions

Next Steps:

- Complete work plan focused Water Board actions
- Work with and provide support for Governor's Office implementation of California Water Action Plan



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[http://www.waterboards.ca.gov/water_issues/programs/
groundwater/workplan.shtml](http://www.waterboards.ca.gov/water_issues/programs/groundwater/workplan.shtml)