

# SAN MATEO PLAIN GROUNDWATER SUBBASIN

## CASGEM Compliance Update

COUNTY OF SAN MATEO OFFICE OF SUSTAINABILITY

19 March 2020



# OVERVIEW

- CASGEM Background
- County's Progress towards CASGEM Compliance
- CASGEM Monitoring Plan and Network
- Monitoring Performed to Date
- Discussion/Next Steps

# BACKGROUND ON THE CASGEM PROGRAM

## CASGEM: California Statewide Groundwater Elevation Monitoring

- Senate Bill 6 (Steinberg), passed in 2009, added Part 2.11 “Groundwater Monitoring” (commencing §10920) to Division 6 of Water Code
- Legislative Intent (§10920):
  - That groundwater elevations be regularly and systematically monitored in all California Basins **by January 1, 2012**.
  - That the resulting information be readily and widely available
  - That the Department of Water Resources (DWR) continue its current monitoring and coordinate with local entities.



# BACKGROUND ON THE CASGEM PROGRAM

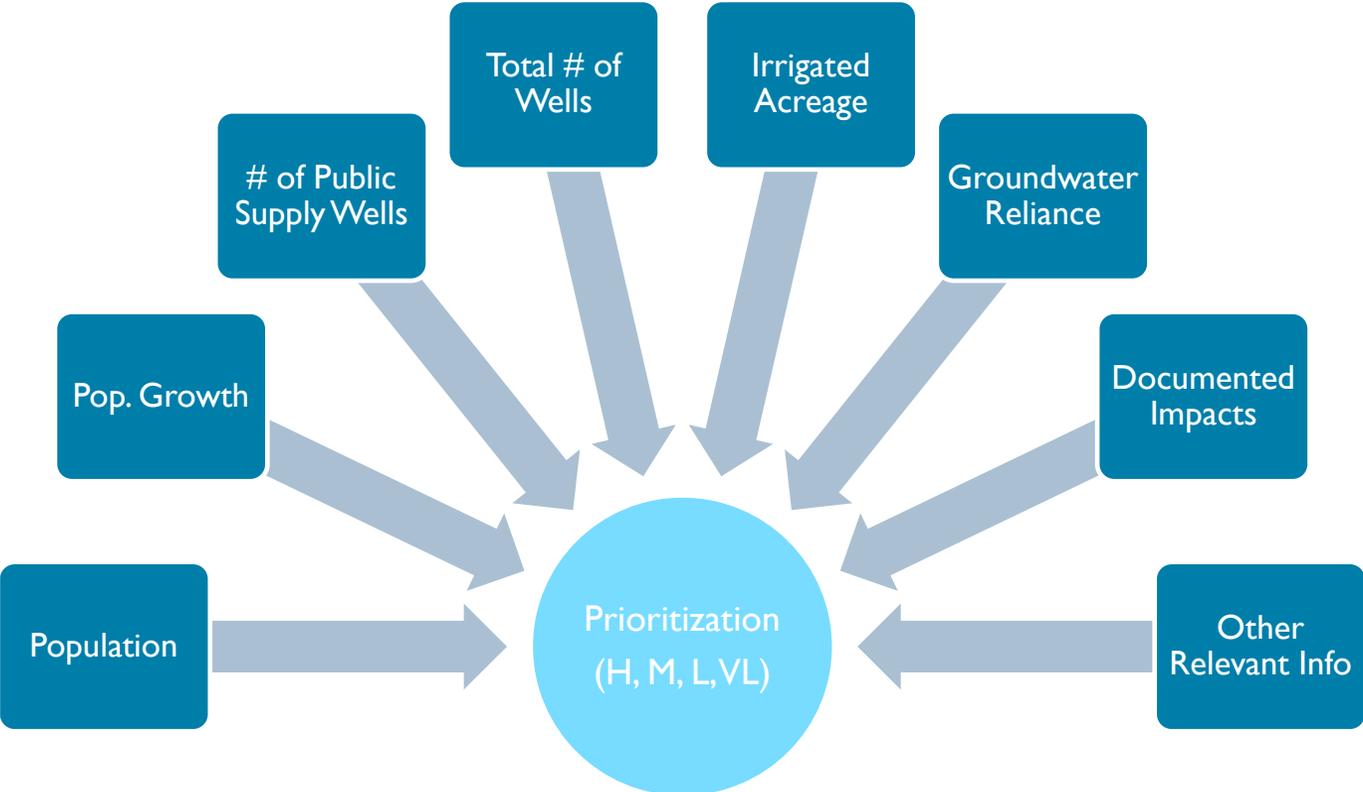
## CASGEM: California Statewide Groundwater Elevation Monitoring

### ■ Key Provisions:

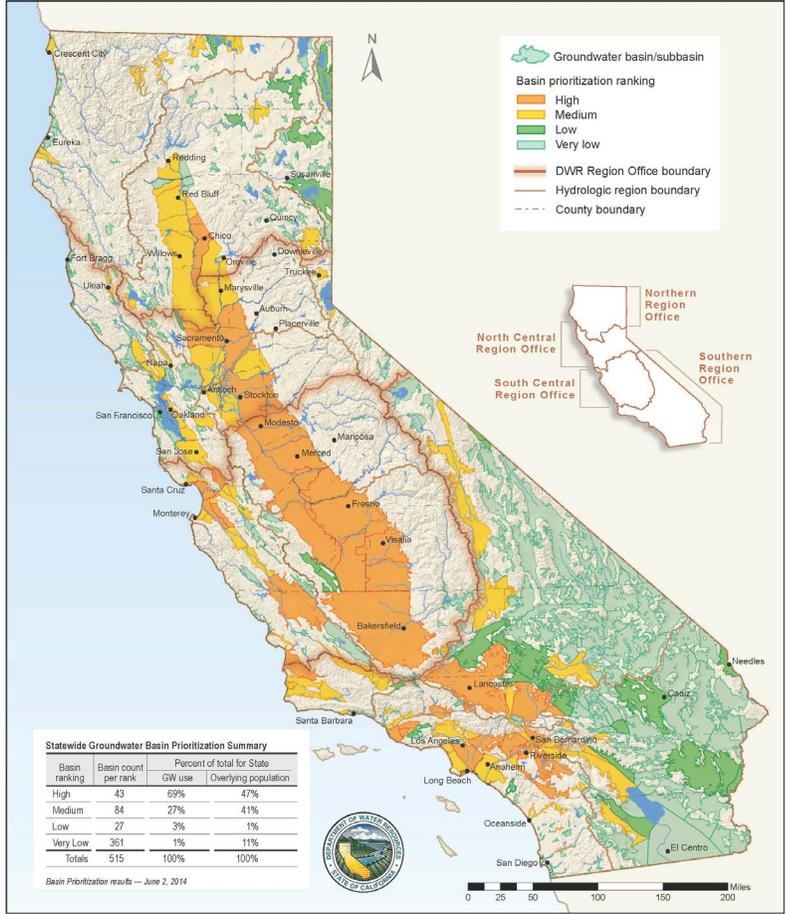
- Allows certain entities to assume the role of **Monitoring Entity** (ME), responsible for monitoring and reporting groundwater elevations for all or part of a basin (§10927)
- Requires DWR to work cooperatively with Monitoring Entities to determine the manner in which groundwater elevation information is reported (i.e., develop a CASGEM Plan) (§10931)
- Requires Monitoring Entities to commence monitoring and reporting by **January 1, 2012** (§10932)
- Requires DWR to prioritize basins and identify the extent of monitoring (§10933)
- Requires DWR to perform monitoring in portions of basins without a ME (§10933.5)
- In those basins, the County and ME-eligible entities are not eligible for water grants or loans administered by the state. (§10933.7)

# CASGEM BASIN PRIORITIZATION

- Basins were first prioritized by DWR in 2014

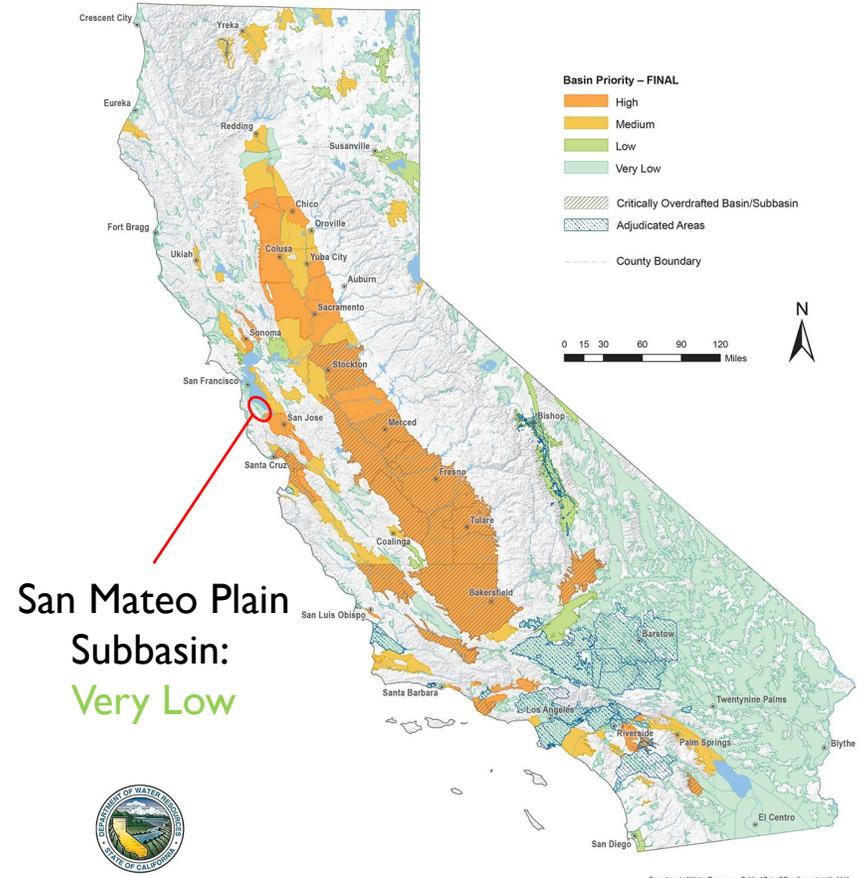
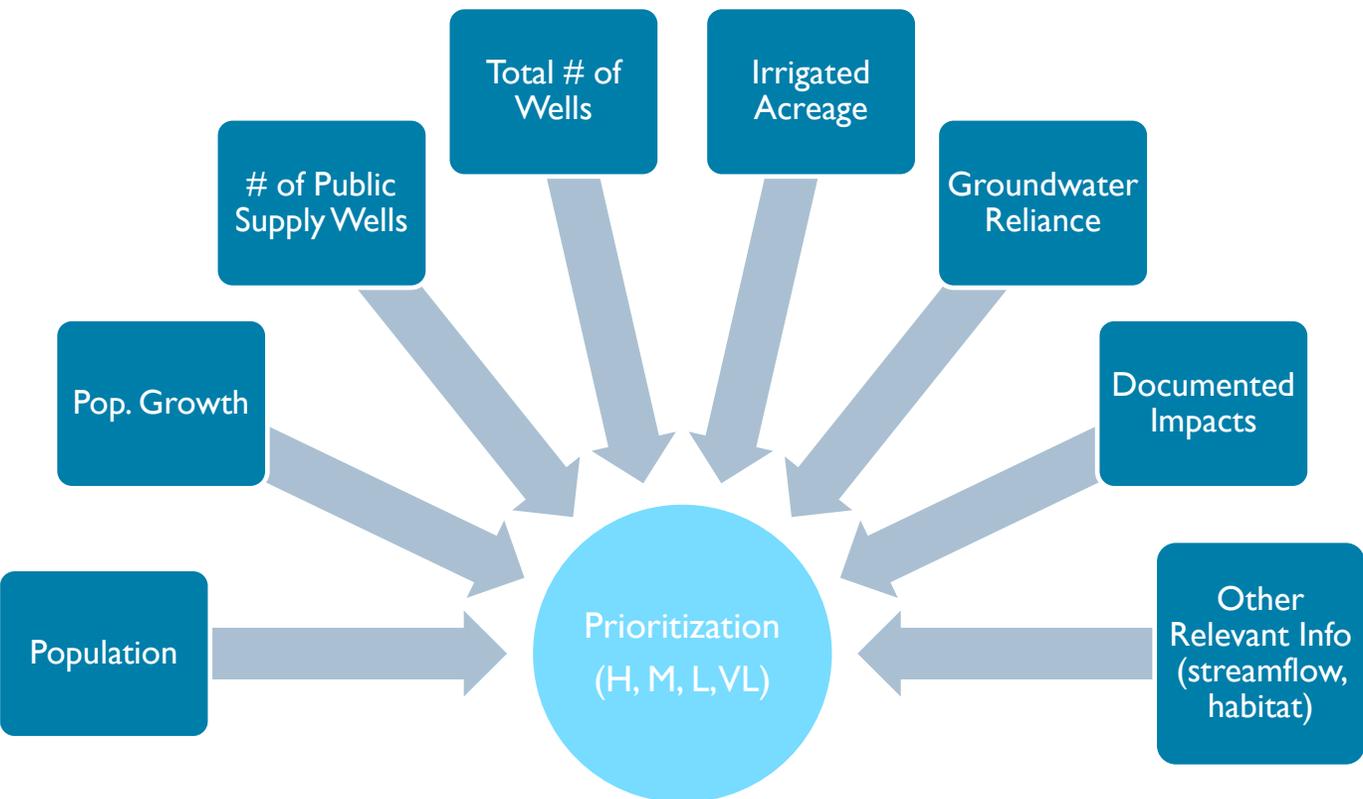


CASGEM Groundwater Basin Prioritization



# CASGEM BASIN RE-PRIORITIZATION

- Basins were re-prioritized by DWR in 2018/19

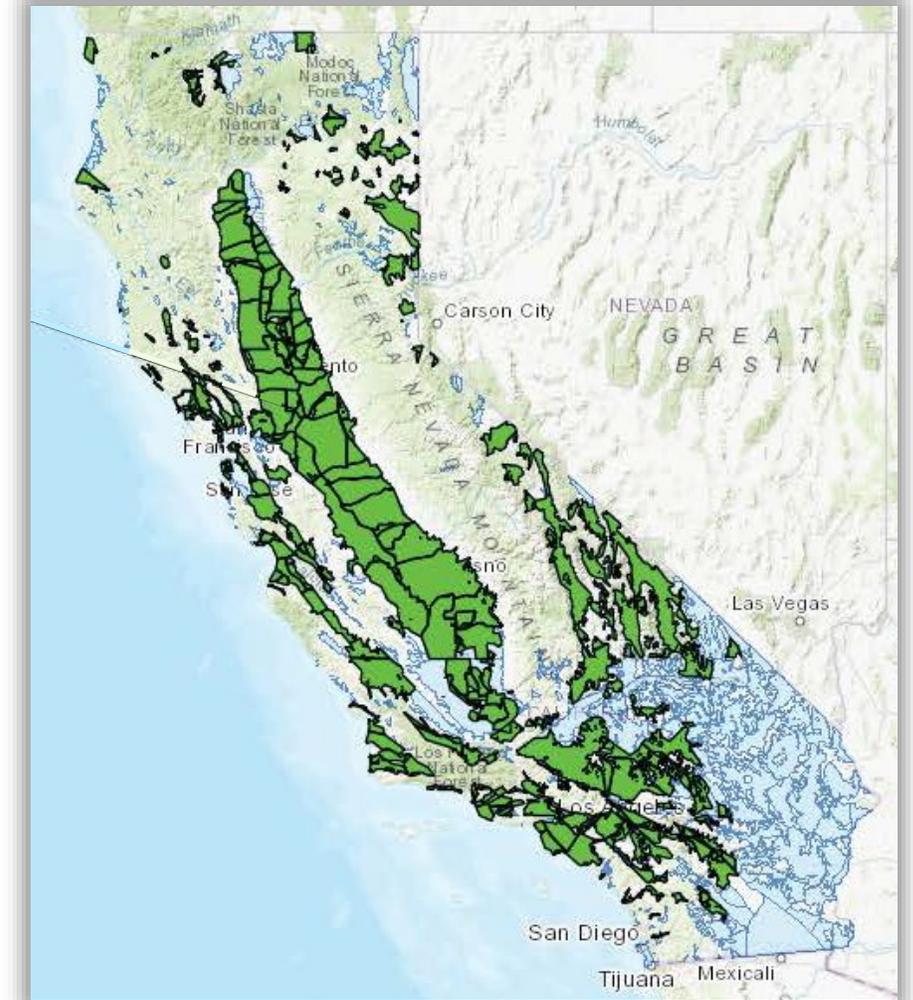


# CASGEM BASIN PRIORITIZATION IMPLICATIONS

- CASGEM Basin Prioritization is a determining factor for whether certain Sustainable Groundwater Management Act (SGMA) requirements apply:
  - All **High** and **Medium** priority basins must be covered by a GSA and must have a GSP adopted and submitted by January 31, 2020 (critically-overdrafted basins) or by January 31, 2022 (all other High and Medium priority basins)
  - **Low** and **Very Low** priority basins are not required to have GSA/GSP coverage
- Enforcement of CASGEM compliance requirements has thus far been focused on High and Medium priority basins
- CASGEM Basin Prioritization may affect other state programs or policies in the future...

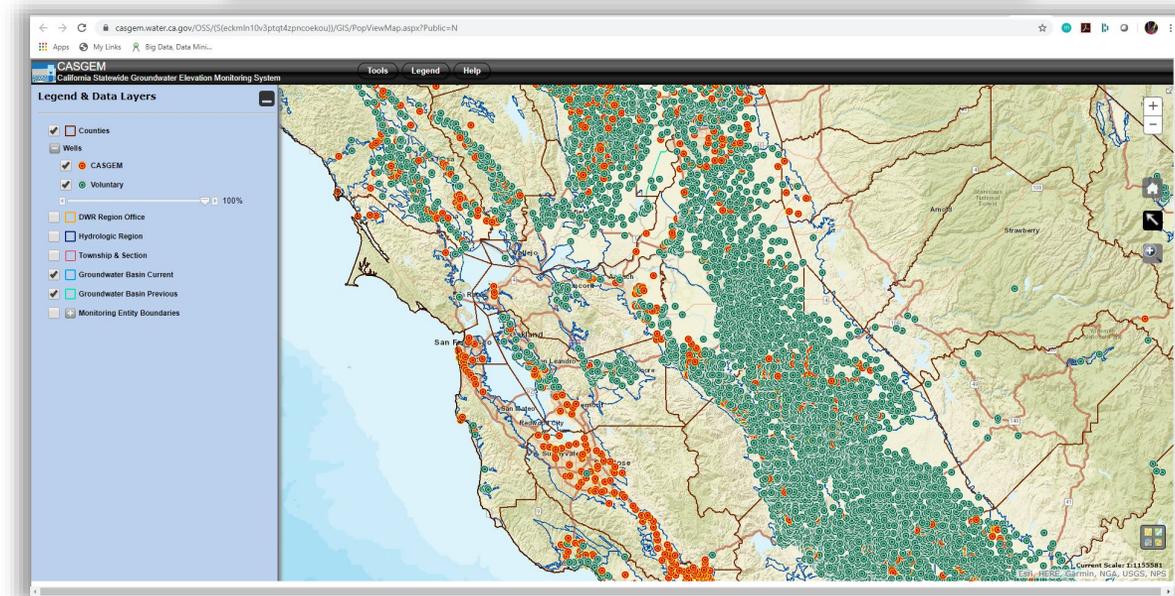
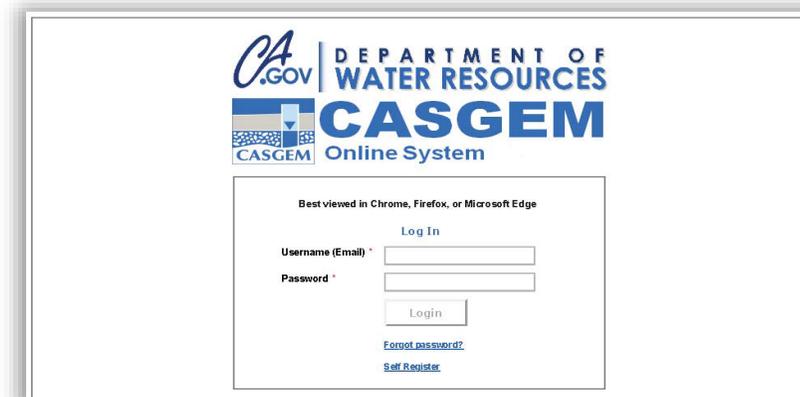
# MONITORING ENTITY COVERAGE

- Nearly all High and Medium priority basins are now covered by a Monitoring Entity



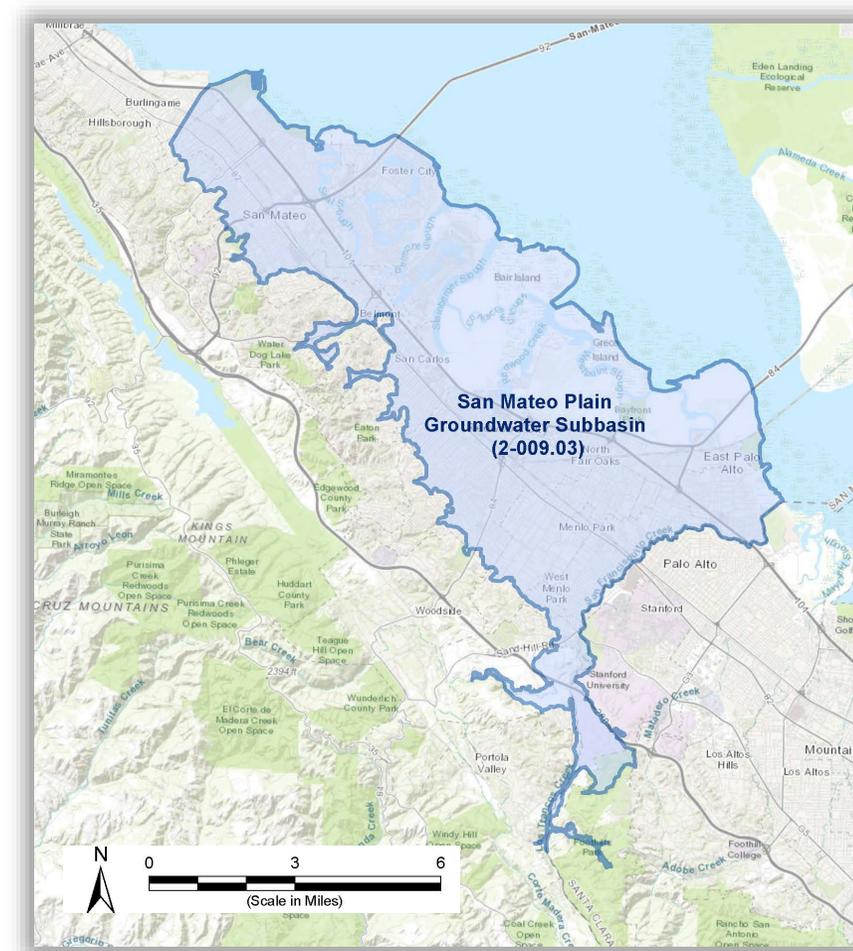
# REASONS TO BECOME CASGEM COMPLIANT

- Ease of Use: Working system for groundwater level data storage and access, administered by DWR
- Public Access: CASGEM online system allows public to access groundwater level data, including mapping and hydrograph tools
- Grant/Loan Eligibility: Certain water grants and loans administered by the state (e.g., Prop 68 SGM) are contingent upon CASGEM compliance in Medium and High priority basins



# SAN MATEO PLAIN GROUNDWATER SUBBASIN

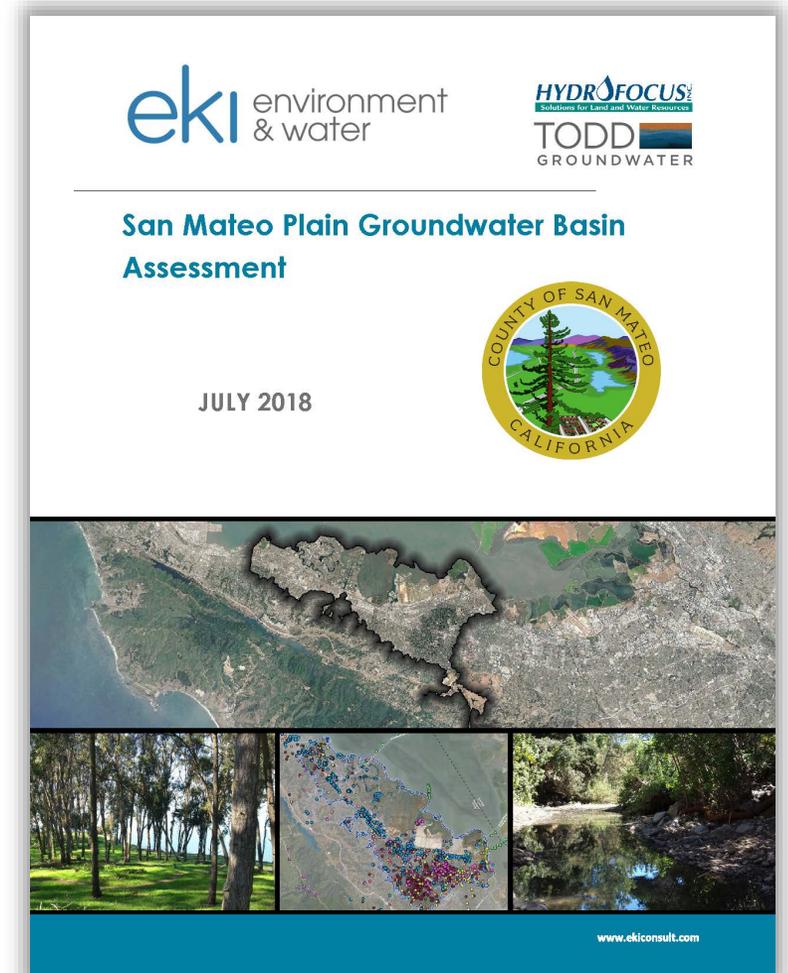
- Subbasin of the Santa Clara Valley Groundwater Basin
- Bounded by:
  - San Francisco Bay (E)
  - San Francisquito Creek/Santa Clara County line (S)
  - Bedrock foothills of Santa Cruz Mountains (W), and
  - Bedrock high (N)
- **Very Low** CASGEM priority, due to low groundwater use (<9,000 AF/yr) and no documented impacts



# SAN MATEO PLAIN GROUNDWATER SUBBASIN

## San Mateo Plain Groundwater Basin Assessment

- Completed 2016-2018
- Funded through Measure K and Office of Sustainability
- Objectives:
  - Increase public knowledge
  - Evaluate hydrogeologic and groundwater conditions
  - Evaluate risk of undesirable results
  - Potential groundwater management strategies



# PROGRESS TOWARDS CASGEM COMPLIANCE

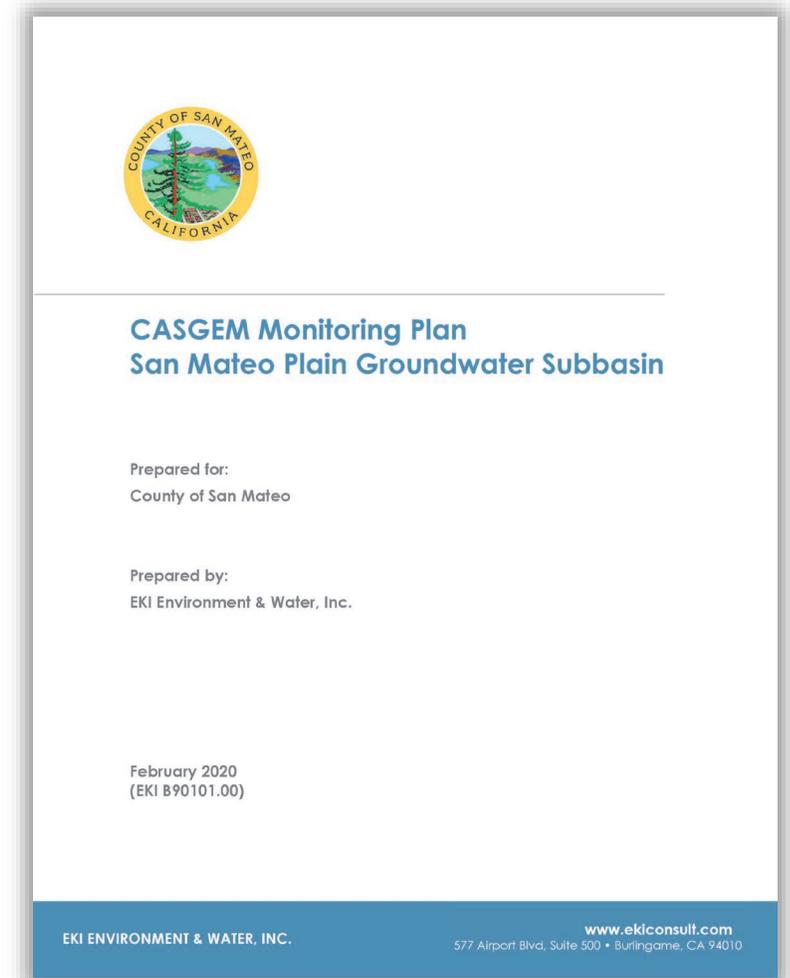
- County staff hosted an initial meeting to discuss interest in becoming CASGEM compliant (January 2018)
- Based on feedback received, County decided to take the lead in developing a CASGEM Plan
- County-led project to develop a CASGEM Plan kicked off in August 2019, with EKI as consultant
- Contacted DWR in September 2019 to inform of intent to become the CASGEM Monitoring Entity for the basin

# CASGEM PLAN DEVELOPMENT OBJECTIVES

- Focus on the deeper portion of the aquifer system, where supply wells are screened
- Goal is to rely on existing wells to the greatest extent possible
  - Existing wells are located in the portions of the basin where pumping occurs
  - Reduces cost of plan implementation
- Monitoring Network Development:
  - Compiled a list of ~160 candidate wells in deep aquifer\* using database from previous study and DWR
    - \* Criteria: Total Depth > 150 ft – and – Top of Screen depth > 120 ft (or unknown)
  - Filtered candidate well list to government or institutionally-owned wells
  - Outreach to well owners in the basin, August – October 2019
  - Reconnaissance visits to assess condition and viability for monitoring and collect 1<sup>st</sup> round of groundwater level data, October 2019 – February 2020

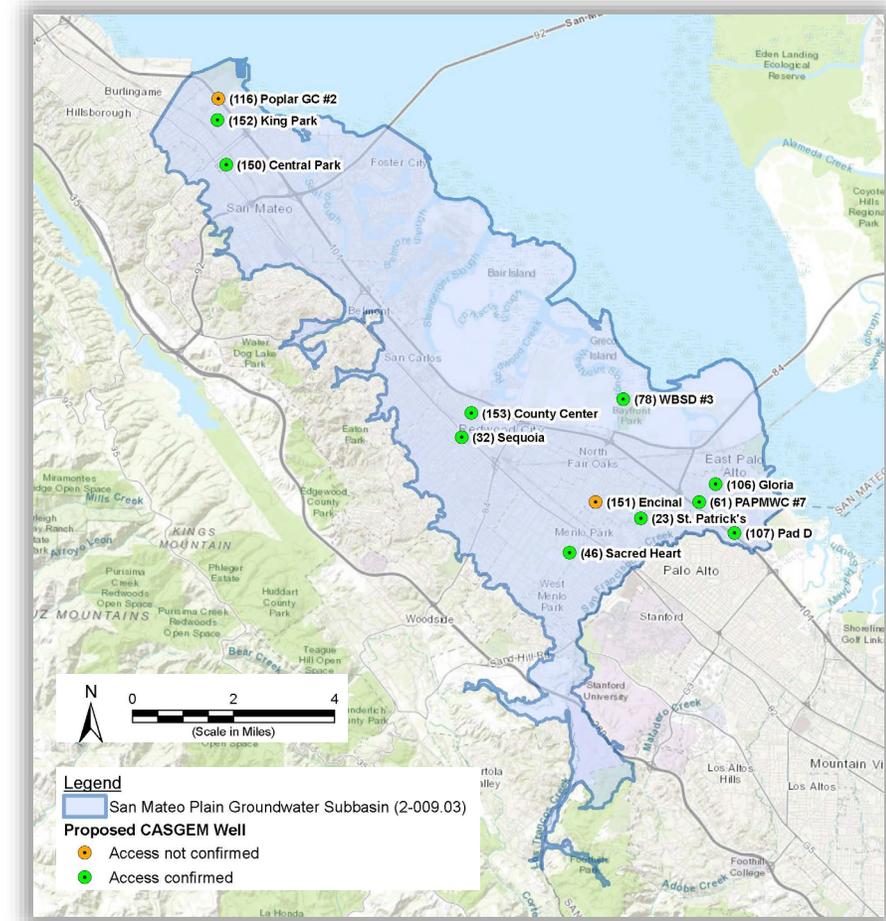
# DRAFT CASGEM PLAN IS COMPLETE

- Draft CASGEM Monitoring Plan
  - Calls for monitoring twice a year (minimum), but more frequently if available
  - First round of groundwater level data collected by EKI, October 2019 – February 2020
  - Second round of data collection: spring 2020 (dates TBD)
  - Includes background, network description & rationale, monitoring protocols & timing, well information, field data collection forms
- Upon preliminary review, DWR staff indicated plan was complete and likely ready for full formal review



# MONITORING NETWORK

- Proposed Monitoring Network includes 12 wells:
  - Three wells in northern portion of basin (one well's accessibility not confirmed\*)
  - Nine wells in southern portion of basin (one well's accessibility not confirmed\*)
  - Two wells monitored by East Palo Alto as part of the City's AB 3030 Groundwater Management Plan; data provided to County
  - One well monitored by Palo Alto Park MWC; data provided to County



\* DWR indicated that wells with unconfirmed accessibility could be included in Plan as “voluntary” wells and then converted to true “CASGEM” wells if/when accessibility is confirmed.



# GROUNDWATER LEVELS FROM FIRST ROUND OF MEASUREMENT

## Legend

 San Mateo Plain Groundwater Subbasin (2-009.03)

## Proposed CASGEM Well

-  Access not confirmed
-  Access confirmed

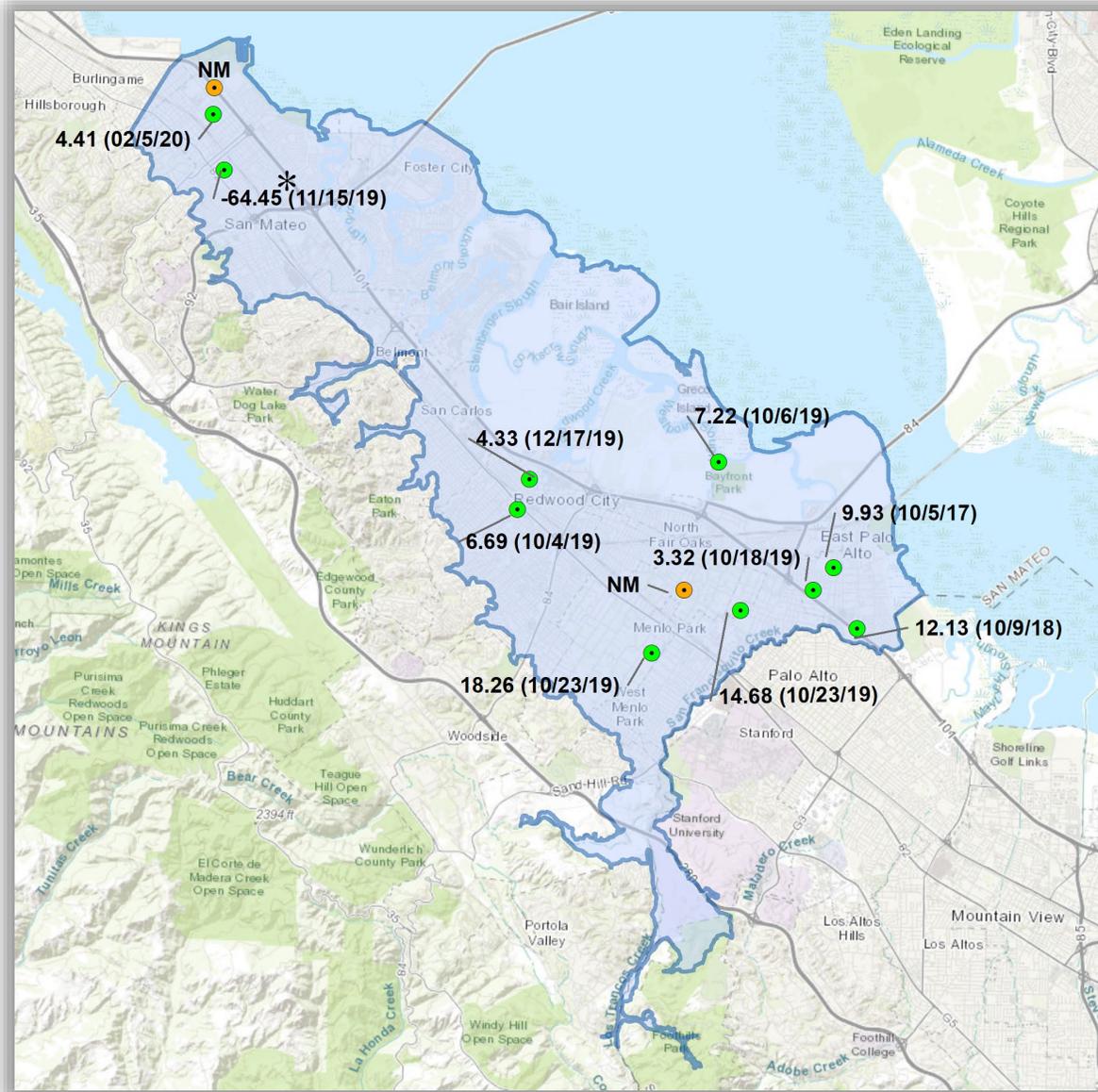
## Abbreviations

CASGEM = California Statewide Groundwater Elevation Monitoring

NM = No measurement

## Notes

1. All locations are approximate.
2. Reference point datum for transducer readings in Well (150) Central Park not verified.



# NEXT STEPS

- Obtain letters from public water systems (East Palo Alto and PAPMWC) with consent to include their wells in the CASGEM program (required)
- Submit CASGEM Plan for formal DWR review
- Work with DWR to enter wells into the CASGEM system
- Collect second round of groundwater level measurements, spring 2020
- Upload all data collected during first and second rounds to CASGEM website
- Work to establish monitoring capability in certain wells
- Optional (but recommended): Survey wells to obtain exact reference point elevations
- Coordinate with entities in basin on CASGEM program administration and funding going forward

# QUESTIONS?

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