

East Bay Plain Basin EBMUD & City of Hayward

Groundwater Reliability Partnership Meeting March 22, 2017





- Overview of the East Bay Plain Basin
- EBMUD's Bayside Groundwater Project
- EBMUD's Activities Relative to the Sustainable Groundwater Management Act (SGMA)
- City of Hayward Groundwater Efforts and SGMA-related Activities
- Working Together for Sustainable Groundwater Management

Regional Groundwater System



- Santa Clara Basin (DWR Basin 2-9)
 - San Mateo Subbasin
 - Santa Clara Subbasin
 - Niles Cone Subbasin
 - East Bay Plain Subbasin

Reference: San Mateo County Groundwater Assessment

East Bay Plain Basin



alignet

EBMUD

Portion of EBPB underlying EBMUD Service Area

> Portion of EBPB underlying City of Hayward

EBMUD and Local Groundwater: A Brief History

- East Bay Plain Basin (EBPB) -Historical source of supply for the East Bay, along with local creeks
- EBMUD prepared a Groundwater Management Plan for the South portion of the EBPB in 2013
- EBMUD became the California Statewide Groundwater Elevation Monitoring (CASGEM) reporting entity for Southern portion of EBPB in 2014
- EBMUD became the CASGEM reporting entity for Northern portion of EBPB in 2015

Artesian Wells; High Street, Oakland CA (1876); Thompson Water Works (predecessor to Contra Costa Water Works)









- EBMUD's Water Supply Management Program 2040 identified a portfolio of projects to improve long term water supply reliability, including groundwater banking
- EBMUD completed construction of Bayside Phase 1 Facility in 2010
- Allows for injection of treated drinking in wet years for later extraction during dry years
- Bayside Phase 1 could provide up to 1 MGD of supplemental supply during a drought
- Potential for future expansion..?



The Bayside Groundwater Project

- Phase 1 facility includes:
 - 600 foot deep injection/extraction well
 - Water treatment plant
 - Distribution pipelines
 - Subsidence monitoring system
 - Network of monitoring wells
- In 2017, following many years of drought, EBMUD was able to make test injections







- SGMA directs local agencies to actively manage groundwater and develop Groundwater Sustainability Agencies (GSAs) for high and medium priority basins
 - The East Bay Plain Basin is designated a medium priority basin
 - Therefore, Groundwater Sustainability Plan (GSP) due in 2022
- Counties and cities within the EBMUD service area preferred that EBMUD serve as the GSA for the East Bay Plain
- If no GSA stepped forward, the State would intervene
 - State costs would be passed on to EBMUD
 - Loss of local control of the basin
 - Punitive measures could also be enacted (loss of grant/loan eligibility)



- In August 2016, EBMUD's Board of Directors held a public hearing and adopted a resolution declaring EBMUD's intent to become the Groundwater Sustainability Agency (GSA) for the entire portion of the basin underlying EBMUD's service area
- After filing a notice with DWR and completing the 90-day comment period, EBMUD became the exclusive GSA on November 28, 2016

History of Groundwater in Hayward





Photos courtesy of the Hayward Area Historical Society

Hayward Emergency Wells



5 wells
Constructed in 1990s
Currently permitted for emergency use
Total maximum capacity = 13.6 MGD



Well	Capacity (gpm)	Depth (feet)
А	1000	560
В	2000	534
С	2000	466
D	1300	600
E	3000	535

Relevance of SGMA to Hayward





- Protection of groundwater resources
- Groundwater management and authority
- Medium-priority groundwater basins
 - Niles Cone Basin
 - East Bay Plain Basin (EBPB)

Hayward Considerations

 GSA responsibilities and authorities
Resources

Costs

Local control



GSA Formation for East Bay Plain



Deadline: June 30, 2017

EBMUD GSA formed in November 2016

Hayward filed GSA notice for remaining portion of East Bay Plain on March 6, 2017



GSP Options for East Bay Plain



- Submit to DWR by January 31, 2022
- Options
 - 1. Multiple GSPs
 - 2. Joint Hayward-EBMUD GSP

Hayward and EBMUD preference to develop joint GSP



Next Steps



- Hayward would become exclusive GSA for City limits following 90-day notice period
- Continue outreach and coordination with basin stakeholders and neighboring agencies
- Develop agreements and scope of work to prepare joint GSP
- Apply for grant funding

Questions & Discussion





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