

East Bay Plain Subbasin

REQUEST FOR PROPOSAL for Groundwater Sustainability Plan Development

Pre-proposal Meeting

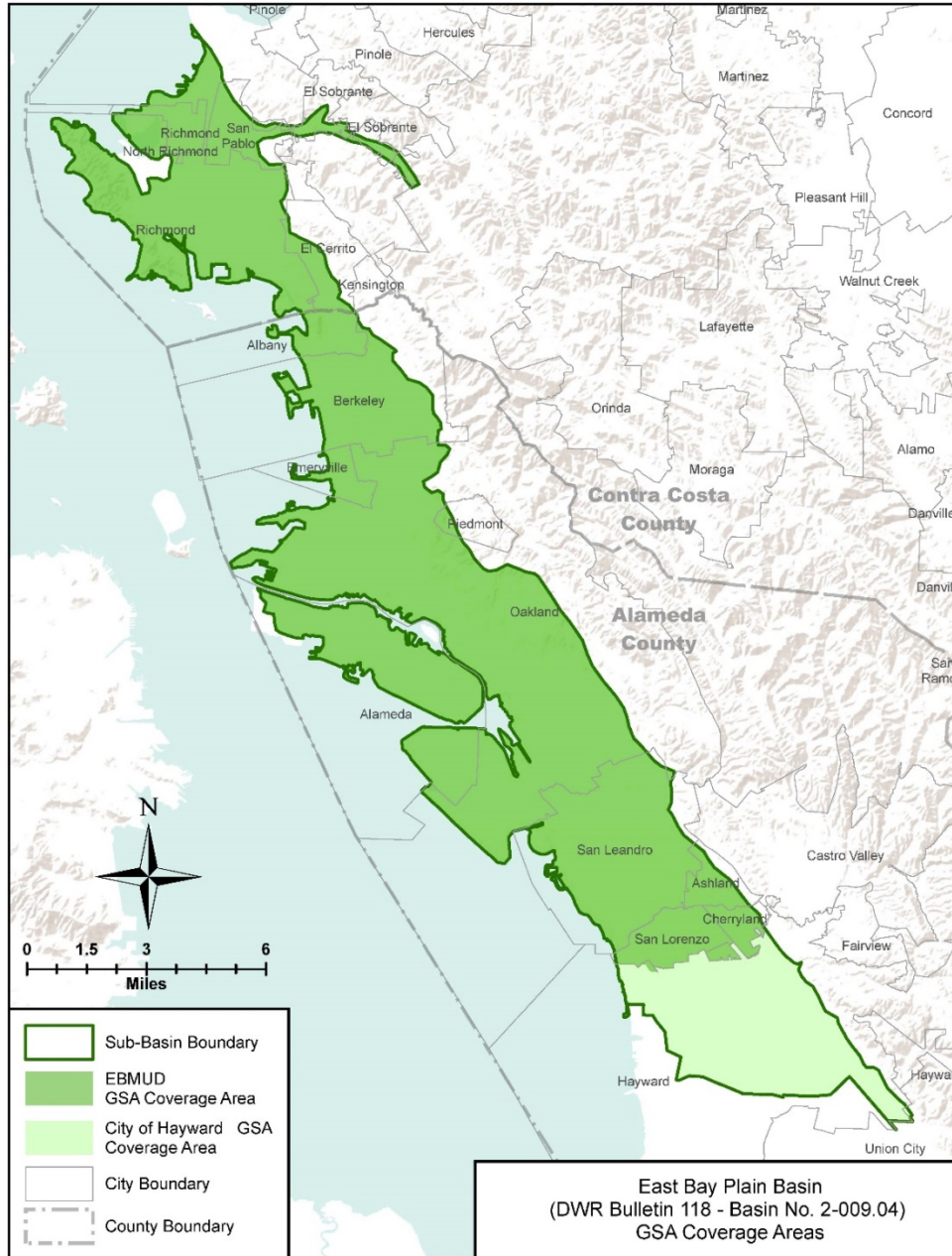
August 21, 2018



Agenda

- Welcome and Introductions
- The City of Hayward's key goals
- EBMUD's key goals
- Collaborative Decision Making Process
- Discussion of the scope of work and available references
- Q & A

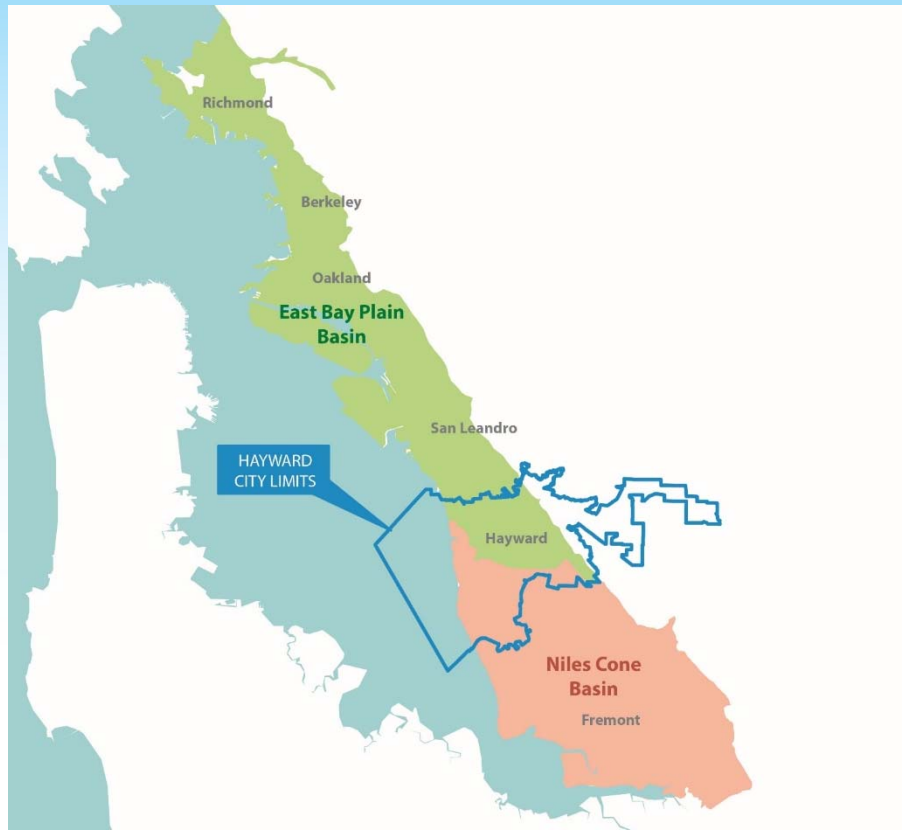
East Bay Plain Subbasin GSA Areas



Document Path: L:\ArcGIS\ArcGIS Maps\Department_Of_Water_Resources\EBMUD_GSA_Basin_Boundary3.mxd



Relevance of SGMA to Hayward



- Medium-priority groundwater basins
 - East Bay Plain Basin
 - Niles Cone Basin
- Ensuring long-term protection of groundwater resources
- Opportunities to diversify water supplies



Hayward Emergency Wells



City of Hayward Well C (Pepsi)

Well	Capacity (gpm)	Depth (feet)
A	1000	560
B	2000	534
C	2000	466
D	1300	600
E	3000	535

Hayward Goals

- Open, transparent, and inclusive process
- Increased understanding of groundwater resources
- Sustainable management criteria based on best available science
- Groundwater model that can be used to evaluate future scenarios
- Framework for guiding decision-making and policies related to long-term sustainable management of groundwater resources



Relevance of SGMA to EBMUD

- Ensure long term sustainability of groundwater resource
- Cities and Counties within EBMUD service area preferred that EBMUD serve as GSA
- A local water supply source; reduces demands during drought
- Bayside Groundwater Project
 - Phase 1 Facility: could provide up to 1 MGD of water
 - Potential future expansion

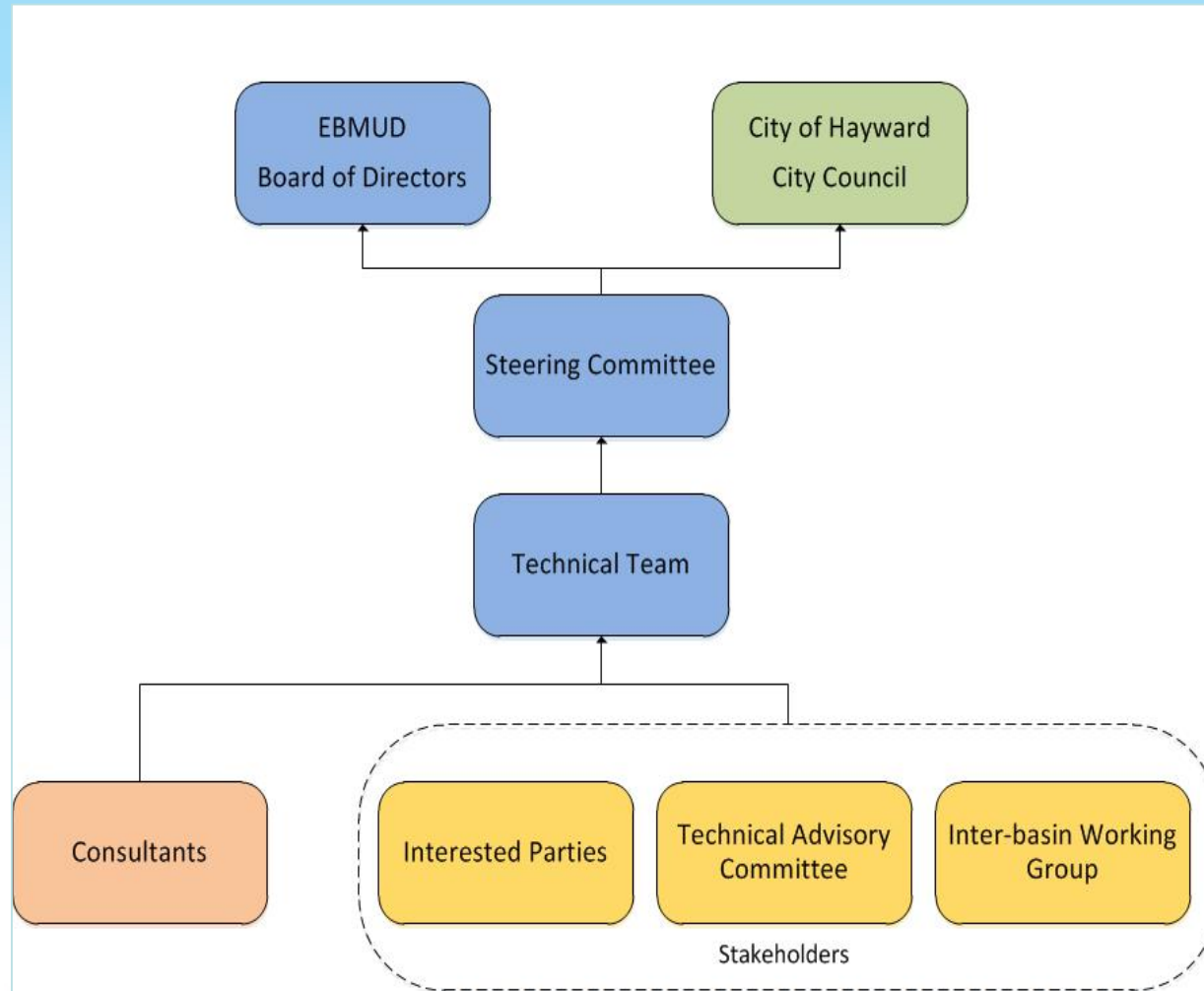


EBMUD Goals

- Develop a GSP based on sound science
- Analysis should consider potential future uses of the basin
- Continue to develop understanding of southern portion of basin; transition zone with Niles Cone
- Characterize northern portion of basin
- Opportunities for stakeholder input and involvement



Collaborative Decision Making Process



Consultant Procurement Schedule

Milestone	Dates
Issue Request for Proposals	8/08/18
Pre-proposal meeting	8/21/18
Questions to be submitted by	9/7/18
Proposals due	9/21/18
Oral Interviews	10/19/18
Notice to proceed	11/28/18



Scope of Work



Scope of Work

- Task 1: Stakeholder C&E support
 - EBMUD and Hayward will handle most stakeholder communications and engagement, with technical support from consultant(s)
 - Regular stakeholder meetings, Technical Advisory Committee (TAC), Interbasin Working Group



Scope of Work, Continued

- Task 2: Project management and grant reporting
 - Provide documentation to support EBMUD reporting to DWR for Prop 1 grant
- Task 4.1: Data syntheses and analysis
 - Identification of data gaps



Scope of Work, Continued

- Task 4.2: Hydrogeologic Conceptual Model Development
 - High-level representation of groundwater flow system
 - Include all water budget components
 - 3D framework model defining stratigraphy and connectivity of each geologic layer



Scope of Work, Continued

- Task 4.3: Groundwater model objectives and selection
 - Model will be used to quantify water budget, determine sustainable yield, and evaluate sustainability indicators
 - Capable of surface water/gw interaction, areal recharge, variable-density gw flow and transport
- Task 4.4: Construct, calibrate, validate and perform uncertainty analysis of the East Bay Plain Groundwater Model (EBPGM)



Scope of Work, Continued

- Task 4.5: Develop and analyze baseline and alternative management scenarios
 - Develop baseline model that describes current basin conditions
 - Simulate proposed water management actions, current and future groundwater resources development
 - Recommend sustainable management actions



Scope of Work, Continued

- Task 5: Preparation of East Bay Plain GSP
 - General information
 - Sustainable management criteria and management actions
 - Monitoring network
 - Implementation Plan



Scope of Work, Continued

- Optional Services:
 - Salt and Nutrient Management Plan
 - Environmental compliance and permitting (as needed)
 - Data Management System



List of Available References

	Title	Year	Author
1	Groundwater Recharge in the East Bay Plain area, Alameda County, California	Jul-90	Kenneth S. Muir
2	Isostatic Residual Gravity Map of the San Francisco Bay Area	Jan-93	C.W. Roberts and R.C. Jachens
3	Groundwater Storage Capacity of a Portion of the East Bay Plain, Alameda County, California	Jan-94	DWR
4	Late Quaternary Depositional History, Holocene Sea-Level Changes, and Vertical Crustal Movement, Southern San Francisco Bay, California	Jan-97	USGS
5	East Bay Injection Extraction Groundwater Pilot Project Phase II Report	Feb-98	Fugro West, Inc.
6	Groundwater Study and Water Supply History of The East Bay Plain	Jun-98	Norfleet Consultants
7	East Bay Plain Groundwater Basin Beneficial Use Evaluation Report	Jun-99	San Francisco Regional Water Quality Control Board
8	Oakport Groundwater Storage Pilot Project	Jun-99	Fugro
9	Regional Hydrologic Investigation South East Bay Plain	Jan-00	CH2MHILL
10	Nile Cones East Bay Plain IGSM Model	Jan-00	Wrieme
11	Hydrogeology and Geochemistry of Aquifers Underlying the San Lorenzo and San Leandro Areas of the East Bay Plain	Jan-03	USGS
12	Gravity and Magnetic Expression of the San Leandro Gabbro with Implication for The Geometry and Evolution of The Hayward Fault Zone	Feb-03	D.A. Ponce et. al
13	East Bay Plain Aquifer Test Project – South East Bay Plain and Niles Cone Groundwater Basins	Apr-03	Luhdorff & Scalamanini

	Title	Year	Author
14	DRAFT bayside groundwater project-evaluation of projects effects and mitigation measures TM	Feb-05	CH2MHILL
15	DEIR EBMUD Bayside Groundwater Project	Mar-05	EBMUD
16	FEIR EBMUD Bayside Groundwater Project	Apr-05	EBMUD
17	Subsurface Structure of the East Bay Plain Ground-Water Basin San Francisco Bay to the Hayward Fault	Jan-06	USGS
18	Characterization of Existing Groundwater Quality for Bayside Groundwater Project	Aug-07	Fugro West, Inc.
19	Groundwater quality data in the San Francisco Bay study unit	Jan-09	USGS
20	Status and Understanding of Groundwater Quality in the North San Francisco Bay groundwater basins 2004	Jan-10	USGS
21	DRAFT bayside groundwater project 2010 phase 1 well aquifer test	Jan-11	Fugro West, Inc.
22	The Bayside Groundwater Project, 2010 phase 1 well aquifer test	Sep-11	Fugro
23	south east bay plain basin groundwater management plan 2013	Mar-13	EBMUD
24	south east bay plain basin groundwater management plan appendices and references	Mar-13	EBMUD
25	Lithostratigraphic, borehole-geophysical, hydrogeologic, and hydrochemical data from the East Bay Plain	Jan-15	USGS
26	Hydrogeologic Controls and Geochemical Indicators of Groundwater Movement	Jan-18	USGS

Questions and Comments

