







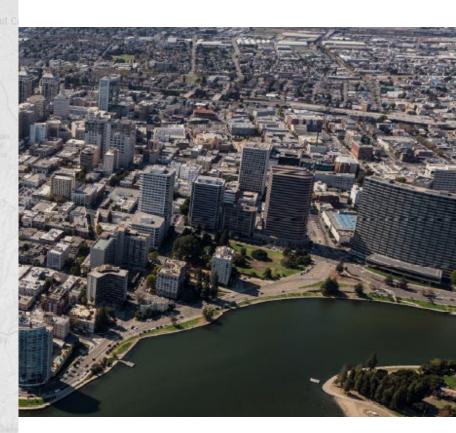


East Bay Plain Subbasin

# Groundwater Sustainability Plan Implementation

Stakeholder Communications & Engagement Meeting

March 6, 2023



## Agenda

Welcome and Introductions

GSP Implementation Overview

Stream Isotope Study of San Pablo and San Leandro Creeks

Data Management System Demonstration

Comments and Questions

## Background and Status



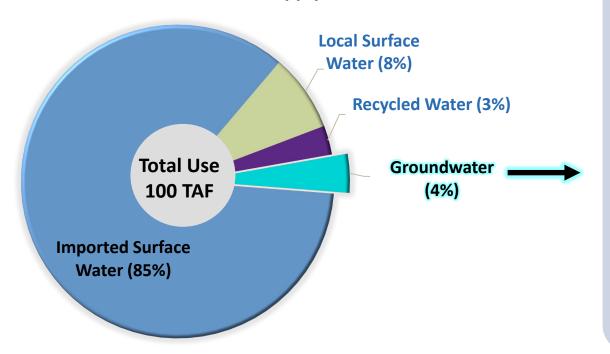
- East Bay Plain (EBP) Subbasin is managed by EBMUD GSA and the City of Hayward GSA
- EBP GSP was submitted to DWR in January 2022 and is under review
  - Living document updated every 5 years
- GSP implementation is ongoing
- SGMA implementation grant application submitted to DWR in December 2022

EBMUD: East Bay Municipal Utility District GSA: Groundwater Sustainability Agency GSP: Groundwater Sustainability Plan

SGMA: Sustainable Groundwater Management Act

## Water Supply

#### 2021 EBP Subbasin Water Supply



Primary Beneficial Uses and Users of Groundwater

**Industrial Uses** 

Large Irrigators (e.g., parks, golf courses)

**Domestic Irrigators** 

**Environmental (GDEs)** 

GDEs: Groundwater Dependent Ecosystems

TAF: thousand acre-feet

#### **Key Takeaways**

- 1 EBP Subbasin groundwater levels are stable and the basin is sustainable because of limited groundwater use.
- 2 Domestic wells supplement irrigation and are not currently used as a source of drinking water.

# Sustainability Goal & SMC

#### EBP Sustainability Goal: Must be achieved within 20 years (by 2042)

- ✓ Manage & protect the East Bay Plain Subbasin
- Collect data to support science-based decisions
- Evaluate new opportunities for sustainable groundwater beneficial uses
- Maintain sustainability through sustainable management criteria that avoid undesirable results (URs)

#### **Sustainable Management Criteria (SMC)**

Metrics defining when URs occur for the six sustainability indicators and when the sustainability goal is maintained/achieved

GW: Groundwater SW: Surface water

#### **Six Sustainability Indicators**



Lowering GW Levels

Quality



Reduction of storage



Seawater Intrusion



Land Subsidence



SW Depletion

#### **Key Takeaway**

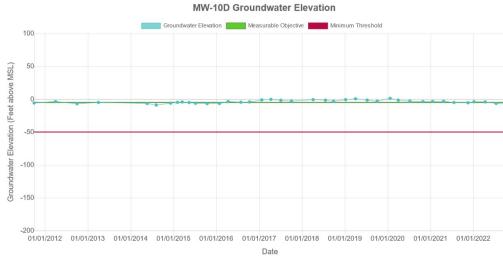
Interim SMC for the sustainability indicators were developed with stakeholder input and using best available science & data with the caveat that major data gaps need to be addressed.

# Representative Monitoring Site (RMS) Wells



Monitoring data are available on the East Bay Plain Data Management System (DMS):

eastbayplaindms.com



#### **Key Takeaways**

- RMS wells are used to evaluate the sustainability indicators.
- Data gaps are being filled with data from the initial 15 RMS wells, with more wells planned in the future.

## **Ongoing Implementation Activities**

#### **Filling Data Gaps**

- Groundwater levels and quality monitoring
- Subsidence monitoring with extensometers
- Stream isotope study
- Updating groundwater pumping estimates
- Expanding monitoring network

#### **Sustainability Indicators Addressed**





























#### **Key Takeaway**

Data gaps are being filled to drive future science-based solutions and address questions (e.g., groundwater dependent ecosystems).

## Ongoing Implementation Activities

#### **Basin Boundary Evaluation**

• Isotope study to further delineate and characterize the hydrogeologic boundary between the EBP Subbasin and Niles Cone Subbasin

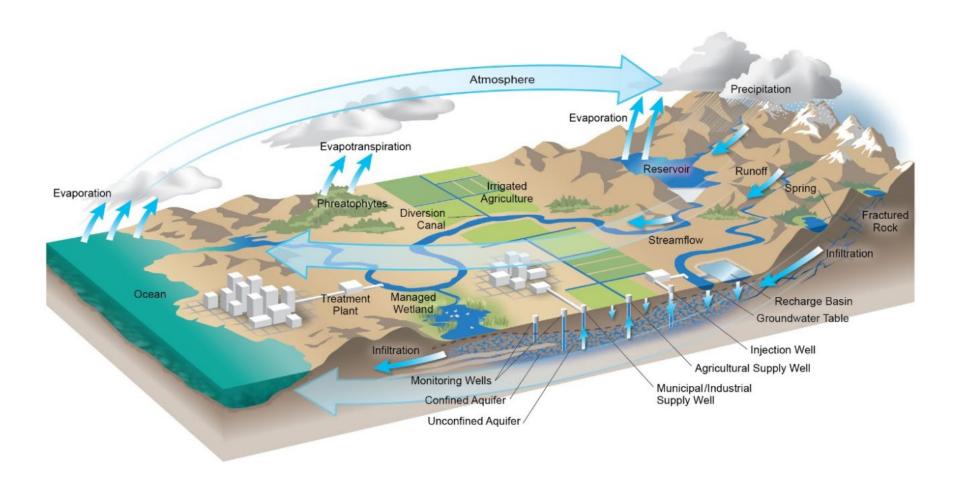
#### **Annual Reporting**

Preparing Water Year 2022 Annual GSP Report

#### **Governor's Executive Order**

 Developing a process to determine if a proposed new (or modified) groundwater well is consistent with the EBP GSP

## Comments or Questions?



The Hydrologic Cycle, DWR Water Budget BMP, 2016

# East Bay Plain Subbasin Data Management System (DMS)

## <u>Agenda</u>

- DMS: the Why, How, and What?
- Live Demonstration

## DMS – the Why, How, and What?

## Meets GSP Emergency Relations 23 CCR§352.6 Data Management System

 Each Agency shall develop and maintain a data management system that is capable of storing and reporting information relevant to the development or implementation of the [GSP] and monitoring of the basin

#### EBP DMS Process

July 2021: GSAs selected Woodard & Curran

July-Nov: Model Development

Dec.-Feb: Beta Testing & GSA Steering Committee Briefing

Feb. 2022: Public launch (<a href="https://eastbayplaindms.com/">https://eastbayplaindms.com/</a>)

## DMS – the Why, How, and What? (continued)

- A flexible, One-Stop Shop for Sharing and Managing your Groundwater Data
  - Provides an easy-to-use web-based, GIS-enabled interface to view and manage multiple datasets
  - Allows for transparent and efficient sharing of sustainability indicators and associated data
  - Supports automated annual reporting
  - Allows the GSAs to monitor and track undesirable results

## Live Demonstration

East Bay Plain DMS Weblink:

https://eastbayplaindms.com/