



DATE: November 8, 2021

TO: Council Sustainability Committee

FROM: Director of Public Works

SUBJECT: East Bay Plain Subbasin Groundwater Sustainability Plan – Information and Discussion

RECOMMENDATION

That the Council Sustainability Committee (CSC) reviews and comments on this report.

SUMMARY

As Groundwater Sustainability Agencies (GSAs) for the East Bay Plain Subbasin (Subbasin), the City of Hayward and East Bay Municipal Utility District (EBMUD), must adopt and submit a Groundwater Sustainability Plan (GSP)¹ to the Department of Water Resources (DWR) by January 31, 2022. The GSP will establish sustainable management criteria and actions to protect the Subbasin, while ensuring local groundwater resources are available for current and future beneficial uses.

BACKGROUND

In response to extreme drought conditions and unprecedented historic low groundwater levels, Governor Jerry Brown signed three bills, AB 1739 (Dickinson), SB 1168 (Pavley), and SB 1319 (Pavley) into law on September 16, 2014. Collectively, these three bills, referred to as the Sustainable Groundwater Management Act (SGMA), created a statewide framework for sustainable, local groundwater management in California. As part of SGMA, local agencies in Medium and High-priority basins (including the East Bay Plain Subbasin) are required to form GSAs and then have the authority and responsibility to develop, adopt, and implement a GSP.

DISCUSSION

For more than a century, the City relied on groundwater for day-to-day water supplies. Beginning in the 1960s, the City entered into an agreement with the San Francisco Public Utilities Commission for potable water supplies. Subsequently, the City ceased groundwater use. Following the Loma Prieta earthquake, the City constructed five emergency groundwater wells (three within the Subbasin and two within the adjacent Niles Cone Subbasin) in the

¹ [East Bay Plain Subbasin Groundwater Sustainability Plan | City of Hayward - Official website \(hayward-ca.gov\)](https://www.hayward-ca.gov/DocumentCenter/View/11111/East-Bay-Plain-Subbasin-Groundwater-Sustainability-Plan)

1990s and early 2000s. With a total maximum design capacity of more than 10 million gallons per day, the emergency wells are critical to the City's short-term water supply reliability (currently permitted to pump up to fifteen days per year with no more than five consecutive days of pumping).

With the passage of SGMA in 2014, the City determined that it was in its interest to become a GSA for its portion of the Subbasin and it filed its intention to do so. The City became an exclusive GSA for the portion of the Subbasin underlying its jurisdictional area in 2017. EBMUD became an exclusive GSA for the portion of the Subbasin underlying EBMUD's service area in 2016. The two GSAs entered into an initial cooperating agreement to work together on SGMA implementation. The initial agreement was dated June 25, 2018, and it has been amended twice (March 29, 2019, December 22, 2020), and is going before Council on November 16, 2021, for approval of Amendment No. 3.

A primary purpose of the initial cooperating agreement is to coordinate the preparation of a single GSP for the entirety of the Subbasin that will satisfy SGMA requirements, in particular the requirement that the Subbasin's GSAs (Hayward and EBMUD) prepare, adopt, and implement a GSP "consistent with the objective that a basin be sustainably managed within 20 years of Plan implementation without adversely affecting the ability of an adjacent basin to implement its Plan or achieve and maintain its sustainability goal over the planning and implementation horizon" (California Code of Regulations Title 23, Section 350.4(f)).

GSP Development

SGMA specifies a schedule for GSP adoption and submittal that is based on DWR's basin prioritization (i.e., Critically Overdrafted basins first, followed by High- and Medium-Priority basins). DWR has designated the Subbasin as a Medium Priority basin; therefore, Hayward and EBMUD must adopt, and submit a GSP for the Subbasin to DWR by January 31, 2022. Hayward and EBMUD contracted with a consultant team led by Luhdorff & Scalmanini Consulting Engineers (LCSE) to prepare the GSP, which is being partially funded by a \$1 million Proposition 1 grant from DWR.

The primary purpose of SGMA and the GSP is to prevent significant and unreasonable effects for the following six conditions (also known as sustainability indicators):

- Chronic Lowering of Groundwater Levels
- Reduction in Groundwater Storage
- Seawater Intrusion
- Degradation of Water Quality
- Land Subsidence
- Depletion of Interconnected Surface Water

The GSP is comprised of five main chapters: (1) Introduction, (2) Plan Area and Basin Setting, (3) Sustainable Management Criteria, (4) Projects and Management Actions to Achieve Sustainability Goal, and (5) Plan Implementation. A series of appendices provide additional

detailed information to supplement the content of each Chapter. An Executive Summary is provided at the beginning of the document to provide a high-level overview of the GSP.

Chapter 1 - Introduction

- Purpose of the GSP
- Subbasin's sustainability goal
- Description of the agencies (GSAs) and their organization

Chapter 2 - Plan Area and Basin Setting

- Institutional and physical setting of the Subbasin
- Existing water resources management and monitoring programs
- Stakeholder communication and engagement
- Land use elements and general plans
- Hydrogeologic conceptual model (aquifer systems, geology, etc.),
- Water budget for historical, current, and projected future conditions

The important conclusion from this Chapter is that the Subbasin is currently in a sustainable condition, with stable water levels and no occurrences of significant and unreasonable effects for any sustainability indicators. The current rate of groundwater pumping is approximately one third of the rate considered to be the “sustainable yield”.

Chapter 3 - Sustainable Management Criteria (SMC)

- Criteria that are used to define and measure sustainability

The SMC are arguably the most critical components of the GSP, as they define what sustainability looks like in a specific and quantitative manner for each of the sustainability indicators. Under SGMA, each GSP must define the “undesirable results” that occur for each of the six sustainability indicators and the SMC that will be used to determine whether an undesirable result has occurred. SMC are metrics defining when undesirable results occur. The basin is considered to be managed sustainably (i.e., the sustainability goal is maintained/achieved) when undesirable results are avoided.

The SMC developed for the Subbasin were based on the best available data and science, as required by SGMA; however, the SMC are likely to change in the future as significant data gaps (e.g., insufficient groundwater level data in certain parts of the Subbasin) are filled over time. The SMC were developed with significant public input obtained through a series of stakeholder meetings open to the public, and with a Technical Advisory Committee (TAC) consisting of experts from Lawrence Berkeley National Laboratory, local groundwater users, cities, and non-governmental organizations. Stakeholder and TAC meetings were held between February 2018 and October 2021.

Chapter 4 - Projects and Management Actions to Achieve Sustainability Goal

- Actions that each GSA plans to undertake over the 20-year GSP implementation period to achieve/maintain sustainability

Because the Subbasin is in a sustainable condition currently, these actions primarily involve one-time data gap-filling activities and regular monitoring of the Subbasin to ensure that the SMC are met, and undesirable results continue to be avoided. The key management actions include:

- Installing new groundwater monitoring wells and stream gauges as necessary
- Monitoring groundwater levels, quality, and local stream flow
- Conducting habitat surveys to confirm and monitor groundwater dependent ecosystems
- Completing annual reports and a publicly accessible data management system
- Updating the GSP every five years to account for new data and regulations
- Coordinating with local stakeholders, and as necessary, enforce SMC to protect the Subbasin

Along with the above management actions, the two GSAs each included projects in the GSP that involve production of groundwater using existing facilities. The City's project involves use of its emergency supply wells, as needed in the event of a short-term emergency interruption of surface water supplies. The City and EBMUD are committed to developing and maintaining diverse water supply portfolios to help improve resiliency in the face of changing climate, water supply needs, and regulations. In addition to water conservation and recycled water, beneficial use of groundwater is an important potential source. The GSAs are also committed to maintaining sustainability within the Subbasin, and the existing and future potential projects in the GSP reflect the GSAs desire to fill data gaps and let science-based decision making drive the feasibility of future groundwater pumping.

Chapter 5 - Plan Implementation

- Estimated costs and schedule for implementation of the GSP

ECONOMIC IMPACT

There are no direct economic impacts associated with development of the GSP. It is primarily a planning document to establish sustainable management criteria and actions to protect the Subbasin, and to ensure local groundwater resources are available for current and future beneficial uses. The community could benefit from project and management actions to achieve sustainability goals resulting in greater diversity and reliability of water supplies, especially during water emergency periods.

FISCAL IMPACT

The Water Improvement Fund in the Capital Improvement Program (CIP) includes funds for groundwater-related activities such as preparation and implementation of the GSP. Staff anticipates the costs for developing a GSP and DMS will not exceed \$528,000 including

reimbursement to EBMUD for consultant fees and \$150,000 for internal costs. The allocation in the CIP is sufficient to fund the City's share of preparing the technical studies and investigations, along with developing a GSP that complies with SGMA requirements. There will be no impact on the General Fund.

The estimated cost for the City to implement its GSP over the next five years is \$500,000. Funds would need to be allocated for this purpose beginning in FY 22-23.

STRATEGIC ROADMAP

This agenda item is a routine operational item and does not relate to one of the Council's six Strategic Priorities.

SUSTAINABILITY FEATURES

The City's role as a GSA, along with its responsibility for developing a GSP, provide the authority to ensure that the groundwater beneath the City is protected and sustainably managed for the future. A long-term commitment to groundwater sustainability increases the City's overall water supply reliability, maximizes local sources, and diversifies the City's water supplies, which will help the City respond to future water supply uncertainties and the effects of climate change.

PUBLIC CONTACT

Development of the GSP was supported by three groups of public participants: General Stakeholders, a Technical Advisory Committee (TAC), and an Interbasin Working Group.

- General Stakeholders, participated in public meetings and provided input on the development of the Subbasin GSP. Eight meetings were held.
- TAC reviewed the Subbasin GSP technical work products and provided comments and recommendations. Six meetings were held.
- Interbasin Working Group (IWG) met quarterly and included participants from the neighboring groundwater subbasins that discussed issues outlined in the GSP regulations related to potential impacts on neighboring subbasins. Seven meetings were held.

Interested community members can submit comments on the Draft GSP. The public comment period for the Draft GSP began on September 17, 2021, and will conclude on November 1, 2021. A draft of the GSP is available for public review both online², and at the Hayward Downtown Library located at 888 C Street. In addition, the public will have the opportunity to provide comments during the Council public hearing on December 7, 2021.

NEXT STEPS

² <https://www.hayward-ca.gov/content/east-bay-plain-subbasin-groundwater-sustainability-plan>

The Council will hold a public hearing and will consider the Draft GSP for adoption on December 7, 2021. If the Council adopts the Draft GSP, the City and EBMUD will submit the document to DWR in accordance with State guidelines by January 31, 2022.

Prepared by: Cheryl Muñoz, Water Resources Manager

Recommended by: Alex Ameri, Director of Public Works

Approved by:

A handwritten signature in black ink, appearing to read 'K. McAdoo', is written over a horizontal line.

Kelly McAdoo, City Manager