

West San Jacinto Groundwater Sustainability Agency (GSA) Development of the West San Jacinto Groundwater Sustainability Plan (GSP) – January 14, 2019

Rachel Gray January 14, 2019

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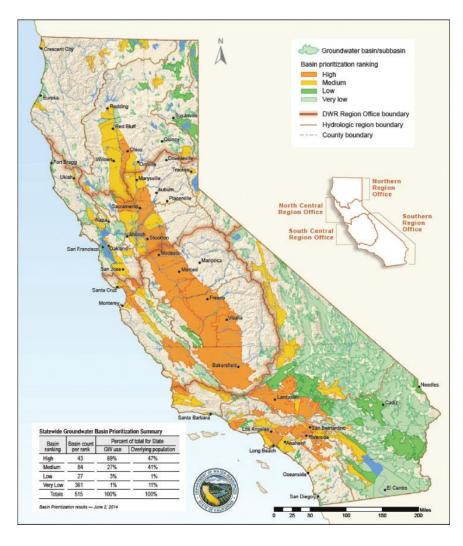




Project Overview

What is the Sustainable Groundwater Management Act?

- Signed September 16, 2014
- Effective January 1, 2015
- Requires:
 - Formation of groundwater sustainability agencies (GSAs) for high and medium priority groundwater basins
 - Preparation of groundwater sustainability plans (GSPs) by 2022
 - Achieve sustainability within 20 years of plan adoption
- "A central tenet of these bills is the recognition that groundwater management is best accomplished locally."
 - Governor Edmund G. Brown Jr.



What is a Groundwater Sustainability Plan?

- Technical and planning document that includes
 - Hydrogeological understanding of the basin
 - Geologic setting
 - Aquifer location, thickness, and depth to groundwater
 - Sources of water
 - Uses of water
 - Predictions of future groundwater use and conditions in the basin
 - Criteria by which the basin will be managed sustainably by 2042
 - Based on 6 sustainability indicators

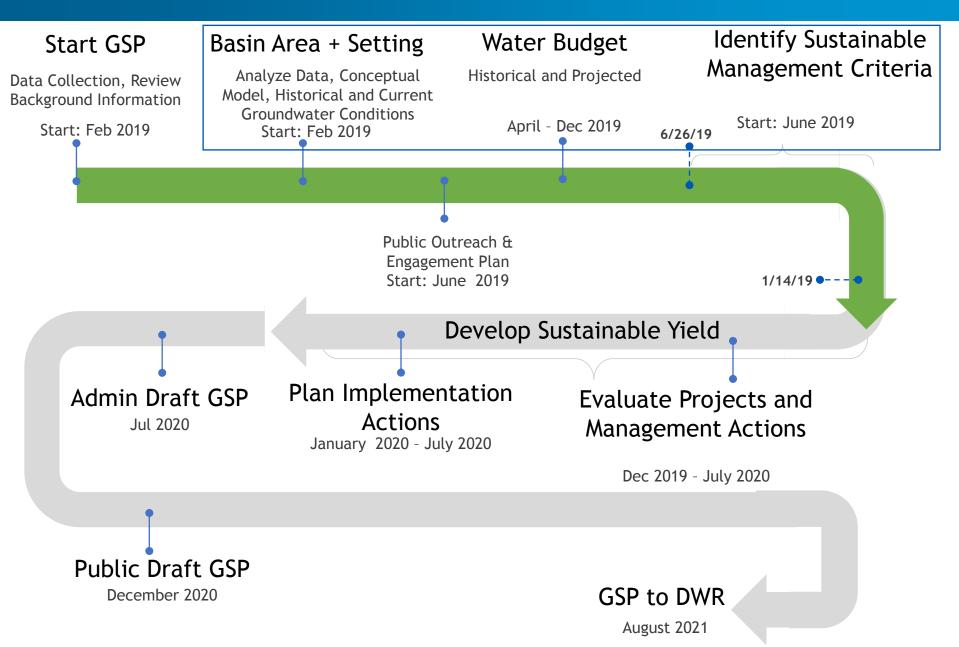


December 2016

Guidance Document for the Sustainable Management of Groundwater

Groundwater Sustainability Plan (GSP) Annotated Outline

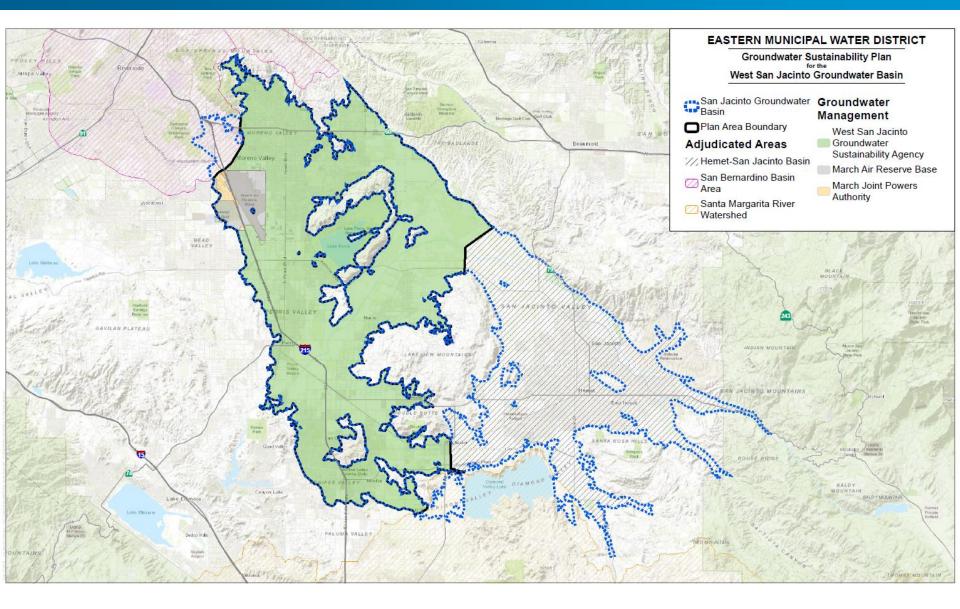
GSP Development Process Update



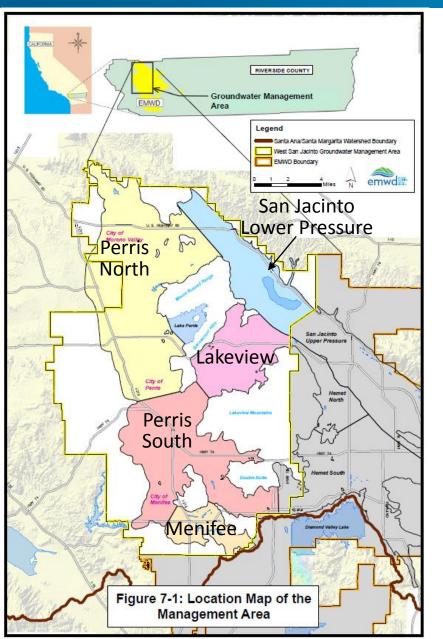


Update on the Groundwater Sustainability Plan Development

West San Jacinto Groundwater Basin (WSJGB)



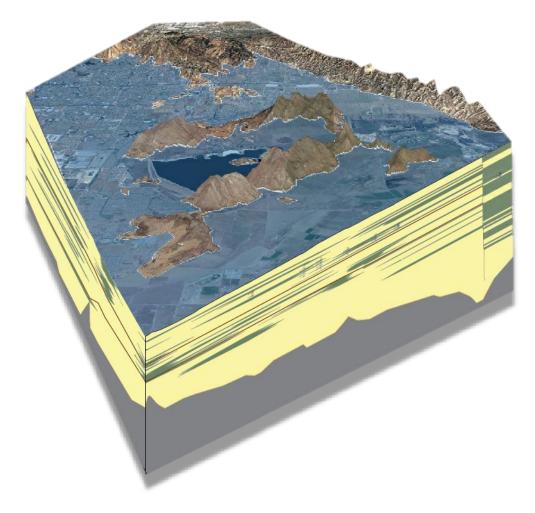
West San Jacinto Groundwater Basin (WSJGB)



- Managed under a groundwater management plan (GMP) since 1995
 - 5 groundwater management zones:
 - Perris North
 - Perris South
 - Menifee
 - San Jacinto Lower Pressure
 - Lakeview

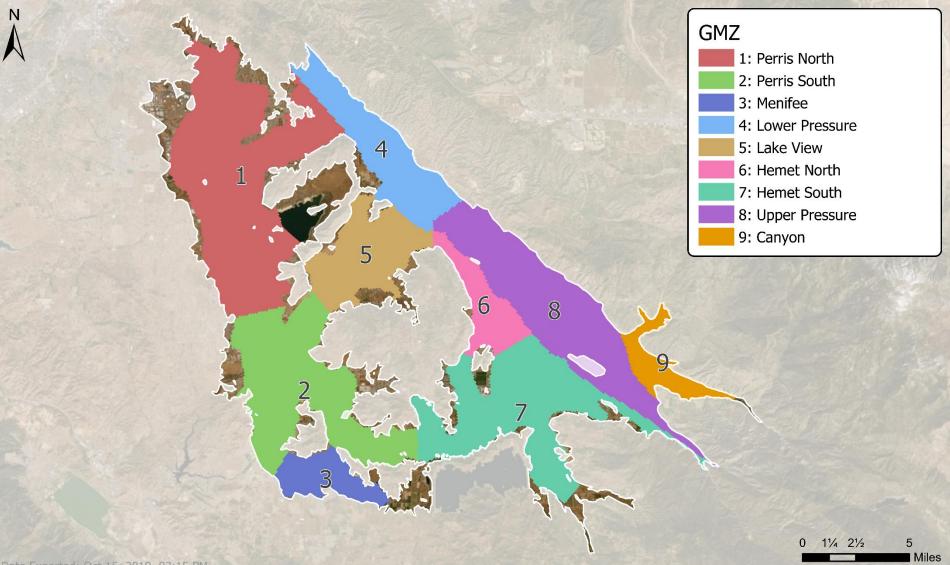
Hydrogeologic Conceptual Model

Provides an understanding of the general physical characteristics related to regional hydrology, land use, geology and geologic structure, water quality, aquifers, and aquitards

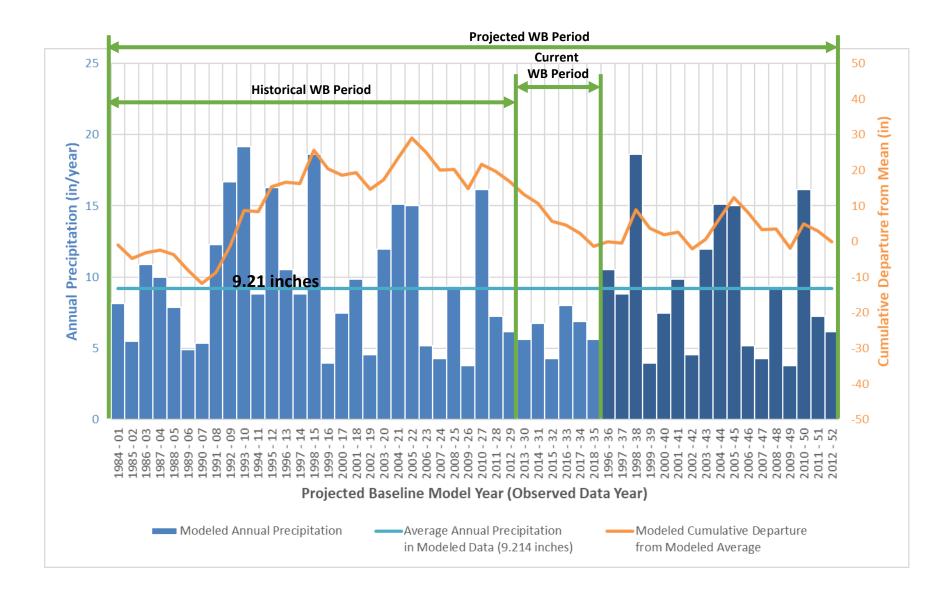


Gravel, Sand, Silty
Sand, Clayey Sand
Clay, Sandy Clay, Silty
Clay, Gravelly Clay
Bedrock

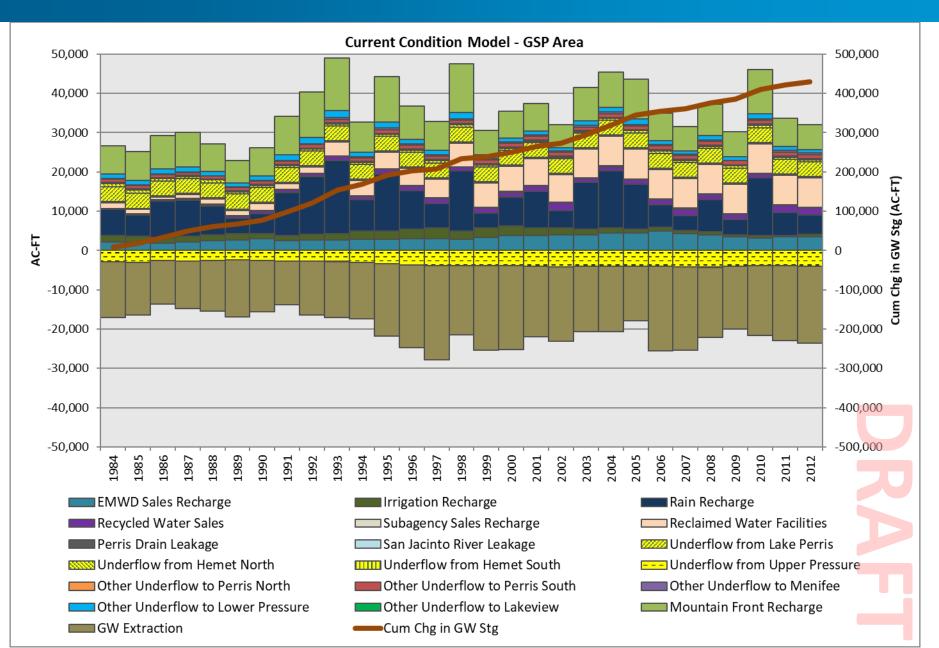
Basin Boundary Adjustments in the Model



Model Hydrologic Periods

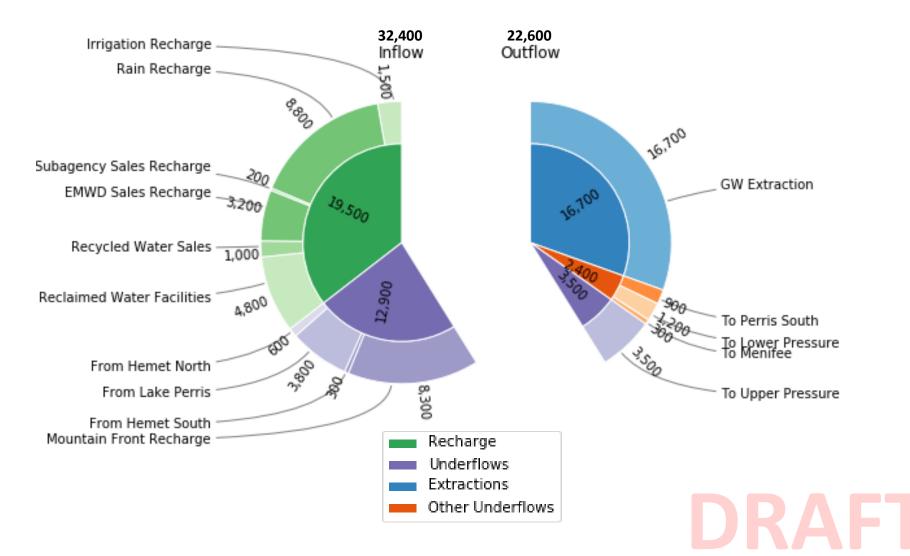


Historical Water Budget – GSP Area

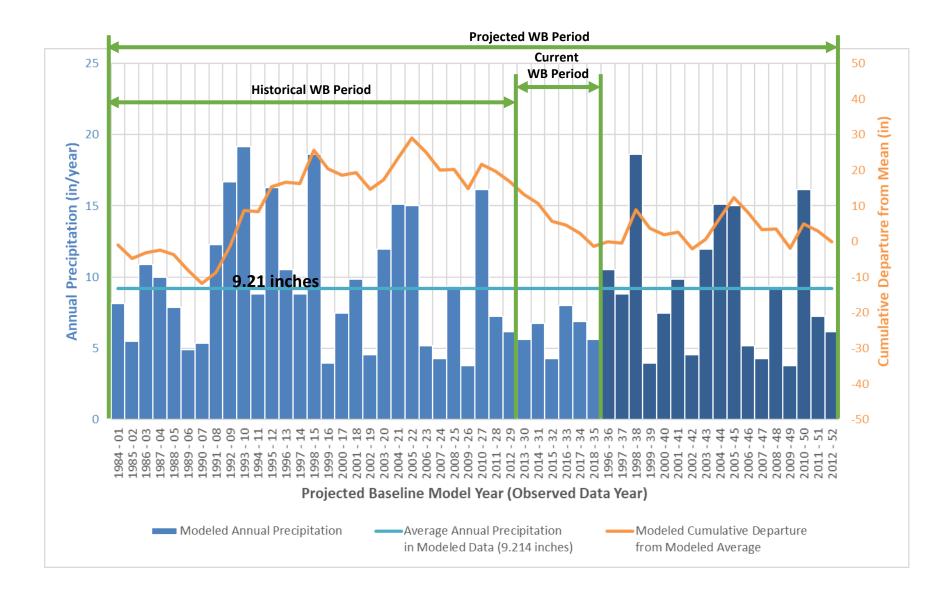


Historical Water Budget – GSP Area

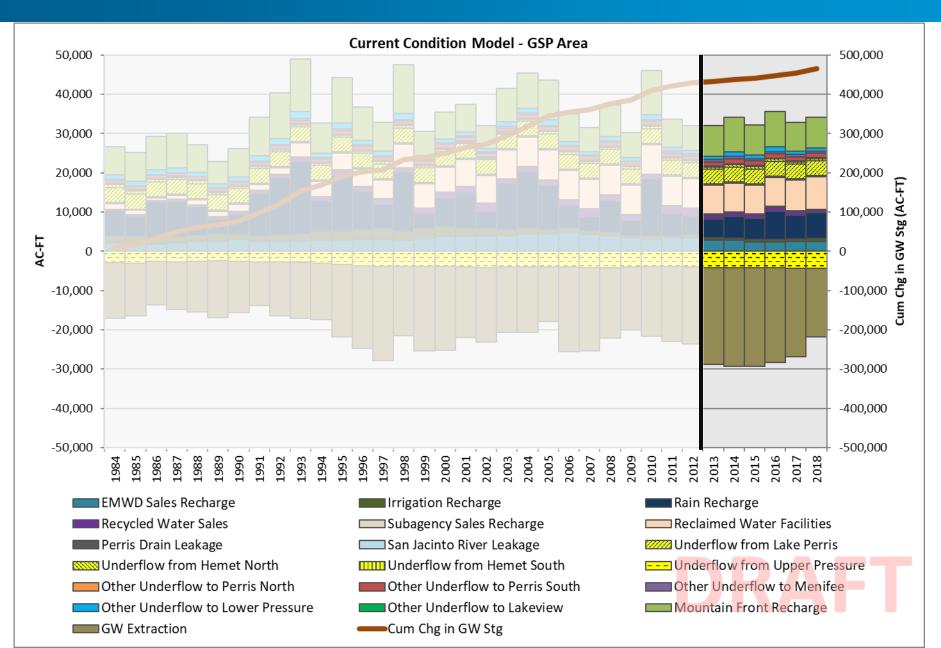
Average Flows During 1984 – 2012, Volumes in AF/Year



Model Hydrologic Periods

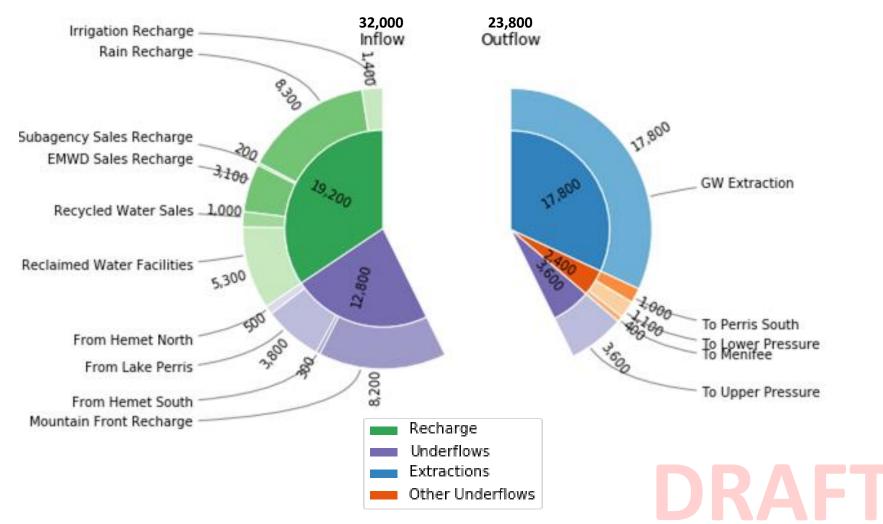


Current Conditions Baseline – GSP Area



Current Conditions GW Budgets

Average Flows During 2013 – 2018, Volumes in AF/Year

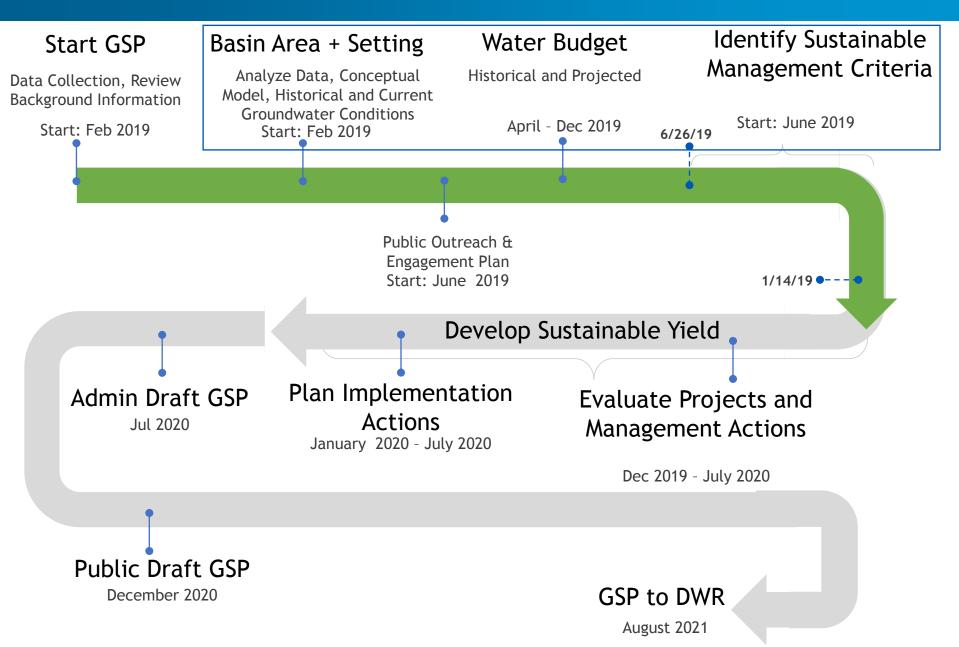


Units: AF/Yr



Timeline and Next Steps

GSP Development Process Update



Next Steps

- EMWD and consultant team will continue to work together to:
 - Conduct future groundwater model scenarios
 - Evaluate the future water budget
 - Continue to define sustainable management criteria
- Next stakeholder advisory group meeting scheduled for April 2020



Questions