Watsonville Slough System
Managed Aquifer Recharge and Recovery Projects

Draft
Environmental Impact Report

Public Information Meeting
September 23, 2020
Project Team Introductions

• Brian Lockwood, PV Water General Manager
• Marcus Mendiola, PV Water Conservation and Outreach Specialist
• ESA, Environmental Review
  – Jill Hamilton, Project Manager
  – Alena Maudru, Deputy Project Manager
  – Rachel Brownsey, Biologist
  – Andy Collison, Hydrologic and Hydraulic Modeling
• Gary Kittleson, Wildlife Biologist
• Paul Friedlander, Carollo Engineers
• Directors
Meeting Purpose

Agenda

- Description of the WSS-MARR Projects
- Overview of CEQA Process
- Draft EIR Overview
- How to Comment
- Informal Questions, Comments
Key Details

• Draft EIR available for review at:
  – https://www.pvwater.org/wss-marr
  – PV Water (36 Brennan Street)

• Written Comments due by 5:00 p.m. October 19th
  – Via Mail
    Pajaro Valley Water Management Agency
    ATTN: Brian Lockwood
    36 Brennan Street
    Watsonville, California 95076
  – Via e-mail
eir@pvwater.org
Pajaro Valley Water & SGMA

- PV Water Est. 1984
- SGMA Adopted, Fall 2014
- Groundwater Sustainability Agency, Fall 2015
- Basin Boundary Modification, Spring 2016

Groundwater Sustainability Plan - Alternative Approval, July 2019
Prop. 68 Grant - $0.5 million, awarded Fall 2019, to update Alternative
Geophysics Illustrates Progress

Delivered Water
Starting in 2002

Delivered Water
Starting in 2009

Goebel, et al, JoH, 2017

Geologic Cross Section: Hanson et al., 2002; Brabb et al., 1997
Basin Management Plan Update contains three primary components to achieve 12,100 AFY.
WSS-MARR Project Components

Draft EIR Section 2.2, Figure 2-1
Recharge Basins

Draft EIR Section 2.2, Figure 2-3
Struve Slough Pump Station

Draft EIR Section 2.2, Figure 2-4
## Operations

<table>
<thead>
<tr>
<th>Key Feature</th>
<th>Harkins Slough Project</th>
<th>Struve Slough Project</th>
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</thead>
<tbody>
<tr>
<td><strong>Annual Diversion</strong></td>
<td></td>
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<tr>
<td>Average</td>
<td>~ 740 AFY</td>
<td>~ 1,320 AFY</td>
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<tr>
<td>Maximum</td>
<td>2,000 AFY</td>
<td>4,000 AFY</td>
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<tr>
<td><strong>Water Supply Diversion</strong></td>
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<tr>
<td>• November 1 – May 31</td>
<td>Consistent with existing terms of Water Right Permit.</td>
<td>• Year round</td>
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<tr>
<td>• Up to 30 cfs</td>
<td></td>
<td>• November – March 31 up to 30 cfs</td>
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<td>• April 1 – October 31 up to 3 cfs</td>
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</tbody>
</table>

AFY = acre-feet per year  
cfs = cubic feet per second

Draft EIR Sections 2.5, Table 2-1
## WSS-MARR Design and Construction Schedule

<table>
<thead>
<tr>
<th>Component</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
<th>2028</th>
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<tbody>
<tr>
<td><strong>Harkins Slough Facilities Upgrades Project</strong></td>
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<td>Southeast Recharge Basin, Recovery and Monitoring</td>
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<td>Wells, and Pipelines</td>
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<td>Filter Plant Upgrades</td>
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<td><strong>Southwest Recharge Basin, Recovery and Monitoring</strong></td>
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<td><strong>Struve Slough Project</strong></td>
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<td>Screened Intake and Pump Station</td>
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<td><strong>Struve Slough to Filter Plant Pipeline</strong></td>
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<td>Filter Plant to Recharge Basins Pipeline</td>
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<td><strong>North Recharge Basin, Recovery and Monitoring</strong></td>
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**NOTE:**

a Blue represents the design and bid period, while black represents the construction period.
CEQA Process for the WSS-MARR Projects

Draft EIR Published 9/1
Overview of Draft EIR

Contents

S. Summary
1. Introduction
2. Project Description
3. Environmental Setting, Impacts, and Mitigation Measures
4. Other CEQA
5. Alternatives
6. Report Preparers
Appendices

746 pages, 59 Tables, 40 Figures
## Analysis of Environmental Impacts

<table>
<thead>
<tr>
<th>Less than Significant</th>
<th>Less than Significant with Mitigation</th>
<th>Significant and Unavoidable</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Air Quality and Greenhouse Gas Emissions</td>
<td>• Surface Water, Groundwater, and Water Quality</td>
<td>• Land Use and Agricultural Resources (Conversion of Important Farmland)</td>
</tr>
<tr>
<td>• Energy, Utilities, Public Services, and Recreation</td>
<td>• Biological Resources</td>
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<td>• Geology and Soils</td>
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<td>• Hazards and Hazardous Materials</td>
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<td>• Noise and Vibration</td>
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<td>• Transportation and Traffic</td>
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<td></td>
<td>• Cultural Resources</td>
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<td>• Tribal Cultural Resources</td>
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<tr>
<td></td>
<td>• Aesthetic Resources</td>
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</tbody>
</table>
Important Farmland

Prime Farmland

Farmland of Statewide Importance

Unique Farmland

Draft EIR Section 3.2, Figure 3.2-2
Conversion of Important Farmland

- Permanent conversion: up to 34.2 acres
  - Recharge basins, recovery/monitoring wells

- Mitigation Measures
  - Agricultural Easements
  - Replacement of Topsoil

- Why Significant and Unavoidable?
  - Agricultural easements may not be feasible

Draft EIR Section 3.2, Figure 3.2-2
Impacts to Biological Resources

- Construction and operational impacts to wetlands and riparian habitat
- Effects on waterfowl and other wildlife
- 21 mitigation measures (e.g., avoidance, habitat restoration)
- Project area includes critical habitat for California red-legged frog (CRF)
- Modeling: limit effects on CRF through varied pumping rates, periods of diversion to avoid rapid drawdown during critical periods

Draft EIR Section 3.4
CRF Critical Habitat within the Project Area
Impacts to CA Red Legged Frog

• Operations would affect aquatic habitats for CRF by:
  – Altering the seasonal extent of flooded emergent marsh habitat;
  – Affecting WSE in breeding areas during breeding season, potentially leading to desiccation of egg masses, stranding of larvae;
  – Concentrating predatory fish, birds by lowering WSE in areas that support CRF; and
  – Reducing spring, summer rearing habitat through water withdrawals.

• Mitigation Measure BR-1b: requires restoration, enhancement or creation of CRF breeding habitat.
Alternatives

• Screening
  – Focus: Feasible alternatives that meet Project objectives, reduce significant impacts
  – Many alternatives considered previously
  – Alternatives Evaluated
    • No Project Alternative
    • Aquifer Storage and Recovery
    • Reduced Impacts to Cultural and Biological Resources
    • Struve Slough Pump Station on Land Trust Property
Aquifer Storage and Recovery Alternative

Not shown: 20 ASR wells, detention basins, associated pipelines

Draft EIR Chapter 5, Figure 5-1
Comparison: Projects vs. Aquifer Storage and Recovery Alternative

- Reduces Impacts:
  - Conversion of Important Farmland by ~78%

- Worsens Impacts:
  - Biological Resources (wetlands, California red legged frog habitat)
  - Noise and Vibration (well construction)
  - Cultural/Tribal Cultural Resources (excavation for pipeline)
  - Aesthetics (water treatment plant, ASR wells)
Reduced Impacts to Cultural and Biological Resources Alternative

Draft EIR Chapter 5, Figure 5-2
Comparison: Projects vs. Reduced Impacts to Cultural and Biological Resources Alternative

• Reduces Impacts:
  – Biological Resources (wetlands, CRF habitat)
  – Cultural Resources (avoid known archaeological sites)

• Worsens Impacts:
  – Increases conversion of Important Farmland by 4%
  – Geology and Soils (liquefaction-induced settlement)
  – Transportation and Traffic (lane closure)
Struve Slough Pump Station on Land Trust Property Alternative

Draft EIR Chapter 5, Figure 5-3
Comparison: Projects vs. Struve Slough Pump Station on Land Trust Property Alternative

• Reduces Impacts:
  – Biological Resources (wetlands, CRF habitat)
  – Noise (distance from sensitive receptors)

• Worsens Impacts:
  – Conversion of Important Farmland by <1%
Navigating the EIR

Draft EIR available for review at:
https://www.pvwater.org/wss-marr

CHAPTER 3
Environmental Setting, Impacts, and Mitigation Measures

3.1 Overview

This chapter provides an analysis of the physical environmental effects of implementing the proposed Harkins Slough Facilities Upgrades Project (Harkins Slough Project) and the proposed Struve Slough Project (collectively called the Watsonville Slough System Managed Aquifer Recharge and Recovery Projects, or Projects) as described in Chapter 2, *Project Description*. This chapter describes the environmental setting, assesses impacts, and identifies mitigation measures for significant impacts.

The Projects were analyzed under their former names—the Harkins Slough Recharge Facilities Upgrades and Watsonville Slough Recharge Facilities Upgrades. The Draft Project Environmental Impact Report (PEIR) as two of seven component plans of the Basin Management Plan Update (BMP Update) for the Watsonville Slough System (WSS) went through a robust public review process during 2014 and 2015. The Draft PEIR provides detailed, project-level analysis of the environmental impacts, and includes the mitigation measures that were developed during the review process.
Searching the Document

• Look for the magnifying glass and the word “Find”

OR

• Press “Ctrl+F”
Draft EIR Public Review

• Draft EIR available for review at:
  – https://www.pvwater.org/wss-marr
  – PV Water (36 Brennan Street)

• Submit written comments by 5:00 pm Monday, October 19:
  – Via Mail
    Pajaro Valley Water Management Agency
    ATTN: Brian Lockwood
    36 Brennan Street
    Watsonville, California 95076
  – Via e-mail
    eir@pvwater.org
Questions?

Thank You