Watsonville Slough System Managed Aquifer Recharge and Recovery Projects
Final EIR Certification & Project Approval

Board of Directors Meeting
January 20, 2021

Pajaro Valley Water Management Agency

ESA 50 YEARS 1969-2019

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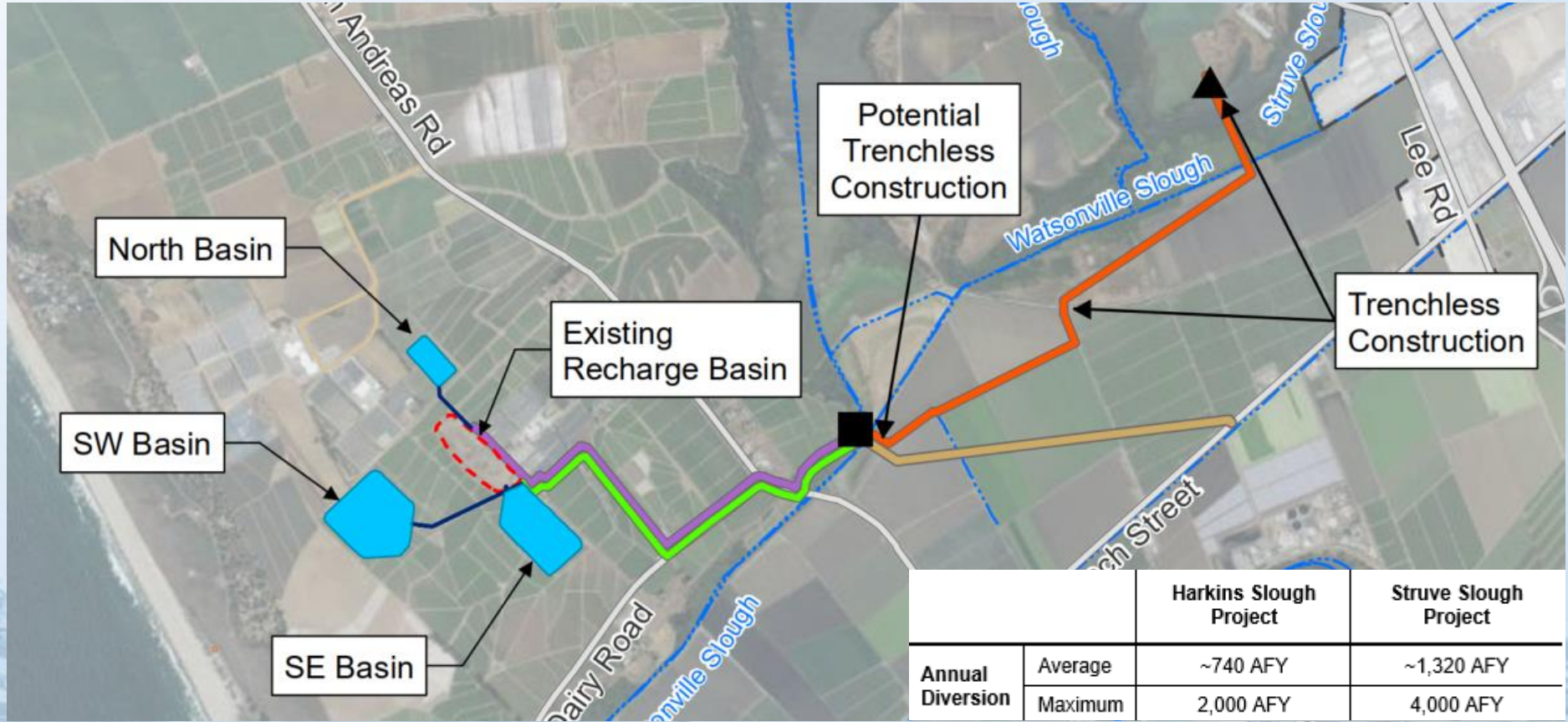
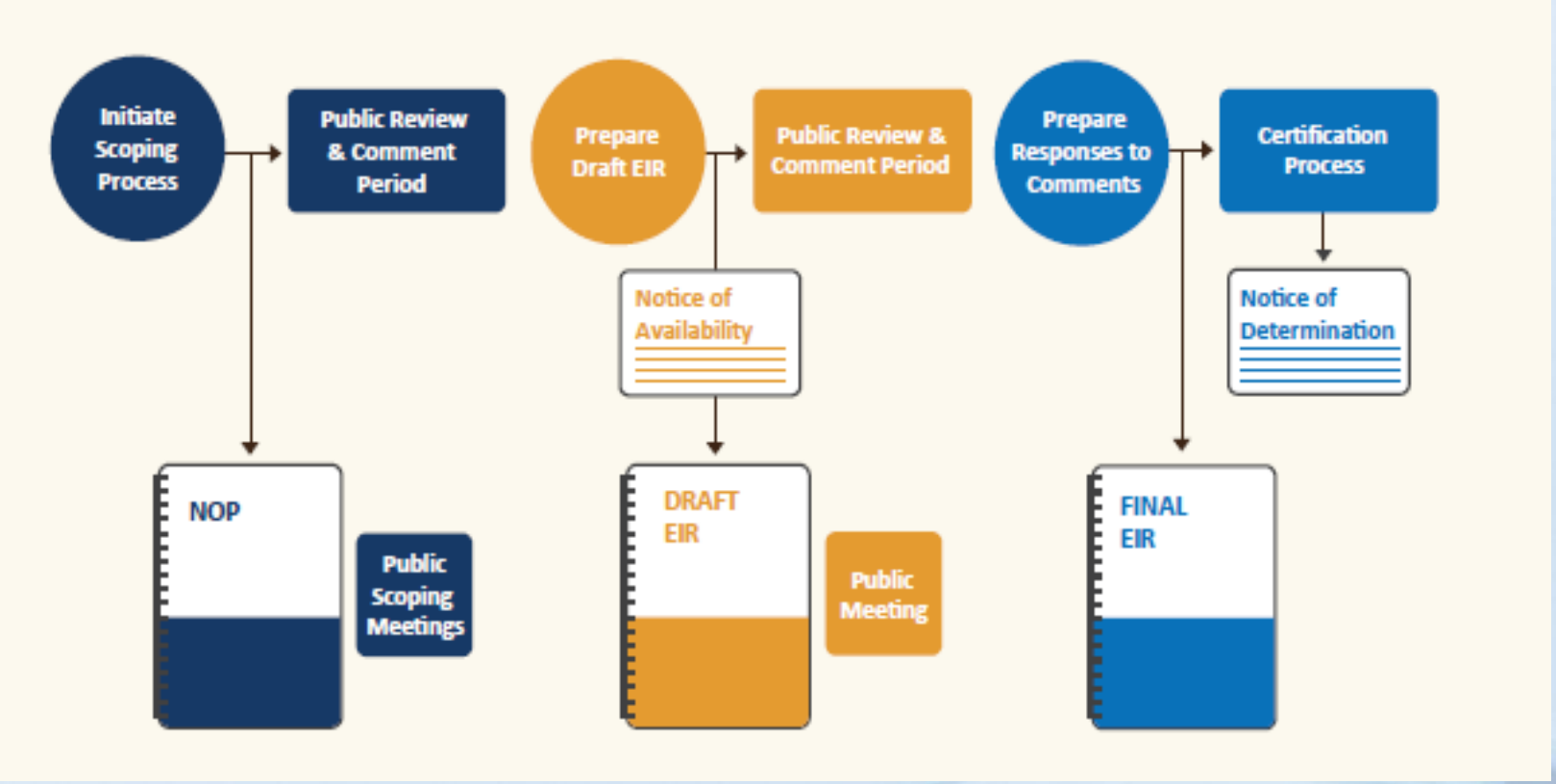
WSS-MARR Projects FEIR - Agenda

- CEQA Overview
- Responses to Comments
- Documents supporting Certification, Project Approval:
  - Findings, Statement of Overriding Considerations, Mitigation Monitoring and Reporting Program, Notice of Determination



		Harkins Slough Project	Struve Slough Project
Annual Diversion	Average	~740 AFY	~1,320 AFY
	Maximum	2,000 AFY	4,000 AFY

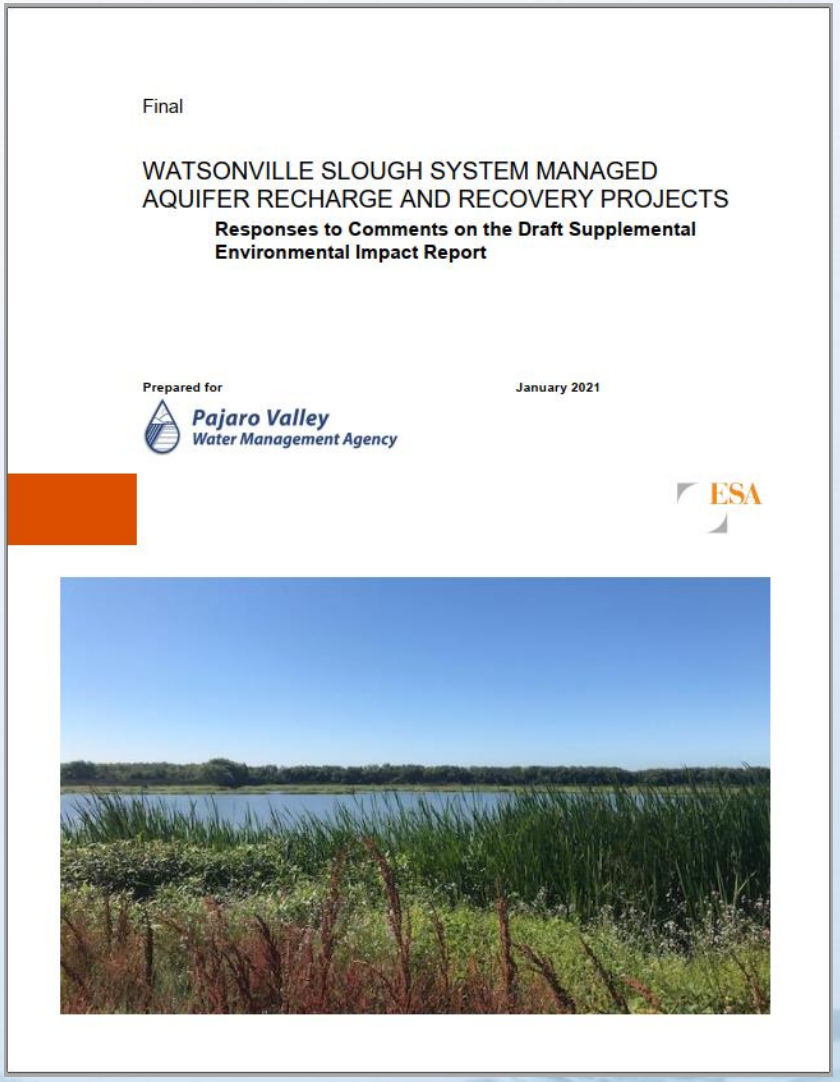
CEQA Process for the WSS-MARR Projects



June 2019 September 2020 January 2021

Final EIR Published 1/8

Responses to Comments Document



Published:

January 8, 2021

Final EIR: Draft EIR plus Responses to Comments Document

Comments on Draft EIR

Agencies and Organizations that Commented

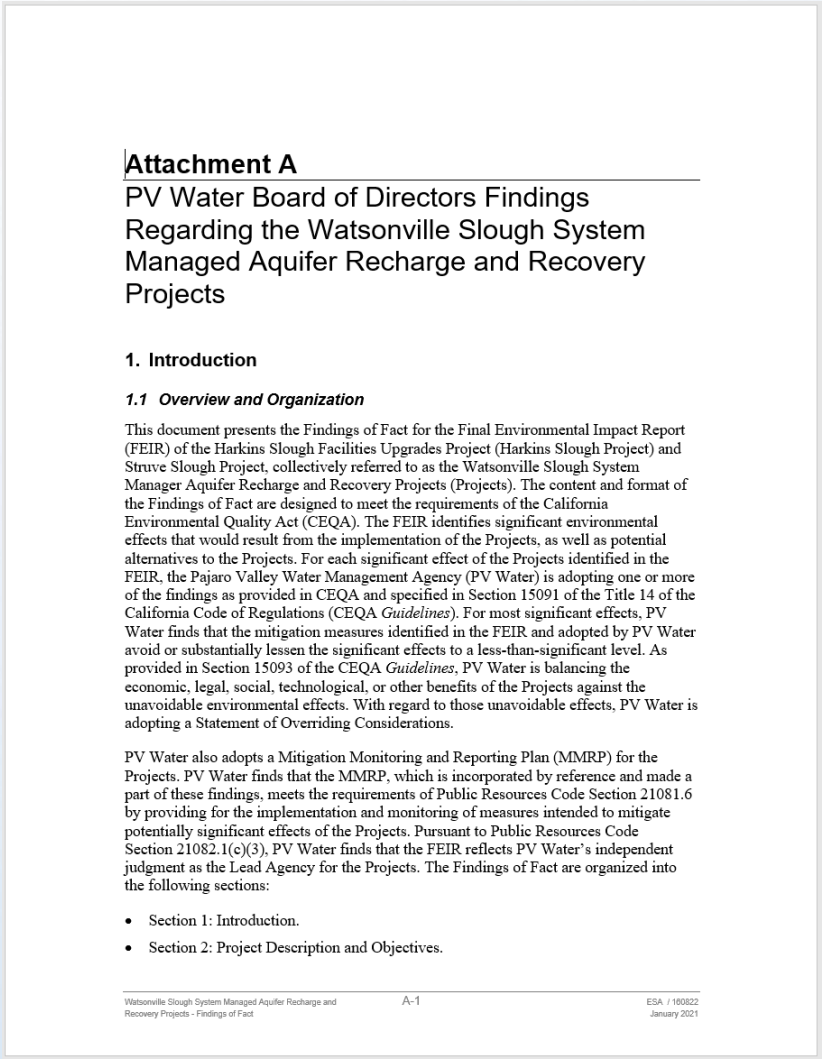
- Land Trust of Santa Cruz County (SC Land Trust)
- Monterey Bay Air Resources District
- Watsonville Wetlands Watch (WWW)

Comments on Draft EIR

Comments	Responses
Biological Resources • Effects on wetlands/waters	• Wetlands/waters will be replaced as required by agencies
• Offers from SC Land Trust, WWW to assist with habitat replacement	• Offers of assistance appreciated
• Pipeline through Land Trust property	• Will narrow pipeline corridor, bury pipe deeper to avoid conflicts with wetlands
• Nighttime lighting	• Lighting will be shielded/hooded
• Request for AMP	• Not warranted (other mitigation)
Air Quality • Use “Tier 4” construction equipment	• Will comply with all Air District requirements
Struve slough pump station • Owner of proposed site opposed; SC Land Trust okay with hosting the facility	• Board doesn’t need to choose site today; Findings allow deferral of decision.
• Other: Importance of Projects for agriculture, appreciation for PV Water stewardship	

CEQA DOCUMENTS SUPPORTING CERTIFICATION, PROJECT APPROVAL

CEQA Findings



Attachment A

PV Water Board of Directors Findings Regarding the Watsonville Slough System Managed Aquifer Recharge and Recovery Projects

1. Introduction

1.1 Overview and Organization

This document presents the Findings of Fact for the Final Environmental Impact Report (FEIR) of the Harkins Slough Facilities Upgrades Project (Harkins Slough Project) and Struve Slough Project, collectively referred to as the Watsonville Slough System Manager Aquifer Recharge and Recovery Projects (Projects). The content and format of the Findings of Fact are designed to meet the requirements of the California Environmental Quality Act (CEQA). The FEIR identifies significant environmental effects that would result from the implementation of the Projects, as well as potential alternatives to the Projects. For each significant effect of the Projects identified in the FEIR, the Pajaro Valley Water Management Agency (PV Water) is adopting one or more of the findings as provided in CEQA and specified in Section 15091 of the Title 14 of the California Code of Regulations (CEQA *Guidelines*). For most significant effects, PV Water finds that the mitigation measures identified in the FEIR and adopted by PV Water avoid or substantially lessen the significant effects to a less-than-significant level. As provided in Section 15093 of the CEQA *Guidelines*, PV Water is balancing the economic, legal, social, technological, or other benefits of the Projects against the unavoidable environmental effects. With regard to those unavoidable effects, PV Water is adopting a Statement of Overriding Considerations.

PV Water also adopts a Mitigation Monitoring and Reporting Plan (MMRP) for the Projects. PV Water finds that the MMRP, which is incorporated by reference and made a part of these findings, meets the requirements of Public Resources Code Section 21081.6 by providing for the implementation and monitoring of measures intended to mitigate potentially significant effects of the Projects. Pursuant to Public Resources Code Section 21082.1(c)(3), PV Water finds that the FEIR reflects PV Water's independent judgment as the Lead Agency for the Projects. The Findings of Fact are organized into the following sections:

- Section 1: Introduction.
- Section 2: Project Description and Objectives.

Board makes Findings for

- Significant Impacts:
  - Changes (mitigation measures) to avoid/lessen impacts
    - Incorporated into Project
    - Are the responsibility of another Agency
    - Are infeasible
- Alternatives
- *All information in Findings is from the EIR*

Statement of Overriding Considerations

Exhibit B

Statement of Overriding Considerations

CEQA Requirements

The California Environmental Quality Act (CEQA)[1] requires lead agencies to balance the economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a project against its unavoidable environmental impacts when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits of a project outweigh the unavoidable adverse environmental effects, the adverse environmental impacts may be considered "acceptable." The lead agency must state in writing the specific reasons to support its action based on the final EIR and/or other information in the record. The statement of overriding considerations must be supported by substantial evidence in the record. The statement of overriding considerations should be included in the record of the project approval and should be mentioned in the notice of determination.

Significant and Unavoidable Impacts

The following Project-related environmental impacts could not be eliminated or reduced to a less-than-significant level with implementation of mitigation measures:

1. **Conversion of Important Farmland.** The Projects would result in the conversion of Important Farmland to non-agricultural use. Even with implementation of Mitigation Measures LU-1a (Compensate for Conversion of Important Farmland) and LU-1b (Replacement of Topsoil), these impacts would be significant and unavoidable on a project-specific and cumulative basis. (Impacts LU-1 and C-LU-1)

   Impact LU-1: The Projects would convert Important Farmland to non-agricultural use and could involve changes in the existing environment which, due to their location or nature, could result in conversion of Important Farmland to non-agricultural use.

   Impact C-LU-1: The Projects, in combination with past, present, and probable future projects in the Project area, would have a cumulatively considerable impact on the conversion of Important Farmland to non-agricultural use.

   PV Water adopts the following mitigation measures that would support reducing impacts related to converting Important Farmland to non-agricultural use.

   Mitigation Measure LU-1a: Compensate for Conversion of Important Farmland. *Track Conversion of Important Farmland.* PV Water shall review California Department of Conservation's Farmland Mapping and Monitoring Program farmland designations for the recharge basins and associated recovery wells and monitoring wells annually beginning with

[1] Public Resources Code Section 21083 et seq; CEQA *Guidelines* Section 15093.

Required for significant, unavoidable impacts

- Conversion of Important Farmland*
  - ~34 acres
- Considerations:
  - Environmental, economic, legal, other factors
  - Project Benefits

Mitigation Monitoring and Reporting Program

Exhibit C
Mitigation Monitoring and Reporting Program

TABLE C-1
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Harkins Slough Facilities Upgrades Project Components			Struve Slough Project Components					Mitigation Schedule	Monitoring, Reporting Responsibility	Verification of Compliance by PV Water*
	Filter Plant Upgrades (including intake screen)	Southwest and Southeast Recharge Basins, Wells, and Pipelines	Backwash and Raw Water Pipeline	Screened Intake	Pump Station	SS to Filter Plant Pipeline	Filter Plant to Recharge Basins Pipeline	North Recharge Basin, Wells, and Pipelines			
Land Use and Agricultural Resources											
LU-1a: Compensate for Conversion of Important Farmland *Track Conversion of Important Farmland.* PV Water shall review California Department of Conservation's Farmland Mapping and Monitoring Program farmland designations for the recharge basins and associated recovery wells and monitoring wells annually beginning with the first year of construction and continuing for five years after construction of components located in Important Farmland is completed. PV Water shall identify Prime Farmland, Farmland of Statewide Importance, and Unique Farmland referred to herein as Important Farmland that is associated with the recharge basins and associated recovery wells and monitoring wells that converts due to implementation of the Projects. *Establish Memorandum of Understanding for Agricultural Easement Fund.* PV Water shall enter into a Memorandum of Understanding with the Santa Cruz Land Trust or similar entity. The Memorandum of Understanding shall include details regarding an Agricultural Easement Fund to be paid by PV Water and the timing of acquisition of agricultural easements for the purpose of offsetting impacts on Important Farmland caused by the Projects. Acceptance of this fee by the Santa Cruz Land Trust or similar entity shall serve as an acknowledgment and commitment to: (1) secure agricultural easements to offset the conversion of Important Farmland caused by the Projects; and (2) provide documentation to PV Water describing the project(s) funded by the mitigation fee. If there is any remaining unspent portion of the Agricultural Easement Fund following implementation, PV Water shall be entitled to a refund in that amount. To qualify under this mitigation measure, the specific agricultural easement acquisition projects must preserve acreage of farmland of an equal or greater Farmland Mapping and Monitoring Program designation value (e.g., Prime Farmland, Farmland of Statewide Importance, or Unique Farmland) within the PV Water service area to offset the permanent conversion of Important Farmland by the Projects. *Contribute to Agricultural Easement Fund.* PV Water shall initially designate funds to secure easements for up to the equivalent area of Important Farmland associated with development of the first recharge basin and associated recovery wells and monitoring wells. *Directly Fund Agricultural Easements.* As an alternative approach to establishing a memorandum of understanding for, and contributing to an agricultural easement fund, PV Water could elect to directly fund the purchase of agricultural easements for Important Farmland in the Pajaro Valley.		X			Applies if Land Trust site is used; does not apply if proposed site is used			X	2. Pre-Construction 3. Construction 4. Post Construction	PV Water, Land Trust of Santa Cruz County (Potential)	
LU-1b: Replacement of Topsoil In agricultural areas, PV Water shall require contractors to stockpile topsoil at Project sites during Project grading and reapply it in situ after construction to promote vegetative growth. In agricultural areas temporarily disturbed by construction and where excavation occurs, the following measures shall apply: • Strip 18 inches of topsoil from the area excavated unless otherwise stipulated by landowner. The topsoil shall be stored separately from subsoil and other construction materials. • Clearly mark topsoil with signs, and store topsoil separately from other excavated and imported materials in such a manner that the topsoil is not damaged, mixed, or covered by subsoil or surface rocks, and so that it is not continually disturbed. • Stockpile topsoil on the same property from which it was stripped and return topsoil to same property from which it was stripped.		X	X		X	X	X	X	3. Construction 4. Post Construction	Contractor to implement; PV Water to monitor	

Notice of Determination

Notice of Determination Appendix D

TO:

☒ Office of Planning and Research
For U.S. Mail: P.O. Box 3044 Sacramento, CA 95812-3044
Street Address: 1400 Tenth Street Sacramento, CA 95814

☒ County Clerk
County of: Santa Cruz
Address: 701 Ocean Street, Room 310
Santa Cruz, CA 95060

FROM:

Public Agency: Pajaro Valley Water Management Agency
Address: 36 Brennan Street, Watsonville CA 95076
Contact: Brian Lockwood
Phone: 831-772-9292
Lead Agency (if different from above):
Address:
Contact:
Phone:

Subject: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

State Clearinghouse Number (if submitted to State Clearinghouse): 2019059130

Project Title: Watsonville Slough System Managed Aquifer Recharge and Recovery Projects

Project Location (include county): Santa Cruz County, California

Project Description: The primary purpose of the Projects is to help balance the groundwater basin, prevent further seawater intrusion, and help meet the water supply needs in the Pajaro Valley. The Projects are located in unincorporated Santa Cruz County. The Harkins Slough Project would include upgrades at the Harkins Slough pump station, installation of intake screens, installation of a backwash and raw water pipeline from the filter plant at the Harkins Slough pump station to an existing gravity sewer, and construction of two new recharge basins and associated recovery wells, monitoring wells, and pipelines. The Struve Slough Project would develop Struve Slough as a water supply source by installing a new screened intake, pump station, a pipeline to connect the new pump station to the Harkins Slough filter plant, a pipeline to connect to the recharge basins, and a new recharge basin and associated recovery wells, monitoring wells, and pipelines.

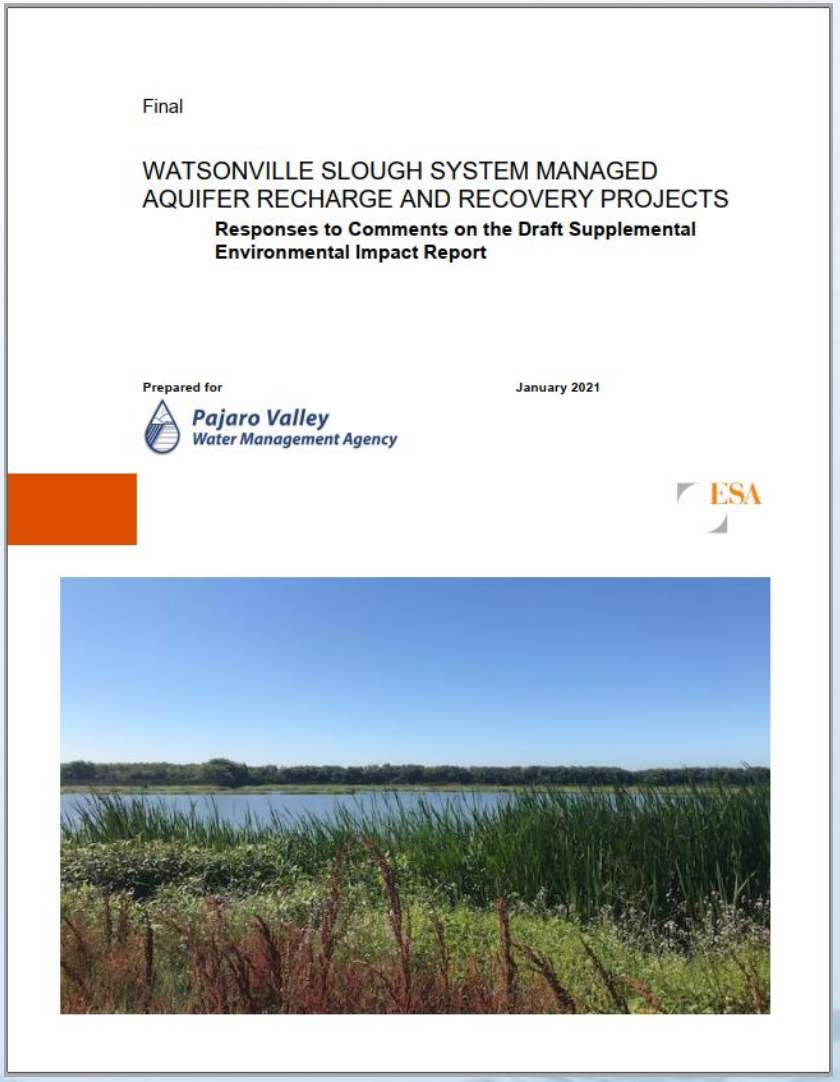
This is to advise that the Pajaro Valley Water Management Agency has approved the above described project on
(☒ *Lead Agency or* ☐ *Responsible Agency*)

Janury 20, 2021 and has made the following determinations regarding the above described projects.
(*Date*)

1. The project [☒ will ☐ will not] have a significant effect on the environment.
2. ☒ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
   ☐ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [☒ were ☐ were not] made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan [☒ was ☐ was not] adopted for this project.
5. A statement of Overriding Considerations [☒ was ☐ was not] adopted for this project.
6. Findings [☒ were ☐ were not] made pursuant to the provisions of CEQA.

Notification that:

- Project approved, will have significant environmental effects
- EIR prepared
- Mitigation Measures, Findings, Statement of Overriding Considerations, MMRP adopted
- File with county clerk, OPR



Questions?

Thank You

Analysis of Environmental Impacts

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

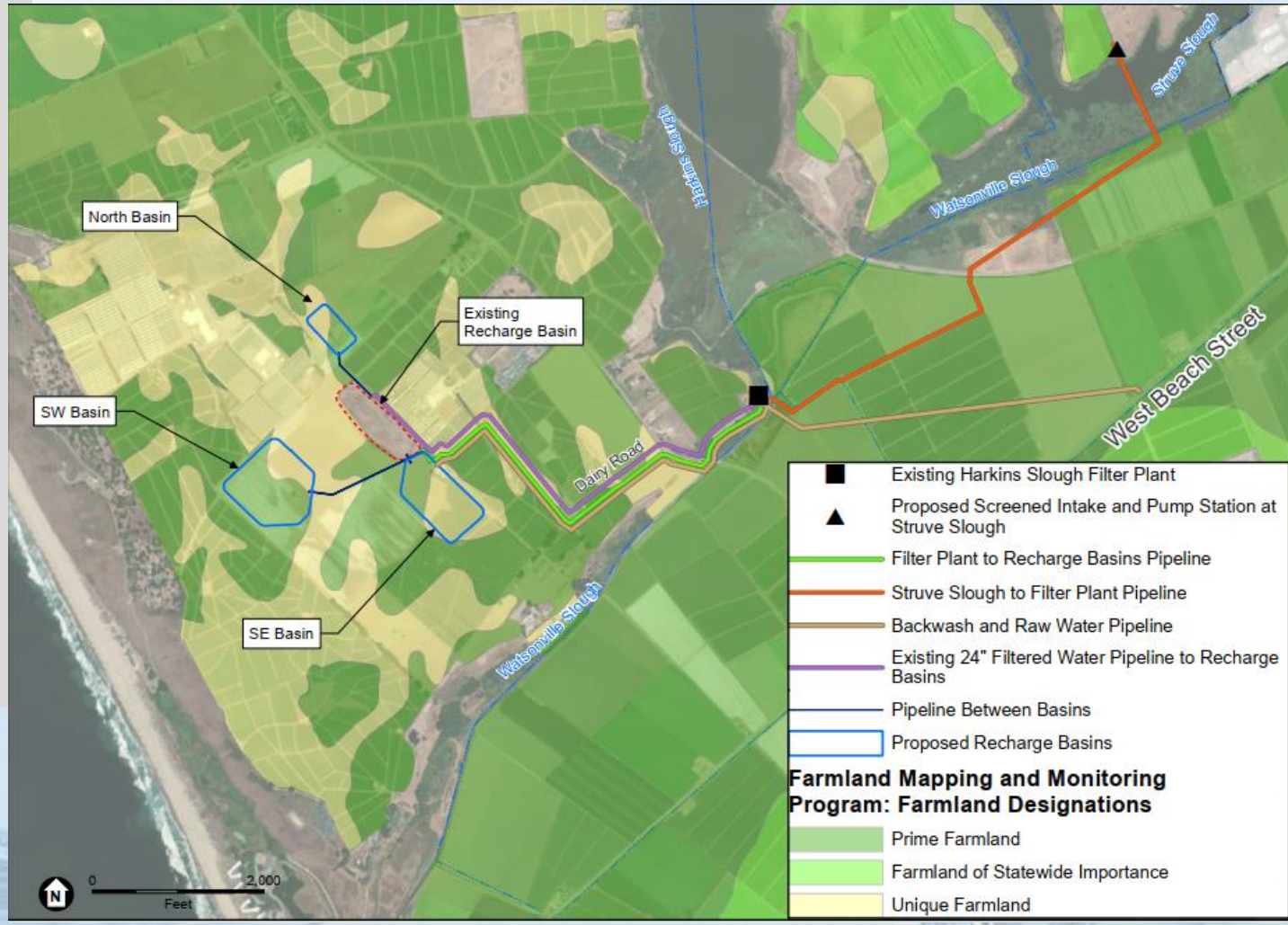
WSS-MARR previously evaluated in 2014 Basin Management Plan Update Program EIR

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

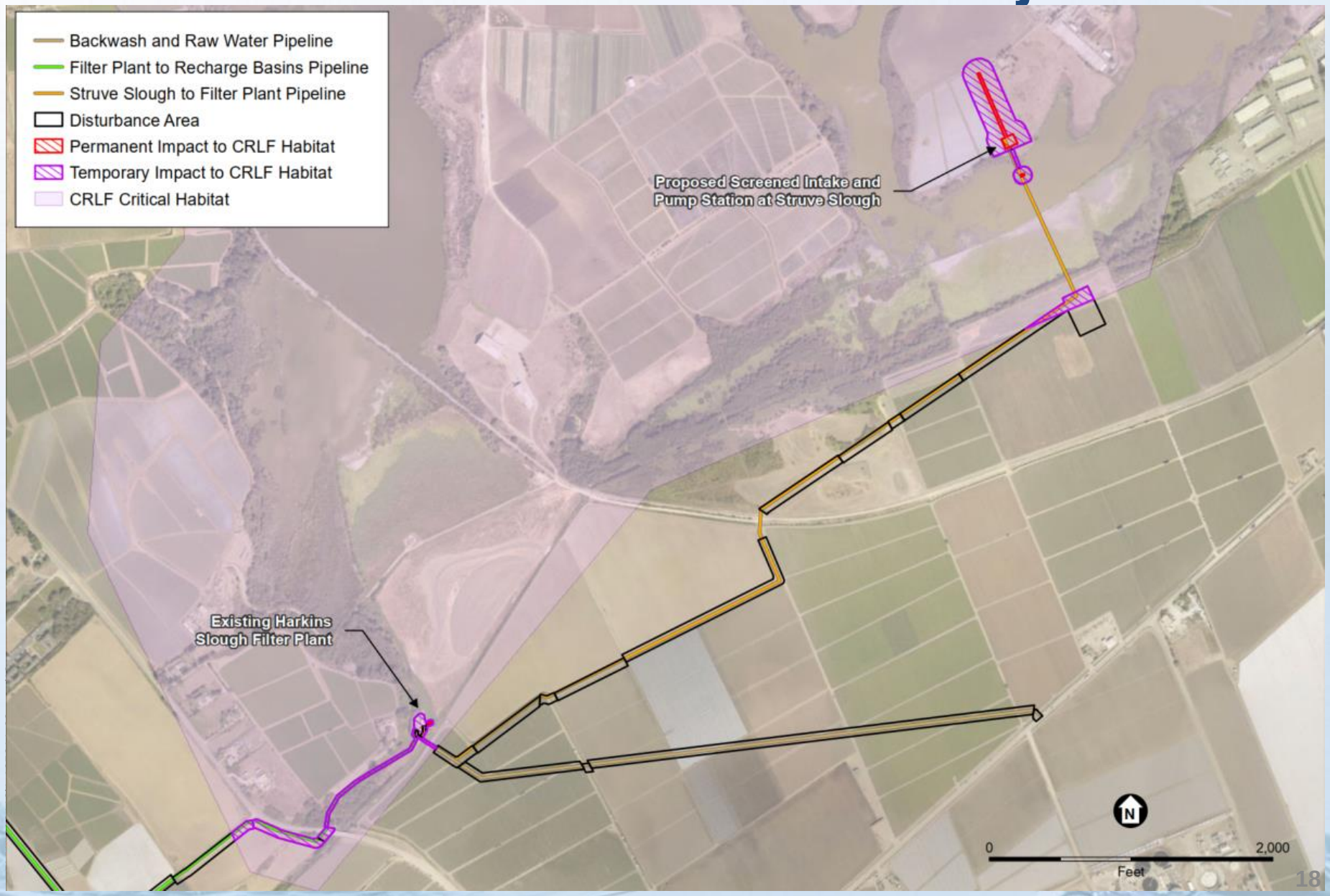
Draft EIR Section 3.2, Figure 3.2-2

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



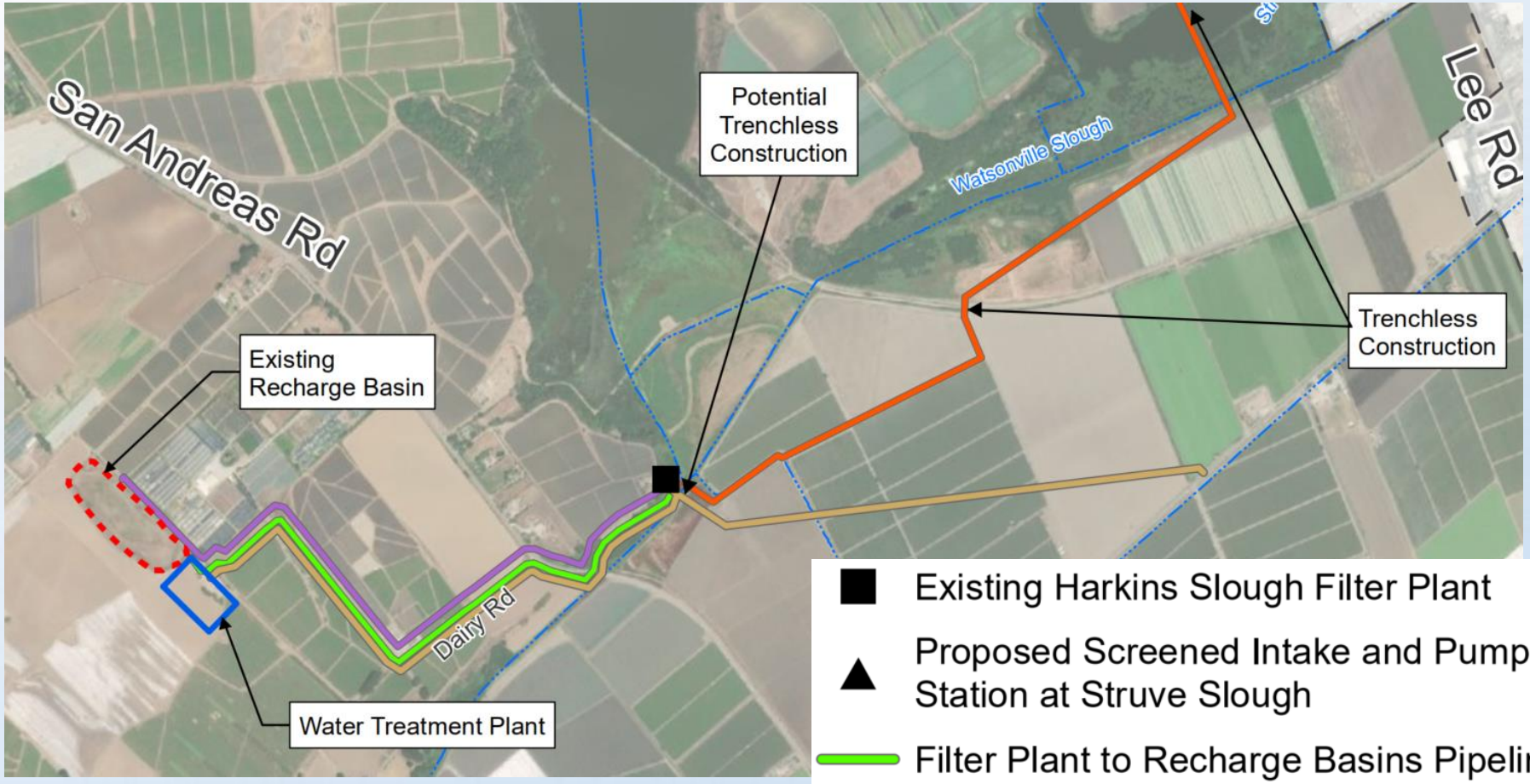
Impacts to CA Red Legged Frog

- 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

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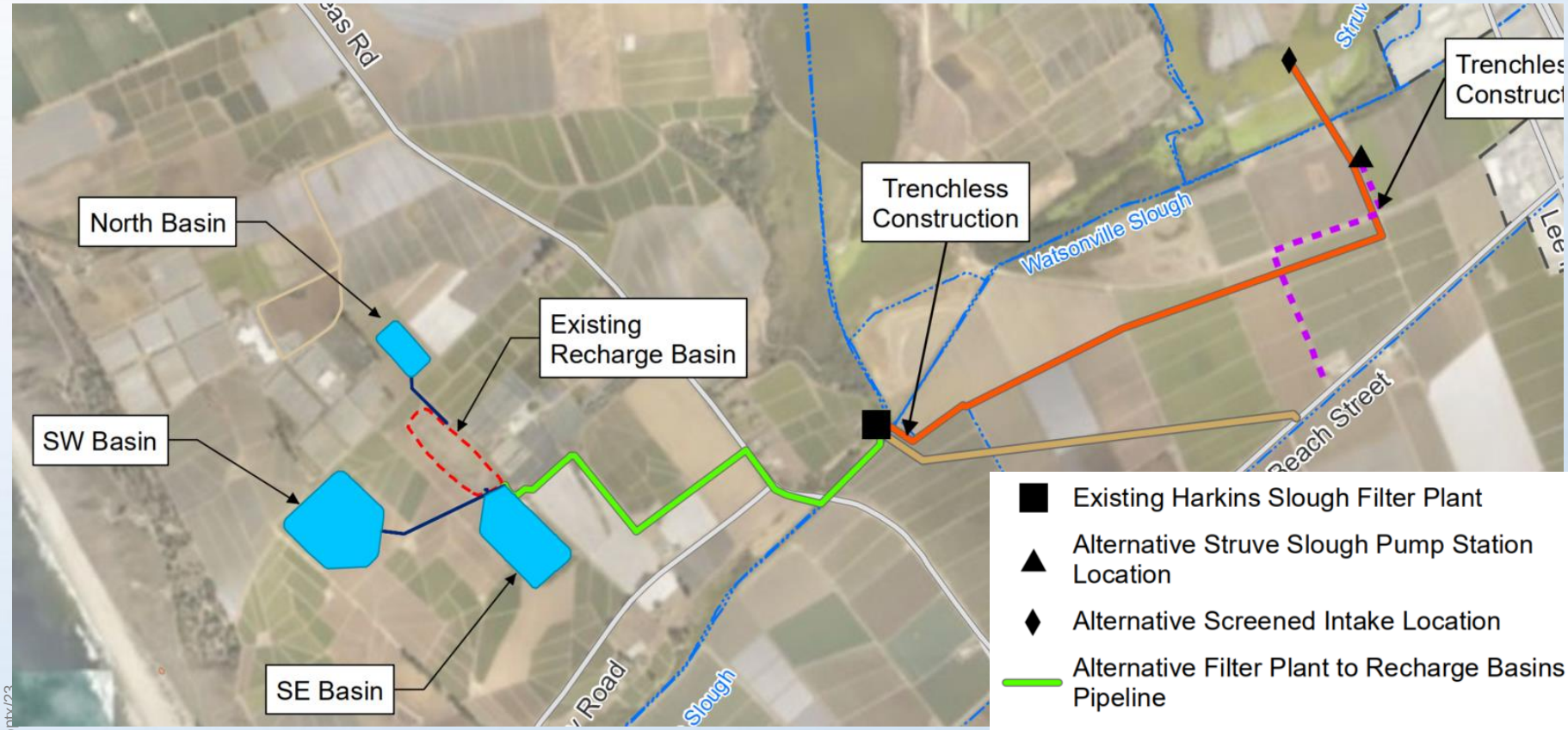
Comparison: Projects vs. Aquifer Storage and Recovery Alternative

- 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)

Draft EIR Section 5.3

Reduced Impacts to Cultural and Biological Resources Alternative

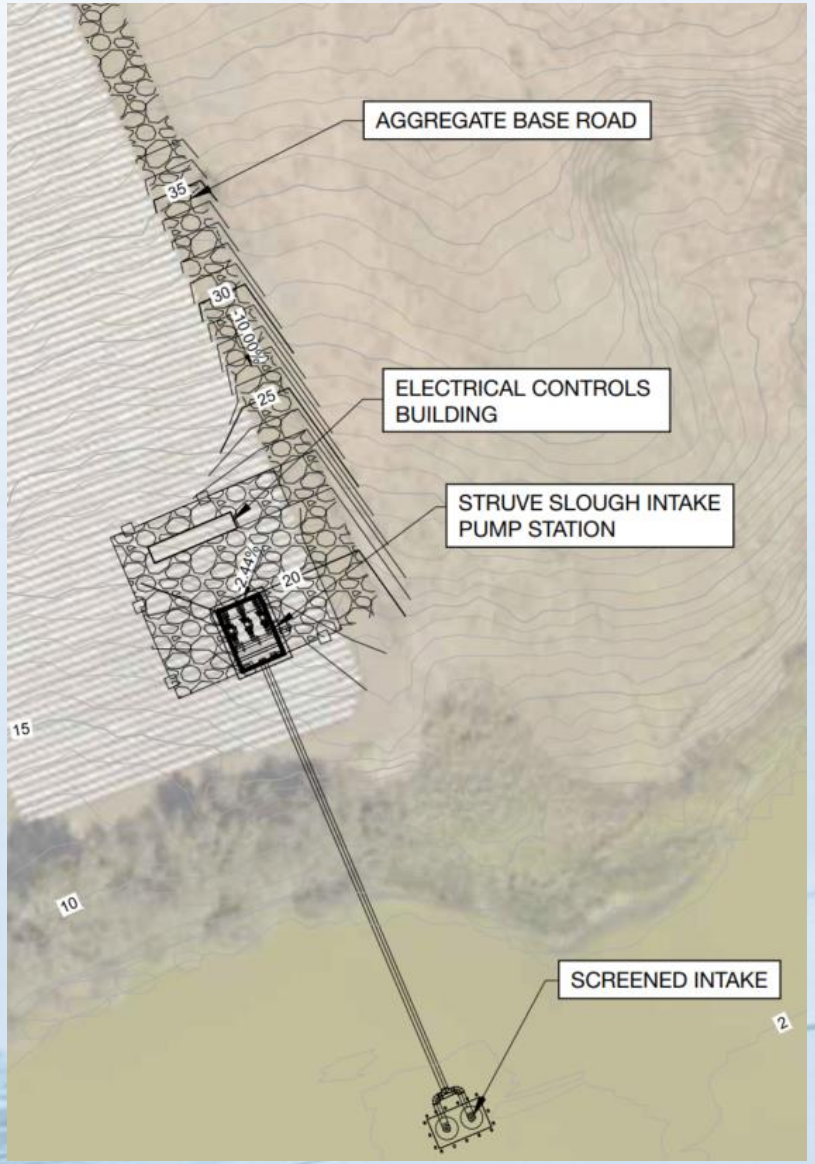


Draft EIR Chapter 5, Figure 5-2

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

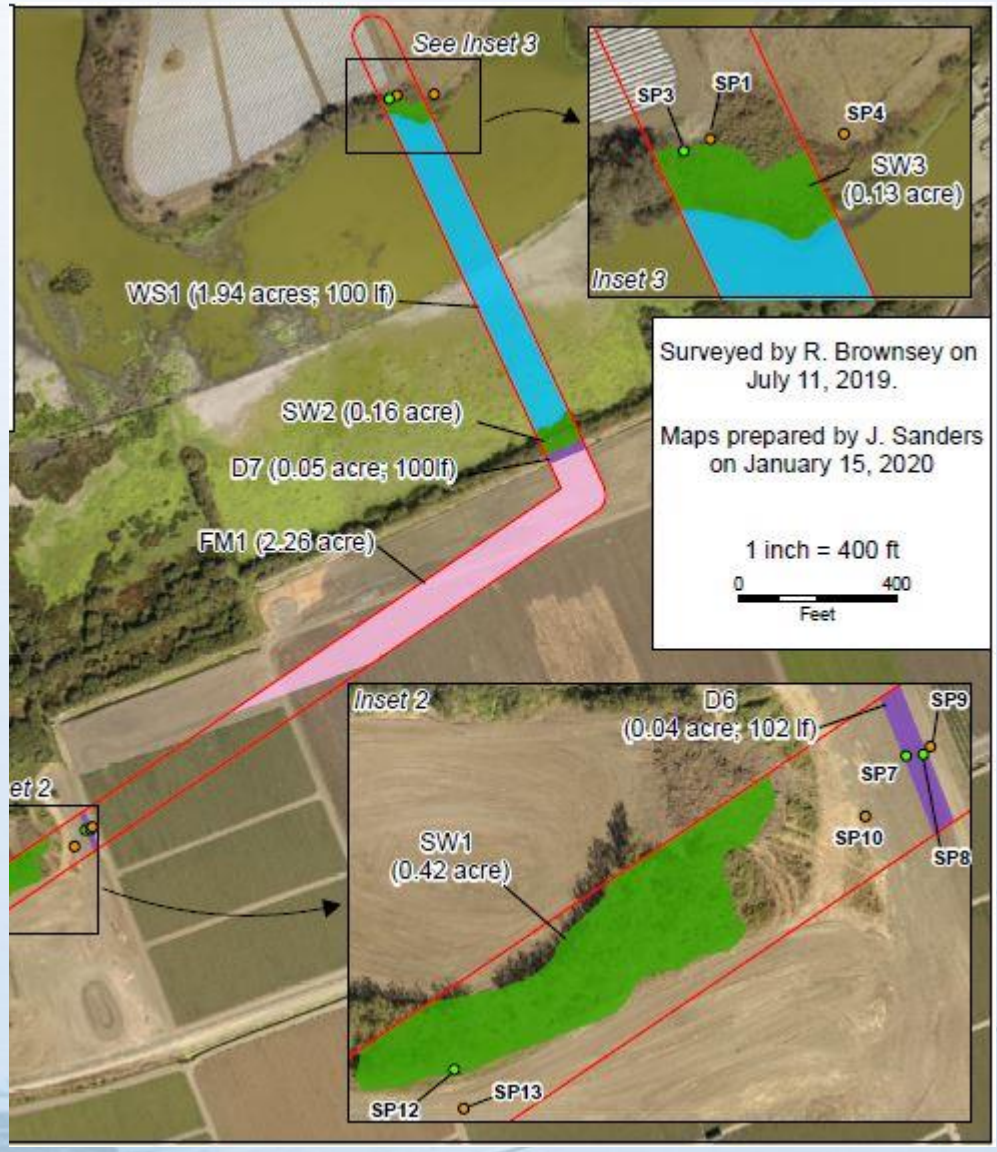
Comparison: Projects vs. Struve Slough Pump Station on Land Trust Property Alternative

- Reduces Impacts:
  - Biological Resources (wetlands, CRF habitat)
  - Noise (distance from sensitive receptors)
- Worsens Impacts:
  - Conversion of Important Farmland by <1%

Impacts to Cultural Resources and Tribal Cultural Resources

- 5 archaeological resources near sites; some considered Tribal Cultural Resources
  - 1 recharge basin site eliminated (2018), Struve Slough pump station location altered
  - Potential to encounter resources during construction, particularly for some pipelines
  - 12 mitigation measures identified (surveys, worker training, testing, avoidance if possible, data recovery)
  - 1 Alternative to avoid potential Tribal Cultural Resources

Wetlands and Riparian Habitat- Construction Area



Effects on Wetlands and Riparian Habitat

- Project operations could result in
  - 6 to 7 inch drop in average water surface elevations at upper limit of wetlands
    - Potential loss of coastal freshwater marsh, where it occurs at the upper wetland boundary.
  - Greater between-year differences in water surface elevations
    - Shift from coastal freshwater marsh, where it occurs, to seasonal wetland.
  - Lower water surface elevations in years when extractions are made
    - Increase in area of mudflat and seasonal wetland habitat
    - Potential increase in willow recruitment