Notice of Preparation Draft EIR

Russ Creek and Centerville Slough Restoration Project

Humboldt County Resource Conservation District

April 27, 2022

Notice of Preparation
Draft Environmental Impact Report
Russ Creek and Centerville Slough Restoration Project

Humboldt County Resource Conservation District, Lead Agency
5630 South Broadway
Eureka, CA 95503

Attention: Jill Demers, Executive Director
(707) 442-6058 x 5

In collaboration with:

USDA – Natural Resources Conservation Service
430 G Street, Room 4164
Davis, CA 95616

Attention: Dean Kwasny, Easement Program Specialist
(530) 792-5648

GHD Inc.
718 Third Street
Eureka, CA 95501

Contact: Jeremy Svehla, Project Manager
T (707) 443-8326 | E jeremy.svehla@ghd.com | ghd.com

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1. Introduction

1.1 CEQA Requirements

This proposed Project is subject to the requirements of the California Environmental Quality Act (CEQA). The CEQA lead agency is the Humboldt County Resource Conservation District (HCRCD), the decision-making body being the HCRCD. The HCRCD is responsible for assuring the completion of the appropriate evaluation and processes required by CEQA. The HCRCD has the sole responsibility to make the appropriate findings and determinations with respect to the CEQA process and disposition of the Project. The purpose of this Notice of Preparation (NOP) is to solicit participation in determining the scope of the Environmental Impact Report (EIR) which would be prepared for the Russ Creek and Centerville Slough Restoration Project (Project) with regard to the Project description described below. The EIR being prepared is intended to satisfy the requirements of CEQA (Public Resources Code, Div 13, Sec 21000-21177), and the State CEQA Guidelines (California Code of Regulations, Title 14, Chapter 3, Sec 15000-15387).

1.2 General Information

Protect Title: Russ Creek and Centerville Slough Restoration Project

Lead Agency: Humboldt County Resource Conservation District, Lead Agency
5630 South Broadway
Eureka, CA 95503
Attention: Jill Demers, Executive Director

Availability of Project Documents/Files: Project documents/files are available for review at the Humboldt County Resource Conservation District, Lead Agency, located at 5630 South Broadway, Eureka, 95503 California. The NOP is available on the HCRCD's website: http://humboldtrcd.org/

Written Comments: Written comments on the scope of the EIR can be sent to Jill Demers, Executive Director, Humboldt County Resource Conservation District, Lead Agency, located at 5630 South Broadway, Eureka, California 95503. Comments may also be sent via email to jillhcrcd@gmail.com with "Russ Creek and Centerville Slough Restoration Project, Comments on NOP" in the title.

Comment Period: CEQA Guidelines Section 15082 (b) requires a 30-day response period for input about the scope and content of the EIR. The comment period for the NOP begins on April 27, 2022 and ends on May 26, 2022. The post mark deadline for submitting written or emailed comments is May 26, 2022, at 5:00 PM.

Public and Agency Scoping Meeting: A hybrid (in-person and virtual) public scoping meeting to accept comments on the environmental issues germane to the Project will be held on May 20, 2022, from 2:00 to 4:00 PM at the Humboldt County Agriculture Center, 5630 South Broadway, Eureka, 95503 California and via Zoom phone +1(669)900-6833 (Meeting ID: 838 9516 5708; Passcode: 2345) or Zoom weblink: https://us02web.zoom.us/j/83895165708?pwd=T0h3UGdXdFNsanBYdENZaTN1YmtuQT09

1.3 Previous CEQA Analysis and Public Review

A previous project (Eel River Estuary and Centerville Slough Enhancement Project, formerly referred to as the Eel River Estuary Preserve Ecosystem Enhancement Project, SCH#2014122040) was proposed for a

similar project area. The EIR was circulated in September 2016. The EIR was then amended and recirculated in December 2016. The recirculated EIR was certified by the CEQA Lead Agency (California Coastal Conservancy) in February 2017. The project was never constructed and has since been redesigned. The redesigned project is described herein this NOP.

2. Project Location and Setting

The Project Area is approximately 1,860-acres and is located approximately four miles west of the City of Ferndale, in Humboldt County, California (Figure 1). The Project Area primarily includes various parcels privately owned by the Russ family and parcels owned by The Wildlands Conservancy (TWC) known as the Eel River Estuary Preserve (EREP). The west side of the Project encompasses the near shore dunes of Centerville Beach and extends to the Pacific Ocean. East of the dunes, the Project supports a system of sloughs and pastures that comprise a portion of the Salt River watershed, itself a tributary to the Eel River estuary. The northern portion of the Project Area borders the Eel River. Much of the southern half of the Project east of the former Centerville Slough was reclaimed and has been converted to pasture for agricultural purposes. Some of this land represents diked former tidelands that are separated from the estuarine wetlands by a series of dikes and the Cutoff Slough tide gates. An upland area occupies the southeastern portion of the Project, where vehicular access is gained from Russ Lane via Centerville Road. Centerville Road is maintained by Humboldt County and is the southern extent of the Project. Few structures occur on site, but there is one residence at the southwestern edge of the Project, two barns within the upland area near Russ Lane (referred to as the Potato Barn and Quonset Hut), a third barn (North Barn) located between Cutoff Slough and the near shore dunes, approximately midway between the north and south property lines and a fourth barn (South Barn) located in the southwest corner of the Project Area. The North and South barns are connected by unimproved roads to the Potato Barn.

EREP includes agricultural (grazing) land, tidal salt marsh, brackish marsh, riparian scrub, sloughs/open water channels, freshwater ponds and ditches, and nearshore dune ridges and swales. The Russ family owns the parcels of land immediately south of the EREP; this area includes grazing land with managed ditches, open water channels and mixed freshwater and brackish marsh and dunes.

The climate is Mediterranean with precipitation most abundant in the winter months, and the average annual rainfall is approximately 48.5 inches. Approximately two thirds of the year, the site is influenced by coastal fog. Prominent water features include Russ Creek, remnant Centerville Slough, Cutoff Slough, and the Western Drainage Ditch (which in turn conveys the flow of Shaw Creek and Creamery Ditch), as well as smaller (seasonal) slough channels and drainage ditches. The northern end of the site borders the mouth of the Eel River.

Humboldt County General Plan land use for the Project Area is Natural Resources (NR/R) and Agriculture Exclusive (AE), which includes prime agricultural lands. Primary uses are limited to the production of food, fiber, plants, timber, timber agriculturally related uses, and agriculture related recreational uses. Very-low intensity residential uses may be allowed if they are incidental to the property and if they support agricultural activities or are necessary for the enhancement and protection of the natural resources of the area. Minimum parcel size is 60 acres, except divisions to 20 acres may be permitted where the parcel is subject to an agricultural preserve contract or agreement, such as the Williamson Act. Zoning for the Project Area is NR/R and AE-60/W,F,R,T, which is consistent with the land use designation. Combining zones include Coastal Wetland Areas (W), Flood Hazard Areas (F), Streams and Riparian Corridors Protection (R), and Transitional Agricultural Lands (T).

A large portion of the Project Area is enrolled in Williamson Act contracts.

The Natural Resources Conservation Service (NRCS) has worked cooperatively with the private landowners to acquire three Agricultural Conservation Easement Program - Wetland Reserve Easements (ACEP-WRE) on EREP totaling 1,077.75 acres of the Project Area, and two on Russ property totaling 162.21 acres of the Project Area, of which one is nearing finalization. These are perpetual conservation easements that seek to protect and restore wetland habitat while allowing limited livestock grazing in suitable habitat types. NRCS will be serving as the federal cooperating agency for this Project.

3. Project Description

3.1 Project Goals and Objectives

The goal of the Project is to improve geomorphic and ecosystem function that will enhance habitats for native fisheries and aquatic species, support water bird and wildlife species, and increase agricultural land viability and resiliency to changing geomorphological and climatic conditions. The Project would enhance existing tidal wetlands and restore marginal diked pasture land to a mosaic of natural habitats, including estuarine and tidal slough channels, freshwater streams, and agricultural pastures, all within the context of promoting the resilience of the Project Area and viability of adjacent agricultural lands outside of the Project Area.

Specific objectives of the Project include:

- Restore natural functions and processes of tidal cycles, riverine inundation and sedimentation, tidal channel connectivity, and wetlands maintenance by removing or modifying existing infrastructure and reestablishing historic tidal channels
- Increase resiliency of existing agricultural lands to sea level rise by reconfiguring dikes and enhancing dune function that promotes natural dune formation processes that reduce over wash during extreme high tides and storm events
- Improve access for agricultural land management, maintenance, outdoor recreation, and nature study compatible with existing land uses and the ACEP-WRE conservation easements
- Enhance native plant communities, and expansion of rare plant habitat, through active and passive habitat development, control and eradication of invasive non-native species, and establishment of native species
- Improve access to restored aquatic habitats for salmonids and other aquatic dependent species by increasing migratory access between estuarine and inland waters and by restoring overwintering and rearing habitat for juvenile salmonids
- Improve drainage efficiency and sediment transport while enhancing tidal processes by reestablishing connectivity of Russ Creek and Shaw Creek to a restored Centerville Slough
- Establish a long-term adaptive management and maintenance program for the Project

3.2 Overall Concept

The Project would restore a landscape of mostly diked pasture land to a mosaic of pasture and natural habitats, including estuarine and tidal slough channels, freshwater streams, freshwater ponds and agricultural pastures. Critical to achieving this is the restoration of tidal flow and an enhancement in tidal flushing to reactivate wetland functions. Reestablishing the connection of Centerville Slough to the Eel

River and removing and reconfiguring dikes would provide full tidal prism into a restore Centerville Slough, restoring historic tidal slough channels that have been filled and degraded due to reclamation efforts, sediment, and significant tectonic activity. Improvements to tidal channels and the tidal prism would restore aquatic organism passage from the Eel River to Centerville Slough, Shaw Creek and Russ Creek, while improving drainage and the transport of sediment. Additionally, adding new tide gates structures to Shaw Creek, Russ Creek, and other strategic locations would increase reliability of the drainage efficiency and reduce saltwater intrusion of surrounding pasture lands. Realignment and restoration of Centerville Slough, Russ Creek and Shaw Creek are expected to support overwintering juvenile salmonids, water bird habitat and drainage from the landscape, and maintain an existing drainage easement agreement. Improved drainage, sediment transport, and habitat conditions would be established along Russ Creek. Project components are illustrated in Figure 2.

As a strategy to increase agricultural land viability and reduce vulnerability from frequent dune over-wash events and projected sea level rise, proposed placement of set-back berms provide increased resiliency to ongoing and projected geomorphic and climactic changes. The longevity of this Project depends upon the successful restoration of natural ecological processes and the frequency and nature of maintenance activities but would be heavily influenced by uncontrollable natural events within this dynamic, highly altered and geologically unstable watershed. As a result, this Project would include an adaptive management and maintenance program to provide a feedback mechanism between monitoring, maintenance, and management actions.

3.3 Proposed Project Activities

Reestablish Full Tidal Cycle to Centerville Slough Marsh Network

Historically, Centerville Slough extended south from the Salt River, parallel to the dune network to the community of Centerville at the base of the Wildcat Mountains. Reclamation and the associated reduction in the tidal prism, coupled with actively directed Russ Creek avulsions, resulted in a significant reduction in hydraulic capacity. The Western Drainage Ditch is all that remains as a remnant drainage feature. Russ Creek and Shaw Creek, which once flowed into Centerville Slough, now terminate with avulsion and overland sheet flows over existing pastures and create large sediment loads that impact agricultural uses.

The Project proposes to realign and expand Centerville Slough along former tidal channels and reestablish the Centerville Slough connection to Eel and Salt Rivers in order to increase the tidal prism within the Project Area. The Centerville Slough channel would be sized to enhance flood storage, conveyance of flood flows and sediments, and restore brackish aquatic habitat. Some of the existing levees/dikes would be removed to increase tidal exchange within the site. The increased tidal prism would increase sediment transport throughout the system.

Create and Enhance Inter- and Sub-Tidal Habitats

Portions of the Project Area that were diked and drained for agricultural purposes are currently at elevations below current tidal marsh elevations due in part to ground subsidence from tectonic activity and oxidation. The lack of frequent tidal and river flooding has also minimized sediment accretion in these disconnected areas. Other portions of the Project Area that were diked and drained have elevated overtime due to deposition of sediment from Shaw and Russ Creeks. This in-balance of sediment exchange across the Project Area has resulted in infilling of the Centerville Slough and associated historic tidal channels. The Project proposes to restore and enhance the Centerville Slough marsh network, which would be comprised of four hydrologically connected and enhanced marsh areas, including the Outer Marsh, Inner Marsh, Russ

Creek Marsh, and Angels Camp Marsh, in order to restore ecosystem services throughout the Project Area to enhance habitat and agricultural productivity. Active improvements throughout the marsh areas would include the restoration and creation of new tidal channels, enhancement of existing tidal channels, construction of tidal ridges along tidal channels to improve sediment transport processes, restoration and enhancement of ecotone/estuarian habitat, and removal of existing access roads through proposed wetlands. Marsh areas would be graded to provide habitat variability and promote sediment accretion in subsided areas through a network of inter-tidal lagoons and hummocks. The lagoons would passively evolve into inter-tidal salt marshes with sediment accretion from the Eel River and Russ Creek over time, providing diverse habitats of mudflat, saltmarsh, and subtidal channels. Native planting and invasive species removal would occur as a part of the restoration work and ongoing site management.

Protect and Enhance Drainage, Land Uses, and Habitats

Threats to the richness of existing habitat and land uses include disturbances of dunes, saltwater intrusion, sedimentation of watercourses, subsidence and natural conversion of agricultural pasture, and invasive species. While some areas within the Project Area are targeted for wetland restoration and enhancement, other areas would be preserved for continued agricultural land uses. The Project design would preserve and enhance agricultural land uses on properties within and adjacent to the Project Area.

Enhance Existing Berm and Construct New Agricultural Protection and Access Berm

An agricultural protection and access berm would be constructed on the eastern side of the Centerville Slough Marsh Network to prevent inundation of adjacent agricultural lands from tidal, brackish water. An access road/walking path would be located on the berm to provide passive outdoor recreation, nature study opportunities, and access for site maintenance. Onsite sediment would be used to construct berms, elevate marsh plains, and create habitat ridges and hummocks.

Realign Russ Creek and connect to Centerville Slough

A new fish friendly tide gate would be installed in the access berm to reconnect Russ Creek to the Centerville Slough-Russ Creek Marsh area in order to improve site drainage, create in-channel flood storage, reestablish a long estuary-stream ecotone and provide a wetland prism that includes freshwater wetland and/or riparian habitat, as well as habitat connectivity for anadromous fish. The area around Russ Creek would be modified to improve drainage efficiency and maintain areas in agricultural production. Modifications could include raising ground levels around Russ Creek to contain flows, constructing a new planted berm, and/or realigning and new drainage ditches to convey runoff to new tide gates.

Improve Agricultural Drainage and Pasture Productivity

Improvement of agricultural lands would occur through active implementation projects and ongoing management.

– Tide gates
    - Tide gates would be installed in the access berm to re-connect Shaw Creek and Creamery Ditch to Centerville Sough that will improve sediment transport, and fish passage.
    - Additional tide gates would be installed at strategic locations to hydrologically connect inboard ditches for agricultural drainage to the Centerville Slough-Russ Creek Marsh area and to allow drainage connection of the Halley property behind the southern portion of the berm to the Centerville Slough-Angel Creek Marsh area.
– Livestock management

    - New fencing would allow vegetation to recover in designated areas and prevent livestock from accessing wetland areas.
- Access routes, culverts, and bridges
    - Project implementation and future management would require durable yet limited access routes that minimize impacts to the Project Area. Some existing access routes, culverts and bridges would be improved and maintained, while others may be decommissioned. Routes would be designed to accommodate a range of vehicle types and weight classes and culverts replaced as needed to increase access reliability.

Convert Existing Uplands to Wetlands

A portion of uplands within the Project Area would be converted to wetlands in order to balance wetland fills associated with new berms.

Enhance Back Dune Berms

Significant disturbance from off-road vehicle use and dune over-wash has occurred to the dune field west of the Project Area. The Project would include passive and active techniques to prevent further dune loss and migration of existing dunes into Centerville Slough. This would occur through the construction of back dune berms to reduce wave over-wash, direct drainage, and capture sand to passively build up the foredune. Native dune species would be planted along with construction of sand fencing to capture sand and prevent migration inland. The Project would focus on back dune enhancements outside of designated Snowy Plover Critical Habitat.

Elevate Centerville Road

Depending on the alternative selected, a portion of Centerville Road (approximately 300 linear feet) may be elevated, generally within its current footprint, to prevent increase in flood frequency of the County Road.

Repair the Existing Cutoff Slough Tide Gate

Minor repairs to the existing Cutoff Slough tide gate may be made to increase resiliency of agricultural fields to sea level rise.

Beneficial Re-use of Sediment

Excavated sediment would be reused on site and would not be hauled off-site for disposal. On-site sediment reuse would include:

- Construction of back dune berms
- Application to agricultural areas subject to rising saline groundwater
- Construction of new berms and rehabilitation of the existing berms and permanent access roads
- Construction of tidal ridges and marsh plain fill

Develop Adaptive Maintenance, Management, and Monitoring Plan

The Project would include an adaptive management and maintenance program to provide a feedback mechanism between monitoring, maintenance, and management actions.

Provide Public Education and Access

Access to the Project Area is currently limited. Russ properties are managed for livestock grazing. TWC property is managed for livestock grazing and for outdoor recreation and education opportunities. The EREP has a waterfowl hunting lease, welcomes scheduled and docent led small group site visits, and uses the site to educate elementary school children about wetland and estuary systems and agriculture as practiced in the coastal zone. Public access is not anticipated to increase as a result of the proposed Project. No public education or access is proposed outside of the EREP portion of the Project.

Kayak Put In and Take Out

A kayak put in and take out would be installed near the restored Centerville Slough on EREP in order to facilitate post-Project monitoring and maintenance, aquatic educational programs and limited recreational use by visitors. The launch will consist of a 10 to 15-foot-wide graveled slope extending from the bank of the slough to the slough channel to facilitate launching of kayaks and small non-motorized watercraft.

Road and Access Improvements

In order to ensure the viability of continued agricultural operations and management within and around the Project Area, a variety of minor access improvements are proposed on EREP, such as new gates, parking area, vault toilet, lighting and fencing. These minor access improvements will be located outside of the ACEP-WRE conservation easement boundaries.

4. Probable Environmental Effects

The following discussion evaluates potential adverse effects by resource category based on preliminary review of the proposed Project. The environmental categories presented below are from Appendix G of the CEQA Guidelines. Mitigation measures would be developed in the EIR and presented along with additional and specific site information and analysis. There is the potential for significant impacts to occur as a result of the proposed Project, even with the use of mitigation measures; therefore, an EIR would be prepared to evaluate potential environmental effects as a result of the proposed Project and would also evaluate alternatives. The EIR would recommend mitigation measures, as feasible, to lessen the significance of any impacts identified as potentially significant. Per CEQA Guidelines Section 15082 (a)(1)(c), the probable environmental effects of the Project are summarized below.

4.1 Aesthetics

Would the project:
a) Have a substantial adverse effect on a scenic vista?
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?
c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The Project Area is in a highly scenic area and includes tidal wetlands, freshwater marsh, sand dunes, grasslands, agricultural pastures, and beach frontage. Project activities are not anticipated to substantially degrade scenic resources in the Project Area. However, the EIR would analyze the potential impacts to

aesthetic resources, and if necessary and appropriate, include feasible mitigation measures to address any potentially significant impacts.

4.2 Agricultural & Forestry Resources

Would the project:
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?
d) Result in the loss of forest land or conversion of forest land to non-forest use?
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

The proposed Project would strike a balance between restoration of critical ecosystem functions and preservation of agricultural resources, including sustaining agricultural productivity. An Agricultural Conversion Analysis prepared for the Project would be utilized to determine the impacts/benefits to agricultural land resources on the Project Area and would be used as supporting information for the EIR. A portion of the Project Area's agricultural lands are under Williamson Act contract and are intended to remain under contract post Project. Potential impacts could be the loss of Important Farmland or the conversion of agricultural land to another use. The EIR would analyze the potential effects to agricultural resources from implementation of the Project and include feasible mitigation measures, if needed, to reduce any potentially significant impacts to a less than significant level. The Project Area does not include any forest land or land zoned timberland.

4.3 Air Quality

Would the project:
a) Conflict with or obstruct implementation of the applicable air quality plan?
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?
d) Expose sensitive receptors to substantial pollutant concentrations?
e) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The Project Area is located within the North Coast Air Basin (NCAB), which is under the jurisdiction of the North Coast Unified Air Quality Management District (NCUAQMD). The NCAB is currently in attainment (or is unclassified) for all state and federal ambient air quality standards, with the exception of the state standard for particulate matter less than ten micrometers in diameter (PM_{10}). The EIR would discuss the temporary impacts from construction and operational activities and identify potential mitigation measures if needed. The EIR would discuss the Project's conformity with applicable air quality plans and exposure of sensitive receptors to criteria air pollutants and odors, and mitigation measures would be included where applicable.

4.4 Biological Resources

Would the project:
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

A wide variety of wildlife, including special-status species inhabit the Project Area, utilize the site and may be affected by implementation of the Project. The Project Area also includes wetlands, riparian areas, coastal dunes and uplands that support a diverse array of aquatic and terrestrial biological resources. The EIR would utilize a number of special studies in the preparation of this section such as habitat mapping, sensitive plant and animal studies, wetland delineations, vegetation mapping, biological evaluations, and other existing reports/studies. The EIR would analyze potential impacts to special status-species, wetlands, riparian habitat, coastal dunes and include feasible mitigation measures to address any potentially significant impacts. The EIR would also discuss the Project's conformity with local policies or plans protecting biological resources.

4.5 Cultural Resources

Would the project:
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?
c) Disturb any human remains, including those interred outside of formal cemeteries?

A Cultural Resources Investigation has been prepared for the Project by Roscoe and Associates to inventory cultural resources and assess potential impacts on these resources from Project activities. Potential impacts could include the impaction of unknown cultural resources. The EIR would include the results from this investigation and include mitigation measures for the inadvertent discovery of cultural resources and the inadvertent discovery of human remains.

4.6 Energy

Would the project:
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Construction of the Project would consume energy as a result of combustion of fossil fuels used in construction equipment and vehicles from workers commuting to and from the site. The Project would require the use of several pieces of heavy earthmoving equipment, and construction commute and utility

vehicles. The County has not yet adopted a Climate Action Plan; however, impact analysis will evaluate the Project's potential impact related to energy resources. This potential impact would be further discussed in the EIR and appropriate mitigation measures would be included if applicable.

4.7 Geology & Soils

Would the project:
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
ii. Strong seismic ground shaking?
iii. Seismic related ground failure, including liquefaction?
iv. Landslides?
b) Result in substantial soil erosion or the loss of topsoil?
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Geologic and soils issues include potential erosion and sedimentation during and after construction due to proposed grading, excavation, channel reconfiguration, levee reconfiguration, and filling. The EIR would describe the Project Area's existing geologic conditions and soils based on existing information and technical reports prepared for the Project. Potential impacts could include soil erosion or the loss of topsoil. The EIR would include an analysis of the geology of the site as it relates to slope stability, earthquake hazards, landslides, and any other potential geologic hazards, and recommend appropriate best management practices and mitigation measures if applicable.

4.8 Greenhouse Gas Emissions

Would the project:
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Construction of the Project would cause release of GHG emissions as a result of combustion of fossil fuels used in construction equipment and vehicles from workers commuting to and from the site. The Project would require the use of several pieces of heavy earthmoving equipment, and construction commute and utility vehicles. The NCUAQMD has not adopted a threshold for construction-related GHG emissions against which to evaluate significance and has not established construction-generated criteria air pollutant screening levels above which quantitative air quality emissions would be required; however, this potential impact would be further discussed in the EIR and appropriate mitigation measures would be included if applicable.

4.9 Hazards & Hazardous Materials

Would the project:
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Phase I and II Environmental Site Assessments were completed within the Project Area to support the previous EIR. The information from these assessments would be used in the analysis of this resource category and appropriate mitigation measures would be incorporated if applicable. Potential impacts could include the discovery of unknown hazardous materials during construction, or the release of hazardous materials associated with transport, use and disposal. The EIR would discuss the existing conditions with regard to potential hazards in the Project Area, identify appropriate spill prevention measures, identify potential impacts to Project workers and recreation users due to potential soil contamination and other potential hazards at the site, and describe necessary mitigation measures.

4.10 Hydrology & Water Quality

Would the project:
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
i. result in a substantial erosion or siltation on- or off-site;
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
iv. impede or redirect flood flows?
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The Project could affect water quality through release of contaminants and sediment from construction activities. The Project could alter hydrodynamic processes, which control local salinity levels. The Project could increase turbidity during and after construction, adversely affecting water quality. In addition, flows in Centerville Slough, Cutoff Slough, Russ Creek and Salt River are likely to change with the increased tidal prism following restoration; these increased flows could affect water quality, erosion along these waterways, and fisheries use of these waterways. The reconfiguration of the existing levee system could alter flood

patterns to adjacent properties including Centerville Road. The EIR will discuss these issues and potential effects to surface and groundwater and incorporate mitigation measure if applicable.

4.11 Land Use & Planning

Would the project:
a) Physically divide an established community?
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The Project would require a Conditional Use Permit from Humboldt County and a Coastal Development Permit from the Coastal Commission per the California Coastal Act. The EIR will describe existing land uses in the Project Area, assess Project impacts and identify any potential land use conflicts. The EIR will review the County's General Plan and the Eel River Area Plan and summarize applicable goals and policies and assess the Project's consistency with applicable General Plan and Eel River Area Plan goals and policies, land use designations, and the County Zoning Ordinance. The need for mitigation measures related to land use and planning is not anticipated.

4.12 Mineral Resources

Would the project:
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

There are no mining operations in the Project Area. The Project would not require the use of a substantial amount of any mineral resource and would not result in the loss of availability of known mineral resources of value to the state, region or locally. The EIR would analyze potential effects to mineral resources. The need for mitigation measures related to mineral resources is not anticipated.

4.13 Noise

Would the project:
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
b) Generation of excessive groundborne vibration or groundborne noise levels?
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Noise levels would increase temporarily during construction activities at the Project Area. The EIR would describe the existing noise levels in the Project Area and identify any noise sensitive receptors. The EIR would evaluate the potential for temporary noise impacts from construction. Project construction would be limited to daytime hours. Future operational noise levels would be compared to existing noise levels to determine if the Project would cause a significant increase in ambient noise levels and mitigation measures would be included if applicable.

4.14 Population & Housing

Would the project:
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The proposed Project would not add either new homes or businesses and no new housing is proposed. The Project would not displace any housing or people, on or adjacent to the site. The need for mitigation measures relation to population and housing is not anticipated.

4.15 Public Services

Would the project:
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:
i. Fire protection?
ii. Police protection?
iii. Schools?
iv. Parks?
v. Other public facilities?

Except in the event of an emergency, the Project would place no material demand on fire and police services. The Project would not place additional demands on schools, parks, or other services. The Project does not include the construction of residential or commercial structures, and the Project is not anticipated to result in substantial population growth in the area; and therefore, would not substantially increase the need or use of public services and amenities.

4.16 Recreation

Would the project:
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The Project is not anticipated to place additional demands on recreational facilities and the Project does not require recreational facility construction or expansion. The Project does include features, described above, that relate to recreation. These include: 1) maintenance roads and turn-outs that can serve as pedestrian pathways and overlooks with interpretative signage; 2) A kayak put in and take out to Centerville Slough, and; 3) Minor improvements to existing infrastructure intended to avoid interactions between recreational and agricultural operations and be compatible with the NRCS ACEP-WREs. The EIR would analyze potential impacts to recreational resources and identify feasible mitigation measures if significant impacts are identified.

4.17 Transportation & Traffic

Would the project:
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?
c) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?
d) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
e) Result in inadequate emergency access?

The Project would result in a temporary increase in traffic during construction and minimal traffic post construction, potentially affecting levels of service on local streets. The EIR would discuss existing traffic volumes and level of service in the Project Area and recommend mitigation measures (such as the implementation of a traffic control plan) that would ensure any potential significant environmental impacts on transportation would remain less than significant.

4.18 Tribal Cultural Resources

Would the project:
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either included or determined to be eligible for inclusion in the California Register of Historical Resources; or included in a local register of historical resources as defined in subdivision (k) of Section 5020.1; or a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. The Project may potentially encounter known or as-of-yet unknown archaeological materials during Project-related construction activities. If such resources were to represent “tribal cultural resources” as defined by CEQA, any substantial change to or destruction of such resources would be a significant impact. The Humboldt County Resource Conservation District will complete tribal consultation with local tribes through the AB 52 process. Any tribal cultural resources identified through tribal consultation would be evaluated in the EIR. The EIR will analyze tribal cultural resources per Public Resources Code Section 21080.3.1, and include mitigation measures, if applicable, per Public Resources Code Section 21080.3.2.

4.19 Utilities & Service Systems

Would the project:
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

The Project does not include the construction of facilities (residential, commercial, or industrial) that would place additional demands on public water systems, wastewater systems, or landfills. The EIR would include information obtained from the County of Humboldt and applicable utility providers regarding any potential constraints. The need for mitigation measures related to utilities and service systems is not anticipated.

4.20 Wildfire

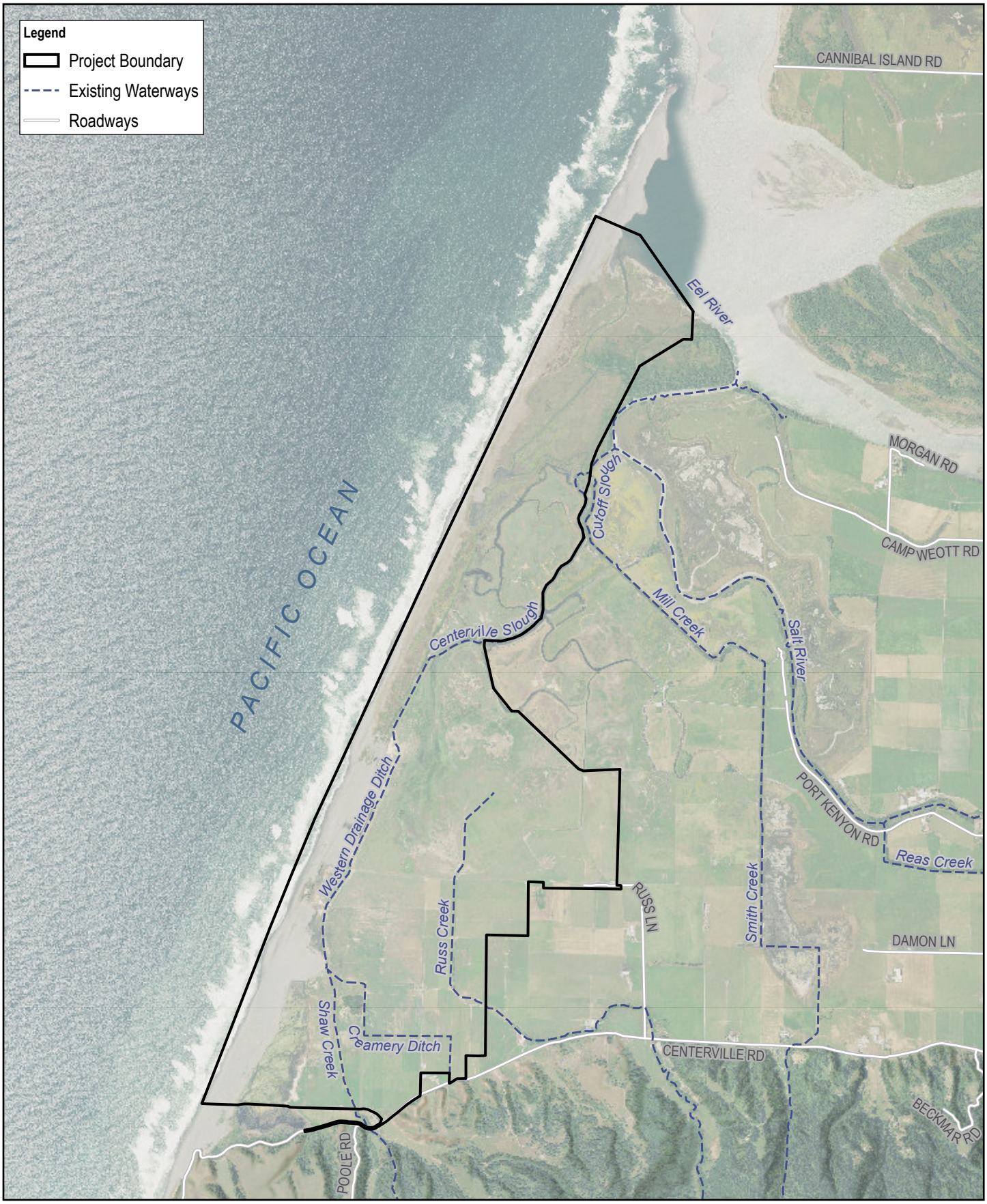
Would the project:
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides as a result of runoff, post-fire slop instability, or drainage changes?

The Project is not anticipated to impair emergency response or evacuation plans, exacerbate wildfire risks, or expose people or structures to significant risks as a result of wildfire. The EIR would include information obtained from the County of Humboldt and Local and State Responsibility Area emergency service providers regarding potential risks. The need for mitigation measures related to wildfire is not anticipated.

Appendices

Appendix A

Figures



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Humboldt County Resource Conservation District
Russ Creek and Centerville Slough Restoration Project

EIR Notice of Preparation
Approximate Project Boundary

Project No. **11187323**
Revision No. **D**
Date **Apr 2022**

FIGURE 1

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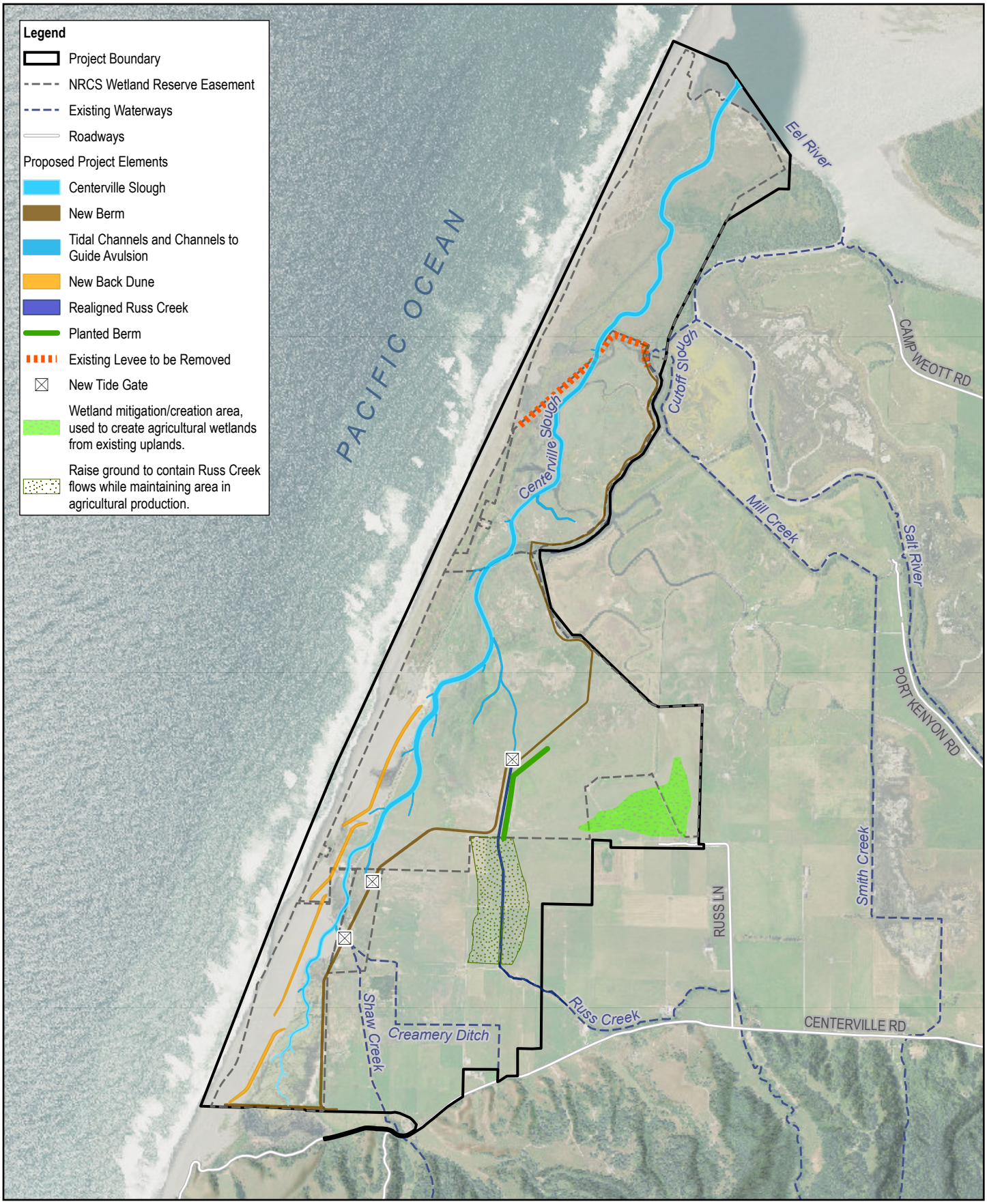

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Humboldt County Resource Conservation District
Russ Creek and Centerville Slough Restoration Project

EIR Notice of Preparation
Approximate Project Components

Project No. **11187323**
Revision No. **-**
Date **Apr 2022**

FIGURE 2

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Data source: Project Boundary, GHD 3/4/22; Humboldt County parcels, 3/3/2022; NAIP 2020; World Hillshade: Esri, NASA, NGA, USGS, FEMA. Created by: jclark2