



United States Department of the Interior



In Response Reply To:
FWS/R8/WSFR

FISH AND WILDLIFE SERVICE
Pacific Southwest Region
Wildlife and Sport Fish Restoration
2800 Cottage Way, Suite W-1916
Sacramento, California 95825

March 17, 2017

Mr. Barry Thom, Regional Administrator
West Coast Region
National Marine Fisheries Service
National Oceanic and Atmospheric Administration
1201 North East Lloyd Boulevard, Suite 1100
Portland, Oregon 97232-1274

Dear Mr. Thom,

Subject: Request for Initiation of Formal Consultation under Section 7 of the Endangered Species Act and Magnuson-Stevens Fisheries Conservation and Management Act Regarding the Martin Slough Enhancement/Restoration Project (F17AP0059).

This memo is to request initiation of formal consultation for the Martin Slough Restoration Project with interrelated federal nexus, pursuant to Section 7 of the Endangered Species Act and consultation regarding Essential Fish Habitat under the Magnuson-Stevens Fishery Conservation and Management Act. Martin Slough is a tributary of Swain Slough, which in turn flows into the Elk River. The project is centered at Latitude 40.751172, Longitude -124.178349 near Humboldt Bay in Humboldt County, CA (Figure 1). The California State Coastal Conservancy (SCC) applied for and was approved to receive a grant from the U.S. Fish and Wildlife Service (USFWS) under the National Coastal Wetlands Conservation Grant Program. The project was subsequently selected to receive grant funding from the National Oceanic and Atmospheric Administration's Restoration Center (NOAA RC). The overall restoration plan includes re-contouring and restoring approximately 6,000 feet of tidal channel network in Martin Slough, restoring 4.6 acres of tidally influenced marsh and ponds, and restoring 3.6 acres of riparian forest (Figure 2). These interrelated and allied elements, henceforth referred to as the Project, will also require permitting by the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. Because of the interrelated nature of these federal actions, the enclosed Biological Assessment has been developed for this consultation and addresses the entire breadth of the Project. The U.S. Fish and Wildlife Service's Wildlife and Sport Fish Restoration Program (WSFR), with permission from our federal partners, is taking the federal lead in this request for consultation under Section 7 of the Endangered Species Act on behalf of the three federal agencies.

The proposed Project, funded through WSFR and NOAA RC, has been designed to restore and enhance tidal and freshwater wetlands and riparian habitat that were characteristic of the historic Martin Slough ecosystem. The activities proposed for the site would restore it to a geomorphic configuration, hydrologic regime and habitat mosaic that would contribute to conservation of

sensitive and imperiled plant and animal species; improve water quality, and enhance habitat to benefit fisheries and wildlife. Dewatering, cut, fill, grading, pipeline relocation, and re-planting operations involved in the restoration would result in temporary impacts across the 270 acre project area, which includes 18.9 acres of waters of the United States. Once completed, the Project will provide a matrix of restored landscape features of native salt marsh, fresh and brackish wetland, seasonal wetland, and riparian habitats intended to provide for fish and wildlife habitat.

While the Project area is highly disturbed and largely disconnected from tidal influence, it has potential to support a number of federally listed species. Juvenile Coho salmon have been present in ponds within the work area, and small numbers of adults could conceivably be present during the early winter spawning period. While steelhead occur in many permanent streams in Humboldt County, repeated samplings of Martin Slough have observed very few juvenile or adults. Chinook salmon have been consistently reported from the Elk River system, but only a single juvenile has been observed in Martin Slough in repeated sampling events since 2007.

Based upon the enclosed Biological Assessment, the WSFR Program, NOAA RC, and the USACE have reached the following determinations with regard to ESA listed species and designated critical habitats:

The proposed Project may effect, and is likely to adversely affect the federally threatened Coho salmon (southern Oregon/northern California ESU), Chinook salmon (California coast ESU), and steelhead (northern California DPS).

The proposed Project may affect but is not likely to adversely affect designated critical habitat for the federally endangered *coho salmon (southern Oregon/northern California ESU)*, *Chinook salmon*, and *steelhead (northern California DPS)*. While work will take place in designated critical habitat, and habitats may be temporarily impaired through dewatering, grading, and revegetation; those effects will be temporary. Effects of the short-term disruption will be offset by the near immediate and long-term beneficial effects from restoration and re-establishment of a muted tidal prism.

The Project activities in Martin Slough were evaluated for their potential to affect Essential Fish Habitats identified in the Pacific Coast Salmon Fishery Management Plan, Pacific Coast Groundfish Fishery Management Plan, and the Coastal Pelagic species Fishery Management Plan. Based upon the enclosed Biological Assessment, the WSFR Program, NOAA RC, and the USACE have reached the following determinations with regard to Essential Fish Habitat.

The Project will have no effect on the Essential Fish Habitat for Coastal Pelagic species.

The Project **may temporarily affect, and is likely to adversely affect** Essential Fish Habitat for Pacific Coast Ground Fish within Martin Slough, which is a Habitat Area of Particular Concern (HAPC). Once complete, the Project is likely to beneficially affect Essential Fish Habitat for Pacific Coast Ground Fishes, as estuarine habitat will be created and restored.

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The Project **may temporarily affect, but is unlikely to adversely affect** Essential Fish Habitat for Pacific Salmon associated estuarine and freshwater rearing habitats in Martin Slough. Once complete, the Project is likely to beneficially affect Essential Fish Habitat for Pacific Salmon, as estuarine and freshwater rearing habitats will be created and restored.

Direct and indirect impacts to Coho, Chinook, and steelhead will be avoided and minimized to the extent feasible. Avoidance and minimization measures are incorporated into the Project design and operating policies. Outcomes, conservation measures, EFH recommendations from this consultation will be incorporated as enforceable provisions and terms of the grant agreements with SCC and the permits issued to Northcoast Regional Land Trust by USACE.

The WSFR Program, on behalf of the three federal agencies, is seeking your concurrence on our determinations, and to initiate formal consultation regarding effects to Coho salmon (southern Oregon/northern California ESU), Chinook salmon (California coast ESU), and steelhead (northern California DPS). We would greatly appreciate your review and guidance. Additionally, we would like to schedule a teleconference meeting with your staff and other stakeholders at your earliest convenience. Mr. Matt Goldsworthy of your staff has already provided valuable input on the Project and this Biological Assessment and we would like to thank him for his time reviewing these documents and his guidance. Please have Mr. Goldsworthy, or other delegated members of your staff, contact our Grants Management Specialist, Larry Riley, at 916-978-6182 or email: lawrence_riley@fws.gov, to schedule a meeting.

Sincerely,



Marie Strassburger, Chief
Wildlife and Sport Fish Restoration Program

Enclosure

cc: Lisa Van Atta, NOAA – Fisheries, California Coastal Office, Long Beach, CA
Jeff Jahn, NOAA, National Marine Fisheries Service, Arcata, CA
Matt Goldsworthy, NOAA National Marine Fisheries Service, Arcata, CA
Bob Pagliuco, NOAA Office of Habitat Conservation, Restoration Center, Arcata, CA
Kasey Sirkin, Eureka Field Office, San Francisco District, USACE
Liisa Schmoele, USFWS Arcata Fish and Wildlife Office, Habitat Restoration Program
Steve Kramer, USFWS Arcata Fish and Wildlife Office, Ecological Services
Joel Gerwein, California State Coastal Conservancy, Oakland, CA

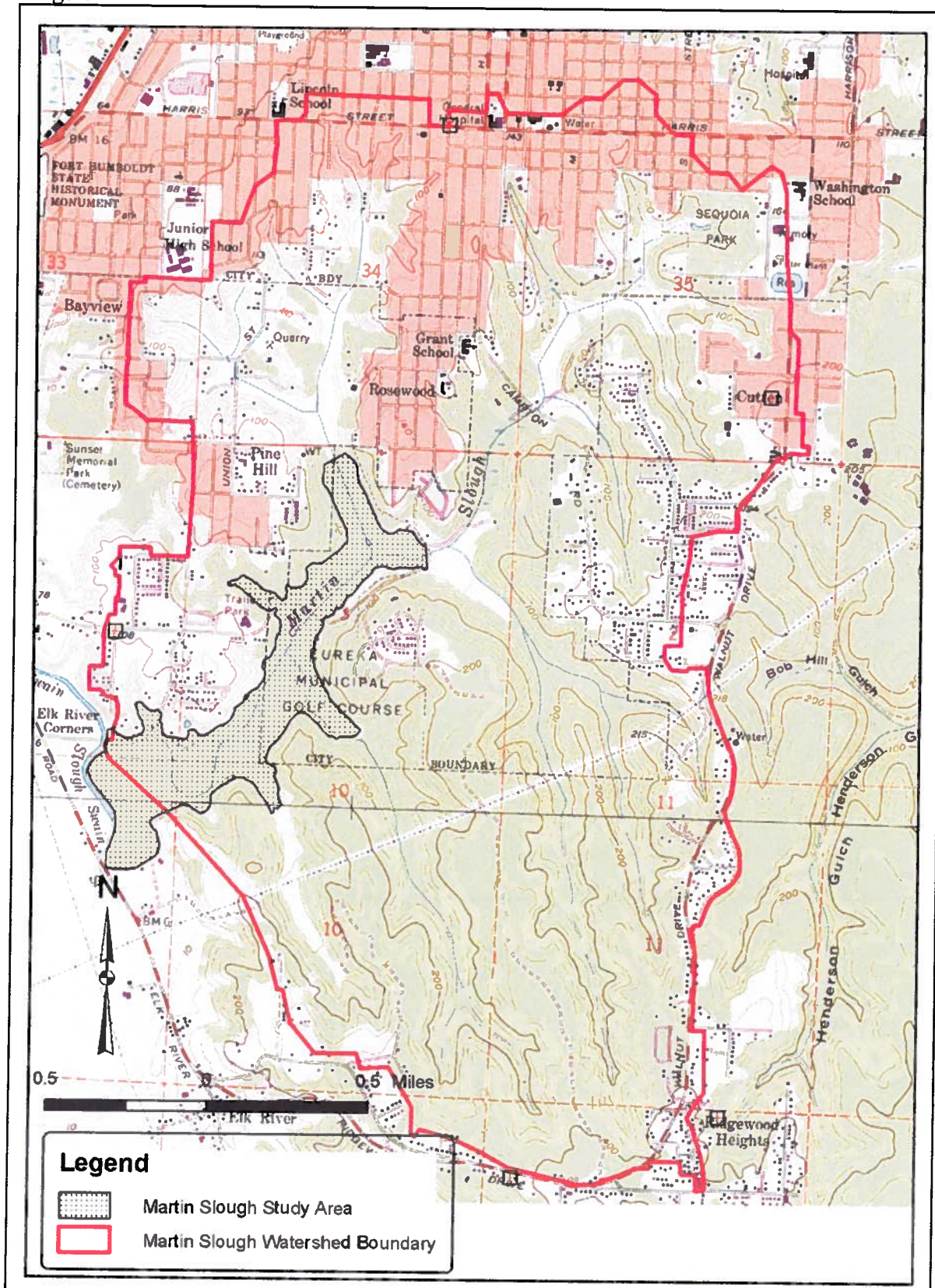
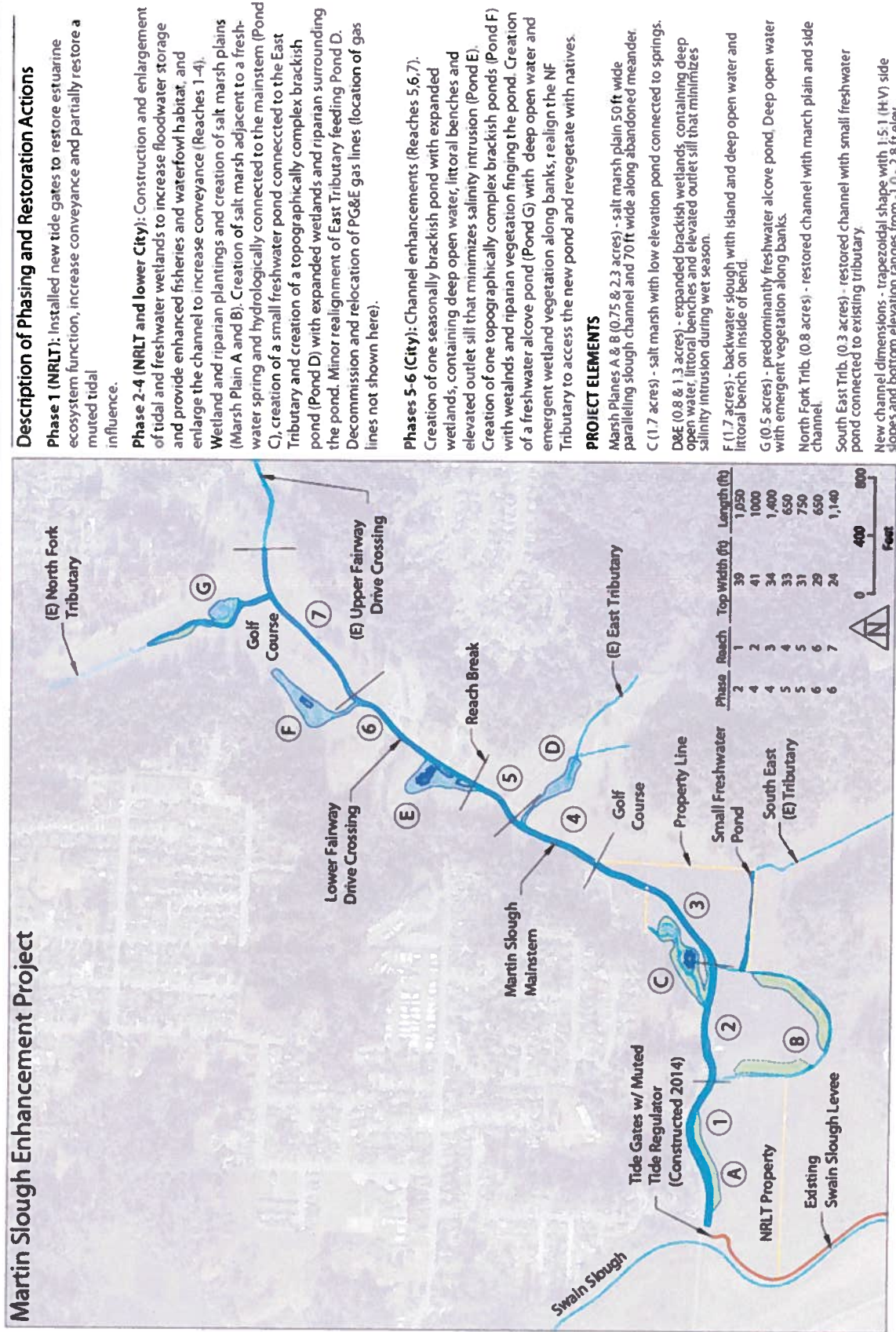


Figure 1. Martin Slough, located in the City of Eureka California. The restoration Project will be undertaken on parcels owned by the City of Arcata and the Northcoast Regional Land Trust.



Description of Phasing and Restoration Actions

Phase 1 (NRLT): Installed new tide gates to restore estuarine ecosystem function, increase conveyance and partially restore a muted tidal influence.

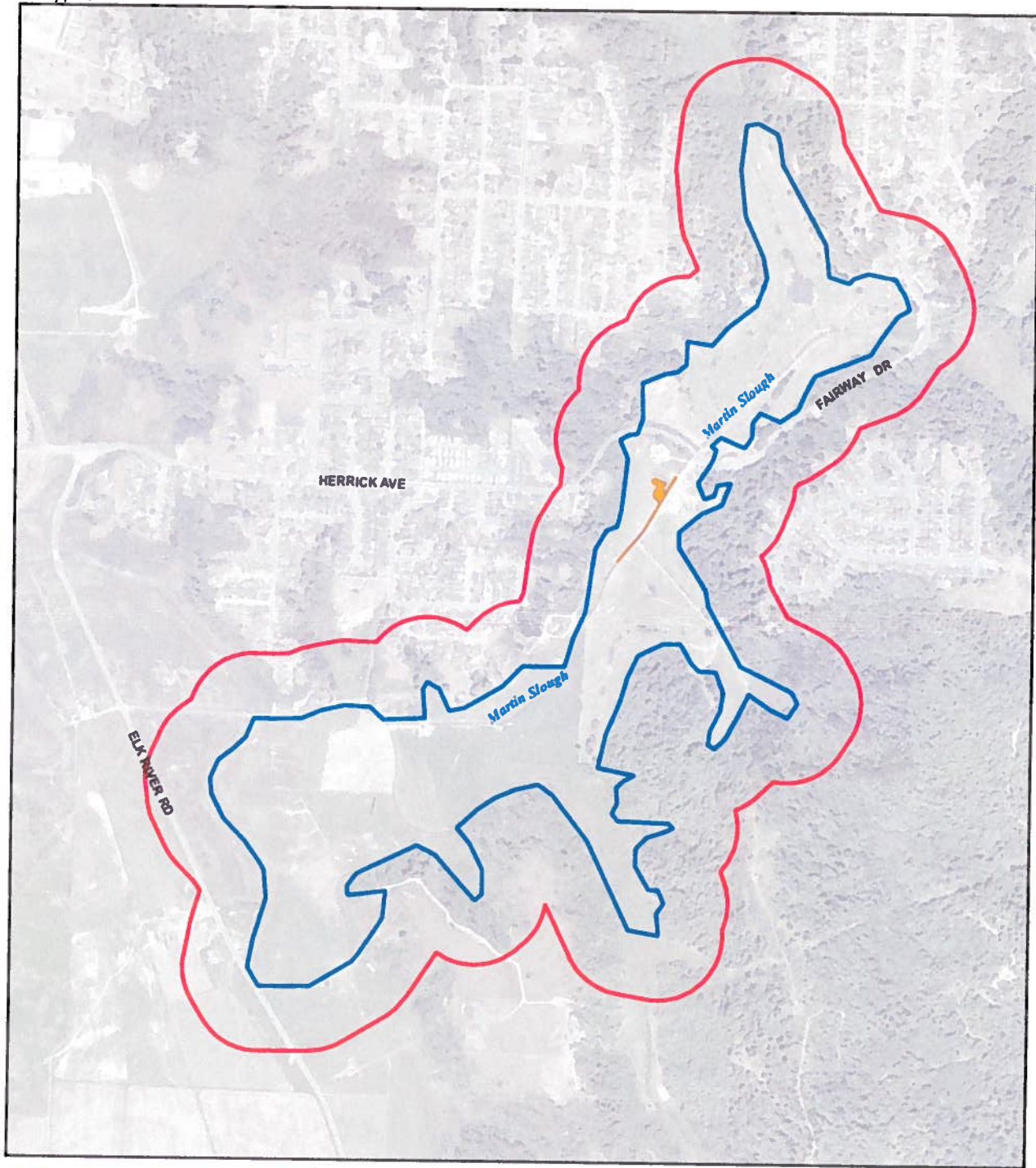
Phase 2-4 (NRLT and lower City): Construction and enlargement of tidal and freshwater wetlands to increase floodwater storage and provide enhanced fisheries and waterfowl habitat, and enlarge the channel to increase conveyance (Reaches 1-4). Wetland and riparian plantings and creation of salt marsh plains (Marsh Plain A and B). Creation of salt marsh adjacent to a freshwater spring and hydrologically connected to the mainstem (Pond C), creation of a small freshwater pond connected to the East Tributary and creation of a topographically complex brackish pond (Pond D) with expanded wetlands and riparian surrounding the pond. Minor realignment of East Tributary feeding Pond D. Decommission and relocation of PG&E gas lines (location of gas lines not shown here).

Phases 5-6 (City): Channel enhancements (Reaches 5,6,7). Creation of one seasonally brackish pond with expanded wetlands, containing deep open water, littoral benches and elevated outlet sill that minimizes salinity intrusion (Pond E). Creation of one topographically complex brackish ponds (Pond F) with wetlands and riparian vegetation finging the pond. Creation of a freshwater alcove pond (Pond G) with deep open water and emergent wetland vegetation along banks, realign the NF Tributary to access the new pond and revegetate with natives.

PROJECT ELEMENTS

- Marsh Planes A & B (0.75 & 2.3 acres) - salt marsh plain 50 ft wide paralleling slough channel and 70 ft wide along abandoned meander.
- C (1.7 acres) - salt marsh with low elevation pond connected to springs.
- D&E (0.8 & 1.3 acres) - expanded brackish wetlands containing deep open water littoral benches and elevated outlet sill that minimizes salinity intrusion during wet season.
- F (1.7 acres) - backwater slough with island and deep open water and littoral bench on inside of bend.
- G (0.5 acres) - predominantly freshwater alcove pond, Deep open water with emergent vegetation along banks.
- North Fork Trib. (0.8 acres) - restored channel with marsh plain and side channel.
- South East Trib. (0.3 acres) - restored channel with small freshwater pond connected to existing tributary.
- New channel dimensions - trapezoidal shape with 1:5:1 (H:V) side slopes and bottom elevation ranges from -1.0 - 2.8 ft elev.

Figure 2. Martin Slough Restoration Project elements.



Tidewater Goby Critical Habitat Martin Slough Action Area (Site Boundary + 500ft Buffer)

<p>Paper Size ANSI A 0 1,000 Feet</p> <p>Map Projector: Lambert Conformal Conic Horizontal Datum: North American 1983 G70 NAD 1983 StatePlane California 1 FIPS 5401 Feet</p>			<p>Redwood Community Action Agency Martin Slough</p>	<p>Job Number 01581-08002 Revision A Date 13 Feb 2017</p>
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Tidewater Goby Critical Habitat **Figure 3**

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