



# 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 16, 2017

## MEMORANDUM

To: Bruce Bingham, Field Supervisor  
Arcata Fish and Wildlife Office, Arcata, California

From: Marie Strassburger, Chief *Marie Strassburger*  
Wildlife and Sport Fish Restoration Program (WSFR)

Subject: Request for Initiation of formal Consultation for Tidewater Goby and Tidewater Goby Designated Critical Habitat for the Martin Slough Enhancement/Restoration Project (F17AP0059), Humboldt County, CA.

This memo is to request initiation of consultation for the Martin Slough Restoration Project with interrelated federal nexus, pursuant to Section 7 of the Endangered Species Act, , as amended (16 U.S.C. 1531 *et seq.*). 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, 4.6 acres of tidally influenced marsh and ponds, and 3.6 acres of riparian forest (Figure 2). These interrelated and allied elements, 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 WSFR Program, 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. 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/or brackish wetland, seasonal wetland, and riparian habitats intended to provide for fish and wildlife habitat.

March 16, 2017

While the Project area is currently highly disturbed and largely disconnected from tidal influence, it has potential to support a number of federally listed species. In particular, tidewater goby has been present in ponds within the proposed work area.

Based upon the enclosed Biological Assessment, the WSFR Program, NOAA Restoration Center, and the USACE have reached the following determinations with regard to listed species and habitats:

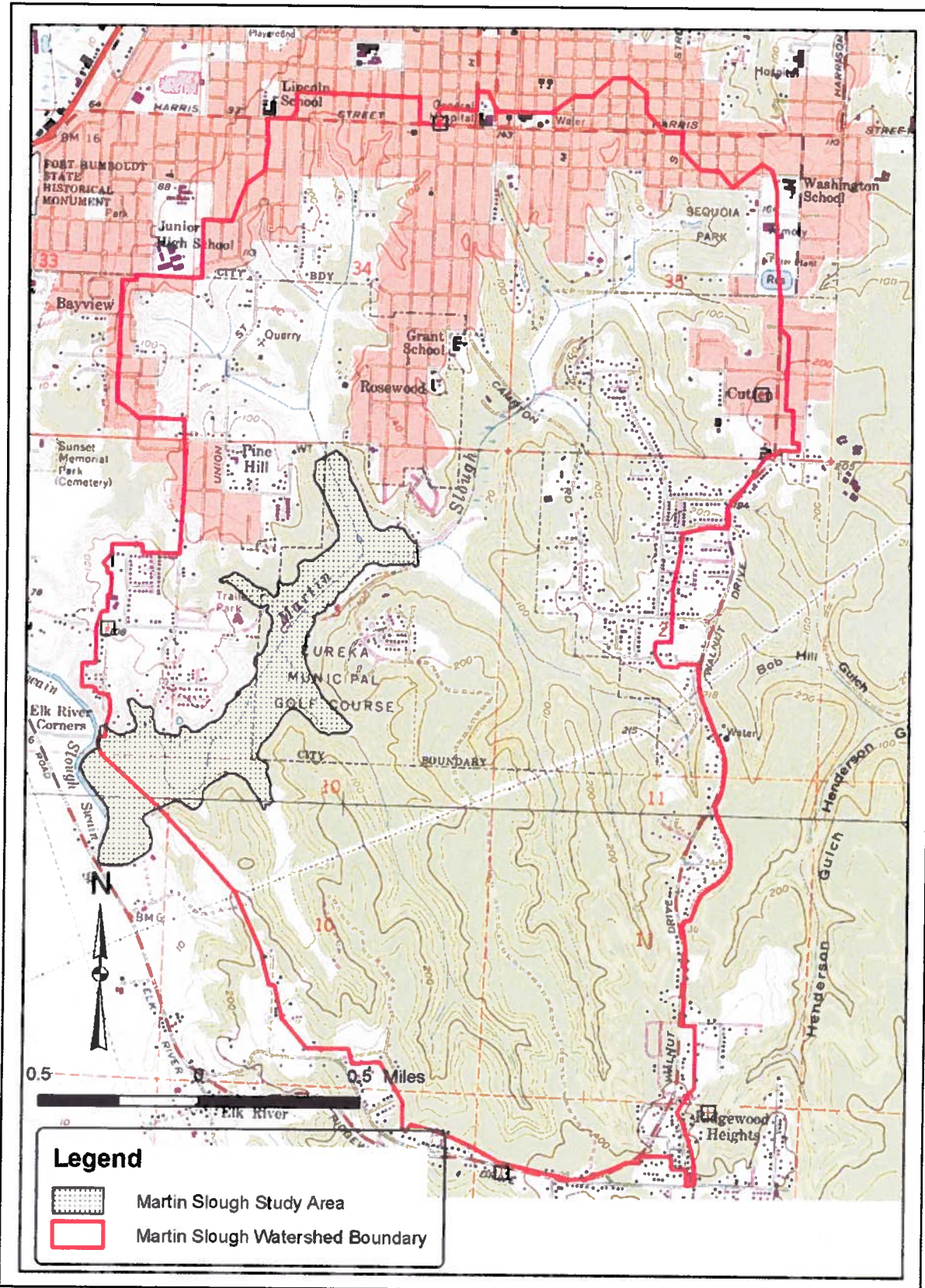
**The proposed Project may affect, and is likely to adversely affect** the federally endangered *tidewater goby* (*Eucyclogobius newberryi*). Direct and indirect impacts to tidewater goby will be avoided and minimized to the extent feasible. Avoidance and minimization measures are incorporated into the Project design and operating policies. Any outcomes and conservation measures resulting from this consultation will become enforceable provisions and terms of the grant agreements with SCC and the permits issued to Northcoast Regional Land Trust by USACE.

**The proposed Project may affect, but is not likely to adversely affect designated critical habitat** for the federally endangered tidewater goby. While work will occur in designated critical habitat (Figure 3), effects of the short-term disruption will be offset by the immediate and long-term beneficial effects from restoration, re-establishment of a muted tidal prism, and protecting existing and creating additional suitable habitat for tidewater goby.

The WSFR Program, on behalf of the three federal agencies, is seeking your concurrence on our determinations, and to initiate consultation regarding effects to tidewater goby and its designated critical habitat. 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. Steve Kramer 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 this document and his guidance. Please have Mr. Kramer, or other delegated members of your staff, contact our Grants Management Specialist, Larry Riley, at 916-978-6182 or email: [lawrence\\_riley@fws.gov](mailto:lawrence_riley@fws.gov), to schedule a meeting.

Enclosure

cc: Steve Kramer, USFWS Arcata Fish and Wildlife Office, Ecological Services  
Matt Goldsworthy, NOAA National Marine Fisheries Service, Arcata, CA  
Liisa Schmoele, USFWS Arcata Fish and Wildlife Office, Habitat Restoration Program  
Bob Pagliuco, NOAA Office of Habitat Conservation, Restoration Center  
Kasey Sirkin, Eureka Field Office, San Francisco District, USACE  
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.

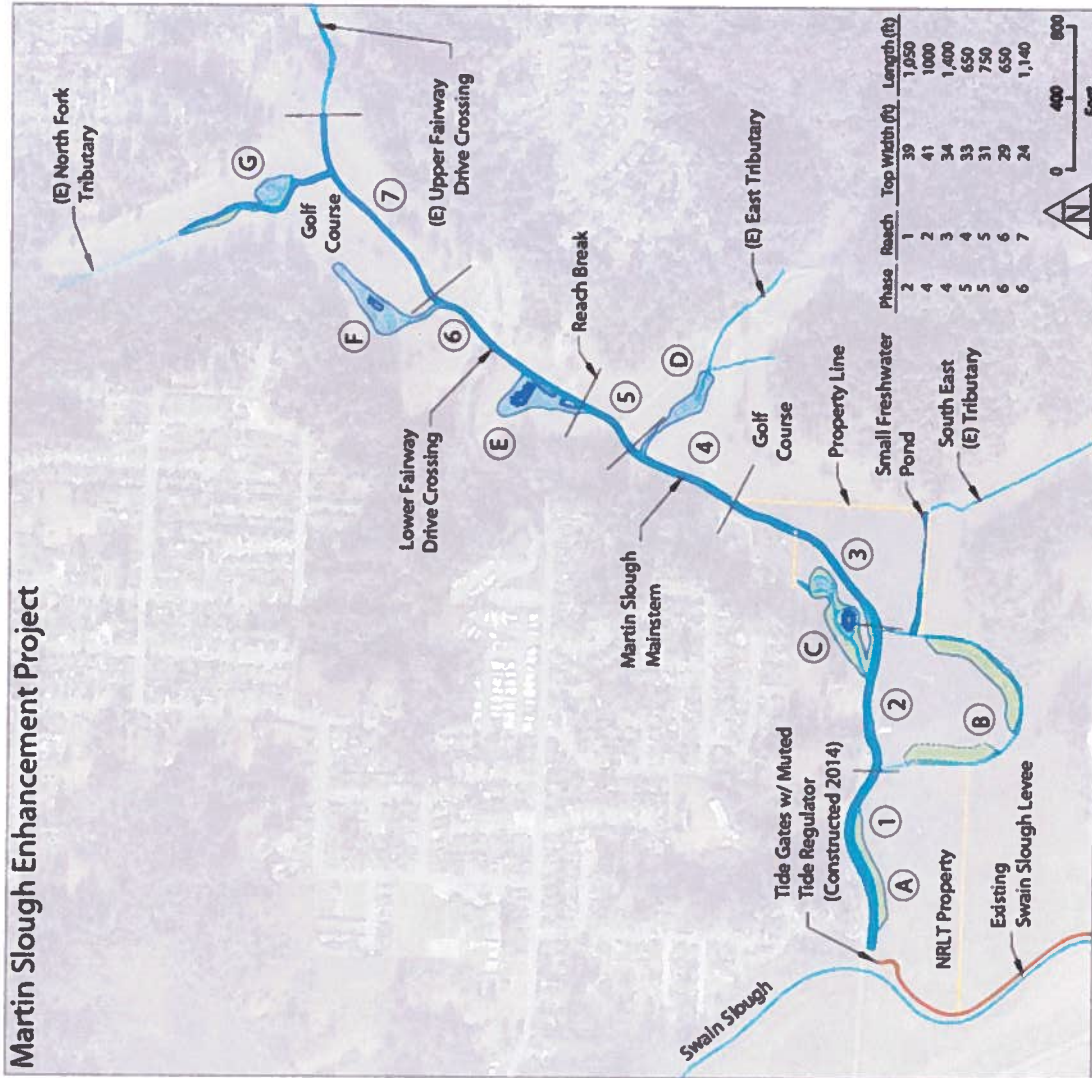
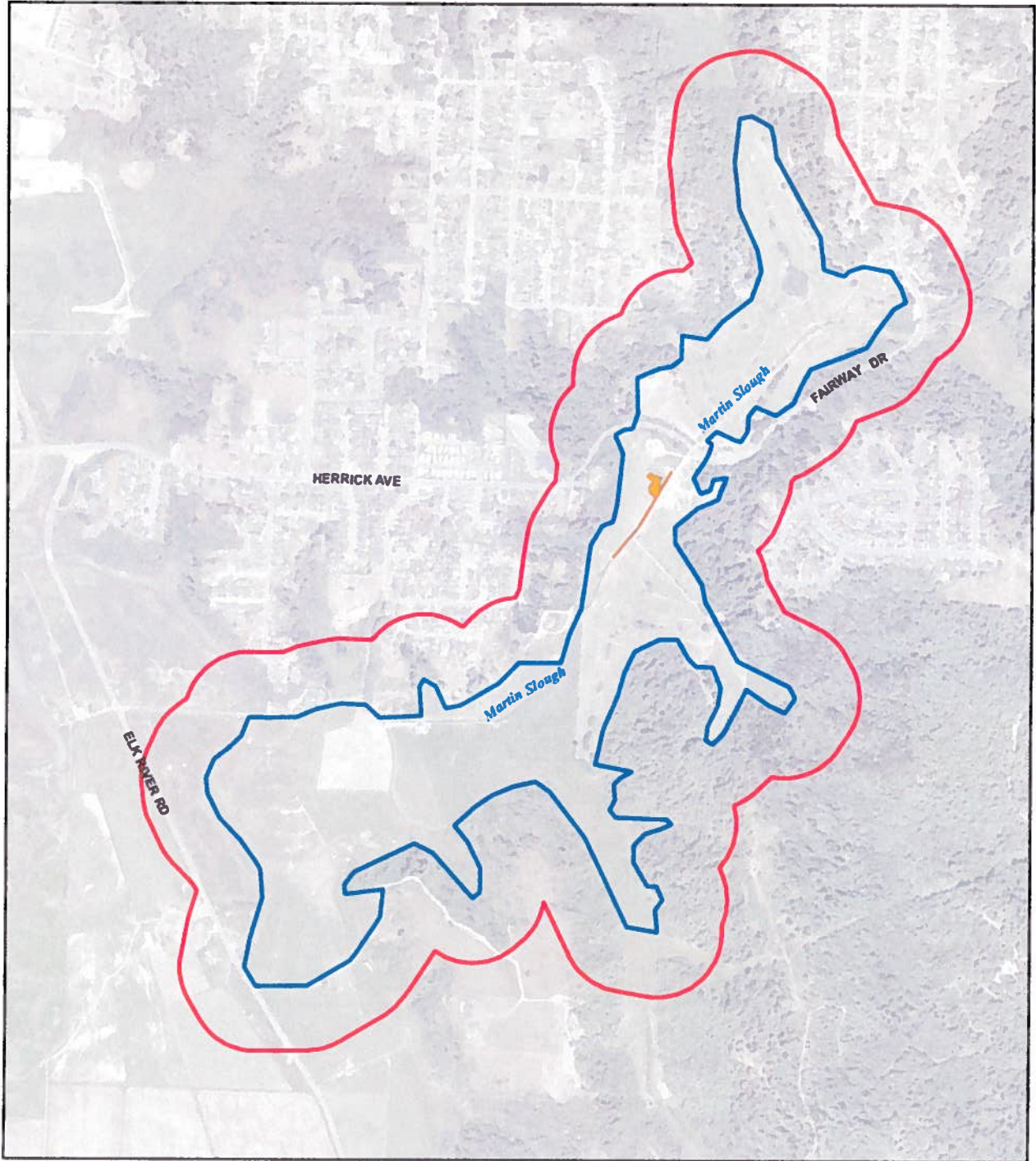


Figure 2. Martin Slough Restoration Project elements.



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

Paper Size ANSI A  
 0 1,000  
 Feet  
 Map Projection: Lambert Conformal Conic  
 Horizontal Datum: North American 1983  
 Grid: NAD 1983 StatePlane California I FIPS 5001 Feet



Redwood Community Action Agency  
 Martin Slough

Job Number: 01581-08002  
 Revision: A  
 Date: 13 Feb 2017

Tidewater Goby Critical Habitat **Figure 3**

G:\111\11136558\RCAA-Martin Slough Enhance-Env\08-GIS\Maps\BA\Maps\Figures\4\_Tidewater\_Goby\_Critical\_Habitat.mxd  
 718 Third Street Eureka CA 95501 USA T 707.443.8326 F 707.444.8330 E eureka@ghd.com W www.ghd.com  
 © 2017. Whilst every care has been taken to prepare this map, GHD makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and cannot accept liability and responsibility of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred by any party as a result of the map being inaccurate, incomplete or unsuitable in any way and for any reason.  
 Drawn by: City of Petrol & Aerial / Provided by: GHD