NAME: Humboldt Estuarine Complex Intertidal Habitat Restoration and Climate Change Adaptation

LOCATION: Humboldt Bay and Eel River Estuary, Humboldt County, California

ACRES: 50 acres intertidal habitat

NON-FEDERAL SPONSOR: Ducks Unlimited

PROJECT COST:

Total Project Cost	$302,452
Total Federal Share of Project Cost	$200,138 (64%)
ERA amount	$200,138
Other Federal funds	$0

PROJECT DESCRIPTION:
The proposed project will eradicate more than 50 acres of invasive eelgrass through multiple traditional and innovative techniques. The proposed project will develop a promising new method of sterilizing the plant and seedbank with high heat cartridges inserted into the substrate; heaters will be systematically moved to control above and belowground plant material, completing eradication of large areas in a short time. A second innovative technique is covering the perimeter of large (> 40 square feet) patches. These methods will be monitored to evaluate whether this slows growth within the patch and/or kills the plants. The project will also monitor seed viability, epibenthic invertebrate community structure, shorebird use of infested sites, and look for new occurrences via shoreline surveys.

EXPECTED BENEFITS:
Protected species that will benefit from this project include tidewater goby, coho salmon, steelhead salmon, chinook salmon, green sturgeon. Species of concern that will benefit include willets, marble godwits, dunlin, least sandpiper, long billed curlew, whimbrel, Western sandpiper. The mid to upper intertidal ecosystem will benefit from the eradication of dwarf eelgrass, *Zostera japonica*. Open mudflats support large numbers of resident and migrating shorebirds and waterfowl as they feed on a variety of invertebrates (crustaceans, polychaetes, mollusks, etc) and the native eelgrass, *Zostera marina*.

STATUS: Planning and Design