

LARGE SCALE SPARTINA CONTROL

Humboldt Bay National Wildlife Refuge

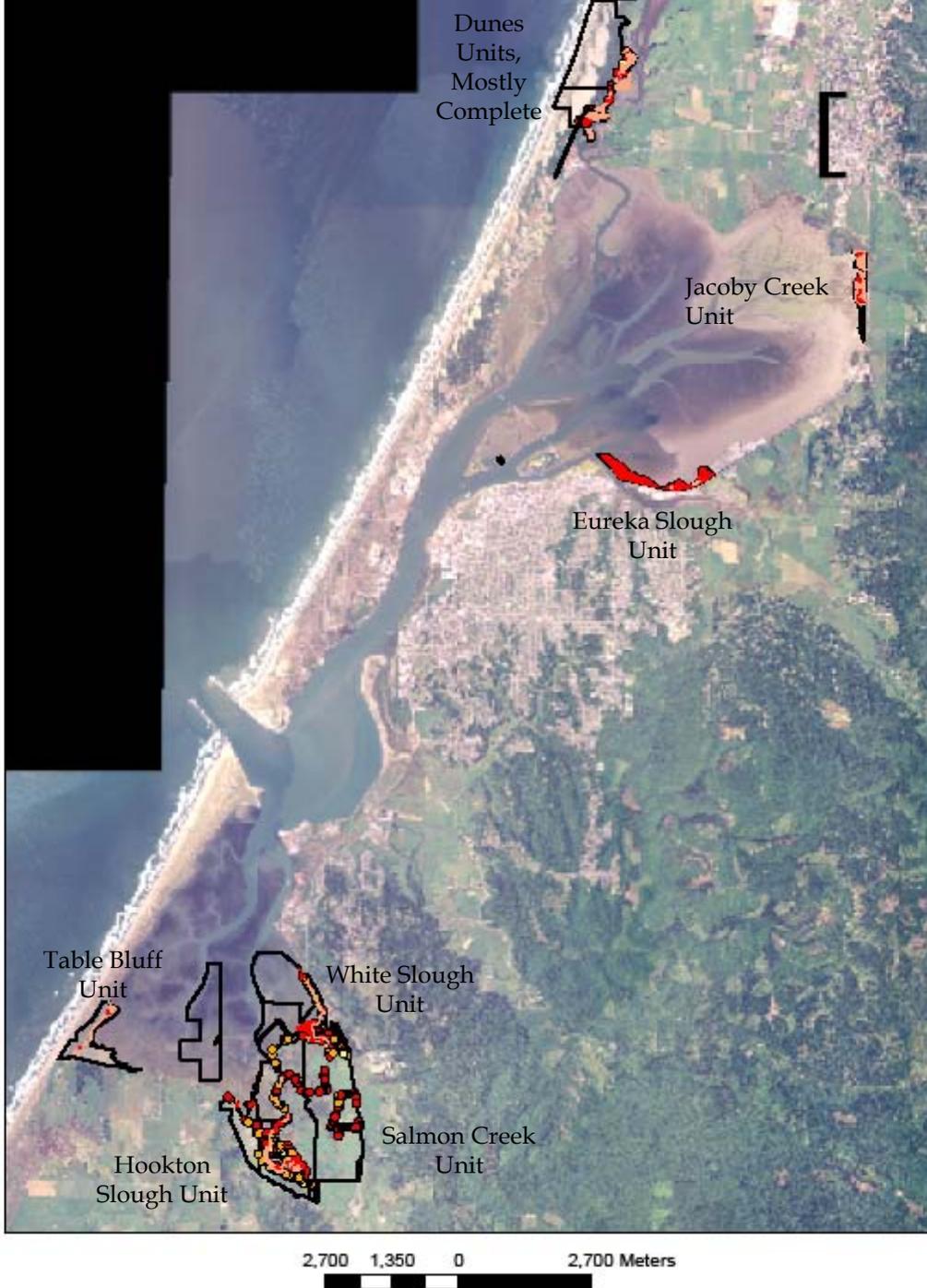


Eric Nelson, Refuge Manager

\$ 1 million competitive allocation for invasive *Spartina*

- Allocation to one refuge annually, intended for an eradication project
- This project is not true eradication, it is intended to demonstrate feasibility of control on a large scale, in order to facilitate regional eradication
- State Coastal Conservancy is funding a regional eradication plan
- FWS is partnering with the Harbor District for allocation flexibility & in recognition of their key role in future regional eradication efforts

**Total Acres of
Salt Marsh to
Be Restored on
the refuge:
Approximately
300**



Hookton/Salmon North and White



390 195 0 390 Meters

- Refuge encompasses most of South Bay *Spartina*/ salt marsh
- Will work with partners (DFG/BLM) to target remaining *Spartina* in south bay (South Spit)
- South Bay more defensible from re-establishment by tidal dispersal

Partners

- Humboldt Bay Harbor, Recreation, and Conservation District (Conservation Director oversees project with USFWS, will hire staff)



- Humboldt County Sheriff's Department (Agreement with HD for one inmate crew each summer)



- California Conservation Corps (FWS contracted for two dedicated crews summer 2010)



- California State Coastal Conservancy



Partners

- North Coast Resource Center (Agreement with HD for part time crew 2010)



- California Department of Forestry and Fire Protection (crews)



- Friends of the Dunes (Volunteer coordination and outreach)



- Ducks Unlimited NAWCA Grant

Environmental Compliance

NEPA EA/FONSI/ESA through refuge
CCP 2009

Coastal Commission Negative Determination
2010

No COE permit required for work with
brushcutters

Organizational Structure

- Project Coordination by USFWS and HBHRCD
- Harbor District to hire Project Manager, Elite Crew Leader, and Elite Crewmembers (3)
 - Project Manager writes plan, oversees Elite Crew Leader, Administrative Aid for budget and labor tracking, and carries out monitoring
 - Elite Crew oversees CCC and other labor crews, works in sensitive areas, maintains and transports equipment

STRATEGIES

- Plan will be formalized early in project due to constrained time frame
- Control areas prioritized for mapping through SCC regional *Spartina* mapping project (finer scale and updated mapping will guide efforts). Mapping already completed in areas where work has started.
- Baseline monitoring design has been developed and implemented prior to start (including photo points)

STRATEGIES

- Focus on medium to sparse areas first with brushcutters.



STRATEGIES

- Address dense areas with brushcutters in areas inaccessible to wheeled/tracked equipment



STRATEGIES

- Use wheeled/tracked equipment over dense areas as possible after evaluation/permitting.



First year goals

1. Complete all brushcut areas
2. Complete or top mow all of south bay areas
3. Establish experimental plots for wheeled/tracked equipment in dense areas.



Second year goals

1. Re-treat all first year brushcut areas as needed
2. Evaluate and apply most efficient wheeled/tracked equipment technique to dense areas
3. Re-treat those areas with brushcutters as needed



Logistics

1. Trailers
2. Equipment Repair/Maintenance
3. Fueling
4. Access- People & Equipment
Floating dock
Permits & Tides



Project Documentation

- Photo-documentation
- Results of quantitative monitoring
- Document per-acre labor needs for each treatment
- Evaluate efficiency of alternative treatments and provide recommendations for future efforts
- Work with Partners to set long-term objectives, acquire necessary funding & eradicate *Spartina*

Questions?

