



United States Department of the Interior

FISH AND WILDLIFE SERVICE



Humboldt Bay National Wildlife Refuge
1020 Ranch Road
Loleta, California 95551-9633

Memorandum

To: Assistant Regional Director, Refuges

From: Project Leader, Humboldt Bay National Wildlife Refuge, Loleta, California

Subject: Request for minor revision to the 2009 Humboldt Bay NWRC Comprehensive Conservation Plan to include the Caltrans Property on Lanphere Road

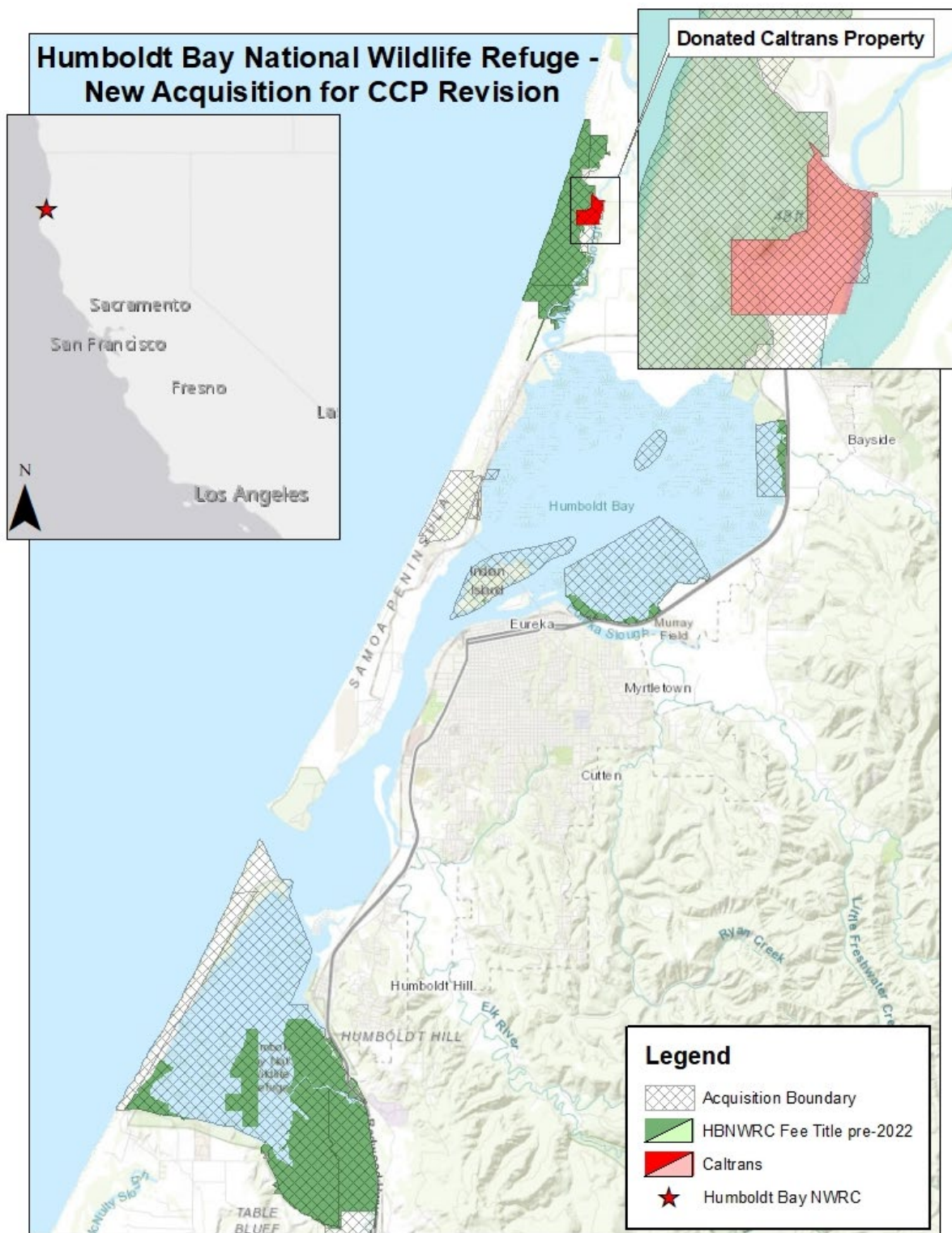
Humboldt Bay National Wildlife Refuge (Humboldt Bay NWR) has acquired a parcel of land totaling 73.19 acres within the approved project boundary. This memorandum revises the Humboldt Bay NWR Complex's Comprehensive Conservation Plan (CCP) to incorporate the California Department of Transportation (Caltrans) property, as required by the National Wildlife Refuge System Improvement Act of 1997 and Service policy. The CCP is not scheduled to be revised for several years; therefore, we are revising the CCP to integrate this property into the Humboldt Bay NWR (Figure 1) and implement approved management strategies for 73.19 acres.

Background/Need for Amendment

The National Wildlife Refuge System Improvement Act of 1997 and Service policy (Fish and Wildlife Service Manual, 602 FW 1 and 3) identify the need to periodically review and revise Comprehensive Conservation Plans. Specifically, the Service Manual chapter 602 FW 3, (Comprehensive Conservation Planning Process) Section 3.2 states "We will revise the CCP every 15 years ... or earlier if monitoring and evaluation determine that we need changes to achieve planning unit purpose(s), vision, goals, or objectives."

The addition of the property shown in Figure 1 is considered a minor revision to the 2009 CCP. The addition of this property does not alter the original intent of any part of the CCP. This CCP revision is considered minor because it includes minimal changes to CCP objectives and strategies that do not significantly change the management direction of the refuge. Compliance with the National Environmental Policy Act of 1969 (NEPA) meets the criteria for the categorical exclusion 516 DM 8.5 B(9), which states, "Minor changes in existing master plans, comprehensive conservation plans, or operations, when no or minor effects are anticipated. Examples include minor changes in the type and location of compatible public use activities and land management practices." The list of extraordinary circumstances in 43 CFR part 46 §46.215 was reviewed and none were found to be applicable.

This memorandum complies with the National Wildlife Refuge System Improvement Act of 1997, which states that the "Secretary shall ... revise the plan at any time if the Secretary determines that conditions that affect the refuge or planning unit have changed significantly." Examples of new information or changed conditions include but are not limited to the following: (1) changes in the acreage of a specific habitat type; (2) changes in water management or



CCP = Comprehensive Conservation Plan California. Caltrans = Department of Transportation. HBNWRC = Humboldt Bay National Wildlife Refuge Complex. NWRC = National Wildlife Refuge Complex

Figure 1. Location of the Donated California Department of Transportation (Caltrans) Property on Lanphere Road in Arcata, California, in Relation to Other Refuge Lands Around Humboldt Bay, California

availability; (3) changes in the status of a listed species; (4) the need for changes to wildlife management or public use programs; (5) changes to Service policy; (6) the need to construct new facilities, and/or (7) changes in sea level or other climate related changes.

Description of Acquired Parcels

Humboldt Bay NWR is not complete. The approved acquisition boundary includes 9,502 acres. The Humboldt Bay NWR CCP includes management and visitor services activities for 3,817.82 acres in fee title. In 2022, the Service acquired the Caltrans property comprising 73.91 acres. This property was within the approved acquisition boundary as shown in Figure 1.

Approximately 40 acres of the property is former tidelands that were converted to agricultural pastures enclosed by an earthen levee on the east side of the property. The rest of the property comprises of dune forest, riparian, and open dune habitats with a right-of-way that bisects the property at the foot of the dunes. This property is located on the south side of Lanphere Rd. outside of the City of Arcata, CA and is adjacent to the Lanphere Dunes Unit of Humboldt Bay NWR.

Management Strategies

Goals 1, 2, 3 and 4 in the CCP address objectives and strategies for managing these habitats and the prevention and control of invasive plants and animals, while Goals 5 and 6 address objectives and strategies for Visitor Services and Cultural Resources. These goals are descriptive, open-ended, and are broad statements of a desired future condition that convey a purpose but do not define measurable outcomes. Goals translate Refuge purposes into management direction. Each goal is supported by measurable, achievable objectives with specific strategies needed to accomplish them. Management of the Caltrans property would fall under Goals 1 through 6. The specific objectives and strategies applicable to this property are listed in Table 1, in Attachment 1 of this Minor CCP Revision. Changes in objectives or strategies are shown in strikethrough and/or underline. While Goal 5 applies to Visitor Services, this property is currently not open to the public, except through Special Use Permit for educational/interpretive purposes. Public uses of the property will be considered in the future through the compatibility process (603 FW 2). Additionally, this property will be included in general operations and management programs outlined in the CCP, including, but not limited to, prescribed fire, wildlife monitoring, infrastructure maintenance, and other refuge management activities.

Refuge Manager/
Project Leader:

(Signature)

(Date)

Concurrence:

Chief, Natural
Resources Division:

(Signature)

(Date)

Refuge Supervisor:

(Signature)

(Date)

Approval:

Assistant Regional
Director, Refuges:

(Signature)

(Date)

Attachment 1

Table 1. Application of Goals, Objectives, and Strategies to Properties Acquired After 2009

<i>Goals, Objectives, Strategies</i>	Caltrans Property
<i>Goal 1. Conserve, manage, restore, and enhance estuarine and palustrine wetland habitats representative of the Humboldt Bay area to benefit their associated native fish, wildlife, plants, and special status species.</i>	X
<i>Objective 1.2. Salt Marsh Habitat:</i> Within 15 years, maintain 345 <u>343</u> acres of existing salt marsh habitat and remove western dike on Table Bluff Unit. If feasible, restore 275 <u>235</u> acres to native salt marsh habitat <u>(40 acres on California Department of Transportation (Caltrans) property).</u>	X
<i>Strategy 1.2.1.</i> Continue to develop and implement restoration projects with the staff of the Partners for Fish and Wildlife and Coastal Programs at the Arcata Fish and Wildlife Office. Also, coordinate restoration projects with the National Oceanic and Atmospheric Administration (NOAA) Fisheries Service, U.S. Army Corps of Engineers (USACE) and other permitting agencies.	X
<i>Strategy 1.2.3.</i> Gather existing information and pursue funding to assess existing elevation on refuge units and sedimentation rates within Humboldt Bay, and locations in South Bay with respect to salt marsh restoration.	X
<i>Strategy 1.2.6.</i> Assess possibilities of using clean dredge spoil or excavated materials to increase tidal elevations prior to restoration (Humboldt Bay Harbor, Recreation and Conservation District; Caltrans, etc.).	X
<i>Strategy 1.2.7.</i> Facilitate research projects related to salt marsh function (efficient restoration techniques value to wildlife, influence on hydrology, functions).	X
<i>Strategy 1.2.8.</i> Adaptively manage restoration of salt marsh habitat and maximize experimental value of all projects using adequate monitoring.	X
<i>Strategy 1.2.11.</i> If feasible, use the dike material and additional appropriate fill from local sources on <u>salt marsh restoration projects</u> the White Slough Unit to raise the marsh elevation.	X
<i>Strategy 1.2.15.</i> If feasible, import local topsoil layer or dredge spoil as fill to increase the elevation on the Table Bluff Unit to restore native salt marsh.	X

Goals, Objectives, Strategies	Caltrans Property
Objective 1.5. Eelgrass and Mudflat Habitat: Over the next 15 years, participate in the ongoing partnerships and create new partnerships to conserve and manage mudflat/eelgrass habitat for long-term health.	X
Strategy 1.5.2. Continue partnership with the Humboldt Bay Ecosystem Program for studying the bay ecosystem, including mudflat/eelgrass habitat, and continue collaboration with California Polytechnic State University (<u>Cal Poly</u>) Humboldt State University, U.S. Fish and Wildlife Service (USFWS), and U.S. Geological Survey (USGS) to study eelgrass/brant/sea level rise interrelationships.	X
Strategy 1.5.3. Continue partnership with California Department of Fish and Wildlife (CDFW), University of California Sea Grant, and Humboldt Bay Harbor Recreation, and Conservation District for continued monitoring of and research on invasive species that may impact eelgrass.	X
Strategy 1.5.4. Pursue additional funding for research on the ecology and conservation of eelgrass, including effects of sea level rise, through the Pacific Coast Joint Venture (PCJV) and the Service's Coastal Program.	X
Strategy 1.5.8. During saltmarsh restoration projects and if feasible, create conditions that would support eelgrass.	X
Strategy 1.5.9. Pursue collaborative research with Cal Poly Humboldt and other local researchers, to conduct experiments on developing or expanding eelgrass beds in restored areas.	X
Strategy 1.5.10. Pursue collaborative research with Cal Poly Humboldt and other local partners to conduct experiment on developing or expanding native shellfish beds in restored areas.	X
Goal 2. Conserve and restore globally rare dune and dune forest habitats, associated native plant and animal species, and support recovery of threatened, endangered, and endemic species dependent upon these rare habitats.	X
Objective 2.1. Dune Mat/Foredune Grassland: Within 5 years, restore the Ma-le'l Dunes and Table Bluff Units' dune mat/foredune grassland habitat. Over 15 years, create ongoing experimental dune blowouts in late successional, low-diversity dune mat (to mimic natural disturbances), and assess impacts on existing habitat and special status plants on the Lanphere Dunes Unit <u>and other acquired dune properties.</u>	X
Strategy 2.1.1. Continue to work with the Humboldt County Dunes Cooperative to contribute to managing Humboldt County dunes as an ecosystem.	X

Goals, Objectives, Strategies	Caltrans Property
Strategy 2.1.7. <i>Develop a Habitat Management Plan and Resource Inventory and Monitoring Plan for all refuge units.</i>	X
Strategy 2.1.8. <i>Inventory wildlife species, including invertebrates, in dune mat/foredune grassland habitats.</i>	X
Strategy 2.1.9. <i>Seek funding for a new full time employee (FTE) biologist position to assist in planning and implementing projects and strategies.</i>	X
Objective 2.2. Dune Swale: <i>Within 15 years, restore about 300 acres of upland dunes and dune swale plant communities on all dune units. Wildlife species that may benefit from dune swale habitat restoration include northern red-legged frog (a California species of special concern), black-capped chickadee, yellow warbler, and Cooper's hawk and a variety of mammals. Plant species that may benefit include Menzies' wallflower, beach layia, beach bluegrass, beach strawberry, beach pea, beach morning glory, seaside daisy, dune goldenrod, beach bur, yellow sand verbena, beach buckwheat, beach knotweed, and beach evening primrose.</i>	X
Strategy 2.2.1. <i>Continue to work with the Humboldt County Dunes Cooperative to contribute to managing Humboldt County dunes as an ecosystem.</i>	X
Strategy 2.2.2. <i>Assess need for and revegetate with appropriate native local plants after invasive plants are removed.</i>	X
Strategy 2.2.3. <i>Pursue funding to complete restoration.</i>	X
Strategy 2.2.4. <i>Develop a Habitat Management Plan and Resource Inventory and Monitoring Plan for all refuge units.</i>	X
Strategy 2.2.5. <i>Inventory wildlife species, including invertebrates, in dune swale habitats.</i>	X
Strategy 2.2.6. <i>Inventory nonvascular plants, and quantitatively sample and describe dune swale plant communities.</i>	X
Strategy 2.2.7. <i>Seek funding for a new FTE biologist position to assist in planning and implementing projects and strategies.</i>	X

<i>Goals, Objectives, Strategies</i>	Caltrans Property
Objective 2.3. Dune Riparian/Swamp: <i>Within 15 years, <u>maintain and restore approximately 50 33</u> acres of riparian/swamp habitat on the Mal-le'l Lanphere, and other acquired dune properties and. <u>Gain a more comprehensive understanding of plant and animal species that inhabit the riparian/swamp habitat on <u>all the Ma-le'l and Lanphere</u> Dune Units.</u> Species that may benefit from dune riparian swamp habitat restoration include the northern red-legged frog, many species of migratory birds, and several bird species of special concern, including Vaux's swift, willow flycatcher, yellow-breasted chat, and the bank swallow, a California Endangered Species Act (ESA)-listed as threatened bird.</i>	X
Strategy 2.3.1. <i>Continue to work with the Humboldt County Dunes Cooperative to contribute to managing Humboldt County dunes as an ecosystem.</i>	X
Strategy 2.3.2. <i>Develop a Habitat Management Plan and Resource Inventory and Monitoring Plan for all refuge units.</i>	X
Strategy 2.3.3. <i>Inventory wildlife species, including invertebrates, in dune riparian/swamp habitat.</i>	X
Strategy 2.3.4. <i>Work with Humboldt Bay Bird Observatory, the <u>Cal Poly Humboldt State University</u> wildlife department, and other partners to develop avian research objectives.</i>	X
Strategy 2.3.5. <i>Continue collaborative research on neotropical migrant birds by <u>Cal Poly Humboldt State University</u>, Humboldt Bay Bird Observatory, or other partners.</i>	X
Strategy 2.3.6. <i>Seek funding for a new FTE biologist position to assist in planning and implementing projects and strategies.</i>	X
Strategy 2.3.7. <i>Inventory nonvascular flora, and quantitatively sample and describe vegetation communities of riparian/swamp habitats.</i>	X
Strategy 2.3.8. <i>To enhance dune riparian/swamp habitat, plant native dune riparian/swamp species where invasive plants were removed or gaps in native vegetation exist and are vulnerable to re-infestation by invasives, as appropriate.</i>	X

Goals, Objectives, Strategies	Caltrans Property
Objective 2.4. Coniferous Dune Forest: Over 15 years, maintain and restore 180 acres of coniferous dune forest habitat on all Dunes units; within 10 years, gain a more comprehensive understanding of animal species that inhabit the coniferous dune forest habitat on all Dunes units.	X
Strategy 2.4.1. Continue to work with the Humboldt County Dunes Cooperative to facilitate coordinated ecosystem management of dune forests.	X
Strategy 2.4.3. Develop a Habitat Management Plan and Resource Inventory and Monitoring Plan for all refuge units.	X
Strategy 2.4.7. Inventory wildlife species, including invertebrates, in dune forest habits.	X
Strategy 2.4.8. Seek funding for a new FTE biologist position to assist in planning and implementing projects and strategies.	X
Strategy 2.4.9. Grow or identify local appropriate sources for restoration plant materials.	X
Goal 3. Conserve and restore all refuge habitats through the prevention and control of invasive plants and animals.	X
Objective 3.1. Prevention and early detection: Over the next 5 years, develop and implement an <u>Early Detection Rapid Response (EDRR)</u> a Hazard Analysis and Critical Control Point (HACCP) Plan for the refuge. Within 10 years, develop and enhance the refuge's capacity to identify, report, and effectively respond to newly discovered, localized invasive species. Over the next 15 years, increase organizational collaboration on invasive species issues with Federal, State, and local entities, tribes, private organizations, and individuals.	X
Strategy 3.1.1. Develop an <u>EDRR</u> a Hazard Analysis and Critical Control Point (HACCP) Plan for the refuge to prevent establishment of new invasive species on the refuge.	X
Strategy 3.1.3. Continue coordination and collaboration on control projects with existing partners [e.g., Friends of the Dunes (FOD), Friends of HBNWR , Fortuna Creeks Project, California Conservation Corps (CCCs), California Department of Forestry and Fire Protection (CDF), etc.].	X
Strategy 3.1.4. Participate in the local weed management area coordination meetings.	X

Goals, Objectives, Strategies	Caltrans Property
<i>Strategy 3.1.6. Develop a volunteer early detection rapid response crew that can quickly remove incipient invasive species populations at all units.</i>	X
<i>Strategy 3.1.7. Provide outreach and information to adjacent landowners, co-operators and the public, informing them of the complete costs of invasive plants.</i>	X
<i>Strategy 3.1.8. Eradicate/control invasive species in south refuge units identified in Volunteer Invasive Species Mapping Program as early detection species Phalaris arundinacea, Phalaris aquatica, Echinochloa crus-galli, Cortaderia jubata, Cirsium arvense, and Calystegia silvatica.</i>	X
<i>Strategy 3.1.10. Continue ongoing survey, monitoring, and treatment of new occurrences of previously eradicated species including English ivy and other forest-invasive plants.</i>	X
<i>Strategy 3.1.11. Continue the annual European beachgrass (ammophila) sweep at dunes units and expand to detect new infestations of other high priority, previously eradicated species, including Cortaderia jubata and Cirsium vulgare.</i>	X
<i>Strategy 3.1.15. Coordinate with adjacent landowners and proactively work with partners and pursue grant funding to control the spread of invasive plants onto Humboldt Bay NWR units.</i>	X
Objective 3.2. Control and reduce the spread of established invasive species populations in refuge habitats: <i>Within 15 years, monitor and strategically remove, control, or eradicate invasive plant infestation. Within 5 years, expand the existing the volunteer program for invasive plant control to achieve maintenance-level control of high priority target invasive plant species. Within 10 years, use an additional contract-based control program to achieve maintenance-level control of all targeted invasive plants.</i>	X
<i>Strategy 3.2.1. Within 15 years, complete and implement a step-down Integrated Pest Management Plan (IPM) for control of all invasive plant species that threaten Humboldt Bay NWR Habitats and species.</i>	X
<i>Strategy 3.2.2. Control and/or eradicate invasive plants on all units using IPM methods, with emphasis on newly established populations, including Lotus uliginosus, Iris pseudacorus, Senecio sylvaticus, reed canary grass (Phalaris arundinacea), and Erechtites gomeratus on the Hookton Slough Unit, and on annual grass, European beachgrass, and yellow bush lupine infestations on dune units.</i>	X

Goals, Objectives, Strategies	Caltrans Property
Strategy 3.2.7. <i>Work with <u>partners</u> California Conservation Corps and California Department of Forestry (High Rock Conservation Camp) to complete removal of Hedera helix, and other forest invasive plants and any remaining ice plant on dune units.</i>	X
Strategy 3.2.9. <i>Work with partners to complete manual removal of European beachgrass on all Dunes units.</i>	X
Strategy 3.2.10. <i>Use heavy equipment to remove European beachgrass on appropriate areas of all Dunes units.</i>	X
Strategy 3.2.11. <i>Work with Youth Conservation Corps (YCC), volunteers, and contractors to plant coniferous dune forest species on all Dunes units in areas with European beachgrass (on interior high slip faces).</i>	X
Strategy 3.2.12. <i>Address off-site source of annual grass infestation on dune units through cooperative agreements or acquisition and management of source sites.</i>	X
Strategy 3.2.13. <i>Work with Ma-le 'ls Cooperative Management Area (CMA) partners [Bureau of Land Management (BLM), Redwood Gun Club, Sierra Pacific, Friends of the Dunes, staff of the Service's Partners for Fish and Wildlife and Coastal Programs, and private landowners] to address offsite sources of invasives such as reed canary grass (Phalaris arundinacea), pampas grass (Cortaderia jubata), yellow bush lupine (Lupinus arboreus), and Scotch broom (Cytisus scoparius) using <u>contractors</u>, YCC <u>staff or</u> volunteers. Seek funding from multiple sources such as the Coastal Program, Partners for Wildlife, and the Humboldt Weed Management Area (WMA).</i>	X
Strategy 3.2.14. <i>Test and where appropriate use prescribed burns on dunes to control annual grasses, European beachgrass (ammophila), yellow bush lupine (Lupinus arboreus), and other invasives.</i>	X
Goal 4. <i>Promote long-term viability of the Humboldt Bay estuarine and dune ecosystems through ecosystem-based management (including endangered and threatened species management across boundaries) coordinated with both public and private partners around the Bay.</i>	X
Objective 4.1. Ecosystem Management: <i>Over 15 years, continue participation on ecosystem-based management collaborations as staff time and resources permit. Pursue information and activities that will help determine a long-term sustainable management direction for refuge lands. Within 2 years, devote an additional ¼ FTE</i>	X

Goals, Objectives, Strategies	Caltrans Property
<i>(combined staff time) to serve an increased role in ecosystem-based management collaborations over the 15-year period.</i>	
Strategy 4.1.2. <i>Pursue and support relevant bay ecosystem studies and modeling (currents and sediment transport, hydrology, sea level rise, nutrient cycling, etc.) that would provide information needed to determine a long-term sustainable management direction for refuge lands.</i>	X
Strategy 4.1.3. <i>Work with USFWS, USGS, academic institutions, other agencies, and collaborative groups to monitor and address effects of and management response to local sea level rise and other environmental changes resulting from climate change.</i>	X
Strategy 4.1.5. <i>Collaborate to the extent possible with public and private partners.</i>	X
Strategy 4.1.6. <i>Seek funding for a new FTE biologist position to assist in planning and implementing projects and strategies.</i>	X
Goal 5. <i>To provide the public (and especially children) with accessible, safe, high-quality wildlife-dependent recreation opportunities to enhance public appreciation and understanding of fish, wildlife, plants, and habitats of Humboldt Bay and associated watersheds.</i>	X
Objective 5.3. Visitor Services—Outreach/Friends and Partners: <i>Over 15 years, refuge staff will collaborate with Friends groups and other regional partners to annually host at least two regionally based environmental education field trips, workshops, seminars, or study courses, and refuge staff will take a local leadership role in developing and strengthening partnerships.</i>	X
Strategy 5.3.1. <i>With Friends groups, volunteers, and staff, continue to participate in interpretive events both on and off the refuge.</i>	X
Strategy 5.3.2. <i>Continue to involve volunteers in a variety of refuge programs and community events to strengthen ties with the community.</i>	X
Strategy 5.3.4. <i>Work with Friends groups to develop and implement priority projects for the refuge (environmental education/interpretation programs, trail guide, Children's Outdoor Exploration Area, bookstore, etc.).</i>	X

Goals, Objectives, Strategies	Caltrans Property
<i>Strategy 5.3.5. Pursue funding for permanent full-term Information and Education Specialist and Volunteer Coordinator positions to assist in planning and implementing projects to strengthen and enlarge the volunteer services program and to provide effective training and program management of the program for a corps of 50–100 volunteers.</i>	X
<i>Objective 5.4. Visitor Services—Hunting: Improve information and outreach of existing regulations.</i>	X
<i>Strategy 5.4.1. Maintain current sport hunting program as described in the updated Humboldt Bay NWR Sports Hunting Plan, 2023.</i>	X
<i>Strategy 5.4.9. Create new maps of hunting areas to improve accuracy and quality of the hunting experience and the efficiency of the hunting system. <u>Include areas that are closed to hunting.</u></i>	X
<i>Strategy 5.4.12. Post additional boundary signs on the Eureka Slough, Jacoby Creek, and Table Bluff and Hookton Slough Units, and Egret Island and Teal Islands and Hookton Slough. Post “No Hunting” signs in areas closed to hunting, including the newly restored White Slough Unit and newly acquired Wadulh Lagoon.</i>	X
<i>Strategy 5.4.15. Increase law enforcement on the Humboldt Bay NWR, especially during waterfowl season, by contract or hiring a seasonal law enforcement officer.</i>	X
<i>Goal 6. In cooperation with tribal representatives, identify and protect tribal cultural resources on the Humboldt Bay NWR. In addition, assess and manage refuge’s more recent cultural resources and structures.</i>	X
<i>Objective 6.1. Cultural Resource Management: Create and implement a basic Cultural Resources Management capability at Humboldt Bay NWR to respond to the basic compliance requirements of Federal cultural resources legislation.</i>	X
<i>Strategy 6.1.1. Notify the Regional Office Archaeologist when site-specific projects are initiated so that appropriate resource assessments and coordination with State Historic Preservation Officer (SHPO) and the Wiyot Tribe, Bear River Band of Rohnerville Rancheria, and the Blue Lake Rancheria will occur.</i>	X
<i>Strategy 6.1.2. Consult with the Wiyot Tribe, Bear River Band of Rohnerville Rancheria, and the Blue Lake Rancheria, and the Regional Office Archaeologist on a project-by project specific basis to collect related cultural</i>	X

Goals, Objectives, Strategies	Caltrans Property
<i>resources background information and develop strategies for protection and preservation of cultural resources within refuge boundaries per Section 110 of National Historic Preservation Act.</i>	
Strategy 6.1.3. <i>Within 15 years, work with the Wiyot Tribe, Bear River Band of Rohnerville Rancheria, and the Blue Lake Rancheria, to develop a memorandum of understanding (MOU) or Cultural Resources Management Plan that addresses resource management issues and inventory, evaluation, and treatment of at-risk cultural places on the Complex.</i>	X
Strategy 6.1.4. <i>Incorporate cultural resource values, issues, and requirements into design and implementation of the other habitat, wildlife, and public-use activities and strategies conducted by the refuge.</i>	X
Strategy 6.1.5. <i>Communicate and consult with the Wiyot Tribe, Bear River Band of Rohnerville Rancheria, and the Blue Lake Rancheria, academic institutions, advocacy organizations, agencies, and the California SHPO for basic informational, compliance, research, and “government-to-government” purposes.</i>	X
Strategy 6.1.6. <i>Develop and implement a plan to survey the Humboldt Bay NWR for newly identified cultural resources, including archaeological sites and traditional cultural properties, and previously unsurveyed areas.</i>	X
Strategy 6.1.8. <i>Identify, inventory, evaluate, and nominate to the National Register sites eligible for the National Register under Criteria A-D, in consultation with the Wiyot Tribe, Bear River Band of Rohnerville Rancheria, and the Blue Lake Rancheria.</i>	X
Strategy 6.1.9. <i>Create a cultural resource layer in the refuge Geographic Information System (GIS) that aids in the identification, planning and monitoring, and interpretation of cultural sites.</i>	X
Objective 6.2. Cultural Resource Management—Education: <i>Within 5 years of CCP approval, develop, in partnership with the Wiyot Tribe, Bear River Band of Rohnerville Rancheria, the Blue Lake Rancheria, and other preservation partners, a cultural resources overview of the Humboldt Bay NWR.</i>	X
Strategy 6.2.1. <i><u>Collaborate to develop</u> interpretation and education programs and information at the Headquarters Unit <u>or other public areas, as appropriate,</u> that illustrate indigenous lifestyles and various subsistence strategies of the Wiyot Tribe, and contemporary Wiyot communities and cultural activities.</i>	X

Goals, Objectives, Strategies	Caltrans Property
Strategy 6.2.2. Consult with the Wiyot Tribe, Bear River Band of Rohnerville Rancheria, the Blue Lake Rancheria, and other stakeholders to design and implement educational materials, programs, and activities that would be used to address traditional or sacred resources.	X
Strategy 6.2.3. Update the Humboldt Bay NWR brochures and interpretive signage, as staffing and funding allow, with appropriate cultural resources information.	X
Strategy 6.2.5. Within 40 <u>15</u> years, in consultation with the Wiyot Tribe, Bear River Band of Rohnerville Rancheria, the Blue Lake Rancheria, research the ethnobotany and traditional plants and periodic-use locations on the refuge; and plan, fund, and implement restoration of ethnobotanical resources on the dunes units.	X
Strategy 6.2.6. Within 40 <u>15</u> years, in consultation with the Wiyot Tribe, Bear River Band of Rohnerville Rancheria, the Blue Lake Rancheria, conduct research on Traditional Ecological Knowledge and its contribution to habitat management on the refuge.	X
Strategy 6.2.7. Identify and evaluate cultural resources that can educate refuge users on how humans have interacted with wildlife and habitats in the past, and consult with tribes and other stakeholders on ways to use these resources to achieve educational, scientific, and traditional cultural needs.	X
Objective 6.3. Cultural Resource Management—Coordination: Meet periodically with the Wiyot Tribe, Bear River Band of Rohnerville Rancheria, Blue Lake Rancheria, and other concerned tribal groups to discuss land management and restoration activities planned for the future.	X
Strategy 6.3.1. Offer an annual meeting with the Wiyot Tribe, Bear River Band of Rohnerville Rancheria, and the Blue Lake Rancheria to review previous projects or summarize management or restoration projects and public events that are planned by the Humboldt Bay NWR for the upcoming year; whether these activities will require formal SHPO consultation.	X
Strategy 6.3.2. Work with the Wiyot Tribe, Bear River Band of Rohnerville Rancheria, and the Blue Lake Rancheria on projects to restore habitats for important native plants, and to harvest (for traditional, noncommercial purposes) native plant foods.	X

<i>Goals, Objectives, Strategies</i>	Caltrans Property
<i>Strategy 6.3.3. Review and reissue, if appropriate, any special-use permits for traditional activities, such as plant collecting for basket weaving medicinal, ceremonial, food-resources, utilitarian or artistic purposes.</i>	X
<i>Strategy 6.3.4. Develop in consultation with the appropriate tribes procedures and information required under the Native American Graves Protection and Repatriation Act.</i>	X