

**MEETING SUMMARY OF THE
ESTUARY HABITAT RESTORATION COUNCIL
NOAA Headquarters
1315 East-West Highway, Silver Spring, MD
June 12, 2013**

The meeting convened at 1:00 pm, with the following members and participants:

Council Members:

- **Mr. Samuel Rauch, Acting** Assistant Administrator for Fisheries, National Oceanic and Atmospheric Administration (NOAA)
- **Mr. Paul Cough**, Director, Oceans and Coastal Protection Division, U.S. Environmental Protection Agency (EPA)
- **Ms. Ellen Cummings** *for* Assistant for Environment, Tribal and Regulatory Affairs, Office of the Assistant Secretary of the Army (Civil Works)
- **Mr. Astor Boozer**, Acting Deputy Under Secretary, Natural Resources and Environment, U.S. Department of Agriculture *for* Ann Mills, Acting Under Secretary, Natural Resources and Environment, U.S. Department of Agriculture
- **Mr. Jeff Rupert**, Chief of the Division of Natural Resources and Conservation Planning, National Wildlife Refuge System, U.S. Fish and Wildlife Service *for* Cynthia Martinez, Acting Assistant Director, Deputy Chief of National Wildlife Refuge System

Work Group Members:

- Julia Royster, NOAA
- Ellen Cummings, U.S. Army Corps
- Noemi Mercado, EPA
- Chris Eng, USFWS
- Barbara Watkins, USFWS
- Craig Goodwin, USDA/NRCS

Other Participants:

- NOAA – Buck Sutter, Perry Gayaldo, and Julie Nygard
- Chesapeake Bay Foundation - Alexandra Hostetter
- City of Gulf Breeze - Heather Reed
- Delaware Center for Inland Bays - Eric Buehl
- Ducks Unlimited - Caroline Brouwer
- Ducks Unlimited - Jeff McCreary
- Elkhorn Slough NERR - Monique Fountain
- Janicki Environmental - Mike Wessel
- Palm Beach County Department of Environmental Resources Management - Julie Mitchell
- Pacific Northwest National Laboratory - Lara Aston
- The Nature Conservancy, Alabama - Judy Haner

1. Welcome and Introductions

Sam Rauch provided background on the meeting and asked attendees to introduce themselves.

2. Council Chair Election

NOAA nominated the U.S. Fish & Wildlife Service (FWS) to serve as Council Chair for the next three year period. FWS accepted the nomination. With no objections from the Council members, FWS was elected Chair of the Council. Mr. Rupert (FWS) assumed the duties of Chair immediately.

3. ERA Updates

The members of the interagency working group presented status updates on current workgroup priorities, including the Estuary Restoration Act, Estuary Restoration Habitat Strategy and Action Plan, and the National Ocean Policy. The Estuary Restoration Council Meeting Update is attached to this meeting summary (Attachment A). The Council requested that the schedule in the Action Plan be updated. Council members asked to review the Congressional Report prior to its official submission to the Secretary of the Army for final approval.

4. Status of Previously Funded Projects

Ellen Cummings (USACE) provided a status update of Corps funded ERA projects, updating the group on the status of the projects including project terminations. Julia Royster (NOAA) provided a similar update for the NOAA funded projects. Sam Rauch noted that it was important for the Council to understand why projects are terminated so that they can consider those factors in selecting the most viable projects in the future. There is continued concern regarding ways to reduce the likelihood of terminations and other issues delaying implementation of projects. One issue is land ownership and O&M responsibilities. The work group noted that the most recent solicitation was a major revision and did highlight several potential issues. The Corps has different requirements than the other agencies have with regard to funding projects of this type. The Council members also raised the issue of identifying additional performance metrics in addition to acres. A table providing a summary of the Status of Estuary Habitat Restoration Projects is attached to this meeting summary (Attachment B).

5. FY 2013 FFO Highlights and Review of Ranked Project List

The primary business for the meeting was the approval of a prioritized list to be recommended to Army for consideration of funding (see Attachment C). The Corps is the only agency with funds available for projects in FY13 although the other agencies have the authority to request appropriations for this program. The work group presented information on 12 projects and the Council approved that list. The Chair will send the list to Assistant Secretary of the Army (Civil Works) who will then approve projects for funding. The list contains more projects than the Corps can currently fund. The Assistant Secretary of the Army (Civil Works) will make final selection of projects to be funded. The additional approved projects provide the Corps with the ability to fund additional projects if funds became available. The Corps estimates they have funds for no more than nine of the projects on the list.

The Council was impressed with the projects on the ranked list and briefly discussed criteria used to evaluate the proposals. The work group described the criteria including ecological impact, feasibility, and cost-effectiveness.

6. Public Comment

This was a public meeting and Ducks Unlimited was represented in person and several others called in. There were several opportunities for public comment but there were none.

DECISION: The Council elected FWS as Chair for three years.

DECISION: The Council recommended the ranked 2013 project list move forward to the Secretary of the Army.

ACTION: The Work Group updated the schedule in the Action Plan.

The meeting ended at 2:30 p.m.

Attachment A:

2013 Estuary Restoration Act Update

- **Estuary Restoration Act**
 - Estuary Restoration Act appropriations were authorized from 2008 to 2012.
 - In 2013, the ACOE received an ERA appropriation of \$1 M under a CRA for 2013.
- **ERA Strategy**
 - **Purpose:** ensure a comprehensive approach to maximize benefits derived from estuary habitat restoration projects and to foster the coordination of Federal and non-Federal activities related to restoration of estuary habitat.
 - Revised in 2012 and approved by the Council in November 2012.
 - Available on agencies' websites.
- **ERA Action Plan – see Table 1 below for status of all milestones**
 - **Background Purpose of key milestones:**
 - **Minimum Data Standards:** develop standard data formats for monitoring projects, along with requirements for types of data collected and frequency of monitoring.
 - **Congressional Report:** report on federal estuary restoration performance and analytics (e.g., acres and partners), estuary restoration monitoring database, and restoration techniques.
- **National Ocean Policy**
 - ERA workgroup is engaged with the National Ocean Policy, specifically contributing to the restoration monitoring activities.
 - **Original recommendations** for *Improving the effectiveness of coastal and estuarine habitat restoration projects* included:
 - Review of existing monitoring data standards; revise and approve minimum ecological monitoring data standards for coastal and estuarine habitat restoration projects;
 - Make project information available for projects using the existing minimum monitoring standards available to the public via an estuary restoration act website; and,
 - Implement the revised ecological monitoring standards for restoration projects where project monitoring is required.
 - **Current implementation language** is review, revise, and approve minimum ecological monitoring data standards for coastal and estuarine habitat restoration projects.

Table 1 in Attachment A: ERA Action Plan Milestones with the original proposed timeline by major Strategy section are listed with their status as of June 2013

Action Plan Milestone	Timeline	Status
Implementation		
Federal Funding Opportunity	Annual	FY13 Completed
Fund Projects	Annual	FY13 Completed
Finalize Project and Monitoring Plans	Annual	FY13 Completed
Monitoring - Minimum Data Standards		
Interagency review of existing ecological parameters	Q4 FY12	Completed
Begin review of potential socio-economic parameters	Q4 FY12	Completed
Revise existing standards for ERA and non-ERA funded projects.	Q1 FY14	Working to draft revised data standards.
Convene workshop to discuss with federal and non-federal entities.	Q2 FY14	Decided to conduct after developing a draft revision based on parameters identified within the work group.
All five ERA Council agencies approve data standards for ERA and non-ERA funded projects.	Q4 FY14	On schedule
ERA Council agencies implement standards for restoration projects where implementation and biological monitoring is required.	Q2 FY15	On schedule
Project Tracking		
ERA Council agency commitments to make estuary restoration project information publicly available in a coordinated manner.	Q2 FY12	Completed
Coordinate efforts and implement a mechanism to make estuary restoration project information from agency databases available to the public.	Q1 FY15	Not completed - 2nd tier priority
Report to Congress every other year.	Q4 FY13	Anticipated September 2013

Q1 - October 1 - December 31

Q2 - January 1 - March 31

Q3 - April 1 - June 30

Q4 - July 1 - September 30

FY Funded	Agency	ERA Funds	Status	Project Name	Non-Federal Sponsor	Location	Acres	Habitat	Description
2004	USACE	\$250,000	Monitoring	Alligator Creek Addition Restoration Project, FL	Southwest Florida Water Management District	Charlotte County, FL	350	Marsh	The Southwest Florida Water Management District restored 350 acres by backfilling mosquito ditches and restoring the natural hydroperiod of the area.
2004	USACE	\$63,000	Completed	Restoration of SAV on the Seaside of Virginia's Eastern Shore, VA	Commonwealth of Virginia	Northampton County, VA	40	SAV	The Commonwealth of Virginia and Virginia Institute of Marine Science restored approximately 40 acres of SAV in lagoons along Virginia's eastern shore. Despite a sharp die-off of SAV in the Chesapeake Bay in 2003, restored SAV beds on the seaside of the eastern shore continue to thrive.
2006	USACE	\$1,000,000	Monitoring	Colorado Lagoon Restoration, CA	City of Long Beach	Los Angeles County, CA	28.9	Intertidal and upland habitat	The City of Long Beach and Friends of Colorado Lagoon will restore approximately 28 acres by removing contaminated sediment, re-contouring slopes around the Lagoon, and re-planting native plants. This project will remove non-native species and increase the amount of intertidal and upland habitat in the area, improving habitat for plant and animal species.
2006	USACE	\$645,000	Construction	Stewart's Creek, MA	Town of Barnstable	Barnstable, MA	14	Salt marsh	The Town of Barnstable will restore approximately 14 acres of salt marsh and an estuarine embayment by replacing an undersized culvert, thereby improving tidal flushing. This project will improve habitat for plant and animal species, and is also expected to improve water quality.
2006	USACE	\$113,000	Monitoring	Pelican Island NWR/Indian River Lagoon, FL	Marine Resources Council of East Florida	Brevard County, FL	47.5	Mangrove	The Marine Resources Council of East Florida restored 47.5 acres of estuarine habitat in the Indian River Lagoon by removing invasive species, such as Brazilian pepper, and planting red and white mangroves. Once the invasive species are removed, 4,500 smaller red mangroves and 300 large red and white mangroves were planted. The larger mangroves will be established within 30 to 90 days and will immediately provide habitat for aquatic species and birds.
2007	USACE	\$385,000	Construction	Fort Sheridan Coastal Habitat Restoration Project, IL	Lake County Forest Preserve District	Lake County, IL	79	Forest	The Lake County Forest Preserve District restored 74 acres of forested ravine within the Janes Ravine. This project stabilized an eroding area, helping to reduce sedimentation into Lake Michigan. It also removed point source stormwater flow, re-introduced native vegetation, and improved public access.
2007	USACE	\$660,000	Terminated	Old Place Creek Berm Removal Project, NY	NY State Department of Conservation	Staten Island, NY	15	Tidal wetland	The New York State Department of Environmental Conservation will restore approximately 25 acres of tidal wetland habitat by removing an earthen berm and restoring the tidal connection of the site. Native species will also be planted following removal of nonnative species. This project will benefit shore birds, wading birds, and waterfowl and marine and estuarine species by expanding foraging, refuge, and spawning habitat.
2007	USACE	\$124,000	Planning	Banana River Estuary Restoration Project, FL	City of Cape Canaveral	Brevard County, FL	15	Forested wetland	The City of Cape Canaveral will restore approximately 5 acres of forested wetland, one of the last natural habitat properties within the City. Non-native species removal and planting of native species will occur. This project will improve wildlife habitat and water quality.
2008	USACE	\$855,000	Construction	Half Moon Reef Restoration	The Nature Conservancy	Matagorda Bay, TX	12	Oyster	The Nature Conservancy will restore approximately 20 acres of oyster reef habitat in Matagorda Bay. This project will improve water quality and fish and invertebrate habitat. Construction consists of the strategic placement of large boulders and gravel to create multiple structures approximating 50 feet in width and about eight feet tall in about 20-25 feet of water in Matagorda Bay.
2009	USACE	\$825,000	Construction	Deadman's Island Restoration Projects, FL	The City of Gulf Breeze	Santa Rosa County, FL	16	Salt marsh and oyster	The City of Gulf Breeze is restoring approximately 16 acres of salt marsh, vegetated dune, and oyster reef habitat to help with shoreline stabilization by reducing wave energy. This project will also benefit resident and migratory shore birds and enhance fish habitat.

Status of Estuary Habitat Restoration Projects - June 2012

FY Funded	Agency	ERA Funds	Status	Project Name	Non-Federal Sponsor	Location	Acres	Habitat	Description
2009	USACE	\$480,000	Construction	Kent Island Restoration Bolinas Lagoon, CA	Marin County Open Space District, County of Marin	Marin County, CA	17	Dune	This project will restore 23 acres of tidal marsh/ecotone/coastal dune habitat on Kent Island in Bolinas Lagoon. Native dune habitat on the Pacific Coast has been affected by development and invasive plants. Project will remove invasive species and restore native vegetation, and de-anchor the island allowing it to function naturally as a flood-shoal island. Methods are yet to be determined in non-native removal and depend on the density and distribution of plants.
2009	USACE	\$625,000	Monitoring	West Goleta Slough Restoration Projects, CA	Land Trust for Santa Barbara County	Santa Barbara County, CA	7.68	Estuarine and upland habitat	. The Land Trust for Santa Barbara County will restore approximately 20 acres of estuarine and upland habitat by removing non-native species, planting native vegetation, and restoring water levels. Project will create habitat for rare plants and animals, increase the holding capacity of the wetland in flood events, and increase its ability to filter agricultural runoff.
2009	USACE	\$545,000	Monitoring	Thunder Bay Reef Habitat Restoration, MI	The State of Michigan Department of Natural Resources	Alpena County, MI	1.41	Artificial reefs	The Michigan Department of Environmental Quality built 24 artificial reefs in Lake Huron's Thunder Bay to allow recovery of reef habitat lost by the past deposition of cement kiln dust along the shoreline and lake bottom. This project will benefit lake trout which have been extirpated from the lower four Great Lakes since the 1960s. Initial monitoring found trout fry.
2009	NOAA	\$915,000	Monitoring	McAllis Point, TX	Texas General Land Office	Galveston County, TX	75	Marsh	The Texas General Land Office will restore approximately 75 acres of intertidal marsh along the north shore of West Galveston Island. This project is designed for sea level rise, and will result in recreational opportunities and help to sustain the commercial fishing industry in the Bay. Restoration activities included 75 acres of vegetated habitat mounds constructed with dredged material and transplanted <i>Spartina alterniflora</i> .
2010	NOAA	\$275,000	Construction	McDaniel Slough Tidal Restoration Expansion, CA	City of Arcata	Humboldt County, CA	45.5	Salt marsh, freshwater marsh	The McDaniel Slough Marsh Enhancement Project will restore and enhance coastal and riparian wetland habitats on the northern portion of Humboldt Bay by integrating city and state held lands. The project will restore historic natural geomorphic and biologic processes to create a self-sustaining restored tidal estuary, and enhance freshwater wetlands on the site. The project will remove barriers to fish access, deepen historic slough channels, and remove failing or obsolete levees to restore anadromous fish to McDaniel Slough/Janes Creek.
2010	NOAA	\$190,000	Monitoring	Damde Meadows Tidal Restoration - Phase II	Trustees of Reservations	Hingham, MA	15	Salt marsh	The salt marsh restoration project at World's End Reservation in Hingham, MA involved the complete removal of two undersized concrete box culverts to create day-lighted channels through a series of two dikes at the Martin's Cove end of Damde Meadows. The primary goal of the project was to improve the tidal connection between Damde Meadows and Martin's Cove, thereby restoring a 15-acre coastal wetland system to a natural tidal range salt marsh that supports wildlife habitat, fisheries, shellfish, nutrient production and export, and biodiversity. This was a two phase project. Phase I involved removing the lower culvert and was completed in August 2009. Phase II, which was completed in June 2011, consisted of removing the second culvert and constructing a bridge over the resulting channel to maintain public and emergency vehicle access.
2010	NOAA	\$100,000	Monitoring	Molokai Fishpond and Fringing Reef Restoration Project, HI	KHM	Maui County, HI	2	Beach, soft bottom, hard bottom, rocky shoreline	Ka Honua Momona proposes to remove invasive mangroves (<i>Rhizophora mangle</i>) and invasive marine algae ("gorilla ogo" ; <i>Gracilaria salicornia</i> and "prickly seaweed"; <i>Acanthophora spicifera</i>) from inside two 15th century fish ponds on fringing Molokai reef.

Status of Estuary Habitat Restoration Projects - June 2012

FY Funded	Agency	ERA Funds	Status	Project Name	Non-Federal Sponsor	Location	Acres	Habitat	Description
2010	NOAA	\$1,000,000	Monitoring	Port Susan Bay Estuary Restoration	The Nature Conservancy	Stillaguamish River, WA	150	Salt marsh	The Port Susan Bay Dike Removal Project will restore tidal inundation to approximately 150 acres of land at the mouth of the Stillaguamish River, Snohomish County, Washington. Activities will include removing of a historical dike and levee, decommissioning of drainage ditches, constructing a new levee and flood management structure, and revegetating of the levee face.
2010	USACE	\$480,000	Construction	Restoring Coastal Estuarine Habitat in Three North Carolina Estuaries	North Carolina Coastal Federation	Brunswick, Carteret, Onslow, and New Hanover Counties, NC	9.3, 1.24	Oyster, shoreline	More than nine acres of oyster patch reefs will be created in combination with establishing 1.24 acres of fringing shoreline saltmarsh habitat. This combination of restoration practices will be designed to reduce shoreline erosion caused by storm activity and rising sea levels, providing an innovative approach to managing the declining habitats in these estuaries. The results of this project will be monitored by university researchers and volunteers to document their success. The project will use loose shell and small limestone marl for the patch reefs, and oyster shell bags, limestone marl bags and oyster domes for the shoreline sills. Approximately 900 linear feet of living shoreline will be restored by planting over 45,000 marsh plants.
2011	NOAA	\$286,358	Construction & Monitoring	Habitat Restoration in Kaneohe Bay	HI Department of Land and Natural Resources	Honolulu, County	13	Coral reef	A partnership of State government, University researchers and a non-profit have worked for over 5 years to develop a multi-tiered approach to address the expanding distribution of non-native algae in Kaneohe Bay. This multi-tiered approach includes the efficient mechanical removal of algae coupled with an increase in native herbivory via outplanting of the sea urchin, <i>Tripanistes gratilla</i> . These proven techniques will aid managers in the restoration of 13 acres of habitat, which will help to save existing corals as well as create increased habitat for coral recruitment and fish habitat.
2011	NOAA	\$212,038	Construction	St. Lucie River Oyster Reef Habitat Restoration Project	County of Martin	Martin County, FL	2	Oyster	This project proposes to restore approximately 2 acres of oyster reef habitat in the middle SLE. A total of approximately 1000 yd3 of cultch material will be purchased from an aggregate supplier for construction of oyster reefs. Oyster shell will also be collected on an ongoing basis from local restaurants and seafood suppliers. Barges will be used to transport the material from the staging area to the deployment sites. Additionally, stretches of the St. Lucie Estuary will be planted as a living shoreline to increase resiliency, create habitat and reduce muck deposits from erosion. Approximately 2000 square feet of mangroves, cordgrass, and other appropriate plant species will be planted to stabilize the shoreline. Bagged oyster shell placed in the 0 to 3 foot mean low water depth range will stabilize and protect these plantings. The bagged oysters, when placed near the shoreline will reduce the impact of wave-induced erosion on the restored living shoreline.
2011	USACE	\$1,000,000	Planning	Sears Point Tidal Restoration Project	Ducks Unlimited	Near Petaluma, CA	960	Tidal marsh	Sears Point, the proposed project site, consists of approximately 960 acres of diked agricultural baylands (Figure 1). The objectives of this project are to restore estuarine habitat to the site, providing the last link to form a large continuous band of tidal marsh along the bayfront between Petaluma River and Tolay Creek, to establish a natural wetlands-uplands transition that will be resilient to climate change, and to benefit Federal Trust species as well as other at risk fish and wildlife species. A dual function flood control and habitat levee would be constructed at the northern edge of the site to protect existing infrastructure and residences.

Status of Estuary Habitat Restoration Projects - June 2012

FY Funded	Agency	ERA Funds	Status	Project Name	Non-Federal Sponsor	Location	Acres	Habitat	Description
2011	USACE	\$1,000,000	Planning	Riverside Ranch Restoration Project	Ducks Unlimited	Eureka, CA	356	Tidal marsh	Restoration of 356 acres of estuarine juvenile rearing habitat in the Salt River delta on the Riverside Ranch via two tidal breaches totaling 200-feet, approximately 5,700 linear-feet of levee lowering, approximately 22,800-linear feet of interior slough channel creation, approximately 9,060 feet of set back berm, approximately 3,500 feet of berm refurbishment, filling of approximately 10,100 linear feet of drainage ditches, marsh plain enhancement of 50-acres through re-contouring, approximately 10,000-feet of Salt River channel excavation, and revegetation of wetland and upland native plants.
2011	USACE	\$200,138	Planning	Humboldt Estuarine Complex Intertidal Habitat Restoration and Climate Change Adaptation	Ducks Unlimited	Humboldt County, CA	50	Intertidal habitat	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.
2011	USACE	\$587,000	Planning	Little Oyster Creek Sanctuary Project	North Carolina Department of Environmental and Natural Resources	Pamlico County, NC	10	Oyster	Lower Neuse River in Pamlico Sound, Pamlico County, NC, North Carolina Department of Environment and Natural Resources will restore 10 acres of unproductive soft bottom habitat, turning it into a protected oyster reef sanctuary within the estuary of the Neuse River, Pamlico Sound. The sanctuary is located as far upstream as possible to increase the resiliency of healthy oyster reef development in the face of climate change, specifically sea level rise. This 10-acre site will incorporate a new reef building technique in the state that could significantly reduce restoration costs and increase the surface area available for oyster recruitment and growth. The project will enhance the productivity of the state's primary and secondary fish nursery areas and will benefit recreationally and commercially important finfish species.
2011	USACE	\$576,000	Construction	Skokomish Estuary Restoration Phase III	Mason Conservation District	Shelton, WA	330	Freshwater Wetland	The project proposed to re-establish hydrologic connectivity of a large freshwater wetland to the estuary of the skokomish River in lower Hood Canal. Phases 1 and 2 removed dikes at the mouth of the Skokomish River, restoring inundation to 330 acres of salt marsh. Phase 3 will complement this work by removing hydrological impediments that have disrupted the historic flow of freshwater into the Skokomish estuary and Hood Canal. This will be accomplished by addressing undersized and inappropriately sites culverts associated with road prisms within the project and by restoring flows to historic channel locations
2011	NOAA	\$200,000	Planning	Green Gulch Creek Stream Restoration Project	San Francisco Zen Center	Marin County, CA	1.5	Rearing, refuge and spawning habitat; Riparian habitat	<ul style="list-style-type: none"> • Provide fish passage for adult and juvenile salmonids by removing 10 concrete grade control structures. • Create and enhance instream habitat features: pools and riffles through channel reconstruction. • Provide refugia for aquatic and riparian species by installing large wood structures, widening the floodplain, and planting diverse, dense riparian vegetation. • Improve water quality (temperature and dissolved oxygen) during low-flow season through construction of roughened riffles and cascades, deepening pools, and planting riparian trees for shade.
2011	USACE	\$999,325	Planning	Elkhorn Slough Tidal Restoration: Building Resilience with the Beneficial Reuse of Sediment	Elkhorn Slough Foundation	Monterey County, CA	21	Salt marsh	This project will add sediment to subsided historic marshes in Elkhorn Slough. The marsh will be restored through the placement of sediment from a levee capacity maintenance project along the Pajaro River. The proposed project will divert as much of that material as possible for beneficial reuse, with the acreage of restored wetlands directly proportionate to the quantity of sediment received and placed. This project will also create a 3 acre native grass buffer between a cut flower farmland to improve surface water quality by intercepting stormwater runoff.

Status of Estuary Habitat Restoration Projects - June 2012

FY Funded	Agency	ERA Funds	Status	Project Name	Spring 2013 Updates
2004	USACE	\$250,000	Monitoring	Alligator Creek Addition Restoration Project, FL	Still non-compliant with regard to monitoring
2004	USACE	\$63,000	Completed	Restoration of SAV on the Seaside of Virginia's Eastern Shore, VA	A successful project that restored more acreage than originally planned.
2006	USACE	\$1,000,000	Monitoring	Colorado Lagoon Restoration, CA	Removal of the contaminated soil and regrading of the slopes complete. Planting complete. Monitoring will start this summer.
2006	USACE	\$645,000	Construction	Stewart's Creek, MA	Construction is nearly complete. The culvert and gate are installed and the cofferdam has been removed. The contractor is working on the final project features.
2006	USACE	\$113,000	Monitoring	Pelican Island NWR/Indian River Lagoon, FL	
2007	USACE	\$385,000	Construction	Fort Sheridan Coastal Habitat Restoration Project, IL	Monitoring to begin subsequent to the end of the vegetation contract
2007	USACE	\$660,000	Terminated	Old Place Creek Berm Removal Project, NY	Terminated. Sponsor failed to resolve indemnification issue after multiple deadlines passed.
2007	USACE	\$124,000	Planning	Banana River Estuary Restoration Project, FL	Issues with the sponsor but now proceeding to finalize cost sharing documents.
2008	USACE	\$855,000	Construction	Half Moon Reef Restoration	Agreement executed and physical construction to begin in August.
2009	USACE	\$825,000	Construction	Deadman's Island Restoration Projects, FL	Had some damage from storms. Has submitted a new proposal to complete the project. The work funded by the ERA to date has been well executed. Some earlier work failed.

Status of Estuary Habitat Restoration Projects - June 2012

FY Funded	Agency	ERA Funds	Status	Project Name	Spring 2013 Updates
2009	USACE	\$480,000	Construction	Kent Island Restoration Bolinas Lagoon, CA	The project has successfully completed all environmental compliance, received approval of monitoring plan, and kicked off project construction.
2009	USACE	\$625,000	Monitoring	West Goleta Slough Restoration Projects, CA	Monitoring
2009	USACE	\$545,000	Monitoring	Thunder Bay Reef Habitat Restoration, MI	Early signs of success with project.
2009	NOAA	\$915,000	Monitoring	McAllis Point, TX	Monitoring of mounds continues through TXPWD. Repurposing \$77,000 cost-savings into similar restoration project to support a 70 acres near Bird Island cove. McAllis Point and Bird Island Cove are basically contiguous and therefore is an expansion of the McAllis Point project. These funds were going to support additional planting of 29,000 plants, but TXPWD already has funds to support this option. All other work was completed
2010	NOAA	\$275,000	Construction	McDaniel Slough Tidal Restoration Expansion, CA	This summer final construction which includes connecting the levees to Highway 255 and the levee breach will complete the construction phase of the McDaniel Slough project. In preparation for the tidal flooding associated with the tidal breach, higher elevation areas on site will be revegetated with native salt marsh vegetation to accelerate high salt marsh development. The fish monitoring is being implemented and will be for 2 more years post construction.
2010	NOAA	\$190,000	Monitoring	Damde Meadows Tidal Restoration - Phase II	Award closed August 31, 2012. Working to confirm monitoring of project has continued.
2010	NOAA	\$100,000	Monitoring	Molokai Fishpond and Fringing Reef Restoration Project, HI	Award closed August 31, 2012. Working to confirm monitoring of project has continued.

Status of Estuary Habitat Restoration Projects - June 2012

FY Funded	Agency	ERA Funds	Status	Project Name	Spring 2013 Updates
2010	NOAA	\$1,000,000	Monitoring	Port Susan Bay Estuary Restoration	<p>Fish monitoring – There have been three post-restoration sampling events inside the restored area since February. The salmon catch has been wild juvenile Chinook = 19, hatchery Chinook = 1, 0+ Coho = 7, and Chum = 1. Sampling inside the restored area is challenging due to a lot of woody debris and fluctuating water depth. Despite challenging fish sampling, it's great that wood is moving into the site!</p> <p>The first post restoration invertebrate and soil samples were collected in May and June 2013. These samples will be analyzed over the summer and results available in October 2013.</p> <p>Sediment Elevation Tables (SETs) were monitored in May 2013 and results will be available this summer.</p> <p>TNC is working on establishing a partnership with Western Washington University so that Port Susan Bay can serve as a long-term research site for the University and the results and research conducted at Port Susan Bay can advance the current knowledge about estuary science.</p> <p>Monitoring planned for later this summer includes: analysis of the habitat area and communities in the restored area and the north marsh, monitoring the elevation of the marsh, and channel development.</p> <p>In April 2013, TNC staff and construction managers successfully negotiated a construction claim from Northwest Construction to the mutual satisfaction of both parties, and within the current project budget. Now we can focus on finalizing construction costs for the project.</p>
2010	USACE	\$480,000	Construction	Restoring Coastal Estuarine Habitat in Three North Carolina Estuaries	Locations of the restoration were modified but now proceeding with construction.
2011	NOAA	\$286,358	Construction & Monitoring	Habitat Restoration in Kaneohe Bay	Re-remove algae from Reef 29 is scheduled for August-September and stocked with urchins. Three of original target reefs have had algae removed (26, 27, and 28). Urchins have only been added to two reefs, since there were not enough urchins in the hatchery to stock all 3 reefs at the desired density of 2/m2. Monitoring of fixed permanent sites (fish, benthic, and echinoderm) and random benthic quads have been ongoing. Urchin population assessments on reef 26 and 27 were conducted January and March of 2013. After September, the project will maintain urchin density and monitoring through 2017 when award ends.
2011	NOAA	\$212,038	Construction	St. Lucie River Oyster Reef Habitat Restoration Project	<p>Between April 23 and May 6 we restored approximately 4.5 acres of oyster reef habitat on the south side of the St. Lucie Estuary using leveraged County funds. Living shoreline work is ongoing and expected to be complete by the Fall. Monitoring efforts will begin this summer and continue for five years. 643 hours, during 4 days, of volunteer time and grant funds have been expended on the living shoreline component of the project. 1, 115 square feet of reef has been constructed using bagged oyster shell and Reef Balls.</p> <p>Updated Timeline: Commencement of monitoring: Spring 2013 Completion of Living Shoreline: Fall 2013</p>
2011	USACE	\$1,000,000	Planning	Sears Point Tidal Restoration Project	Continuing issues -- new wrinkle possible change in land ownership status as the state may not want the land.

Status of Estuary Habitat Restoration Projects - June 2012

FY Funded	Agency	ERA Funds	Status	Project Name	Spring 2013 Updates
2011	USACE	\$1,000,000	Planning	Riverside Ranch Restoration Project	Cooperative Agreement (CA) execution pending real estate resolution with California DFW and approval of sponsor's requested modifications to CA Standard Terms&Conditions.
2011	USACE	\$200,138	Planning	Humboldt Estuarine Complex Intertidal Habitat Restoration and Climate Change Adaptation	Original staff to execute this project no longer available . The sponsor Ducks Unlimited is also working to resolve real estate issues.
2011	USACE	\$587,000	Planning	Little Oyster Creek Sanctuary Project	Still working to finalize cooperative agreement package.
2011	USACE	\$576,000	Construction	Skokomish Estuary Restoration Phase III	Cooperative Agreement executed in February. Construction should begin this summer.
2011	NOAA	\$200,000	Planning	Green Gulch Creek Stream Restoration Project	This project received \$949,000 from California Department of Fish and Wildlife's Fisheries Restoration Grant Program and is scheduled to go to construction this summer for Phase I. Spring Vally bypass still needs \$145,000 for construction in 2014.
2011	USACE	\$999,325	Planning	Elkhorn Slough Tidal Restoration: Building Resilience with the Beneficial Reuse of Sediment	Cooperative Agreement (CA) execution pending real estate resolution with land owner (California Department of Wildlife (DFW)). District is working to determine if CDW will agree to language in CA and Standard Terms&Conditions

Attachment C

2013 Recommended Project List					
Rank	Project Title	Applicant Name	State	Acreage and Habitats	ERA Request
1	Grassy Flats Estuarine Habitat Restoration Project	Palm Beach County Board of County Commissioners	FL	19.8 seagrass, 0.3 mangrove, 1.1 tidal marsh, 0.3 tidal flat and 0.6 oyster reef	\$842,000
2	Humboldt Bay Invasive Species eradication	Humboldt Bay Harbor, Recreation and Conservation District	CA	80 tidal marsh	\$299,000
3	Eelgrass Restoration in Puget Sound	Washington State Department of Natural Resources	WA	3,700 subtidal	\$1,000,000
4	The Cedar Beach Creek Habitat Restoration Demonstration Project: Beneficial Re-Use of Dredge Material, Submerged Aquatic Vegetation Planting, and Oyster Reef Establishment.	Cornell Cooperative Extension of Suffolk County	NY	19.5 salt marsh, 1.7 seagrass meadow, and 3.0 open water	\$410,904
5	Oyster Restoration for Ecosystem Services and Fish Habitat in Great Bay Estuary, NH	The Nature Conservancy	NH	10 oyster reef	\$494,275
6	Restoration of historically degraded eelgrass and bay scallops to the coastal bays of Virginia	Virginia Institute of Marine Science, College of William and Mary	VA	50 eelgrass	\$728,696
7	Community-based Restoration of Eelgrass in Frenchman Bay	Mount Desert Island Biological Laboratory	ME	214 eelgrass	\$238,847
8	St. Lucie River Oyster Reef Habitat Restoration Project	Martin County Board of County Commissioners	FL	2 oyster reefs	\$205,240
9	Deadman's Island Restoration Fish Habitat Breakwater Project	The City of Gulf Breeze	FL	3 salt marsh, 1 dune, 5 water column, 2 soft bottom, and 10 upland	\$640,000
10	Farm Pond Restoration	Town of Oak Bluffs	MA	15 salt marsh and 35 salt pond	\$1,000,000
11	Middle Island Restoratoion /Massey's Ditch Beneficial Re-use	Delaware Center for the Inland Bays, Inc	DE	5 salt marsh and 5 upper island habitat	\$1,000,000
12	Round Hill Salt Marsh Restoration Project Dartmouth, Massachusetts	Town of Dartmouth	MA	11.6 salt marsh	\$1,000,000