National Estuaries Restoration Inventory

Inventory Fields

OMB Approval No. 0648-0479

Expires 09/30/2009

Please answer the following questions for your restoration project. For assistance on any of the fields, please see the Inventory Help available at neri.noaa.gov/help.
*(*required field)*

GENERAL INFORMATION

What is the name of this project? *

Note: Name should be a short, descriptive title that includes the specific location of the project and type of restoration being implemented.

_____

What type of project is this? *

__ Funded under the Estuary Restoration Act (ERA)
__ Compensatory (required by state or federal law)
__ All other restoration projects.

1. Provide a topic sentence summarizing this project. *

_____
_____
_____
_____
_____

2. Does this project include monitoring to gauge the success of restoration efforts? *

__ Yes
__ No

3. Does this project's monitoring plan meet ERA Council Monitoring Standards? *

__ Yes
__ No

4. If monitoring data are available on the web, please provide a URL (web address).

_____

5. What is the status of this project? * (Select One):

__ Planning Stage
__ Implementation Stage
__ Implementation Complete
__ Project Terminated

6. Provide the dates for each stage of this project as it occurs. *

Note: For projects in the planning stage, provide estimated implementation stage start date.

Actual implementation start date: _____ (MM/YYYY)
Implementation completion date: _____ (MM/YYYY)

***Questions for ERA-funded projects only: ***

7. What is the size of the area which was/will be directly manipulated?

_____ (Acres)

8. What is the overall size of the area being monitored?

_____ (Acres)

9. How were the measurements in questions 6 & 7 obtained (e.g. aerial photography, GIS, land surveys, etc)?

_____

_____

10. Provide the name of project's non-federal sponsor.

_____

11. Provide the name of the lead federal agency. Select One:

__ Army Corps of Engineers (ACE)
__ National Oceanic and Atmospheric Administration (NOAA)
__ U.S. Department of Agriculture (USDA)
__ U.S. Environmental Protection Agency (EPA)
__ U.S. Fish and Wildlife Service (FWS)
__ Department of Transportation (DOT)

12. Provide the date of the ERA funding agreement.

_____ (MM/YYYY)

13. Has this project qualified as an innovative technology project as defined by the Council's Strategy?

__ Yes
__ No

If yes, please briefly describe the innovative technology.

_____

_____

_____

_____

_____

14. Provide the ERA project number. _____

PROJECT ABSTRACT *

CONTACT INFORMATION

Provide information for up to two primary project contacts.

NOTE: Contact information may be displayed on-line in project queries and reports. If you do not wish to share your information, please leave the field blank. If you are adding another person to the contact list, make sure they are aware that their information may be available on-line."

1. Information for Contact 1*

First Name: _____ Last Name: _____

Position Title: _____

Office: _____

Address 1: _____

Address 2: _____

City: _____ State/Territory/Province: _____ Zip Code: _____

Phone: _____ Fax: _____

E-mail: _____

Agency/organization/project Web site address: _____

2. Information for Contact 2

First Name: _____ Last Name: _____

Position Title: _____

Office: _____

Address 1: _____

Address 2: _____

City: _____ State/Territory/Province: _____ Zip Code: _____

Phone: _____ Fax: _____

E-mail: _____

Agency/organization/project Web site address: _____

GEOGRAPHIC LOCATION

1. Where is this project located?

State/Territory/Province: *_____

County/Parish: *_____

City: *_____

Tribe: _____

Region* (see map in Help page):_____

Zip Code (+4 if known): _____

USGS 8-digit HUC: _____

Latitude/Longitude (center of project site in decimal degrees to a minimum of four decimal points):

X coordinate* (longitude)_____

Y coordinate* (latitude)_____

USGS Topographic Quadrangle:_____

Congressional District: *_____

2. What method was used to obtain the latitude and longitude for the project site (e.g. GPS, Topographic map, website)? If known, please also provide the datum.

_____

_____

3a. Is there a GIS data layer (polygon) showing the boundaries of the area (to be) restored?

__ Yes __ No

3b. If yes and GIS contact is not listed as the primary project contact, please provide:

Contact first name _____ Contact last name _____

Contact phone number _____ Contact e-mail _____

PROJECT BENEFITS

Please provide information on this project's benefits.

1. Project Benefits* (see Table 4)	**2. Description of benefit**	**3. If implemented, has this benefit been achieved?**	**4. Comments**
		__ Yes __ No __ Not yet known	
		__ Yes __ No __ Not yet known	
		__ Yes __ No __ Not yet known	
		__ Yes __ No __ Not yet known	

HABITAT TYPES AND ACREAGE RESTORED

Please provide information on the habitat types which have been restored and/or will be restored by this project. Since a given project may restore multiple habitat types, please provide information for each habitat type restored.

Habitat types and acreage restored:

1. Habitat Type Restored* (see Table 1) [1]	**2. Tidal influence of habitat type:**	**3. Specifically describe this habitat type** (e.g. comments on tidal influence, photic/aphotic, location in estuary, etc.)	**4. Estimated acreage to be restored: ***	**For acres already restored, indicate how many acres were:**				
				5. Restored*			**6. Benefited** (not counted toward million acre goal)	
				Created	**Re-established**	**Rehabil-itated**	**Enhanced [2]**	**Protected [2]**
	__ subtidal __ intertidal __ supratidal/spray zone __ not applicable							
	__ subtidal __ intertidal __ supratidal/spray zone __ not applicable							
	__ subtidal __ intertidal __ supratidal/spray zone __ not applicable							
	__ subtidal __ intertidal __ supratidal/spray zone __ not applicable							

NOTES:

[1] For projects providing fish passage, please provide acreage information for habitat actually restored (e.g. via stream channel, restructuring, placement of woody debris, best management practices, etc.), AND for entire stream area opened to fish migration (this information can be provided at the end of this section).

[2] Acres reported in the "Enhanced" and “Protected” categories should not duplicate acres reported in the "Restored" category. If the same project acreage has been enhanced or protected as well as restored, report those acres only in the "Restored" category.

7. What method (e.g. aerial photography, GIS, land surveys) was used to determine the number of acres reported above as created, re-established, rehabilitated, enhanced and/or protected?

_____

_____

*****In-Stream projects only*****

8. If this project provided fish passage, how many stream miles were opened to anadromous fish?

_____ (Miles)

9. For the stream miles reported in #8 above, please provide an estimate of the acres (based on surface area) made accessible to anadromous fish.

_____ (Acres)

RESTORATION TECHNIQUES

Please list the restoration techniques used in this project.

1. Restoration technique(s)* (see Table 2)	**2. Description of Technique** (e.g. materials used, plant spacing)	**3. Success of this technique**	**4. Comments on success**
		__ Very successful __ Somewhat successful __ Not successful __ Not yet known	
		__ Very successful __ Somewhat successful __ Not successful __ Not yet known	
		__ Very successful __ Somewhat successful __ Not successful __ Not yet known	
		__ Very successful __ Somewhat successful __ Not successful __ Not yet known	

MONITORING AND SUCCESS CRITERIA

Please list the parameters and success criteria that were used in monitoring this restoration project.

1. Monitoring Parameter* (see Table 3)	**2. Description** (e.g. methods, frequency, etc.)	**3. Monitoring start date** (MM/YYYY)	**4. Monitoring end date** (MM/YYYY)	**5. Quantitative Success Criteria** (e.g. water depth > x for x hours/day)	**6. Have the success criteria been met?**	**7. Comments on success criteria**
					__ Not yet known __ All __ Some __ None	
					__ Not yet known __ All __ Some __ None	
					__ Not yet known __ All __ Some __ None	
					__ Not yet known __ All __ Some __ None	

REGIONAL RESTORATION PLANS

If this project is being carried out in support of an existing regional restoration plan, please provide the following plan information:

1. Plan Name	**2. Lead Organizations**	**3. Type of Plan** (select one)	**4. Date** (MM/YYYY)	**5. Plan URL**
		_ Business/industry _ Federal _ Local government _ Multistate/regional _ Nonprofit _ State/territory/ province _ Other		
		_ Business/industry _ Federal _ Local government _ Multistate/regional _ Nonprofit _ State/territory/ province _ Other		

BUDGET INFORMATION

1. Provide the original proposed project cost estimate.

_____

2. Of the total cost estimate, how much will go toward project monitoring?

_____

3. List amount(s) for all applicable funding sources:

Federal		**Non-Federal**	
$	Cash	$	Cash
$	In-kind	$	In-kind
$	Lands, easements, etc.	$	Lands, easements, etc.

4. If desired, provide additional information on the project budget below (e.g., operations and maintenance costs, specifics on in-kind contributions, etc.):

_____

_____

*****Question for ERA-funded projects only: *****

5. If project implementation is complete, provide the total actual cost (planning and implementation only) for this project.

_____

PARTNER INFORMATION

Add the following information for project partners:

1. Project Partner*	2. Type of Partner * (select one)	3. Partner web site	4. Additional information for partner
	_ Federal _ State/Territory/Province _ Local Government _ Tribal _ Non-profit _ Academic _ Business/Industry _ Private Citizen		
	_ Federal _ State/Territory/Province _ Local Government _ Tribal _ Non-profit _ Academic _ Business/Industry _ Private Citizen		
	_ Federal _ State/Territory/Province _ Local Government _ Tribal _ Non-profit _ Academic _ Business/Industry _ Private Citizen		
	_ Federal _ State/Territory/Province _ Local Government _ Tribal _ Non-profit _ Academic _ Business/Industry _ Private Citizen		

PROJECT PHOTOS

You may upload up to 3 pictures of your restoration project to the National Estuaries Restoration Inventory. These photos will be used in on-line project profiles that will appear on the NERI web site once your project has been approved. For each photo, please provide the following information:

1. Photo File Name	2. Photo Caption	3. Credit	4. Date of Photo (MM/YYYY)

NOTICE

Responses to this collection are required of grant recipients to support the Estuary Restoration Act. Collection of estuary habitat restoration project information will be undertaken in order to populate a restoration project inventory mandated by the Estuary Restoration Act of 2000. The inventory is intended to provide information to improve restoration methods, provide the basis for required reports to Congress, and track estuary habitat acreage restored. Estuary habitat restoration project information will be submitted by habitat restoration project managers through an interactive web site, and will be accessible to the public via Internet for data queries and project reports. Responses to this information collection are required to retain funding provided by the Estuary Restoration Act and optional for projects that are not funded through the ERA but meet project requirements for the National Estuaries Restoration Inventory. Confidentiality will not be maintained – the information will be available to the public. Public reporting burden for this collection of information is estimated to average four hours for new responses and two hours to update existing responses in the inventory, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspects of this collection of information, including suggestions for reducing this burden, to the NOAA Fisheries Office of Habitat Conservation, Restoration Division, F/HC3, 1315 East West Highway, Silver Spring, MD 20910.

Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to penalty for failure to comply with, a collection of information subject to the requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.

The information collected will be reviewed for compliance with the NOAA Section 515 Guidelines established in response to the Treasury and General Government Appropriations Act, and certified before dissemination.

National Estuaries Restoration Inventory
Table 1: Habitat Types

Habitat Category	Habitat Type
WETLAND	Forested Wetland
WETLAND	Freshwater Marsh
WETLAND	Mangrove
WETLAND	Salt Marsh
WETLAND	Shrub Swamp (non-mangrove)
UPLAND	Beach
UPLAND	Dune
UPLAND	Maritime Forest
UPLAND	Rocky Shoreline
UPLAND	Upland
SUBMERGED	Coral Reef
SUBMERGED	Hard Bottom
SUBMERGED	Kelp
SUBMERGED	Oyster Reef/Shell bottom
SUBMERGED	Pond
SUBMERGED	Soft Bottom/Mud
SUBMERGED	Soft Bottom/Sand
SUBMERGED	Submerged Aquatic Vegetation
SUBMERGED	Water Column
RIVERINE	In-Stream
RIVERINE	Riparian Zone (non-wetland)

National Estuaries Restoration Inventory
Table 2: Restoration Techniques

Construction
native plant nursery construction
reef construction: artificial materials
reef construction: natural materials
stream pool construction
terracing

Fauna
bird habitat enhancement
coral reattachment
coral stabilization
coral transplant
fish hatchery construction
fish passage
fish exclusion devices
stock enhancement
disease control: fauna
invasives removal: fauna
oyster gardening
species reintroduction (non-plant)

Hydrological Manipulation
berm/dike modification (including replacement)
berm/dike removal
bulkhead removal
culvert modification (including replacement)
culvert removal
dam modification (including replacement)
dam removal
stream channel rehabilitation/creation
stream flow modification
weir construction
weir removal
tide gate installation
tide gate removal
tide gate modification (including replacement)
storm water/runoff controls

Physical/Chemical Manipulation
beach nourishment
contaminant removal/remediation
daylighting
debris removal
erosion control
fill removal
large woody debris/structure placement
nutrient management
placement of dredge material
prescribed burn
substrate modification

Protection
fencing/netting
land acquisition
signage
water rights acquisition

Vegetation
planting
disease control: vegetation
invasives removal: vegetation

National Estuaries Restoration Inventory
Table 3: Monitoring Parameters

Physical Characteristics
Channel characteristics
Hydrology
Light penetration/secchi
Temperature
Topography/Geomorphology
Turbidity
Pool/riffle ratio

Water Column Characteristics
Chlorophyll concentration in water
Dissolved Oxygen
Fecal coliforms
Nitrogen
Nutrient cycling
Phosphorus
Silicon
pH
Salinity
Toxics

Soil and Substrate Characteristics
Bulk density
Moisture levels and drainage
Nitrogen (pore water)
Nutrient cycling
Phosphorus (pore water)
Silicon
Organic content
pH (pore water)
Salinity (pore water)
Sediment texture
Sedimentation rate and quality

Vegetation
Abundance
Composition
Basal area
Biomass
Canopy areal extent and structure
Density
Diversity
Edge to area ratio
Herbivory/disease
Litter fall
Growth rate
Percent cover
Productivity rate
Ratio of vegetation to open water
Recruitment
Survival
Woody debris

Amphibians
Abundance
Biomass
Density
Disease
Distribution
Diversity
Growth
Population age composition
Predation
Recruitment
Size
Survival

Birds
Abundance
Biomass
Density
Disease
Distribution
Diversity
Growth
Population age composition
Predation
Recruitment
Size
Survival

Fish
Abundance
Biomass
Density
Disease
Distribution
Diversity
Growth
Population age composition
Predation
Recruitment
Size
Survival

Invasive Species (Fauna)
Abundance
Biomass
Density
Disease
Distribution
Diversity
Growth
Population age composition
Predation
Recruitment
Size
Survival

Invasive Species (Vegetation)
Abundance
Biomass
Distribution
Growth
Population age composition
Recruitment
Size

Invertebrates
Abundance
Biomass
Density
Disease
Distribution
Diversity
Growth
Population age composition
Predation
Recruitment
Size
Survival

Mammals
Abundance
Biomass
Density
Disease
Distribution
Diversity
Growth
Population age composition
Predation
Recruitment
Size
Survival

Mixed Assemblage
Abundance
Biomass
Density
Disease
Distribution
Diversity
Growth
Population age composition
Predation
Recruitment
Size
Survival

Reptiles
Abundance
Biomass
Density
Disease
Distribution
Diversity
Growth
Population age composition
Predation
Recruitment
Size
Survival

Other
Debris
Qualitative assessment

National Estuaries Restoration Inventory
Table 4: Project Benefits

Benefits
improve/provide habitat for migratory birds
improve/provide habitat for fish/shellfish
improve/provide habitat for Threatened & Endangered species
improve/provide habitat for other wildlife (general)
wildlife corridors/benefit to nearby habitat areas
improved water quality
increased water quantity
improve/restore natural hydrology
erosion control
flood control
increase/improve recreational opportunities
community revitalization/citizen participation
compensation for injuries to natural resources