Please answer the following questions for your restoration project. For assistance on any of the fields, please see the Inventory Help available at <u>neri.noaa.gov</u>.

## GENERAL INFORMATION

# What is the name of this project?

## What type of project is this?

- \_\_\_\_ Funded under the Estuary Restoration Act (ERA)
- \_\_\_ Compensatory (required by state or federal law)
- \_\_\_ All other 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	pro	ject?	Select	One:
----	------	----	-----	--------	----	------	-----	-------	--------	------

\_\_\_ Planning Stage

Implementation Stage

\_\_\_ Implementation Complete

Project Terminated

6a. 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.

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

6b. If the project was terminated **before implementation was complete**, provide date of termination.

\_\_\_\_\_ (MM/YYYY)

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)?

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

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.

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 add	ress:
2. Information for Contact 2	
First Name:	Last Name:
Position Title:	
Office:	
Address 1:	
Address 2:	
	State/Territory/Province: Zip Code:
Phone:	_ Fax:
E-mail:	
Agency/organization/project Web site add	ress:

#### **GEOGRAPHIC LOCATION**

1. Where is this pro	oject located?						
State/Territory	//Province:	Latitude/Longitud	de (center of project site in decimal				
County/Parish:		C C	m of four decimal points):				
City:			(longitude)				
Tribe:			(latitude)				
Region (see mar	p in Help page):	USGS Topograph	ic Quadrangle:				
<b>C</b>	known):	Congressional Di	strict:				
·	IUC:						
3a. Is there a GIS a	data layer (polygon) showin No	ng the boundaries of	the area (to be) restored?				
3b. If yes and GIS	contact is not listed as the p	primary project conta	act, please provide:				
Contact first name	Con	itact last name					
Contact phone num	nber Con	ntact e-mail					
PROJECT BENEFITS							
Please provide info	rmation on this project's be	nefits.					
1. Project Benefits (see Table 4)	2. Description of benefit	3. If implemented, has this benefit been achieved?	4. Comments				

#### 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.

		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:				
1. Habitat Type Restored (see Table 1) <sup>1</sup>	2. Tidal influence of habitat type:			5. Restored			6. Benefited (not counted toward million acre goal)	
				Created	Re- establish ed	Rehabil- itated	Enhanced <sup>2</sup>	Protected <sup>2</sup>
	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							

## Habitat types and acreage restored:

## NOTES:

<sup>1</sup> 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).

<sup>2</sup> 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**

For each of the habitats listed above, please add restoration techniques used to restore each habitat type. Since a given project may restore multiple habitat types, please provide information on restoration techniques for each habitat type restored.

Habitat Type Restored (from list above)	1. Restoration technique used to restore this habitat (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	
			<ul> <li>Very successful</li> <li>Somewhat successful</li> <li>Not successful</li> <li>Not yet known</li> </ul>	
			<ul> <li>Very successful</li> <li>Somewhat successful</li> <li>Not successful</li> <li>Not yet known</li> </ul>	
			Very successful Somewhat successful Not successful Not yet known	

## MONITORING AND SUCCESS CRITERIA

For each of the habitat types listed above, please list the parameters that were used to monitor each habitat type. Since a given project may restore multiple habitat types, please provide monitoring and success information for each habitat type restored.

# Habitat Type Restored from above:

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	

NOTE: This section must be repeated for each habitat type restored listed above.

## 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		
		_ Business/industry _ Federal _ Local government _ Multistate/regional _ Nonprofit _ State/territory/ province _ Other		

## BUDGET INFORMATION

1. Provide the original proposed project cost estimate (planning and implementation only).

2. Provide the total cost estimate for project monitoring.

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

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

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

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

#### PARTNER INFORMATION

1. Project Partner	2. Type of Partner (select one)	3. Web site URL for partner	4. Partner Roles (select up to three)	5. Additional information for partner
	<ul> <li>Federal</li> <li>State</li> <li>Local</li> <li>Non-profit</li> <li>Business</li> <li>Tribal</li> <li>Private citizen</li> </ul>		<ul> <li>Planning</li> <li>Technical assistance</li> <li>Project implementation</li> <li>Monitoring</li> <li>Funding</li> <li>Lands, easement, etc.</li> <li>Other (describe)</li> </ul>	
	Federal State Local Non-profit Business Tribal Private citizen		<ul> <li>Planning</li> <li>Technical assistance</li> <li>Project implementation</li> <li>Monitoring</li> <li>Funding</li> <li>Lands, easement, etc.</li> <li>Other (describe)</li> </ul>	
	Federal State Local Non-profit Business Tribal Private citizen		<ul> <li>Planning</li> <li>Technical assistance</li> <li>Project implementation</li> <li>Monitoring</li> <li>Funding</li> <li>Lands, easement, etc.</li> <li>Other (describe)</li> </ul>	
	Federal State Local Non-profit Business Tribal Private citizen		<ul> <li>Planning</li> <li>Technical assistance</li> <li>Project implementation</li> <li>Monitoring</li> <li>Funding</li> <li>Lands, easement, etc.</li> <li>Other (describe)</li> </ul>	

# Add the following information for project partners:

#### 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.

Table 1: Habitat Types

ID	NERI Habitat
1	Beach
2	Coral Reef
3	Dune
4	Forested Wetland
5	Freshwater Marsh
6	Hard Bottom
7	In-Stream
8	Kelp
9	Mangrove
10	Maritime Forest
11	Oyster Reef/Shell bottom
12	Pond
13	Riparian Zone (non-wetland)
14	Rocky Shoreline
15	Salt Marsh
16	Shrub Swamp (non-mangrove)
17	Soft Bottom/Mud
18	Soft Bottom/Sand
19	Submerged Aquatic Vegetation
20	Upland
21	Water Column

Last updated 3/02/04

# Table 2: Restoration Techniques by Habitat Type

Techniques by Habitat Type	and the second se	too de	Dun.	tores	Field Welland	Herri - Marsh	10.00 Martin	<sup>uncean</sup> te <sub>el</sub>	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Marin.	Orac Forest	Porce Reel Shell.	Ribar.	Rock.	Salt , Shoreline	Shuild Shuild	Son Suamp Inc.	Soft Denning Dengo	Subr Subr	Uplan Aluan	Wates	Coum
Construction		Í														ĺ						
native plant nursery construction			х	х	х		х	x	x	x		х	х		х	х			х	х		
reef construction: artificial materials		x				х	х				х	х							х		х	
reef construction: natural materials		x				х	х				х	х							х		х	
stream pool construction							х															
terracing					х										х							
Fauna																						
bird habitat enhancement	х		х	х	х					x			х	х	х	х				х		
coral reattachment		x																				
coral stabilization		x																				
coral transplant		x																				
fish hatchery construction							х					х									х	
fish passage					х		х					х			х							
fish exclusion devices					х		х					х			х							
stock enhancement							х					х									х	
disease control: fauna	х	x	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
invasives removal: fauna	х	x	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
oyster gardening											х											
species reintroduction (non-plant)	х	x	х	х	х	х	х	x	х	х	х	х	х	х	х	х	х	х	х	х	х	
Hydrological manipulation																						
berm/dike modification (including replacement)				х	х		х		x			х	x		х	х	х	х	х			
berm/dike removal				x	x		x		x			x	x		x	x	x	x	x			
bulkhead removal				x	x		x		x			x	x		x	x	x	x	x			
culvert modification (including replacement)				x	x		x		x			x	x		x	x	x	x	x			
culvert removal				x	x		x		x			x	x		x	x	x	x	x			
dam modification (including replacement)				х	х		х		х			х	х		х	x						
dam removal				х	х		х		х			х	х		х	х						
stream channel rehabilitation/creation				х	х		х		х			х	х		х	х			х			
stream flow modification				х	х		x		х			x	х		х	х	x	х	х			
weir construction				х	х		х		х			х			х	х			х			
weir removal				х	х		х		х			х			х	х			х			
tide gate installation				х	х		х		х			х			х	х	х	х	х			
tide gate removal				х	х		х		х			х			х	х	х	х	х			
	_				_	· · · · ·	-	•	-		-				-		-	•				

Techniques by Habitat Type	Rep.	Solution of the second se	Dun.		Fiest Welland	Harrington Marice	10.00 Dation	ter,	Man	Marie	Oser Forest	Ponci Reef Shell,	Rios.	Rout Cone Inc.	Sett , Storetine	Shiris	Soi, Suamo Inc	Son Connuction	Sup.	Upper Aquest	Ulater	Column
tide gate modification (including replacement)				х	х		х		х			х			х	х	х	х	х			
storm water/runoff controls		х		х	х		х		х		х	х	х		х	х	х	х	х	х	х	
Physical/Chemical Manipulation																						
beach nourishment	х		х																			
contaminant removal/remediation	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
daylighting							х															
debris removal	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
erosion control	х	х	х	х	х		х		х	х	х	х	х	х	х	х			х	х	х	
fill removal				х	х	х	х		х			х	х		х	х	х	х	х		х	
large woody debris/structure placement							х															
nutrient management		х	Х	х	Х		х	х	х	х	х	х	Х		Х	х	х	х	Х	х	х	
placement of dredge material	х		х	х	х		х		х	х	х	х	х		х	х	х	х	х	х		
prescribed burn			х	х	х				х	х		х	х		х	х				х		
substrate modification	х	х	x	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х		
Protection																						
fencing/netting	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
land acquisition	х		х	х	х	х	х		х	х	х	х	х	х	х	х	х	х	х	х	х	
signage	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
water rights acquisition							х					х									х	
Vegetation																						
planting			х	х	х			х	х	х	х	х	х		х	х			х	х		
disease control: vegetation		х	х	х	х			х	х	х	х	х	х		х	х			х	х	х	
invasives removal: vegetation		х	х	х	х		х	х	х	х	х	х	х		х	х	х	х	х	х	х	

#### Table 3: Habitat Type and Monitoring Parameter Matrix

																		Last	t upda	ted 05	/27/04	
Physical Characteristics	- AN	ST CS	non put	ro ro	Not the second s	and the second	and a start and a start a star	ten	R 18	SOO NO	tore of	20 <sup>4</sup>	on portor	in Tore	the state of the s	and	UP SUBSTIC	Boron and Contraction	Botoni Stand	and stores in	all	COLUMN COLUMN
Channel characteristics							х															
Hydrology		х		х	х	х	х	х	х		х	х	х	х	х	х	х	х	х			
Light penetration/secchi		х		х	х	х	х	х	х		х	х	х	х	х	х	х	х	х		х	
Temperature		х		х	х	х	х	х	х		х	х		х	х	х	х	х	х		х	
Topography/Geomorphology	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х		
Turbidity		х		х	х	х	х	х	х		х	х		х	х	х	х	х	х		х	
Pool/riffle ratio							х															]

Water Column Characteristics	***	ST Co	de d	en la	Contraction of the second seco	and House House	abit for the second	Lee Contraction of the second	R HE	noo ve	time of	AL CO	Stellow 2015	and Lose	Storman Store	NO CHI	CS AND SOUTH	Botonia Contraction	nud stand	and a started by the	ALL ALL	CO DO
Chlorophyll concentration in water		x		x	х	х	х	х	x		x	x			x	х	х	x	x		x	
Dissolved Oxygen		х		х	х	х	х	х	х		х	х			х	х	х	х	х		х	
Fecal coliforms		х		х	х	х	х	х	х		х	х			х	х	х	x	х		х	
Nitrogen		х		х	х	х	х	х	х		х	х			х	х	х	х	х		х	
Nutrient cycling		х		х	х	х	х	х	х		х	х			х	х	х	х	х		х	
Phosphorus		х		х	х	х	х	х	х		х	х			х	х	х	х	х		х	
Silicon		х		х	х	х	х	х	х		х	х			х	х	х	х	х		х	
рН		х		х	х	х	х	х	х		х	х			х	х	х	х	х		х	
Salinity		х		х	х	х	х	х	х		х	х			х	х	х	х	х		х	
Toxics		х		х	х	х	х	х	х	х	х	х			х	х	х	х	х		х	

Soil and Substrate Characteristics	*	No. Co	no con con	100 100	Non Contraction of the second	and Hander	d Bound	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	R Je	1.1500 LINE	time tor	12 12 12 12 12 12 12 12 12 12 12 12 12 1	sel por	and Dates	Connet Con	LINGS CT	South State	Boron Co	Bound Strange	and and a sol	all	CO COULUNA CONTRACTOR
Bulk density				х					х							х						
Moisture levels and drainage				х					х				х			х						
Nitrogen (pore water)	х		х	х	х	х	х	х	х	х	х	х	х		х	х	х	х	х	х		
Nutrient cycling	х		х	х	х	х	х	х	х	х	х	х	х		х	х	х	х	х	х		
Phosphorus (pore water)	х		х	х	х	х	х	х	х	х	х	х	х		х	х	х	х	х	х		1
Silicon	х											х										1
Organic content	х		х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х		1
pH (pore water)	х									х		х	х							х		
Salinity (pore water)					х					х		х	х		х					х		
Sediment texture	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х		1
Sedimentation rate and quality	х	x	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х		

Vegetation	**	Not Co	te page	en ro	HI HI HI	lord Hospinger	d bourse	Least 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1-	R INC	Insola Internet	tore of	137 - 20 137 - 20 137 - 20 137 - 20	to lot of the lot of t	6 1000 1000 1000 1000 1000 1000 1000 10	Solution of the second	100 000 100 000 000 000 000 000 000 000	10 10 10 10 10 10 10 10 10 10 10 10 10 1	inon-non-non-non-non-non-non-non-non-non	in the second second	and a solution	No. 100 100 100 100 100 100 100 100 100 10	Contraction of Contraction
Abundance	х		х	х	х	х		х	х	х		х	х	х	х	х			х	х	х	
Composition	х		х	х	х	х		х	х	х		х	х	х	х	х			х	х	х	
Basal area				х					х	х			х			х				х		
Biomass	х		х	х	х	х		х	х	х		х	х	х	х	х			х	х	х	
Canopy areal extent and structure				x	x				x	x			x		х	x			х	x		
Density	х		х	х	х	х		х	х	х		х	х	х	х	х			х	х	х	
Diversity	х		х	х	х	х		х	х	х		х	х	х	х	х			х	х	х	
Edge to area ratio					х							х			х							
Herbivory/disease	Х		х	х	х	х		х	х	х		х	х		х	х			х	х		
Litter fall				х			х		х	х		х	х							х		
Growth rate	Х		Х	х	Х	х		х	х	х		х	х	х	х	х			х	х	х	
Percent cover	х		х	х	х	х		х	х	х		х	х	х	х	х			х	х	Х	
Productivity rate	Х		Х	х	Х	х		х	х	х		х	х	х	х	х			х	х	х	
Ratio of vegetation to open water				x	х				х			х			х	х			х		х	
Recruitment	х		х	х	х	X		х	х	х		х	х	х	х	х			х	х	х	

Survival	Х		х	х	х	х		х	х	х		х	х		х	х			х	х		
Noody debris				х			х		х	х		х	х			х				х		
				·																		
		/			Jei	and M	and the						a ala		the strange	ond)	55	Contraction of the second	DOD DOD	sond as	North Contraction of the second secon	ion
Amphibians	AN AN		ACC DU	ne to	NN LEON LEON	and Ho	d Bottom	teon to	R MO	NO NO	Fore ON	20 20	è 228	inor po	Sho Sto	Marsh Shi	JD SNOT	Botton	Bottonie	one de la	Solo No	Contraint Contra
Abundance	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Biomass	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Density	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Disease	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Distribution	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Diversity	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Growth	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Population age composition	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Predation	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Recruitment	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Size	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Survival	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
	-	S.	Res Parts		Not Lee	in the state of th	d bound	Least Least		North New York	time for	A CONTRACTOR	a zite	in the second se	allon consistences	wellow and a start	10 Subring	Conner Solo	and a superior	and an and an and an and an	No of Contraction of	ion contraction of the contracti
Birds	/ 0		r / ··											1 .0						<b>F</b> /	N / VA	/

Birds	18	/ 0	10	/ 40	18	/ *	14	1 4	10	1 1/10	10	✓ 𝔅 <sup>0</sup>	✓ <sup>Q</sup> <sup>™</sup>	/ ~	1 5	1 5	1 5	1 50	/ 5	7 3	12
Abundance	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х
Biomass	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х
Density	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х
Disease	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х
Distribution	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х
Diversity	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х
Growth	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х
Population age composition	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х
Predation	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х
Recruitment	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х
Size	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х
Survival	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х

Fish	**	to the second se	and	Lo Lo	Hold Hold Hold Hold Hold Hold Hold Hold	and ha	and Barton Vi	Least	R HO	noove we	time ov	13 10 10 10 10 10 10 10 10 10 10 10 10 10	Stelloute	and Date	Connelling Connelling	NO ST	10 South South	Connorman Solution	Botton S	and and a star	Non Color Color	S COUNT
Abundance		х		х	х	х	х	х	х		х	х		х	х	х	х	х	х		х	
Biomass		х		х	х	х	х	х	х		х	х		х	х	х	х	х	х		х	
Density		x		х	х	х	х	х	х		х	х		х	х	х	х	х	х		х	
Disease		x		х	х	х	х	х	х		х	х		х	х	х	х	х	х		х	
Distribution		x		х	х	х	х	х	х		х	х		х	х	х	х	х	х		х	
Diversity		x		х	х	х	х	х	х		х	х		х	х	х	х	х	х		х	
Growth		x		х	х	х	х	х	х		х	х		х	х	х	х	х	х		х	
Population age composition		x		х	х	х	х	х	х		х	х		х	х	х	х	х	х		х	
Predation		х		х	х	х	х	х	х		х	х		х	х	х	х	х	х		х	
Recruitment		x		х	х	х	х	х	х		х	х		х	х	х	х	х	х		х	
Size		x		х	х	х	х	х	х		х	х		х	х	х	х	х	х		х	
Survival		х		х	х	х	х	х	х		х	х		х	х	х	х	х	х		х	

Invasive Species (Fauna)	8	the second se	no put	Real Los	Non Le	Liond Ho	and Bottom Price	AND LOO LOO LOO LOO LOO LOO LOO LOO LOO LO	R HE	noo ve	Little Cost	33 40 20	selloro	C TOP	Connelling Connelling	No of the second	South State	nonnon Bound	di d	and an and a start and a start	out his	Contraction of the second
Abundance	X	x	X	x	x	X	X	X	x	x	x	x	x	X	x	x	x	x	x	X	x	ſ
Biomass	х	x	х	х	х	х	х	x	х	х	х	х	х	х	х	х	х	x	х	х	х	1
Density	х	x	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	1
Disease	х	x	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	x	х	х	х	1
Distribution	х	x	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	x	х	х	х	1
Diversity	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Growth	х	x	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Population age composition	х	x	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	x	х	х	х	1
Predation	х	x	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Recruitment	х	x	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	x	х	х	х	]
Size	х	x	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	x	х	х	х	]
Survival	х	х	Х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	Х	х	х	]

Invasive Species (Vegetation)		the second se	A Participation of the second	no co	HI LE	lond Ha	d bourse	Ling Ling Ling	R 18	noole we	tore of	3 100 100	non porto	and love	Chone	NO CONTRACTOR	J.B.S. C.C.	Population of the state	Bound Stand	and an and a star	in the second second	Contraction of the second
Abundance	x			$\frac{x}{x}$	X	x	X	x	X	X	x	X	X		x	x	x	x	x	x	X	(
Biomass	х	x	х	x	х	x	х	х	х	x	х	х	х	х	х	х	х	x	x	x	х	
Distribution	х	x	х	x	х	х	х	х	х	х	х	х	х	х	х	х	х	x	х	x	х	
Growth	х	x	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	x	х	х	х	
Population age composition	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Recruitment	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Size	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
		8	People State		and the second	isrd Hard	and a start	eeeeeeeeeeee		and a second	tore tore	100 miles	nel porte	in the sector	Correst Shoe	Notes I Andrew Contraction	Superior	Contraction of the second	Bottom -	and	10 Mills	COLUMN COLUMN

		~/	₹¢°			STINGE HO	BOTTO	and a	/ /	NONE	IN <sup>O</sup>	2º		ian	Sto	Nois	SWO	ootton	ooton	AND	<u>ک</u>
Invertebrates	8	<mark>ð </mark> ö	A A	<mark>%</mark> / 40	e ve	Si ko	d'In	teon te	R ME	norowe Ne	time of	20	<sup>0</sup> / 2 <sup>5</sup>	Solor P	AN SO	Marsh Shi	UP SNOT	Botton	BOHON SU	Ine Cert	and we
Abundance	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х
Biomass	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х
Density	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х
Disease	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х
Distribution	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х
Diversity	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х
Growth	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х
Population age composition	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х
Predation	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х
Recruitment	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х
Size	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х
Survival	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х

Mammals	- R	ter and the second s	A A A A A A A A A A A A A A A A A A A	0 10	Hold Le	and the second	d double here	A CONTRACT OF CONTRACT.	R INC	1.1900 P.	Line Ov	100 - 200 -	nel polo	and Lose	Chornes Chornes	no start st	10 50 50 50 50 50 50 50 50 50 50 50 50 50	Conner Conner	Boton Contraction	and shares	Jusic Jose	in the second se
Abundance	х	x	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Biomass	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Density	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Disease	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Distribution	х	x	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Diversity	х	x	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Growth	х	x	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Population age composition	х	x	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Predation	х	x	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Recruitment	х	x	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Size	х	x	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Survival	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	

Mixed Assemblage	*	No. Co	10 100 100 100 100 100 100 100 100 100		Len	and Harden Hard	d Baby In	Line Line Line Line Line Line Line Line	R Le	noove we	the Color	20 20	nel lorito	ain lor	Connell Connell	Not of the second second	up Subart	Connon	Debuger of the second s	on on one of the second	Di	North Contraction of the second
Abundance	х	x	x	х	х	х	х	х	x	x	х	х	х	х	х	х	х	x	x	х	х	Í
Biomass	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Density	х	x	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Disease	х	x	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Distribution	х	x	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Diversity	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Growth	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Population age composition	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Predation	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Recruitment	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Size	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Survival	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	

				$\overline{}$												8		Contraction of the second	Je l			CONTRACTION OF THE OWNER
						/						/	nellootor	and total	Jei	Se /		201	\$ <sup>6</sup>		Jog	<u></u>
			/ /	/ /	/	~~	ž /	/ /	/	· /	/		ell por	· /	norin	。/		non	8	à /	10 <sup>11C</sup>	
					Ne		o' an		/			all all	<u></u>	10re				2 Alt	in the	3 28	<sup>S</sup> /	June 1
		~ /	&		w l	SWOTE .	. Soll	. Sal	/ /	10 <sup>NO</sup>	in <sup>e</sup>	× /		ar	STU	Marst	Sano	ooto	ooto	and a	à /	S
Reptiles	200	ی 💦	APE OU	<mark>8</mark> / 40	ested Lie	and Ho	d Bottom	teon te	R No	Nº Nº	time of	205	2 21 C			I Marsh		في 🗸	ND SUPPRIS	er j	a la	No. Contraction of the second
Abundance	x	x	x	x	x	x	x	x	x	x	x	x	x	x	х	x	х	x	x	x	x	
Biomass	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Density	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Disease	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Distribution	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Diversity	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	1
Growth	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	1
Population age composition	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	1
Predation	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Recruitment	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	1
Size	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Survival	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	l
				_	/	/	/	/	/	/	/	/	/	_	/	/	/	/	/	_	/	
				/ /	/ /	/ /	· /	/ /	/ /	/	/ /	/	/ /	in 10th and 10th	/ /	8	· /	Boundary Contraction	Je)	/ /	/ /	State Column
														×/		Se /			\$ <b>`</b> /		6	
				/ /				/ /		/ /			JOTE	/ /	C'NO	/ /		A. T. O		/ /	ic lo	/ / /
						and a	N.S.						en.		10°.	~		not	jè/	nd /	NON!	
		/	/ *	/	Nº		J.M				108	ell		100			ant	2 AN	me	2 2	/	NUTTI
		~	્રશ્ે/		we'	SUNCE	So.	. Sal		10 <sup>NO</sup>	in <sup>e</sup>	×/	$\langle /$	a	S	Nals	San	oot!!!	oot .	and a	`	S.
Other	<b>1</b> 20	ې کې	APE OU	هن / آه	ested here	and Ho	d Bottom	teon te	R	Nº Nº	time of	5/00	nellootor		Show So	I Marsh	V co	في 🔰	ND SUP	of K	NO NO	Contraction of the second seco
Debris	x	x	x	X	X	X X	x	X	X	X	x	X	x	x	x	x	x	x	x	x	X	7 
Qualitative assessment (e.g. photo	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	l
interpretation)		Â	, î	Â	, n	<u>^</u>	Â	Â		Â	Â	, n	Â	Â	Â	Â		Ĺ		Ê	Â	I

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