

- PROJECT TITLE:** *Restoring Historic Bald Cypress Forest at Pointe-aux-Chenes Wildlife Management Area, Louisiana*
- **Last Line of Defense between Terrebonne & Lafourche Parishes & Open Water in the Gulf of Mexico**
- PROJECT LOCATION:** *Pointe-aux-Chenes Wildlife Management Area, Montegut, Louisiana  
15 miles southeast of Houma, Louisiana, 50 miles from New Orleans, Louisiana*
- GOAL:** The goal for this business-led private/public Fund is to secure private funding to be leveraged and amplified with a 1:1 match from public funding, to take action and restore 4,000 acres of historic bald cypress forest. To-date private funding has been secured and 1,000 acres have already been restored.
- ORGANIZATION:** **Restore the Earth Foundation, Inc., P.J. Marshall, Executive Director**  
Office: 607.257.8855; Cell: 607.342.6432; [pjm@restoretheearth.org](mailto:pjm@restoretheearth.org)
- REQUESTED FUNDS:** Restore the Earth is requesting a contribution from Solar Power Events of **\$12,525.00** toward this business-led Fund for a full charitable donation tax receipt. The funds requested represent a 50% discount of the total funding required to restore acres, as a result of a 1:1 match by public funding.
- FUNDING MECHANISM:** The Fund is able to leverage public dollar matches for each private sector dollar invested.
- BENEFITS:**
- 1. For a donation of \$12,525.00, Restore the Earth will assign 2,505 mt CO<sub>2</sub>e to Solar Power Events in perpetuity. A permanent conservation easement is on the site.**
  - 2. The value of these offsets, based on the EPA's current value of the social cost of carbon, \$40 per metric ton.** Based on a investment, with matching funding, the average cost of these offsets is \$5.00/metric ton in 2019 dollars. Offsets created by this project are registered with the American Carbon Registry.
  - 3. Generates Phosphorous and Nitrogen water quality nutrient offsets,** to be assigned to Collaborative Fund partners proportionate to its investment, in perpetuity. The Pointe-aux-Chenes project is a Pilot project for the State of Louisiana's Water Quality Trading Program.
  - 4. The total environmental, social and economic value created by a \$1 investment + the matching public investment is \$14.**
  - 5. Support and commitment to sustainability by** protecting natural resources on which people and industry depend. The project area represents the largest land mass restoration, as the very first line of defense, that is a part of the State

of Louisiana's Master Plan for regional protection of coastal communities. This includes New Orleans, providing green infrastructure solutions to build asset infrastructure resilience.

**6. Generates business development value—partnering on impactful projects.**

Participation in cross-sector and industry partnership — partnership alignment with other private and philanthropic organization, Restore the Earth, a not for profit, Louisiana Department of Wildlife & Fisheries and federal and state agencies.

**7. Provides Employee Engagement.** The project offers the opportunity for volunteers to engage in on-site planting of the reforestation. The Project is able to engage volunteers over multi planting days throughout 2019 and 2020.

**8. Supports Environmental Awareness and Education Programs** — In partnership with Louisiana Department of Wildlife & Fisheries, the restored project site will provide for engagement and interaction with the regional community and recreational tourist. Funding is underway to build a board walk and observation deck and to restore one of the only handicap duck blinds in the region. Restore the Earth is funding an initial plan for a system of board walk meandering through the site, connecting people to nature and recreation.

**9. Supports Sustainable Development Goals:** Partnership with Restore the Earth on this project supports the SDG's and demonstrates a framework for collective action and a powerful approach to maximizing and accessing impact with verifiable metrics. Specifically, this project addresses the following **SDG Goals**:

**GOAL 11 – SUSTAINABLE CITIES AND COMMUNITIES** — Make cities and human settlements inclusive, safe, resilient and sustainable.

**GOAL 12 – RESPONSIBLE CONSUMPTION & PRODUCTION** — Ensure sustainable consumption and production patterns.

**GOAL 13 – CLIMATE ACTION** — Take urgent action to combat climate change and its impacts.

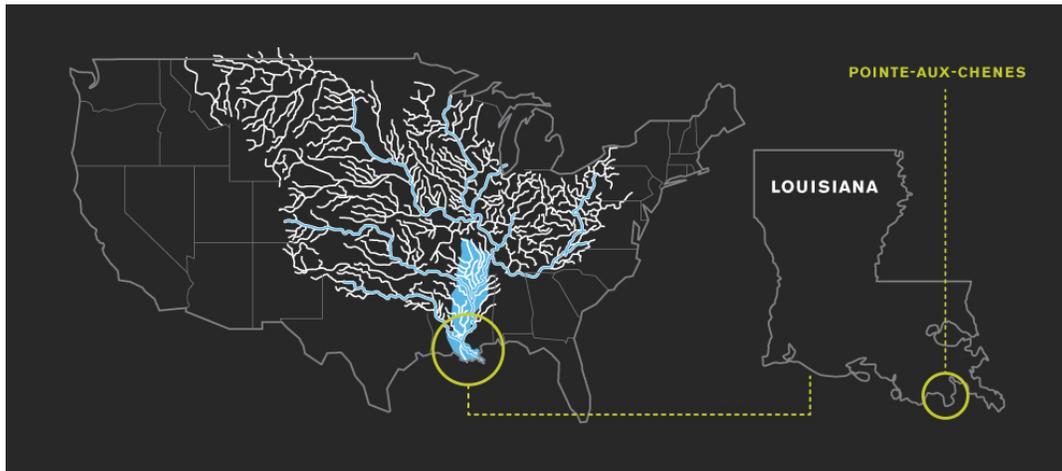
**GOAL 14 – LIFE BELOW WATER** — Conserve and sustainably use the oceans, seas and marine resources for sustainable development.

**GOAL 15 – LIFE ON LAND** — Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, loss.

**GOAL 17 – PARTNERSHIPS FOR THE GOALS** — Strengthen the means of implementation and revitalize the global partnership for sustainable development.

## Fund Louisiana Opportunity

The site is the restoration of 4,000 acres of freshwater forested wetland in the Pointe-aux-Chenes Wildlife Management Area.



The selection of this particular site is deeply symbolic. Pointe-aux-Chenes is located in Terrebonne and Lafourche Parishes, approximately 15 miles southeast of Houma, Louisiana. The site is an essential ecosystem that includes diverse physical, biological and socioeconomic resources, including:

- Threatened and endangered species;
- High fish and bird value;
- Great economic value as commercial and recreational fisheries;
- Most utilized wildlife management area in Louisiana;
- Home to the United Houma Nation and Pointe-au-Chenes Indian Tribe.

**It is the largest landmass providing the first and last line of defense protecting over 200,000+ residents of this coastal community from the open water of the Gulf of Mexico.**

State wide, it is the first line of defense within the “multiple lines of defense” strategy identified and deployed by the State of Louisiana. (<http://coastal.la.gov/our-plan/2017-coastal-master-plan/>). This area is owned and managed by our partners, the Louisiana Department of Wildlife & Fisheries.

### RESTORATION OUTCOMES:

- **Land Protection and Land Building** – This project enhances Louisiana’s coastal wetland and watershed systems, stabilizing existing land mass and supporting the building of additional land mass, protecting adjacent landward marshes -- all a part of supporting and providing storm protection for critical infrastructure and transportation, including Port Fourchon, along the Louisiana coastal area.
- **Carbon, Water & Nutrient Mitigation** — Restoration of forested wetland ecosystems controls erosion, improves water quality/quantity, traps carbon dioxide and provides for pollutant/nutrient removal. The Pointe-aux-Chenes project is a Pilot project for the State of Louisiana’s Water Quality Trading legislation.

- **Community Resilience and Storm Protection** — The project’s restoration will provide a buffer, putting as many barriers as possible between storm surge and flood waters, protecting local and regional communities, and indigenous nations/tribes from risks associated with storm surge and flooding events, enhancing resiliency. This forest restoration project has major environmental, social and economic impacts supporting stated parish, community State of Louisiana Master Plan objectives for restoration and enhanced resilience.
- **Habitat** — The restoration provides for the protection and enhancement of native habitat for:
  - 300 species of Neotropical birds traveling to North America from South America, since the area is one of the first fueling stops after a long journey
  - 15 species of waterfowl, including high priority species to the area and other wetland dependent birds
  - Game and furbearing species (deer, rabbit, squirrels, gallinules, snipe, mink, , muskrat, raccoon, opossum and otter)
  - Critical estuarine and adjacent open water habitat provided within Pointe-aux-Chenes WMA. These habitats are important nurseries for estuarine-dependent species, which **represent the beginning of the food chain for the whole Caribbean Basin**
- **Recreation** — the restoration supports sustainable hunting, fishing, camping and wildlife watching.
- **Economic & Job Creation**— The project creates local jobs, to initiate and implement the project; we contract with local nurseries and businesses. It also rebuilds and supports economic opportunities generated by recreation and tourism.

#### **RESTORE THE EARTH FOUNDATION, INC**

Restore the Earth Foundation, Inc. is a 501(c)(3) not for profit with a mission of restoring the Earth’s essential forest and wetland ecosystems. Restore the Earth knows that it is possible to go beyond just protecting our environment—it is possible to restore it. And when you restore the environment at landscape scale, it creates incredible value for business, communities and the Earth.

Since 2008, Restore the Earth Foundation has reforested over 50,000 acres and deployed the first restoration on oil soiled wetlands following the Deep Water Horizon oil spill.

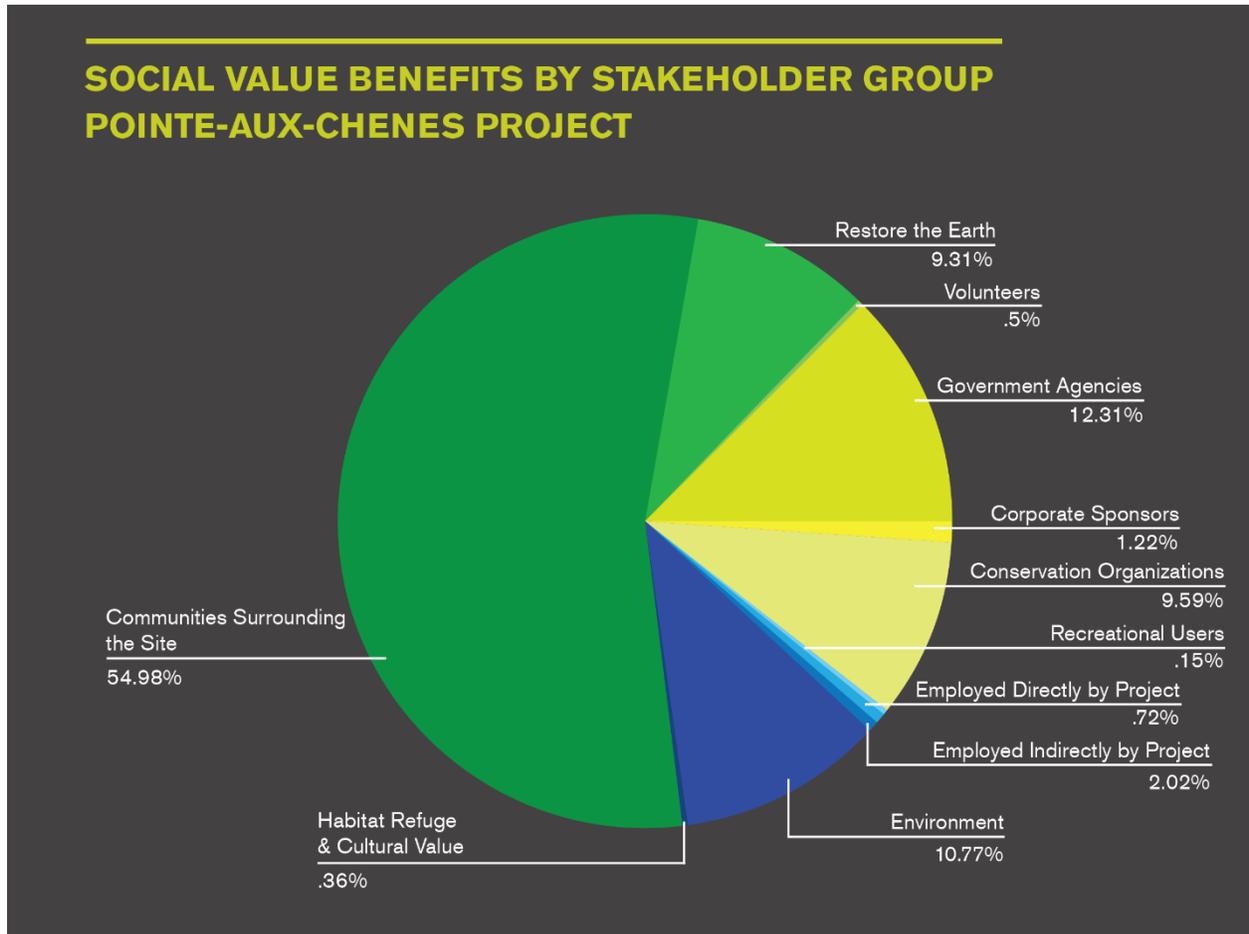
Restore the Earth’s Impact Investment Fund is restoring 1 million acres in the Mississippi River Basin, North America’s Amazon. Restore the Earth works together with partners to bring solid solutions to deliver successful restoration to meet strategic objectives. Its strong public/private partnerships support its longstanding and proven track record of successfully restoring natural systems on a large scale, creating environmental, social and economic value.

Restore the Earth Foundation’s innovative EcoMetrics™ Model, accurately accounts for, in monetized terms, the environmental, social and economic co-benefits/value created by restoration. This report is accredited by international standards, third party verified and ready for audit. EcoMetrics allows Restore the Earth funding partners to report back to stakeholders with complete confidence.

**APPENDIX**

The Water Institute of the Gulf, TerraCarbon and Louisiana Department of Wildlife & Fisheries have applied Restore the Earth’s EcoMetrics to determine the co-benefits and impacts of the 4,000 acre reforestation project. The below is a summary of projections for the environmental, social and economic value created by the restoration.

**Pointe-aux-Chenes Reforestation**



### Pointe-aux-Chenes Reforestation Market Value Return on Investment (ROI)

Stakeholders	Real outcomes due to Pointe-aux-Chenes reforestation project	Market Value Creation	Market Value Creation per Stakeholder Group
Restore the Earth	Enhances Restore the Earth's reputation by planting the first 4,000 acres of 1million acre goal	\$156,000.00	\$22,700,585.27
	Organization of volunteer labor to offset 10% of the project costs	\$1,546,275.97	
	Market value of carbon sequestered	\$15,186,048.89	
	Market value of nitrogen offset	\$3,955,114.65	
	Market value of phosphorous offset	\$1,857,145.77	
Corporate Sponsors	Social license to operate (effects to reputation; positive impact on communities)	\$2,964,000.00	\$2,964,000.00
		<b>Total Present Value</b>	<b>\$25,664,585.27</b>
		<b>Total Investment</b>	<b>\$15,467,763.67</b>
		<b>Market Return on Investment (dollar returned per dollar invested)</b>	<b>1.66</b>

### Pointe-aux-Chenes Reforestation Non-Market Social Return on Investment (SROI)

Stakeholders	Real outcomes due to Pointe-aux-Chenes reforestation project	Social Value Creation	Social Value per Stakeholder Group
Environment	Social value of carbon sequestered	\$18,811,375.10	\$26,259,939.68
	Improved soil formation and nutrient cycling	\$1,342,049.29	
	Erosion control and sediment retention	\$15,676.22	
	Increased waste treatment capacity,	\$6,090,839.08	
Volunteers involved in replanting	Sense of accomplishment	\$127,035.00	\$127,035.00
Government agencies	Enhanced coastal protection for adjacent communities	\$30,006,508.50	\$53,371,834.99
Conservation organizations	Enhanced habitat refuge	\$23,365,326.49	

Recreational users (general recreational users, hunters, fishers, wildlife viewers and birdwatchers)	Enhanced habitats for hunting	\$254,831.74	\$367,433.72
	Enhanced habitats for fishing	\$107,240.72	
	Enhanced habitats for general recreation	\$3,220.83	
	Enhanced habitats for birdwatching	\$2,140.44	
Those employed directly and indirectly by the reforestation project	Direct employment for local nursery and planting services	\$1,758,782.51	\$3,042,834.44
	Enhanced business opportunities	\$1,284,051.93	
	Enhanced habitat refuge	Shared value with Conservation organizations	
Communities surrounding the site and downstream/wind of it that benefit from water and air quality, waste treatment, storm protection, soil stabilization, biological control	Enhanced Water Quality. Value of Marginal Nitrogen and Phosphorus Mitigation.	\$37,383,790.69	\$134,021,266.95
		\$90,701,489.02	
	Increased atmospheric oxygen and cleaner air	\$5,935,987.24	
	Enhanced storm surge protection	Shared value with Government agencies	
Communities that benefit from other ecosystem services such as habitat refuge and cultural value	Sense of community pride; community gathering place	\$274,880.07	\$886,431.73
	Enhanced ecosystem that can be used for cultural rituals and traditions	\$604,736.16	
	More educational programs and opportunities	\$6,815.50	
		<b>Total Present Value</b>	<b>\$218,076,776.51</b>
		<b>Total Investment</b>	<b>\$15,467,763.67</b>
		<b>Non-Market Return on Investment (dollar returned per dollar invested)</b>	<b>14.10</b>