

RESTORE THE EARTH FOUNDATION

Deploying Landscape Scale Restoration
in Coastal Louisiana

RESTORE THE EARTH FOUNDATION



RESTORE THE EARTH'S ESSENTIAL ECOSYSTEMS

Landscape Scale Restoration

Restoration that rebuilds ecological health and integrity at the ecosystem level and creates abundant benefits:

- mitigating climate change
- recharging groundwater
- providing critical habitat
- buffering against sea level rise
- and supporting flood control
- preventing storm damage

POINTE-AUX-CHENES



POINTE-AUX-CHENES

- 5,000 A Bald Cypress Forest Restoration
- 15 Miles South of Houma
- Last Line of Defense Protecting 200,000 + residents
- LDWF Owned & Managed



WHAT'S AT STAKE POINTE-AUX-CHENES



\$2b

revenues from
recreational fishing



#1

nursery for all
marine species of the
Caribbean Basin



2

Home to two tribes, the
United Houma Nation and
Point au Chien



20%

of US commercial
fishing catch



200,000

people for whom this is
last line of defense for
storm protection



\$400b

Most utilized WMA
refuge in LA state



#1

US winter habitat for
millions of migratory birds

RESTORATION OUTCOMES

POINTE-AUX-CHENES

- Reestablish Cypress Forest
- Protection Storm Surge, Flooding
- Provide Community Protection & Resilience
- Restore Habitat, Improve Water Quantity & Quality, Trap CO₂e
- Support Economic Opportunities Hunting, Fishing, Ecotourism
- Creates Jobs



Livelihood · Identity · Culture

National Fish & Wildlife Foundation

National Coastal Resilience Fund 2019 Grant

- \$ 2,600,000 Awarded in 2019
- Green-Gray Approach to Gulf Cost Resiliency
- Landscape scale reforestation of over 3,000 acres at Pointe-aux-Chenes (completing the total acreage)
- Innovative, common sense retrofit of an existing pump infrastructure to provide freshwater diversion into degraded wetland
- Restore the Earth EcoMetrics accounting for impacts and co-benefits





THE FIRST 1,500 ACRES

- EKOgrown® native bald cypress trees were grown from seed
- All seeds are native and locally collected to ensure quality stock and long term survival
- 100,000 trees were planted
- 1,000 acres reforested



PROJECT RESULTS ON THE GROUND

- REF EKOgrown® native bald cypress trees were grown from seed collected locally
- 85% survivability
- 1 gallon trees ~ 4-5 ft at time of planting
- Now between 12-14 ft tall



Spring 2018



Fall 2018



Spring 2019



Spring 2020

REGENERATION AND HABITAT CREATION

- ~20% of trees propagating seeds
- Observations of bird and mammal habitat creation
- Regular monitoring protocols by LDWF to continue to report on key restoration and regeneration indicators

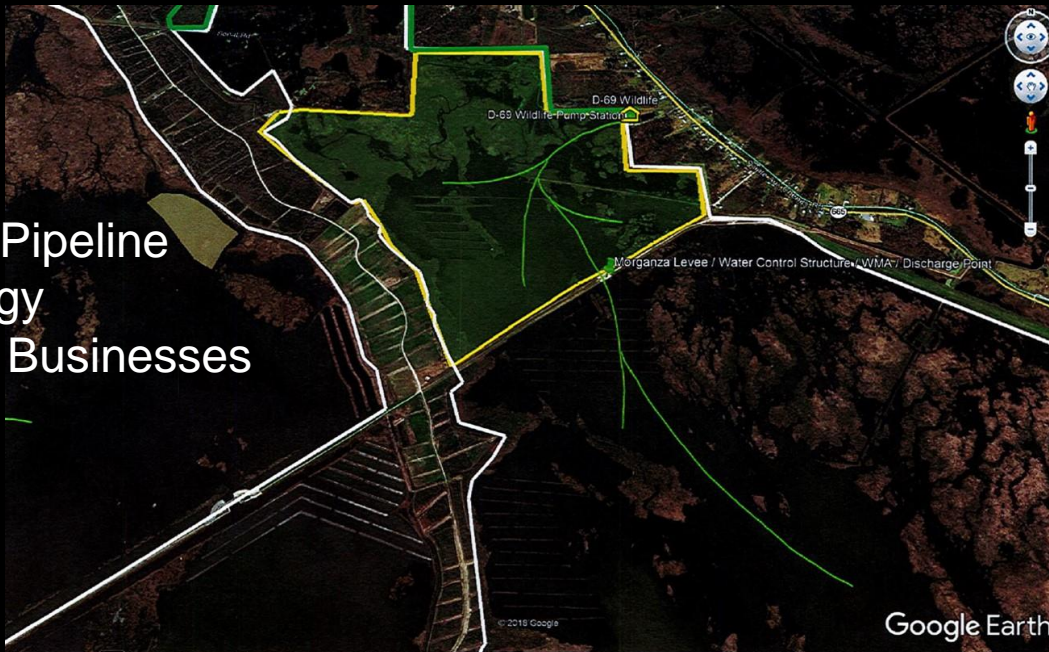


BAYOU TERREBONNE FRESHWATER DIVERSION

Public private partnership for grey infrastructure application for coastal resilience

- Terrebonne Parish
- USDA NRCS
- Coca-Cola Foundation

- Shell Pipeline
- Entergy
- Local Businesses



BAYOU TERREBONNE FRESHWATER DIVERSION

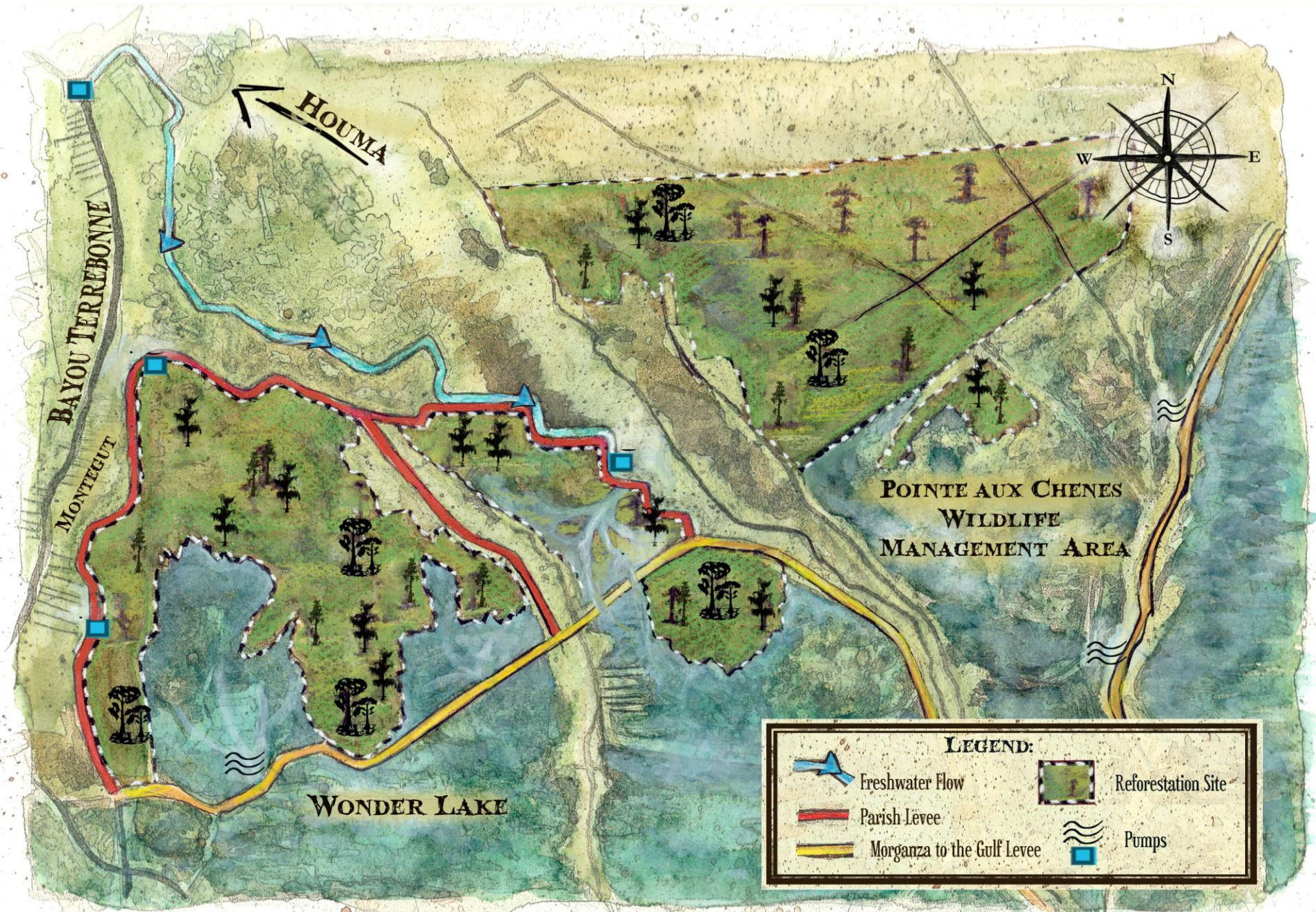
- NRCS Estimates that this diversion will pump approx. **10 billion gallons of freshwater per year** into the Pointe-aux-Chenes wetlands
- This green-grey infrastructure approach will contribute to both enhanced drainage and flood control for the area
- This diversion will enhance the freshwater conditions to trending at the WMA and promoted by the reforestation
- Pump is operational



Example Before



Example After

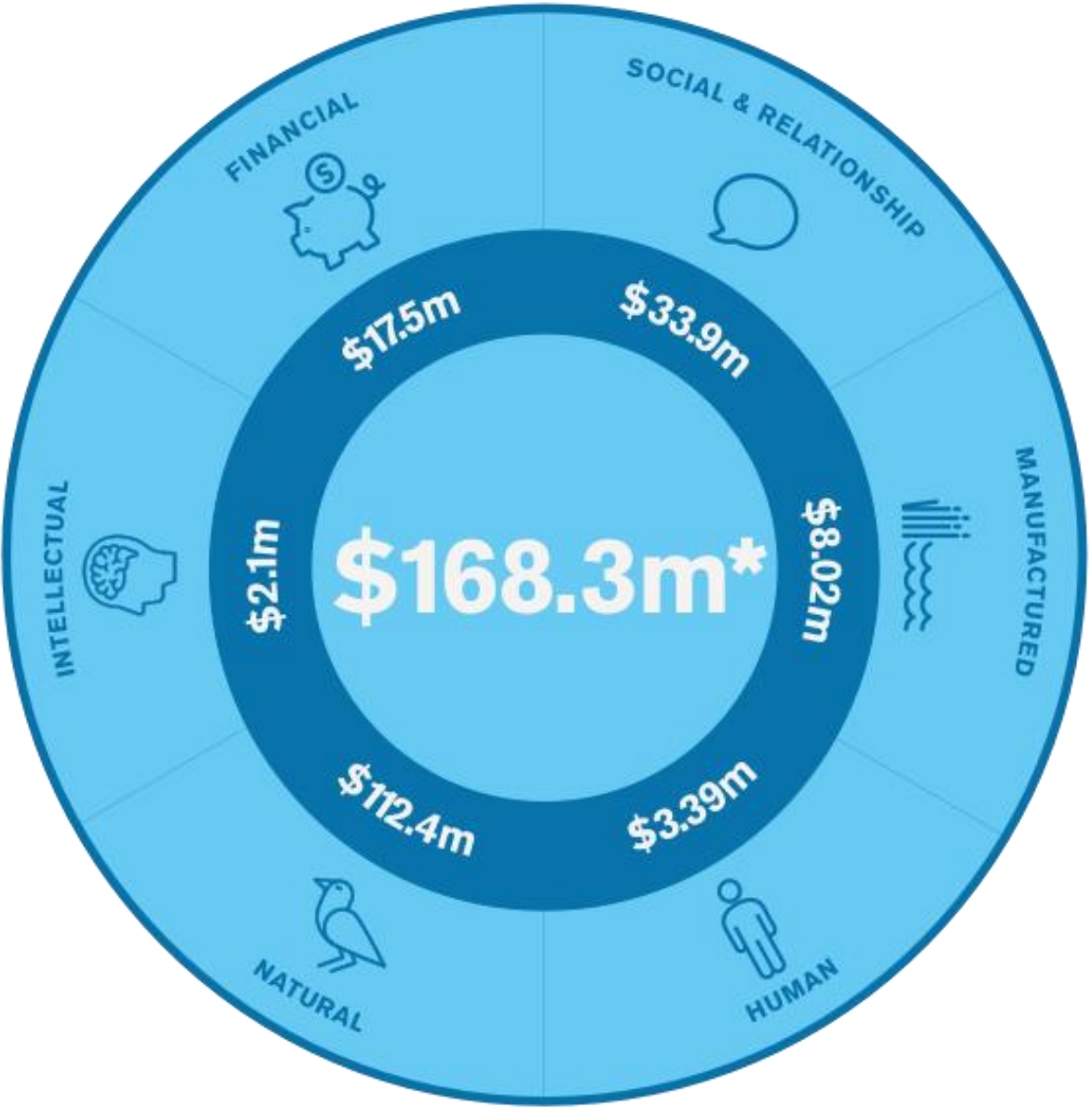
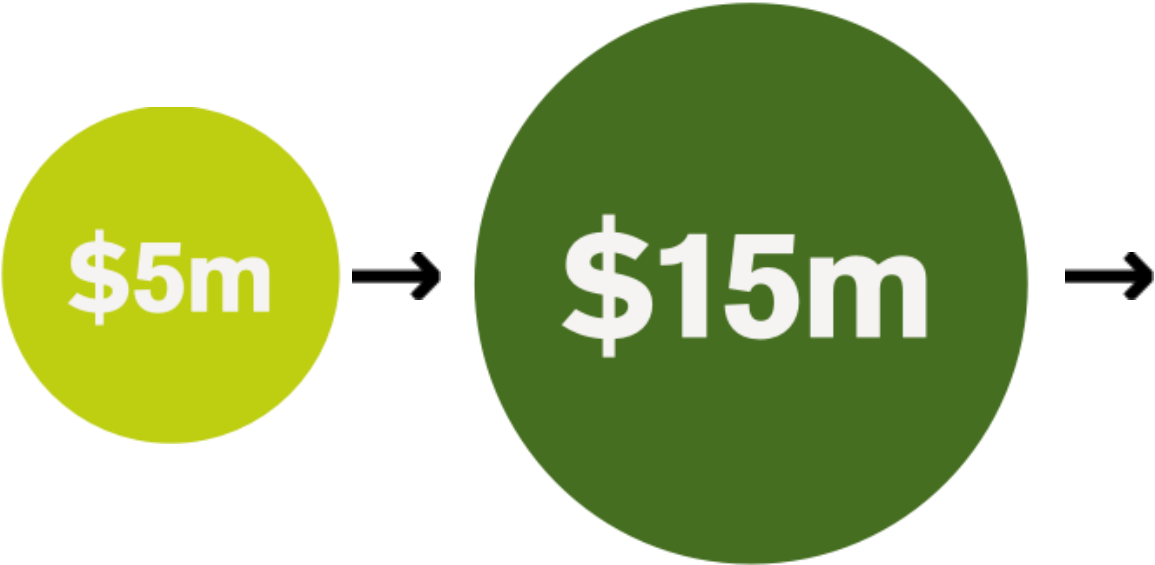




**HOW WE MAKE
IT WORK FOR BUSINESS & INVESTORS**

**POWER OF METRICS PROVES
BIG VISION DELIVERS**

EcoMetrics



EcoMetrics

POINTE-AUX-CHENES REFORESTATION

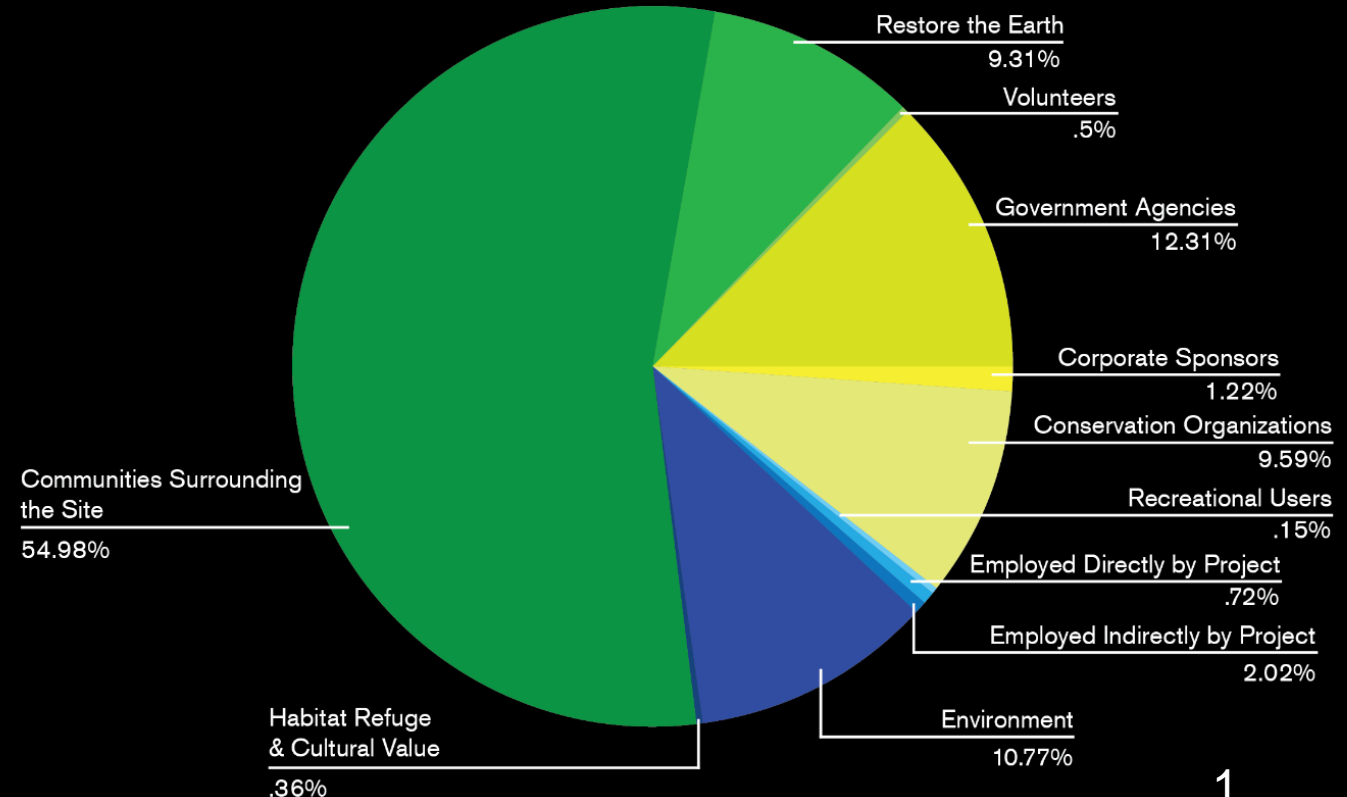
ECOMETRICS



Co-Benefit Value Creation

- 5,000 acres historic cypress restoration creates 1,000,000 mt CO2e offsets
- 10 Billion gallons/year water replenishing
- Delivers \$272,500,000 in market (ROI) & non-market (SROI) value created
- \$1 investment returns \$14 in SROI/ROI
- IIRC 6 Capitals Integrated Reporting Integrated Financial Balance Sheet

SOCIAL VALUE BENEFITS BY STAKEHOLDER GROUP POINTE-AUX-CHENES PROJECT





ADDITIONAL · REAL · PERMANENT · QUANTIFIABLE · ASSURED AGAINST LEAKAGE

3RD PARTY VALIDATED · VERIFIED · REGISTERED

CO-BENEFITS & VALUE STREAMS

“YOU CAN ACTUALLY VISIT THE SITES”

Dow's Nature Based Solution Partner

Dow the Official Carbon Partner of the International Olympics Committee has partnered with Restore the Earth to provide nature based solutions toward net zero future

- Dow's innovative IOC partnership uses the sports platform and Olympics Brand to demonstrate how science, technology and reforestation helps transition to low carbon society
- **Restore the Earth's** landscape scale reforestation of 1 million acres in Mississippi River Basin, North America's Amazon, provides a nature based solution for carbon emission reduction
- Dow with REF demonstrates "on the ground" investment in the oldest, most cost effective & powerful carbon capture technology there is, nature's forests. A solution with national and global impact and benefits for generations to come
- REF **EcoMetrics** will capture the environmental, social and economic co-benefits and value created by the reforestation



OFFICIAL CARBON PARTNER

COMMUNITY OUTREACH

- The South Louisiana Wetlands Discovery Center has incorporated this project into two of its educational curricula
- School Field Trips
- Stakeholder Meetings - both virtual and in person when possible and safe
- Run for the Wetlands in partnership with TEDA
- Community Member Impacts: storm protection, water quality, air quality, habitat for wildlife and fish



DRIVING SCALE DIVERSE PARTNER COLLABORATION



DISCUSSION

