

LA TIG Enhanced Marine Mammal Stranding Network

NOAA FISHERIES

Southeast Region

Lauren Noble Louisiana Marine Mammal Stranding Network Coordinator ERT Inc. Contractor

Restoration Funding in Dollars

Major Restoration Categories	Unknown Conditions	Regionwide	Open Ocean	Alabama	Florida	Louisiana	Mississippi	Texas	Total Restoration Funding*
1. Restore and Conserve Habitat									
Wetlands, Coastal, and Nearshore Habitats				65,000,000	5,000,000	4,009,062,700	55,500,000	100,000,000	4,234,562,700
Habitat Projects on Federally Managed Lands				3,000,000	17,500,000	50,000,000	5,000,000		75,500,000
Early Restoration (through Phase IV)				28,110,000	15,629,367	259,625,700	80,000,000		383,365,067
2. Restore Water Quality									
Nutrient Reduction (Nonpoint Source)				5,000,000	35,000,000	20,000,000	27,500,000	22,500,000	110,000,000
Water Quality (e.g., Stormwater Treatments, Hydrologic Restoration, Reduction of Sedimentation, etc.)					300,000,000				300,000,000
3. Replenish and Protect Living Coastal and Mar	ine Resources								
Fish and Water Column Invertebrates			380,000,000						380,000,000
Early Restoration Fish and Water Column Invertebrates			20,000,000						20,000,000
Sturgeon			15,000,000						15,000,000
Sea Turtles		60,000,000	55,000,000	5,500,000	20,000,000	10,000,000	5,000,000	7,500,000	163,000,000
Early Restoration Turtles		29,256,165						19,965,000	49,221,165
Submerged Aquatic Vegetation						22,000,000			22,000,000
Marine Mammals		19,000,000	55,000,000	5,000,000	5,000,000	50,000,000	10,000,000		144,000,000
Birds		70,400,000	70,000,000	30,000,000	40,000,000	148,500,000	25,000,000	20,000,000	403,900,000
Early Restoration Birds		1,823,100		145,000	2,835,000	71,937,300		20,603,770	97,344,170
Mesophotic and Deep Benthic Communities			273,300,000						273,300,000
Oysters		64,372,413		10,000,000	20,000,000	26,000,000	20,000,000	22,500,000	162,872,413
Early Restoration Oysters				3,329,000	5,370,596	14,874,300	13,600,000		37,173,896
4. Provide and Enhance Recreational Opportuniti	es								
Provide and Enhance Recreational Opportunities				25,000,000	63,274,513	38,000,000	5,000,000		131,274,513
Early Restoration Recreational Opportunities			22,397,916	85,505,305	120,543,167	22,000,000	18,957,000	18,582,688	287,986,076
5. Monitoring, Adaptive Management, and Admin	istrative Overs	ight							
Monitoring and Adaptive Management		65,000,000	200,000,000	10,000,000	10,000,000	225,000,000	7,500,000	2,500,000	520,000,000
Administrative Oversight and Comprehensive Planning		40,000,000	150,000,000	20,000,000	20,000,000	33,000,000	22,500,000	4,000,000	289,500,000
Adaptive Management NRD Payment for Unknown Conditions	700,000,000								700,000,000
Total NRD Funding	\$700,000,000	\$349,851,678	\$1,240,697,916	\$295,589,305	\$680,152,643	\$5,000,000,000	\$295,557,000	\$238,151,458	

* The total restoration funding allocation for the Early Restoration work; each restoration type; and monitoring, adaptive management, and administrative oversight is \$8.1 billion (plus up to an additional \$700 million for adaptive management and unknown conditions).

LA TIG Enhanced Marine Mammal Stranding Network: \$3.1M, ~5 years (started in 2021)

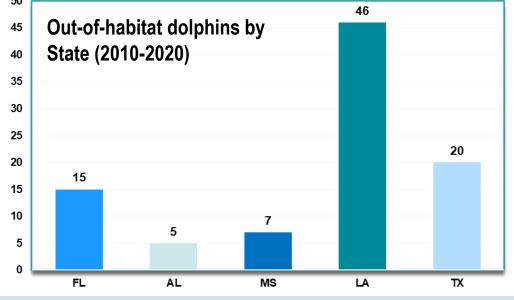
Increasing Capacity & Expanding Partnerships along the Louisiana Coastline for Marine Mammal Stranding Response:

- Increase the ability to diagnose causes of illness and death in stranded marine mammals and to use that information to better understand the population health
- Fill gaps in capabilities and spatial coverage of personnel and material resources along the Louisiana coastline
- Improve timeliness of response, enhance survival, and improve diagnosis of illness and cause of death in cetaceans to better understand natural and anthropogenic threats
- Inform future restoration efforts, monitoring, and adaptive management.



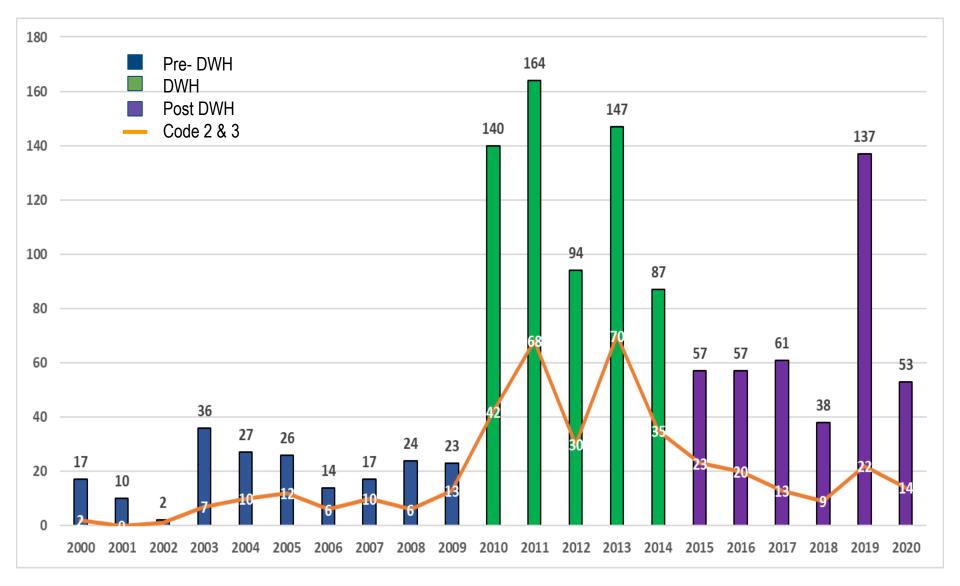
Louisiana Marine Mammal Stranding Network:

- Historically, there has been limited capacity to respond to strandings across Louisiana's large, complex coastline
- On average, approximately 81 cetaceans strand along the coast of Louisiana each year. Of these, 5 percent are found alive and 95 percent are found dead
- Louisiana gets a high number of out-of-habitat dolphins (e.g., from hurricanes, flooding, etc.) requiring monitoring and relocation, relative to other States in the Gulf

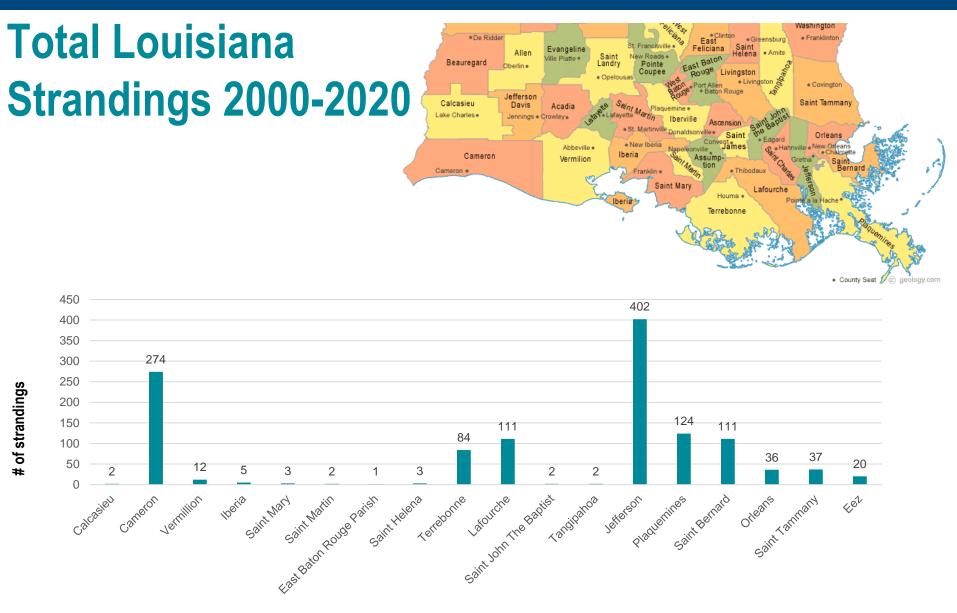




Number of Strandings Per Year- Baseline:







West



►ast

	POST DWH	2021	2022
	2015-2020	(n=109)	(n=43)
Necropsied?	24% were necropsied	32% were necropsied	16% were necropsied
Species?	86% were Bottlenose	87% were Bottlenose	77% were Bottlenose
	dolphins (Tt)	dolphins (Tt)	dolphins (Tt)
Human	88% cases were CBD	83% cases were CBD	100% cases were CBD
Interaction?	6% cases were Yes	15% cases were Yes	
Condition at Examination?	Alive - 5%	Alive - 5%	Alive - 2%
	Fresh Dead - 4%	Fresh Dead - 3%	Fresh Dead - 2%
	Moderate - 22%	Moderate - 29%	Moderate - 30%
	Advanced/Skeletal - 36%	Advanced/Skeletal - 15%	Advanced/Skeletal - 21%
	Not Examined - 33%	Not Examined - 49%	Not Examined - 44%
How long from	Same Day - 30%	Same Day - 34%	Same Day - 49%
initial report to	1 day - 14%	1 day - 10%	1 day - 7%
examination?	2 days or longer - 21%	2 days or longer - 8%	2 days or longer - 0%



Outreach to Public:

- Initial outreach began in Cameron and Jefferson Parishes since these parishes have high stranding numbers and popular beaches where stranded animals are more likely to be found by the public
- Volunteer Stranding meetings
 - Johnson Bayou, LA
 - Grand Isle, LA





 Next Year we will be adding two more outreach locations: LSU and Nicholls State University



Outreach Materials:

Created new outreach materials in collaboration
with Audubon's CWN

PLEASE REPORT Stranded Marine Mammals and Sea Turtles (live or dead)

877-942-5343

- Magnets
- Stickers
- 8.5 X 11 Flyer
- 7 X 5 Flyer
- Hotline Signs
- Installed 89 Hotline stranding signs in Cameron and Jefferson Parishes









Next Year's Outreach Materials:

- Signs All throughout LA and Marinas
 - Hotline Signs
 - DO NOT FEED
- Additional hand out items:
 - Koozies
 - Float keychain
- Billboard signs:
 - As you enter Grand isle
 - Lake Charles area
- Advertisements:
 - Jo Bob's TV
 - Rental information packets



Out of Habitat:

- ANI20210510-01 (Laura)
 - "Casper" (Male, 227 cm) was first spotted on 5/14/21 off or private property in Pecan Island. Rescue took place on 6/8/21 and released at the Freshwater Bayou boat ramp
- ANI20210830-01 (Ida)
 - "Poncho" (Male, 187 cm) was first spotted the day after Hurricane Ida hit 8/30/21 in a small retention pond in Slidell, La. Rescue took place on 9/5/21 and released off Waveland, Ms.
- ANI2021090901 ANI2021090904 (Ida)
 - 4 severely decomposed Bottlenose dolphins were found on the side of the Hermitage Road due to flooding from IDA. All four carcasses were field sampled.
- ANI20211110-02 (Ida)
 - "Dorothy" (Female, 246 cm, BAR_6021) was first reported on 11/10/21 in a cow pasture in Cutoff, LA. Rescue took place on 12/10/21 and released at boat ramp 3 miles south of catch site.









Out of Habitat:

ANI20220115-01 and ANI20220115-02 (IDA)

- Mom and Calf were first reported on 01/15/2022 in a retention pond off of LA-1 in Jefferson Parish
- Mom is a known Barataria Dolphin BAR_2086
- First attempt at a rescue was on 11/14/22 Unsuccessful due to limited boats and weather
- 06/17/2023 Successful rescue and relocation of mom and Calf
 - NOAA, Audubon's CWN, NMMF, Seaworld Orlando, DISL, IMMS, MS State University, SC Aquarium, and Grand Isle Police



Permit # 24359



Permit # 24359



Barataria Bay Health Assessment:

- June 19-29, 2023
- 27 encircled, of which 2 escaped and 1 was released
- 24 dolphins were assessed and received VHF tags
 - 15 females and 9 males
 - 21 were known animals from the photo ID Catalog
 - 20 received ultrasounds
 - 15 had flipper X-rays for aging
 - 17 had AEP's run to determine hearing
- 1 dolphin successfully disentangled



Permit # 24359



Disentanglement:

- YR6 A known Barataria dolphin
- Reported to CWN on June 11th
- First spotted during Health Assessments on June 19th
- 1st Attempt (June 29th) Dolphin Jumped from the compass
- 2nd Attempt A Success
 - All Gear was removed
 - Antibiotics were administered
 - Released back into Barataria Bay



Permit # 24359



Trainings:

- We hosted a NIST training at the Audubon Zoo in New Orleans on July 1st, 2023
 - NIST National Institute of Standards and Technology, National Marine Mammal Tissue Bank in Charleston, SC
 - Collect and preserve tissues for environmental contaminants analysis
 - Liver Trace elements and metal analysis
 - Kidney Hormone and trace metal analysis
 - Blubber Organic contaminant analysis and other pesticides





Sample Collection and Diagnostics:

- Diagnostics contract with University of Illinois Zoo Pathology Program
 - Results from 2022
 - Brucella
 - 36 Cases sent out for analysis 34 were run
 - 7 Positive, 26 Negative and 1 inconclusive
 - Morbillivirus
 - 30 cases sent out for Analysis
 - 28 cases were negative and 2 were inconclusive
 - Biotoxins 13 cases were tested
 - 2 of the cases had a high value for Brevetoxins
 - 2 of the cases had a high value for Domoic Acid
 - 4 of the cases had a high value for Okadaic Acid
 - 2023
 - We have sent out two shipments with roughly 33 samples to be tested
 - Results are still pending



Emerging Issues in Louisiana?

- Effects of climate change on marine mammal populations
 - more and stronger hurricanes = storm surge
 - more rain and freshwater inundation = decreased salinity
 - increased threat from harmful algal blooms (e.g., cyanotoxins)
 - new or emerging pathogens due to run-off or changing temperatures
 - Changes in prey distribution or fishing activity
- Stranding data were critical for determining the impacts of the DWH oil spill on marine mammals and will be critical for monitoring the effectiveness and/or impacts of restoration activities in the future
 - Mid- Barataria and mid-Breton sediment diversion restoration projects

Louisiana Hotline

877-942-5343

Immediately Report Any Injured, Stranded, or Dead Marine Mammals Do Not Push Back into the Water Do Not Handle the Animal

