



LOUISIANA MARINE MAMMAL RESTORATION STRATEGY

Task 1.2 Subject Matter Experts Virtual Working Sessions

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ABOUT THE WATER INSTITUTE

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PREFACE

The National Oceanic and Atmospheric Administration (NOAA) Restoration Center contracted the Water Institute (the Institute) to support the development of a Louisiana Marine Mammal (MM) Restoration Portfolio and strategy document as part of NOAA's Damage, Assessment, Remediation and Restoration Program (DAARP). This activity was funded by the Deepwater Horizon (DWH) oil spill Louisiana Trustee Implementation Group (LA TIG) with the goal of developing a restoration strategy for MM in coastal Louisiana and offshore waters to address MM injuries caused by the oil spill. MM were one of many restoration types identified in the DWH oil spill Programmatic Damage Assessment and Restoration Plan (PDARP) (Deepwater Horizon Natural Resource Damage Assessment Trustees, 2016), and within that plan, approximately \$50 million was allocated for MM restoration in Louisiana to compensate for MM injuries caused by the oil spill.

Several challenges exist to the development and successful implementation of a MM restoration strategy in Louisiana, and project selection, sequencing, timing, funding levels, and evaluation all need careful consideration. Further, successful implementation of a Louisiana strategy will require cooperation, collaboration, and partnership with stakeholders including academic institutions, non-government experts, local fishing communities, state agencies and government, and local government and community leadership, and so must also reflect their interests. As such, a successful Louisiana marine mammal restoration effort will require a robust strategy tailored to the state's unique challenges. The strategy document (the primary deliverable of this project) will identify key partnerships, restoration actions and projects, engagement needs and opportunities, short- and long-term priorities and their connection to other relevant MM restoration and Monitoring and Adaptive Management (MAM) activities by groups with a geographic interest in Louisiana. This report summarizes the engagement with subject matter experts (SMEs) as part of the task to elicit input to inform the Strategy development.

Questions about this research should be directed to Dr. Ashlee Minor with The Water Institute (AMinor@thewaterinstitute.org).



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TABLE OF CONTENTS

Preface	i
Acknowledgements.....	ii
List of Figures	iv
List of Tables	iv
List of Acronyms and Abbreviations	v
1.0 Introduction.....	1
2.0 Background.....	2
3.0 Summary Output.....	4
4.0 Conclusions and Next Steps	9
5.0 References.....	10
Appendix A. SME Workshop 1 Meeting Materials.....	A-1
A.1 SME Workshop 1: Project Overview Document.....	A-1
A.2 SME Workshop 1: Agenda.....	A-5
A.3 SME Workshop 1: Presentation.....	A-5
Appendix B. SME Workshop 2 Meeting Materials	B-1
B.1 SME Workshop 2: Agenda.....	B-1
B.2 SME Workshop 2: SME Input.....	B-2



LIST OF FIGURES

Figure 1. Current project status for tasks related to completion of the Louisiana Marine Mammal Restoration strategy.	1
Figure B-1. Visual workflow of the collection of input from SMEs on projects related to a. addressing human impacts on MM populations, b. improving Marine Mammal (MM) health, and c. increasing available knowledge of threats and stressors to MM populations, and d. the development of partnerships to support MM restoration based on the potential project types identified.....	B-2
Figure B-2. Visual workflow of the collection of input from SMEs for recording SME’s biggest priorities and concerns in the Mural.....	B-3
Figure B-3. SME feedback recorded pertaining to the one additional piece of information they would like the decision-making team to know.	B-5

LIST OF TABLES

Table 1. Marine Mammal (MM) Restoration objectives and potential project component or action types discussed and/or elicited during SME workshop 2.	5
Table 2. Partnership types and potential organizations for partnering with on MM Restoration planning and projects in Louisiana that were elicited by the project team during the discussions in SME Workshop 2.	7
Table A-1. Agenda for SME Workshop 1 held on February 24, 2025	A-5
Table B-1. Agenda for SME Workshop 2 held on March 13, 2025.	B-1
Table B-2. Individual input recorded from SMEs concerning their biggest concern and highest priority related to MM restoration in Louisiana.....	B-4



LIST OF ACRONYMS AND ABBREVIATIONS

Acronym	Term
DAARP	Damage, Assessment, Remediation and Restoration Program
DWH	Deepwater Horizon
LA	Louisiana
LA CPRA	Louisiana Coastal Protection and Restoration Authority
LDWF	Louisiana Department of Wildlife and Fisheries
MAM	Monitoring and Adaptive Management
MM	Marine Mammals
MMB	Marine Mammal Branch
NOAA	National Oceanic and Atmospheric Administration
NRDA	Natural Resource Damage Assessment
PDARP	Programmatic Damage Assessment and Restoration Plan
PEIS	Programmatic Environmental Impact Statement
SERO	Southeast Regional Office
SDM	Structured Decision Making
SME	Subject Matter Expert(s)
TIG	Trustee Implementation Group



1.0 INTRODUCTION

The National Oceanic and Atmospheric Administration (NOAA) Restoration Center has partnered with The Water Institute (the Institute) to support the development of a Marine Mammal (MM) Restoration Portfolio and Strategy (herein referred to as the Strategy) for Louisiana as part of NOAA's Damage, Assessment, Remediation, and Restoration Program (DAARP). The purpose of the Strategy is to ensure that Deepwater Horizon (DWH) Natural Resource Damage Assessment (NRDA) funds are dedicated to compensating for MM injuries in Louisiana, and that the funds are directed to the most beneficial and logistically-sound actions for restoration of MM populations that inhabit Louisiana's coastal and offshore waters. To be fully implementable, the Strategy and recommended actions must consider multiple challenges specific to Louisiana including remote locations, logistical constraints, limited capacity and experience, competing interests, restrictive funds, limited local support, uncertainty in MM threats and stressors, and changing environmental conditions.

Development of the Strategy is divided into two working tasks which will lead to the production of the strategy document and a technical appendix. The project is currently progressing on Task 1 which involves the elicitation of MM restoration goals, objectives, approaches, and project concepts applicable to Louisiana (Figure 1). Task 1 has four subtasks including Task 1.1: Literature Review (Minor et al., forthcoming), Task 1.2: Subject Matter Expert (SME) Workshop(s), Task 1.3: Targeted Public Workshop, and Task 1.4: Summary Table. Tasks 1.1, 1.2, and 1.3 will provide foundational input for consideration in the Strategy, and Task 1.4 will provide formal summarization of the elicited information. This report details the work done to complete Task 1.2 and the output that resulted from the corresponding SME workshops.

To accomplish Task 1.2: SME Workshop(s), NOAA and the Institute engaged SMEs in discussion on the framework developed in Task 1.1 (Minor et al., forthcoming) to identify project types for MM restoration in Louisiana and common themes surrounding the SMEs' highest priorities and concerns. The information elicited in the SME Workshops will be used to develop a targeted list of potential actions to be considered for MM Restoration in Louisiana and for inclusion in the final version of the Strategy. The Strategy will identify key partnerships, restoration projects and actions, engagement needs and opportunities, short- and long-term priorities and their connection to other MM restoration and Monitoring and Adaptive Management (MAM) activities with Trustee Implementation Groups (TIGs) that have a geographic interest in Louisiana.

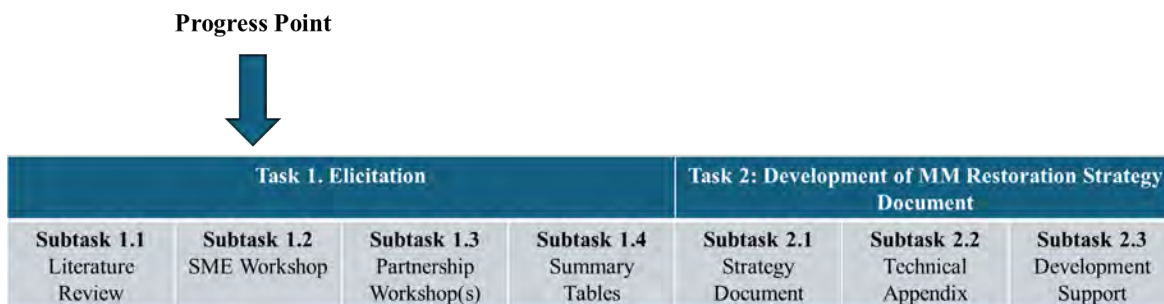


Figure 1. Current project status for tasks related to completion of the Louisiana Marine Mammal Restoration strategy. Subtask 1.2: SME Workshop has been completed.



2.0 BACKGROUND

To develop and successfully implement a MM restoration strategy in Louisiana, several factors must be considered and carefully evaluated, including project selection, sequencing, timing, and funding levels. Further, successful implementation of a Louisiana strategy will require cooperation, collaboration, and partnership with stakeholders including academic institutions, non-government experts, local fishing communities, state agencies and government, and local government and community leadership, and so must also reflect their interests.

NOAA and the Institute will use an SDM framework to determine the highest priorities and most impactful activities to fund for MM restoration in Louisiana. The initiation step of this SDM process was the development of a decision framework (Minor et al., forthcoming) for the Strategy. NOAA and the Institute selected SMEs based on their expertise, background, and involvement in previous MM work, and SMEs were invited to participate in two workshops to share their feedback and input on the specific restoration objectives and project concepts included in the Strategy framework. SME discussions built upon the significant body of work detailing human impacts on MMs, MM health, and MM monitoring and data gaps that is detailed in the PDARP/PEIS (DWH NRDA Trustees, 2016), the LA MAM Strategy (LA TIG, 2021), and MM Strategic framework (DWH NRDA Trustees, 2017) and was incorporated by reference into the Strategy framework. Supporting information for the Strategy framework and foundational background for SME discussions was obtained from:

- The PDARP/ PEIS (DWH NRDA Trustees, 2016)
- The MM Strategic Framework document (DWH NRDA Trustees, 2017)
- The MM section of the LA MAM Strategy Appendix E (LA TIG, 2021)
- The Monitoring and Adaptive Management Activity Implementation Plan: Monitoring Approaches for Bottlenose Dolphin Restoration in Louisiana (Deepwater Horizon Louisiana Trustee Implementation Group, 2022)

Additionally, the SME workshop discussions built upon communications between MM SMEs at the Louisiana Marine Mammal Planning Meeting in January 2024 (NOAA Southeast Regional Office [SERO] Marine Mammal Branch [MMB], 2024) and other formal and informal communication during January 2023 to January 2025.

The Project Team organized and facilitated two virtual workshops with SMEs:

- **SME Workshop 1 - February 24, 2025:** The project team provided SMEs with an overview of the project, an introduction to the SDM process that will be used to establish baseline understanding of the framework organization, and an introduction to the draft objectives hierarchy they would be asked to provide input on during the second workshop. See Appendix A. for supporting materials.
- **SME Workshop 2 - March 13, 2025:** NOAA and the Institute asked SMEs to review and refine the draft objectives and potential restoration actions for MMs in coastal Louisiana and offshore waters. These built upon the PDARP/ PEIS (DWH NRDA Trustees, 2016) and reflected expert



input received in recent years. Additionally, SMEs were asked to provide their highest priority and biggest concern about implementing MM restoration in Louisiana. Discussion of the framework, MM considerations in Louisiana, and input was obtained via virtual meeting and using an interactive Mural board. See Appendix B. for supporting materials related to this process.

NOAA and the Institute used outputs from the SME workshops to refine the list of potential project types for MM restoration in Louisiana. Project concepts and types and potential actions that were identified as having a high likelihood of success or those that reinforced common themes elicited through SME input were compiled into a new list for consideration. These outputs will be used in a rapid prototyping step of the SDM process as part of a preliminary step in preparation for the next task. This rapid prototyping step will involve carefully considering pathways to implementation for each potential project and identifying a portfolio of potential projects for MM restoration in Louisiana. This portfolio will then allow for the development of a targeted list of potential partners on these projects for the workshops in Task 1.3 – Targeted Partnership Workshops.



3.0 SUMMARY OUTPUT

Fourteen SMEs attended SME Workshop One and 13 SMEs attended SME Workshop 2. Professional affiliations of SMEs included NOAA, Marine Mammal Commission, National Marine Mammal Foundation, Louisiana Coastal Protection and Restoration Authority, and Louisiana Department of Wildlife and Fisheries. SMEs represented a range of professional backgrounds relevant to MM in Louisiana including MM veterinarians and health and welfare experts, fisheries and MM biologists, MM stranding and response coordinators, restoration scientists, and coastal resource and wildlife scientists for the state of Louisiana.

At the end of SME Workshop 1, SMEs were introduced to the project and the foundational information needed to participate in SME Workshop 2. Through the input received during SME Workshop 2, NOAA and the Institute identified a list of 68 potential project component or action types for consideration (Table 1), and 50 potential partnership opportunities (Table 2) when developing the recommendations for the Strategy. NOAA and the Institute also identified the following key themes represented in the SME's input (further detailed in Appendix B - SME Workshop 2 – Meeting Materials):

- There is a need for sustainable and durable MM restoration plans and actions in the state of Louisiana. These plans should also account for attitudes, behaviors, and beliefs that drive human-MM interactions.
- It is important to leverage and collaborate with federal and state entities on existing actions, relationships, and plans for Louisiana MM restoration.
- There is a need to better understand the role of dolphin behavior in existing threats and stressors.
- Supporting health outcomes for MM is a function of detection and mitigation of direct stressors (e.g., disease, contaminants, and freshwater), but also of habitat quality characterized by prey, environmental factors, and exposure to stressors.
- There is a strong need for a robust stranding network comprised of coordinated organizations and volunteers.
- Partnership and collaboration at the institutional level is an important part to successful MM restoration in Louisiana.



Table 1. Marine Mammal (MM) Restoration objectives and potential project component or action types discussed and/or elicited during SME workshop 2. MM Restoration objectives were identified in the Strategy framework (Minor et al., forthcoming) and reflect the goal that the potential project component or action type supports.

MM Restoration Objective	Project Component or Action Type
Reduce commercial fishery interactions	Otter trawl
	Skimmer trawl
	Crab pot
	Menhaden purse seine
	Intentional harm
Reduce hook and line fishing interactions	Entanglement
	Depredation
	Illegal feeding associated with recreational fishing
	Deterrence
Reduce noise impacts	Coastal construction of finite duration
	Ubiquitous noise from vessel traffic, underwater cables, etc.
Reduce illegal feeding and harassment	Illegal feeding associated with recreational fishing
	Illegal feeding associated with boating and tourism
	Intentional harm associated with recreation fishing
Reduce mortality from vessel collisions	Inshore vessels
	Offshore vessels
Increase/ improve public engagement	Stranding response
	Report interactions (e.g., illegal feeding)
	Increase public awareness and engagement
Mitigate effect of oil/gas discharge	Reduce pollutant input and increase clean up
	Develop response techniques to limit MM exposure to spills
	Reduce oil and gas spills
	Increase effectiveness of spill damage assessment for MM
	Improve NRDA settlement outcomes for MM
Mitigate freshwater effects from flood control and diversion projects	Prevent freshwater exposure
	Monitor and mitigate freshwater effects
	Moderate freshwater releases in response to dolphin health
Reduce entrapment due to construction or weather event	Reduce entrapment risk during construction
Improve detection/diagnosis of disease	Individual animal diagnostics (i.e., rescue and rehabilitation)
	Population-level detection/diagnosis (i.e., health assessments)
	Baseline monitoring (i.e., stranding network surveys)
	Expand the local professional community, especially veterinary
	Improved public reporting and engagement
	Establish and improve existing Louisiana diagnostic and testing capacity
	Identify and prioritize primary threats and mitigation strategies based on individual and population-level findings



MM Restoration Objective	Project Component or Action Type
Mitigate threats from disease, freshwater, and contaminants	Targeted intervention at the individual level based on disease
	Targeted intervention at the population/stock level based on health status
	Response plan
	Identify and develop management strategies that mitigate environment-related disease
Develop a functional and experienced response network	Identify and establish a fully equipped primary partner/lead organization for Louisiana stranding network
	Establish a cooperative network of organizations in and adjacent to Louisiana
	Increase/develop rehabilitation capacity
	Develop surge capacity
Preserve and/or restore habitat	Improve habitat
	Create/increase protected areas
	Protect prey species (e.g., commercially exploited species such as menhaden (<i>Brevoortia</i> spp.))
	Habitat restoration informed by health and evidence-based approaches
Develop ecosystem-level understanding of stressors and drivers	Prey dynamics
	Habitat use
	Long-term environmental variation
	Salinity changes
	Stressors
	Coastal land loss
Monitor and evaluation population status and trend	Water depth
	Before and after population trends
	Before and after health trends
	Before and after human impacts and interactions
	Standardize long-term monitoring with improved metrics and precision
	Understand and account for cumulative impacts of multiple stressors
Understand MM habitat-use and distribution	Understand key habitats and attributed
	Understand MM movements
	Understand genetics of dolphin populations
Increase understanding of human-dimensions	Establish a better understanding of human interactions
	Increase understanding of high-priority audiences
	Understand how to reach multiple communities for education, outreach, and engagement
Increase availability and distribution of knowledge	Develop products that reach a broader audience
	Contribute to peer-reviewed literature
	Present at conferences



Table 2. Partnership types and potential organizations for partnering with on MM Restoration planning and projects in Louisiana that were elicited by the project team during the discussions in SME Workshop 2.

Partnership Type	Potential Partnership Organization or Organization Type
Coastal Organizations	Service organizations (e.g., Coastal Wetlands Planning, Protection and Restoration Act – CWPPRA)
Fishing organizations	Commercial fishers (e.g., shrimpers, menhaden fishers, crabbers)
	Recreational fishers
	Recreational fishing organizations
	State task forces
Aquariums/Zoos	Audubon Nature Institute
	SeaWorld
Environmental non-government organizations (NGO)	Environmental Defense Fund
	National Wildlife Federation
	Local NGOs (e.g., Restore or Retreat, Pontchartrain Conservancy, Glass Half Full, Common Ground Relief, Coalition to Restore Coastal Louisiana, etc.)
	The Nature Conservancy
	Louisiana Wildlife Federation
	Healthy Gulf
	Louisiana Wildlife Federation
State agencies	Louisiana Coastal Protection and Restoration Authority (CPRA)
	Louisiana Department of Wildlife and Fisheries (LDWF)
	State wildlife refuges/management areas
State academic institutions/Research partners	Louisiana State University (LSU)
	University Consortium (e.g., Louisiana Universities Marine Consortium, LUMCON)
	Nicholls State University (NSU)
	Establishment of an endowed chair for MM in Louisiana
	Louisiana Tech University (LA Tech)
	Tulane University
	McNeese State University
	University of Louisiana at Lafayette (ULL)
	University of New Orleans (UNO)
	Nunez Community College
Veterinary colleges and community	LSU
	Mississippi State University
	Auburn University
	International Association for Aquatic Animal Medicine (IAAAM)
	Association of Zoos and Aquariums (AZA)
	American Association of Zoo Veterinarians (AAZV)
	Wildlife Disease Association (WDA)



Partnership Type	Potential Partnership Organization or Organization Type
Federal and federally funded organizations	Barataria National Estuary Program (BTNEP)
	National Wildlife Refuges
	Louisiana Sea Grant
	United States Fish and Wildlife Service (USFWS)
	Bureau of Ocean Energy Management (BOEM)
	National Oceanic and Atmospheric Administration (NOAA)
	National Park Service (NPS)
	United States Coast Guard (USCG)
	United States Army Corps of Engineers (USACE)
	United States Army Engineer Research and Development Center (ERDC)
Tribal communities	United Houma Nation
	Louisiana Governor's Office of Indian Affairs
Local governments	Town of Grand Isle
	Parish governments
	Local police and fire departments
Industry partners	Companies involved in activities that intersect with MM
	Marine businesses



4.0 CONCLUSIONS AND NEXT STEPS

NOAA and the Institute completed Task 1.2 – SME Workshop(s) to elicit concerns, priorities, and input on potential project types for MM restoration in Louisiana. Important considerations and themes were identified that will guide the development of a targeted list of projects and actions for inclusion in the Strategy. However, the resounding theme from the workshops centered on the importance of local and regional partnerships for achieving MM restoration goals in Louisiana. As such, it became apparent that the originally planned targeted public workshop associated with Task 1.3 should be amended to reflect a focus on partnership development. Future planning of Task 1.3 workshops will identify key partnership opportunities and strategize to facilitate the establishment of partnerships necessary for carrying out MM restoration activities in Louisiana.

The output from SME Workshop 2 will be carried forward into an initial rapid prototyping step of the SDM process. The rapid prototyping step will allow NOAA and the Institute to identify short-coming and strengths of the potential project options elicited in SME Workshop 2 (Blomquist et al., 2010), ultimately allowing the list of potential options to be narrowed to MM restoration projects with high potential for success in Louisiana. High priority projects and action types identified in the rapid prototyping process will set the foundation for development of an invitee list for the Targeted Partnerships workshops in Task 1.3.



5.0 REFERENCES

Blomquist, S. M., Johnson, T. D., Smith, D. R., Call, G. P., Miller, B. N., Thurman, W. M., McFadden, J. E., Parkin, M. J., & Boomer, G. S. (2010). Structured Decision-Making and Rapid Prototyping to Plan a Management Response to an Invasive Species. *Journal of Fish and Wildlife Management*, 1(1), 19–32. <https://doi.org/10.3996/JFWM-025>

Deepwater Horizon Louisiana Trustee Implementation Group. (2022). *Monitoring and Adaptive Management Activity Implementation Plan: Monitoring Approaches for Bottlenose Dolphin Restoration in Louisiana*. <https://www.fws.gov/doiddata/dwh-ar-documents/5381/DWH-ARZ010752.pdf>

Deepwater Horizon Natural Resource Damage Assessment Trustees. (2016). *Deepwater Horizon oil spill final programmatic damage assessment and restoration plan and final programmatic environmental impact statement. Chapter 8: Trustee responses to public comments on the draft PDARP/ PIES*.

Deepwater Horizon Natural Resource Damage Assessment Trustees.
<http://www.gulfspillrestoration.noaa.gov/restoration-planning/gulf-plan>

Deepwater Horizon Natural Resource Damage Assessment Trustees. (2017). *Deepwater Horizon Oil Spill Natural Resource Damage Assessment: Strategic framework for marine mammal restoration activities* (p. 66) [Strategic Framework]. National Oceanic & Atmospheric Administration.
<http://www.gulfspillrestoration.noaa.gov/restoration-planning/gulf-plan>

LA TIG. (2021). *Louisiana Trustee Implementation Group Monitoring and Adaptive Management Strategy* (p. 55) [Final]. <https://la-dwh.com/wp-content/uploads/2021/09/MAMstrategy.pdf>

Minor, A. K., Cowan, J., Dausman, A., Carruthers, T., & Mallindine, J. (forthcoming). *Louisiana Marine Mammal Restoration Strategy—Task 1.1 Literature Review*. The Water Institute. Prepared for and/or funded by National Oceanic and Atmospheric Administration.

NOAA Southeast Regional Office (SERO) Marine Mammal Branch (MMB). (2024, January). *Louisiana Planning Meeting*.

APPENDIX A. SME WORKSHOP 1 MEETING MATERIALS

National Oceanic and Atmospheric Administration (NOAA) and The Water Institute (the Institute) held subject matter expert (SME) Workshop 1 virtually via Teams on February 24, 2025. The purpose of the first workshop was to provide SMEs with an introduction to the project and general background information on structured decision making (SDM) and how it will be used in developing the Louisiana Marine Mammal (MM) Restoration Strategy (herein referred to as the Strategy). NOAA and the Institute explained to SMEs how their input will be used in the SDM process to select the project types and actions that will be included in the Strategy. During this 2-hour meeting, time was built into the agenda to encourage participant questions and discussions.

Below are the materials developed for SME Workshop 1.

A.1 SME WORKSHOP 1: PROJECT OVERVIEW DOCUMENT

NOAA and the Institute prepared and shared a document with SMEs prior to the first workshop. The purpose of the document, entitled *Louisiana Marine Mammal Restoration Implementation Plan and the Structured Decision-Making Process: A Science-Based Process for Collaborative Decision Making*, was to provide an overview of the purpose of developing the Strategy and the process to be used to make decisions on which activities will be included in the Strategy.



THE WATER
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LOUISIANA MARINE MAMMAL RESTORATION IMPLEMENTATION PLAN AND THE STRUCTURED DECISION- MAKING PROCESS

A Science-Based Process for Collaborative Decision Making

THE DECISION CONTEXT

As part of an activity funded by the *Deepwater Horizon* oil spill Louisiana Trustee Implementation Group, NOAA is developing a restoration strategy for marine mammals in coastal Louisiana and offshore waters to address injuries caused by the oil spill. Several challenges exist to the development and successful implementation of a Louisiana marine mammal restoration strategy (LA MM Restoration Strategy), and project selection, sequencing, timing, funding levels, and evaluation all need careful consideration. Further, successful implementation of a Louisiana strategy will require cooperation, collaboration, and partnership with stakeholders including academic institutions, non-government experts, local fishing communities, and local community leadership, and so must also reflect their interests. As such, a successful Louisiana marine mammal restoration effort will require a robust strategy tailored to the state's unique challenges.

STRUCTURED DECISION-MAKING APPROACH

Structured Decision Making (SDM) is an objectives-oriented, transparent process that can support decision makers by providing a framework for engaging stakeholders and incorporating defensible, science-based tools for evaluating the tradeoffs between choices. SDM involves the use of a broad set of tools drawing from the fields of decision analysis, operations research, economics, human dimensions, management science, behavioral psychology, and expert judgment. Through a structured and defined process, decision makers and stakeholders can identify the base cause of a problem. This allows decision makers to systematically identify solutions, address uncertainties that may be leading to indecision, and use robust tools for predicting outcomes. This approach benefits from tools and information that model or forecast outcomes from decisions and uses objective metrics to evaluate the costs and benefits associated with actions. The result of this structured SDM process is one that facilitates decision-making most likely to lead to positive outcomes for all concerns.



STEPS IN SDM: PROACT



- **Define the Problem** – What are decision makers and stakeholders making choices about?
- **Define the Objectives** – Two primary types of objectives are defined: fundamental and means.
 - *Fundamental objectives* reflect the core concern(s) that stakeholders want to improve. These may also incorporate considerations such as community needs, economics, and others. These are the objectives against which the alternatives are evaluated.
 - *Means objectives* are potential actions or alternatives that can be implemented alone or in combination to achieve the fundamental objectives.
- **Identify Alternatives** – Based upon the means objectives, alternatives of potential actions or sets of actions are identified. Alternatives should represent a reasonable range of options for achieving the fundamental objectives.
- **Conduct Consequence Analysis** – How may the alternatives impact the fundamental objectives? This step includes the use of data or models—which can be simple or complex—to predict what these outcomes will be.
- **Evaluate and Optimize Tradeoffs** – What are the benefits across different objectives and what choice or sets of choices result in the most desirable overall outcome? This step can also include quantitative analysis tools of different complexity.
- **Decide and Take Action** – This step is in the hands of the decision maker, but the consequences and tradeoffs are transparent and based on robust tools. In addition, SDM can provide the basis for *adaptive management*, a deliberate process for revisiting and improving choices over time.



APPLICATION OF THE SDM FRAMEWORK

NOAA has partnered with The Water Institute (the Institute) to employ SDM in the development of the LA MM Restoration Strategy. The actions included need to address injuries to marine mammals caused by the oil spill and ensure their effective management in Louisiana for the next 20 years. Decisions will involve complex choices, as a successful strategy must reflect the interests of multiple stakeholders with competing interests and identify actions most likely to meet the unique needs in Louisiana.

The LA MM Restoration Strategy will build upon the restoration approaches and techniques in the *Deepwater Horizon* Programmatic Damage Assessment and Restoration Plan (PDARP) and provide specific actions, costs, and sequence of implementation over approximately 20 years. It is expected to include key partnerships, engagement needs and opportunities, short- and long-term priorities and their connection to other marine mammal restoration and Monitoring and Adaptive management activities with groups that have a geographic interest in Louisiana.

DEFINING OBJECTIVES AND ALTERNATIVES: WORKSHOPS

As an early step in the development of the LA MM Restoration Strategy, a series of workshops with subject matter experts (SMEs) will inform the development of objectives and alternatives that address challenges MM populations face in coastal Louisiana and offshore waters. Information from these workshops will support completion of the SDM process of developing alternatives, conducting consequences and trade-off analyses and, ultimately, selection of the actions for implementation.

NOAA and the Institute will facilitate two workshops to collaborate with SMEs:

- Workshop 1 will include a general introduction to SDM and its application to this decision. SMEs will be able to confidently identify that their contributions are reflected in the SDM process and format of the second workshop.
- In the second workshop, the Institute will engage with SMEs in a collaborative working format to review and refine draft objectives and potential restoration actions for MM populations in coastal Louisiana and offshore waters. These will be built upon the PDARP and reflect expert input received in recent years. NOAA will use the outcomes of the second workshop to identify alternatives of restoration actions that can be evaluated in future phases of the LA MM Restoration Strategy planning.

EXAMPLES OF SDM IMPLEMENTATION BY THE WATER INSTITUTE

[Long-term Strategic Water Sustainability Plan; Capital Area Ground Water Conservation Commission](#)

[Louisiana Barrier Island System Management \(BISM\): Structured Decision-Making](#)



A.2 SME WORKSHOP 1: AGENDA

Table A-1. Agenda for SME Workshop 1 held on February 24, 2025

Time (Central Time)	Topic
1:00 – 1:15 PM	Introductions
1:15 – 1:35 PM	Project Overview
1:35 – 1:55 PM	Structured Decision-making (SDM) Overview, Questions and Answers
1:55 – 2:40 PM	Initial framework for Marine Mammal Strategy development, Questions and Answers
2:40 – 3:00 PM	Next Steps – How to provide your input

A.3 SME WORKSHOP 1: PRESENTATION



Photo Credit: National Marine Mammal Foundation



THE WATER INSTITUTE

DEVELOPING THE LOUISIANA MARINE MAMMAL RESTORATION STRATEGY

Decision Framework and Overview

February 24, 2025

1



AGENDA

Time (CT)	Activity
1:00 – 1:15	Introductions
1:15 – 1:35	Project Overview
1:35 – 1:55	Structured Decision-making (SDM) Overview, Q&A
1:55 – 2:40	Initial framework for MM Strategy development, Q&A
2:40 – 3:00	Next Steps – How to provide your input



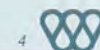
PURPOSE OF TODAY'S WORKSHOP

- Provide an overview of the project
- Provide context for the decision-making structure
- Answer your questions
- Receive initial input and feedback that is relevant to this project
- Prepare for the next workshop where we will discuss and refine the objectives, and the potential restoration options that will be the foundation for developing and evaluating alternatives





PROJECT OVERVIEW



4

INTRODUCTION

- **WHO:** NOAA and partners
- **WHAT, WHY, WHERE:**
 - Develop a **marine mammal restoration portfolio of strategic priorities** in coastal Louisiana and offshore waters that compensates for injuries from the DWH oil spill and takes into consideration uncertainties and constraints.
 - Strategy will describe and sequence actions to be **implemented within 15 years, with benefits accruing over 20+ years** for the remaining LA TIG MM allocation (~\$47M).
- **WHEN:**
 - Strategy to be finalized **January 2026**.
- **HOW:** Collaboratively elicit
 - Restoration goals, objectives, and project concepts
 - Key partnerships & engagement needs/opportunities
 - Short and medium-term priorities and their connection to other marine mammal restoration and MAM activities in LA & RW TIGs



5

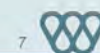


LA MARINE MAMMAL RESTORATION STRATEGY



6

STRUCTURED DECISION MAKING (SDM)



7



Structured decision making (SDM):



“A formalization of common sense for decision problems which are too complex for informal use of common sense.”
(Keeney 1982)



ABOUT SDM

A set of
tools to aid
decision
makers

Draws
from the
fields of:

Decision Analysis

Operations Research
Economics

Human Dimensions

Management Science

Behavioral Psychology

9





KEY BENEFIT

Structuring
conversations
about complex
decisions

Methods: Problem decomposition

Values- and objectives-focused
thinking

Systematic and transparent
consideration of decision
outcomes

10



WHY SDM

Even the
best
decision
makers
encounter
pitfalls

Assume consensus on problems or
scope

Perceive constraints

Avoid necessary conflict

Fall into psychological traps (sunk
costs, favorite alternatives,
preconceived notions, biases, etc.)

11





WHY SDM

Proven
applications

Financial investing

Project management

Species and natural resource
management (USFWS, USGS)

Policy and planning (LA Climate
Action Plan)

Life decisions (buying a car, taking a
new job, etc.)

12



PROACT FRAMEWORK

1. Define the **Problem**
(Decision Context)
2. Determine the **Objectives**
3. Identify **Alternatives**
(Solutions)
4. Evaluate alternatives and
forecast the **Consequences**
5. Evaluate the **Trade-offs**
6. Make the **decision and take
action**
7. Apply **Adaptive
Management** as needed



from Runge MC, Grand JB, Mitchell MS. 2013.
Structured decision making, Chapter 5 in Krausman
PR, Cain JW III, eds. Wildlife Management:
Contemporary Principles and Practices. Johns
Hopkins University Press, Baltimore, Maryland.

13





WHY SDM FOR MM STRATEGY DOCUMENT?

Decisions involve:

Complex choices

Many stakeholders with diverse priorities

Need for transparency and buy-in for successful implementation

Need for an adaptive management framework for decades of implementation

OVERALL BENEFITS

- Can mitigate and overcome decision paralysis
- Incorporates expert, stakeholder input; provides transparency in decision
- Communication of progress achieving objectives
- Mechanism for adaptive management (e.g., tracking metrics associated with each objective)
- Opportunity to continually incorporate new data and tools in a targeted, decision-relevant way

14



MARINE MAMMAL RESTORATION STRATEGY

What is your input feeding into?
What is the output?

Marine Mammal Restoration Strategy

- Provide detailed guidance on what, where, when and how to invest funds
- Will include the list of activities, cost, timing for implementation
- Will identify:
 - Key partnerships & engagement needs/opportunities that are critical to successful implementation
 - Synergies/dependencies with other relevant marine mammal funded work (e.g., projects funded in the Regionwide TIG; other restoration in LA)

15





DECISION FRAMEWORK FOR MARINE MAMMAL RESTORATION STRATEGY DEVELOPMENT

16



OBJECTIVES HIERARCHY – WHAT DO YOU WANT TO ACCOMPLISH?



17





THANK YOU!



Photo Credit: NOAA

March 27, 2025

18





APPENDIX B. SME WORKSHOP 2 MEETING MATERIALS

B.1 SME WORKSHOP 2: AGENDA

Table B-1. Agenda for SME Workshop 2 held on March 13, 2025.

Time (Central Time)	Topic
10:00 – 10:10 AM	Welcome and Purpose
10:10 – 10:25 AM	Introductions and Input
10:25 – 10:40 AM	Input
10:40 – 11:00 AM	Human Impacts
11:00 – 11:15 AM	Improve Marine Mammal Health
11:15 – 11:30 AM	Increase Available knowledge
11:30 – 11:45 AM	Partnerships
11:45 AM – 12:00 PM	Wrap up
12:00 PM	Adjourn



B.2 SME WORKSHOP 2: SME INPUT

In the virtual SME workshop to discuss the MM restoration framework (Minor et al., forthcoming), SMEs were asked to provide input via an interactive Mural board regarding potential project types from three categories that could be used to inform the development of partnerships to support MM restoration in Louisiana (Figure B-1). In addition to providing overarching input on the list of potential activities, SMEs were asked to provide their highest priority and biggest concern during SME Workshop 2 on March 13, 2025 (Figure B-2). Individual SME input is detailed below and was synthesized from the feedback obtained via the virtual discussion and Mural board (Table B-2).

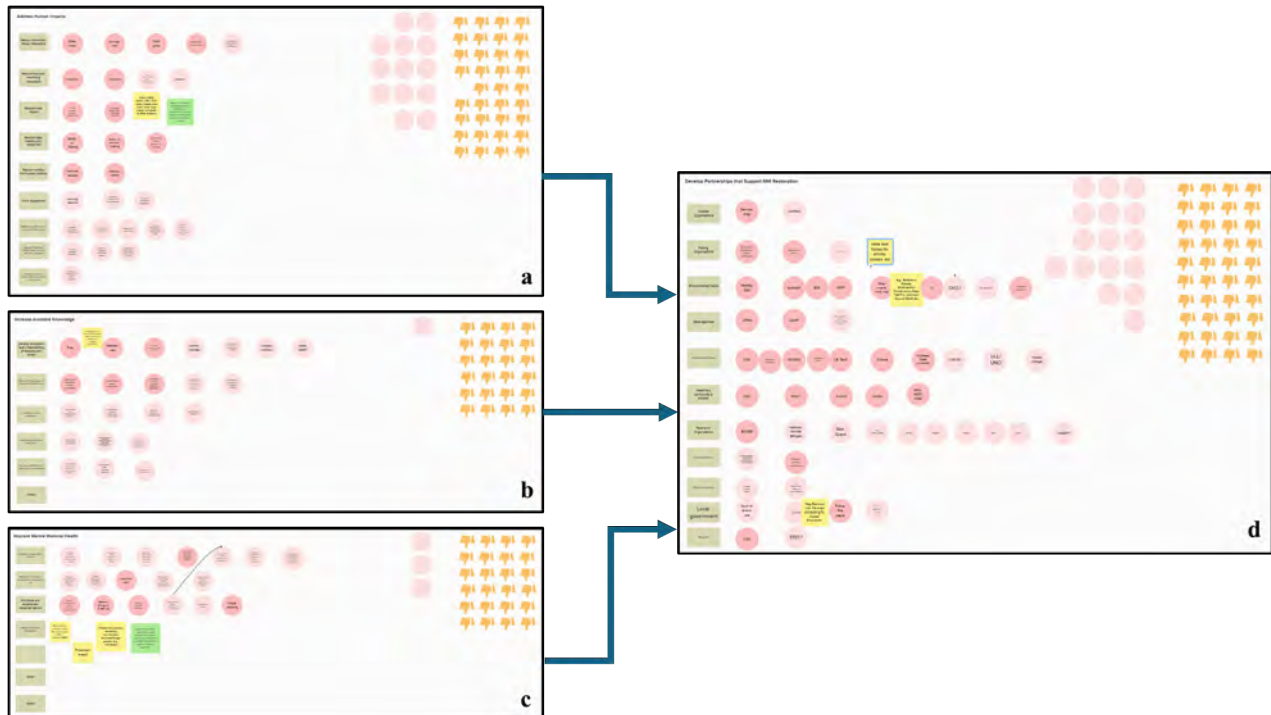
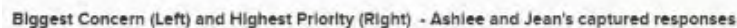


Figure B-1. Visual workflow of the collection of input from SMEs on projects related to a. addressing human impacts on MM populations, b. improving Marine Mammal (MM) health, and c. increasing available knowledge of threats and stressors to MM populations, and d. the development of partnerships to support MM restoration based on the potential project types identified. SMEs were asked to provide negative input on projects using the thumbs-down icon, add additional project types using the pink circles, and provide specific input using square note icons.



TWT Recorder 2 (green)

Community engagement - science, public, agencies - long-term engagement: capacity/integration

Engagement of diverse communities over the long-term because of a persistence of I.A., long-term security and integration of nations to support implementation. Current GIS practitioners of the war in Ethiopia of the coast of I.A., suggest concerns – how to enhance and sustainability contributions of

Invest funds in a way that, when fully expended we have something to show for it

Entanglement and vessel strikes: how best to engage local communities to mitigate for that by engaging coastal fishermen

Lack of baseline is a concern especially because of the long, remote coastline in LA.

Searching tensads of systems with depth of accuracy may be done in a way that allows for significant impact. It is a (relatively) simple and cost-effective way to identify and address challenges. Used by individuals across the entire organization, it can help to reduce the risk of failure and increase the likelihood of success.

likely to produce effective results if a company isn't implementing good monitoring programs to allow the data to flow back into management. Needs to be a well-designed program. Lack of discipline with the report is a huge weakness; ability to integrate future mission rather than mere collection.

Big picture thinking about infrastructure that we need to work with and assume that we'll be able to work with whatever for construction and maintenance and support. Worried about climbing, getting and making that it is important, especially in support that should be able to work on.

Coordinate aspect of the work and how the state of LA can support the actions/ not get in the way.

Office of Economic Policy and Research, 1999 and 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679,

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0893-3200/00/\$12.00
DOI: 10.1037/0893-3200.14.1.100

How do we best engage local communities to mitigate entanglement issues/vessel strikes?

Lack of baseline data
Feasibility logistics of
working in remote areas
of Louisiana

Enhancing feasibility of different policies with respect to making sure that they are done in a way that leads to significant impact. Measuring integration impact of funds.

Maximizing/ integrating use of resources
 Clearly in how effective use of people is maximized
 System taking very high level management

Community partnerships focus on mutual benefit for communities and MM. Standing network should be prioritized, so that we can gain as much information from standing events as possible.

Coordination aspect - How can CIRA and state agencies support rather than oppose actions implemented by NOAA

Emphasis on broader resource
benefits generated by the
Chenilleville restoration project

[illegible]

Laura: Articulate what partnering looks like; what are we trying to accomplish? This will allow us to ID and build the right partner.

BUILDING the right partners in the state

Agree re: partnerships building

Agree with others' comments, and
work to ensure that the shipping
company receives further trans-
shipment instructions and monitoring
from Dordrecht. On the same point
as for 2 years, further from
rehabilitation.

Figure out who the right partners are to buy into the long-term coordinated restoration/monitoring implementation effort.

concur with others.

Regrets. As part of installing performance
and security upgrades, I have seen many
misplaced trust in the OS. I have
seen it all, but I think the biggest
mistake is not to get the right
software.

Baseline data is important to incorporate into planning process, including Master Plan.

UNEP programs are funded in a number of ways. In the environment, 100% of the UN projects already funded and funded in-kind for final strategy development. Rights, Science, and Technology, however, are provided by a number of different sources, including the UN.

Emphasized partnerships. Find common interests as starting point.

Articulate what these partnerships should look like.

Building the right
partnerships to achieve
goals

Establishing who
partners should be

Groundwork before planning

Maintaining capacity for
stranding network and
monitoring and nurturing
existing partnerships

- Finding and building the right partnerships
- Finding common ground on how to approach NM conservation in the Gulf
- Establishing effective talking points

Improved and clarified information is happening on the ground, so that CPRA can incorporate this into planning.

(1987) with
 knowledge of opposing aspects that are
 misaligned with MM, so that these can
 be built into
 (1987)—but it is an better hypothesis
 (specifically Chalmers).

Task 1.2 Subject Matter Experts Virtual Working Sessions



Table B-2. Individual input recorded from SMEs concerning their biggest concern and highest priority related to MM restoration in Louisiana.

SME	Biggest Concern	Highest Priority
1	SME 1's biggest concern is the long-term engagement of diverse communities (e.g., scientists, public, and agencies) to address the unique challenges of MM planning in Louisiana. This engagement should build capacity that leads to integration of actions to support implementation.	SME 1's highest priority is to articulate what partnering looks like and what we are trying to accomplish to allow us to identify and build the right partners. SME 1 also emphasized the importance of partnerships and finding common interests as starting points.
2	SME 2's concern is that in the past, funds have been spent, but there is still a non-workable framework in Louisiana. These funds should be invested in a way that when fully expended, there is something to show for it. The goal is to establish a community in Louisiana to carry on the work for Marine Mammals.	SME 2's highest priority is to build the right partnerships to achieve goals.
3	SME 3's primary concern was about the lack of baseline data pertaining to the issue and effective monitoring efforts. SME 3 emphasized the need for well-designed programs that maximize and strategize the use of resources to establish long-term data collection and monitoring plans that will influence the ability to mitigate future impacts. SME 3 also commented on the need to identify the right partners to support the long-term coordinated restoration, monitoring, and implementation efforts.	SME 3 felt the highest priority is establishing who the partners need to be.
4	SME 4's primary concern is about balancing the breadth of different actions with their depth to ensure that they are done in a way that allows for significant impact. Funds are limited and logistics are challenging, and maximizing the longevity and impact of funds is important. There is a need for effective coordination across projects, resources, and people.	SME 4 agreed with others input and agreed that partnership building is a priority and that setting the groundwork before planning is important.
5	SME 5 has two primary concerns. First is that there is a lack of baseline data and second pertains to the feasibility and logistics of working in remote geographies of Louisiana.	SME 5's highest priority is maintaining the capacity for the stranding network, monitoring and nurturing existing partnerships.
6	SME 6's biggest concern is understanding how to best engage local communities to mitigate entanglement and vessel strikes.	SME 6 concurred with others on the importance of partnerships.



SME	Biggest Concern	Highest Priority
7	SME 7 emphasized the need for a community partnership focus that provides mutual benefits to the communities and MM. SME 7 also highlighted the need to prioritize the stranding network and to maximize the opportunity to gain as much information as possible from stranding events.	SME 7 reiterated the importance of partnerships. SME 7 emphasized the need for finding common ground and effective starting points to identify and build partnerships for MM conservation in the Gulf.
8	SME 8's biggest concern is the coordination aspect of planning. SME 8 would like to understand how CPRA and other Louisiana state agencies can support rather than oppose the actions implemented by NOAA.	SME 8 believed baseline data is important to incorporate into the planning process. Improved and clarified information pertaining to the issue will aid CPRA in the planning process.
9	LDWF's priority is the Chandeleur Islands Restoration Project, and efforts should emphasize broader resource benefits generated by habitat restoration.	SME 9's priority is to collaborate and incorporate the knowledge of ongoing MM projects that are already funded and build upon those. SME 9 also reiterated LDWF's focus on habitat restoration and providing benefit to multiple resources, particularly at the Chandeleur Islands.

One thing to know...

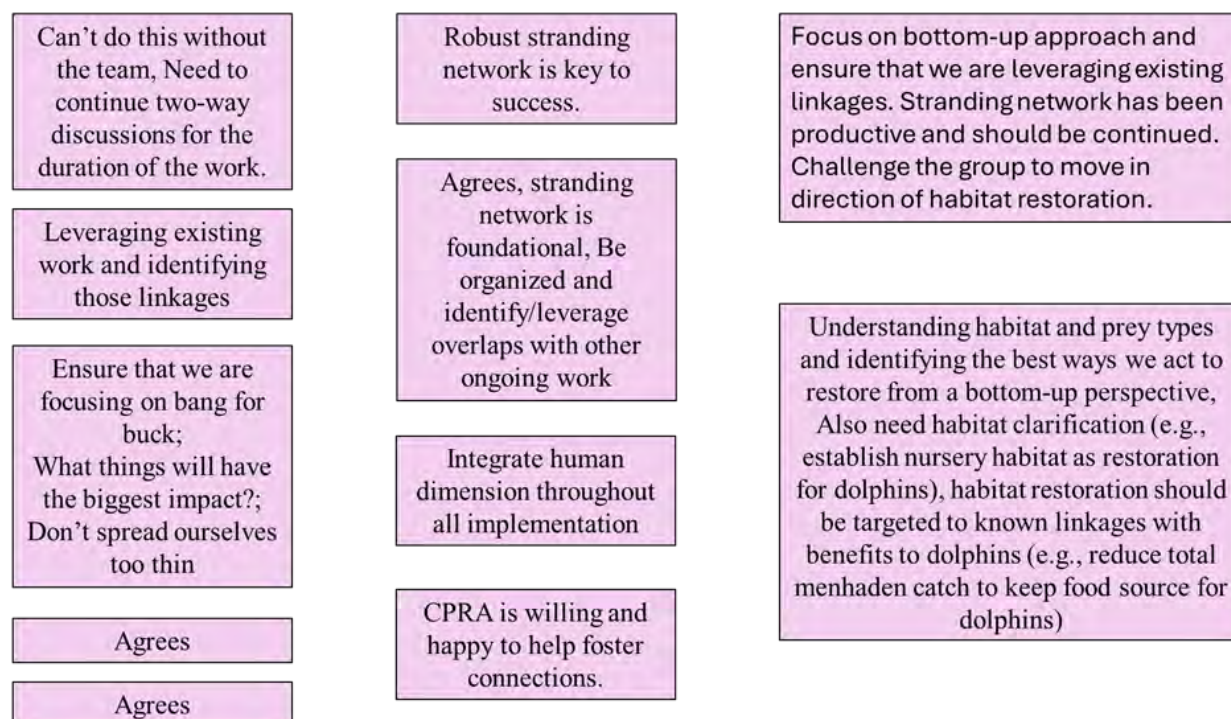


Figure B-3. SME feedback recorded pertaining to the one additional piece of information they would like the decision-making team to know. The content was recorded via the Mural board and adapted to this figure.



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