

Responses to submitted questions under Reducing Impacts from Marine Sound to Marine Mammals in the Gulf of Mexico 7/21/21

Q: Are entities outside the United States eligible to apply? R: Yes.

Q: Can we get access to the budget template? The link from the RFP asks for a password.

R: This was a programming error. You should now have access. If you are still unable to access the materials please contact <u>pico@nfwf.org</u> for emailed version.

Q: What is the budget range you are looking for?

R: NFWF does not have a predetermined range for the budget for this contract. Please prepare the budget based on what is needed to complete the task(s). Offerors should clearly outline their assumptions in both the narrative and budget.

Q: Can we assume that code being delivered in Task 1 will only be used by NOAA to reproduce Task 1 modeling results and will not be distributed, or used for computations of other fields? In other words, we are not delivering finished software products as part of this program, but rather we are doing analysis, and providing the customer with the ability to reproduce the results.

R: Yes, the intent of having the code is to have the ability to replicate only the analysis that is a deliverable in the contract. An ancillary benefit to having both data and code is it also provides full transparency about the results.

Q: What do you consider the upper bound for LF modeling?

R: An upper limit will be determined in consultation with the steering committee however this would typically be considered in the range of $\sim 1-10 \, \text{kHz}$.

Q: Will metrics for impact be limited to SEL, Peak, and Lrms, or are additional metrics expected to be developed, like sizes of impact volumes?

R: As above, impact metrics will be finalized in consultation with the steering committee, but we would expect respondents to consider and propose additional metrics for inclusion (e.g. to account for species distribution and density and overlap with anthropogenic noise).

Q: Will you consider sources beyond shipping, wind and seismic airguns? (HRG source, Piles, Rigs)?

R: As it appears in the RFP (below), additional sources are not required to be modeled, however we would be willing to consider additional sources if a respondent would like to propose

them:

"Conduct Sound Propagation Modeling to map the distribution of low frequency sound produced by two main human activities that produce lower frequency sounds in offshore marine mammal habitat within the Gulf of Mexico: several main classes of vessels that dominate patterns in offshore waters and geological and geophysical surveying efforts that similarly are occurring in offshore waters. Evaluate per source and cumulative sound predictions based on these source types and relative to wind-based predictions. Use empirical data provided by NOAA to support these comparisons and ground-truth model output. Model outputs should include monthly soundscape maps at specified spatial resolutions for each sound source at specified frequencies and depths."

Q: Will there be modeling of mitigation strategies in Task 3, or simply use of Task 1 results?

R: We would like proposals to build in some room for a few model runs in Task 3 but this may be reduced to just Task 1 depending on overall cost.

Q: What types of modeling are being considered, and can you accept innovative modeling approaches?

R: We are open to any modeling approaches but will be looking for assurances of performance to the needs of the project objectives.

Q: What complexity of noise models are you looking to fund? There is a very wide range of how complex (and expensive) this can be.

R: We need to prioritize sound sources and geographic areas for interventions and we look to the Contractor to make the case for what is needed to reasonably achieve this goal. Please note the prioritization and visualization model will be used to identify priorities for future collaborative efforts, not to pinpoint individual sources or locations to specific levels in a way that would need to support regulatory/legal action.

Q: For Task 3, what level of expert elicitation is the proposal looking for? Facilitated with experts in workshops or more general comments?

R: This will be done in close collaboration with the work in Task 2 around industry engagement and will be somewhat driven by the work done under that task. There will need to be enough communication to understand the operability criteria for implementation of the recommended options and the level of detail needed to understand estimated costs to pilot. The level of technical expertise will likely depend greatly on the type of options recommended (i.e. a best operating practice vs. a new complex technology). If these tasks are housed separately then NFWF will work to ensure these tasks are coordinated so that contractors have what they need to produce outcomes.

The Contractor will conduct analyses in accordance with the Oceanic Fish Restoration Project Monitoring Plan ("the Monitoring Plan). Previous analyses of the 2017 – 2019 repose years estimated reductions in discard mortality associated with the implementation of the first three repose periods and explored various economic and ecological performance indicators related to the use and operation of alternative fishing gear. The selected Contractor will build upon these previous efforts, conducting statistical analyses to estimate bycatch reduction and alternative gear performance during the remaining repose

years of the Project. In addition, the Contractor will support evaluation of the overall performance of the Project following the final repose year. In total, the RFP solicited for four (4) tasks including: 1) Working with the Project Team, establish a work plan detailing an analytical approach for annual project monitoring and overall project evaluation; 2) Conduct statistical analyses to evaluate the ecological and economic impacts of the Oceanic Fish Restoration Project; 3) Following the final repose year, evaluate overall performance of the Oceanic Fish Restoration Project; and 4) Provide technical assistance and services associated with the tasks above, as needed.

Deliverables of this work include the detailed work plan, annual reports of analyses related to ecological and economic impacts of the Project, and a final report summarizing key findings from the project evaluation.

Q: Will we need to travel to the Gulf of Mexico region in order to work effectively on Task 1? If so, what activities would need to be undertaken in connection with that travel?

R: No, travel is not required in Task 1 if the Contractor can lay out a clear path to achieving objectives without it.

Q: What kinds and formats of acoustic data will be provided, and what are the sources of those data?

R: Primary data resources to be provided will be ambient sound levels in appropriate bands, summarized as percentiles for longer term data collection periods. Other assets may be available to support source characterization.

Q: What kinds of equipment are being/have been used for acoustic data collection? R: High frequency acoustic recording packages and mid frequency acoustic recording packages

Q: In addition to cetacean population distribution and density maps for key marine mammal taxa in the GoM provided by NOAA, what other kinds of data processing may be required in order to obtain marine mammal population distribution and density information?

R: The model may be used to evaluate potential options to reduce marine sound as listed in Task 3.

Q: What kinds of acoustic and spatial/temporal data will be available for geological and geophysical surveying efforts that are occurring in offshore waters?

R: Courser characterizations of locations, time (including duration), source type and other key operational parameters influencing source level representation in modeling.

Q: Is there a requirement for any specific modeling program(s) to be used in the development of deliverables for Task 1?

R: No requirements beyond what is listed in the RFP and FAQ document.

Q: Does the data that will be provided by NOAA for comparative sound propagation modeling include wind data to support the wind-based predictions model comparison?

R: Wind data are available for download from ocean observing platforms operated by NOAA. While models that integrate observations with predictions of wind influence have

been developed, and in some places these data are available, NOAA will not be further serving this information and will be relying on the contractor to evaluate and make use of the best available resources.