



## DEPARTMENT OF COMMERCE

### National Oceanic and Atmospheric Administration

[RTID 0648-XE504]

#### **Taking and Importing Marine Mammals; Taking Marine Mammals Incidental to Geophysical Surveys Related to Oil and Gas Activities in the Gulf of Mexico**

**AGENCY:** National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

**ACTION:** Notice of issuance of letter of authorization.

**SUMMARY:** In accordance with the Marine Mammal Protection Act (MMPA), as amended, its implementing regulations, and NMFS' MMPA Regulations for Taking Marine Mammals Incidental to Geophysical Surveys Related to Oil and Gas Activities in the Gulf of Mexico, notification is hereby given that NMFS has issued a Letter of Authorization (LOA) to TGS for the take of marine mammals incidental to geophysical survey activity in the Gulf of Mexico (GOM).

**DATES:** The LOA is effective from December 20, 2024 through December 19, 2025.

**ADDRESSES:** The LOA, LOA request, and supporting documentation are available online at <https://www.fisheries.noaa.gov/action/incidental-take-authorization-oil-and-gas-industry-geophysical-survey-activity-gulf-mexico>. In case of problems accessing these documents, please call the contact listed below (see **FOR FURTHER INFORMATION CONTACT** section).

**FOR FURTHER INFORMATION CONTACT:** Rachel Wachtendonk, Office of Protected Resources, NMFS, (301) 427-8401.

#### **SUPPLEMENTARY INFORMATION:**

##### **Background**

Sections 101(a)(5)(A) and (D) of the MMPA (16 U.S.C. 1361 *et seq.*) direct the Secretary of Commerce to allow, upon request, the incidental, but not intentional, taking of small numbers of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing) within a specified geographical region if certain findings are made and either regulations are issued or, if the taking is limited to harassment, a notice of a proposed authorization is provided to the public for review.

An authorization for incidental takings shall be granted if NMFS finds that the taking will have a negligible impact on the species or stock(s), will not have an unmitigable adverse impact on the availability of the species or stock(s) for subsistence uses (where relevant), and if the permissible methods of taking and requirements pertaining to the mitigation, monitoring and reporting of such takings are set forth. NMFS has defined “negligible impact” in 50 CFR 216.103 as an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival.

Except with respect to certain activities not pertinent here, the MMPA defines “harassment” as any act of pursuit, torment, or annoyance, which (i) has the potential to injure a marine mammal or marine mammal stock in the wild (Level A harassment); or (ii) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering (Level B harassment).

On January 19, 2021, we issued a final rule with regulations to govern the unintentional taking of marine mammals incidental to geophysical survey activities conducted by oil and gas industry operators, and those persons authorized to conduct activities on their behalf (collectively “industry operators”), in U.S. waters of the GOM over the course of 5 years (86 FR 5322, January 19, 2021). The rule was based on our

findings that the total taking from the specified activities over the 5-year period will have a negligible impact on the affected species or stock(s) of marine mammals and will not have an unmitigable adverse impact on the availability of those species or stocks for subsistence uses, and became effective on April 19, 2021.

The regulations at 50 CFR 217.180 *et seq.* allow for the issuance of LOAs to industry operators for the incidental take of marine mammals during geophysical survey activities and prescribe the permissible methods of taking and other means of effecting the least practicable adverse impact on marine mammal species or stocks and their habitat (often referred to as mitigation), as well as requirements pertaining to the monitoring and reporting of such taking. Under 50 CFR 217.186(e), issuance of an LOA shall be based on a determination that the level of taking will be consistent with the findings made for the total taking allowable under these regulations and a determination that the amount of take authorized under the LOA is of no more than small numbers.

NMFS subsequently discovered that the 2021 rule was based on erroneous take estimates. We conducted another rulemaking using correct take estimates and other newly available and pertinent information relevant to the analyses supporting some of the findings in the 2021 final rule and the taking allowable under the regulations. We issued a final rule in April 2024, effective May 24, 2024 (89 FR 31488, April 24, 2024).

The 2024 final rule made no changes to the specified activities or the specified geographical region in which those activities would be conducted, nor to the original 5-year period of effectiveness. In consideration of the new information, the 2024 rule presented new analyses supporting affirmance of the negligible impact determinations for all species, and affirmed that the existing regulations, which contain mitigation, monitoring, and reporting requirements, are consistent with the “least practicable adverse impact” standard of the MMPA.

## **Summary of Request and Analysis**

TGS plans to conduct a three-dimensional (3D) ocean bottom node (OBN) survey over 453 lease blocks in the East Breaks area, with water depths ranging from approximately 1,200 to 2,000 m. See section F of the LOA application for a map of the area. TGS anticipates using two source vessels with a low-frequency airgun source known as Gemini (also referred to as a dual barbell source). Please see TGS's application for additional detail.

The Gemini source was not included in the acoustic exposure modeling developed in support of the rules. However, the Gemini was previously described and evaluated in support of a previous LOA and we rely on that analysis here (88 FR 72739, October 23, 2023). For additional detail regarding the source, see section C of the LOA application. Based on this information we have determined there will be no effects of a magnitude or intensity different from those evaluated in support of the rules. NMFS expects that use of modeling results supporting the final rule relating to use of the 4,130 cubic inch (in<sup>3</sup>) airgun array are expected to be conservative as a proxy for use in evaluating potential impacts of use of the Gemini.

The survey effort proposed by TGS in its LOA request was used to develop LOA-specific take estimates based on the acoustic exposure modeling results described in our rule preamble (89 FR 31488, April 24, 2024). In order to generate the appropriate take number for authorization, the following information was considered: (1) survey type; (2) location (by modeling zone<sup>1</sup>); (3) number of days; (4) source; and (5) month.<sup>2</sup> In this case, the 4,130 in<sup>3</sup> airgun array was selected, as discussed above. The acoustic exposure modeling performed in support of the rule provides 24-hour exposure estimates for each species, specific to each modeled source and survey type in each zone and month.

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<sup>1</sup> For purposes of acoustic exposure modeling, the GOM was divided into seven zones. Zone 1 is not included in the geographic scope of the rule.

<sup>2</sup> Acoustic propagation modeling was performed for two seasons: winter (December-March) and summer (April-November). Marine mammal density data is generally available on a monthly basis, and therefore further refines take estimates temporally.

No 3D OBN surveys were included in the modeled survey types, and use of existing proxies (*i.e.*, two-dimensional (2D), 3D (narrow-azimuth) NAZ, 3D (wide-azimuth) WAZ, Coil) is generally conservative for use in evaluation of 3D OBN survey effort, largely due to the greater area covered by the modeled proxies. Summary descriptions of these modeled survey geometries are available in the preamble to the proposed rule (83 FR 29212, 29220, June 22, 2018). Coil was selected as the best available proxy survey type in this case because the spatial coverage of the planned survey is most similar to the coil survey pattern. The planned OBN survey will involve two source vessels sailing along closely spaced survey lines, with daily survey area coverage of approximately 172 kilometers squared per day, similar to that assumed for the coil survey proxy. Among the different parameters of the modeled survey patterns (*e.g.*, area covered, line spacing, number of sources, shot interval, total simulated pulses), NMFS considers area covered per day to be most influential on daily modeled exposures exceeding Level B harassment criteria. Although TGS is not proposing to perform a survey using the coil geometry, the coil proxy is most representative of the effort planned by TGS in terms of predicted Level B harassment exposures.

The survey will take place over approximately 150 days with 90 days of sound source operation in zone 6. The monthly distribution of survey days is not known in advance, so take estimates for each species are based on the time period that produces the greatest value.

For some species, take estimates based solely on the modeling yielded results that are not realistically likely to occur when considered in light of other relevant information available during the rulemaking process regarding marine mammal occurrence in the GOM. The approach used in the acoustic exposure modeling, in which seven modeling zones were defined over the U.S. GOM, necessarily averages fine-scale information about marine mammal distribution over the large area of each modeling zone. Thus,

although the modeling conducted for the rule is a natural starting point for estimating take, the rule acknowledged that other information could be considered (see, *e.g.*, 86 FR 5442, January 19, 2021), discussing the need to provide flexibility and make efficient use of previous public and agency review of other information and identifying that additional public review is not necessary unless the model or inputs used differ substantively from those that were previously reviewed by NMFS and the public. For this survey, NMFS has other relevant information reviewed during the rulemaking that indicates use of the acoustic exposure modeling to generate a take estimate for Rice's whale produces results inconsistent with what is known regarding their occurrence in the GOM. Accordingly, we have adjusted the calculated take estimates for Rice's whale as described below.

NMFS' final rule described a "core habitat area" for Rice's whales (formerly known as GOM Bryde's whales)<sup>3</sup> located in the northeastern GOM in waters between 100 and 400 m depth along the continental shelf break (Rosel *et al.*, 2016). However, whaling records suggest that Rice's whales historically had a broader distribution within similar habitat parameters throughout the GOM (Reeves *et al.*, 2011; Rosel and Wilcox, 2014). In addition, habitat-based density modeling has identified similar habitat (*i.e.*, approximately 100 to 400 m water depths along the continental shelf break) (Roberts *et al.*, 2016; Garrison *et al.*, 2023), and Rice's whales have been detected within this depth band throughout the GOM (Soldevilla *et al.*, 2022, 2024). See discussion provided at, *e.g.*, 83 FR 29228, June 22, 2018; 83 FR 29280, June 22, 2018; 86 FR 5418, January 19, 2021.

Although Rice's whales may occur outside of the core habitat area, we expect that any such occurrence would be limited to the narrow band of habitat described above (*i.e.*, 100-400 m) and that, based on the few available records, these occurrences would be

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<sup>3</sup> The final rule refers to the GOM Bryde's whale (*Balaenoptera edeni*). These whales were subsequently described as a new species, Rice's whale (*Balaenoptera ricei*) (Rosel *et al.*, 2021).

rare. TGS's planned activities will occur in water depths of approximately 1,200 to 2,000 m in the central GOM. Thus, NMFS does not expect there to be the reasonable potential for take of Rice's whale in association with this survey and, accordingly, does not authorize take of Rice's whale through the LOA.

Based on the results of our analysis, NMFS has determined that the level of taking expected for this survey and authorized through the LOA is consistent with the findings made for the total taking allowable under the regulations. See table 1 in this notice and table 6 of the rule (89 FR 31488, April 24, 2024).

### **Small Numbers Determination**

Under the GOM rule, NMFS may not authorize incidental take of marine mammals in an LOA if it will exceed "small numbers." In short, when an acceptable estimate of the individual marine mammals taken is available, if the estimated number of individual animals taken is up to, but not greater than, one-third of the best available abundance estimate, NMFS will determine that the numbers of marine mammals taken of a species or stock are small (89 FR 31535, May 24, 2024). For more information please see NMFS' discussion of small numbers in the 2021 final rule (86 FR 5438, January 19, 2021).

The take numbers for authorization are determined as described above in the **Summary of Request and Analysis** section. Subsequently, the total incidents of harassment for each species are multiplied by scalar ratios to produce a derived product that better reflects the number of individuals likely to be taken within a survey (as compared to the total number of instances of take), accounting for the likelihood that some individual marine mammals may be taken on more than 1 day (86 FR 5404, January 19, 2021; 89 FR 31535, May 24, 2024). The output of this scaling, where appropriate, is incorporated into adjusted total take estimates that are the basis for NMFS' small numbers determinations, as depicted in table 1.

This product is used by NMFS in making the necessary small numbers determinations through comparison with the best available abundance estimates (see discussion at 86 FR 5391, January 19, 2021). For this comparison, NMFS’ approach is to use the maximum theoretical population, determined through review of current stock assessment reports (SAR; <https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessments>) and model-predicted abundance information (<https://seamap.env.duke.edu/models/Duke/GOM/>). Information supporting the small numbers determinations is provided in table 1.

**Table 1 -- Take Analysis**

| Species                     | Authorized take  | Scaled take <sup>1</sup> | Abundance <sup>2</sup> | Percent abundance |
|-----------------------------|------------------|--------------------------|------------------------|-------------------|
| Rice’s whale                | 0                | n/a                      | 51                     | n/a               |
| Sperm whale                 | 674              | 284.9                    | 3,007                  | 9.5               |
| <i>Kogia</i> spp.           | 259 <sup>3</sup> | 79.0                     | 980                    | 9.4               |
| Beaked whales               | 254              | 25.7                     | 803                    | 3.2               |
| Rough-toothed dolphin       | 1,862            | 534.5                    | 4,853                  | 11.0              |
| Bottlenose dolphin          | 2,581            | 740.8                    | 165,125                | 0.4               |
| Clymene dolphin             | 3,209            | 921.1                    | 4,619                  | 19.9              |
| Atlantic spotted dolphin    | 4,349            | 1,248.2                  | 21,506                 | 5.8               |
| Pantropical spotted dolphin | 11,870           | 3,406.7                  | 67,225                 | 5.1               |
| Spinner dolphin             | 152 <sup>4</sup> | 43.6                     | 5,548                  | 0.8               |
| Striped dolphin             | 1,887            | 541.6                    | 5,634                  | 9.6               |
| Fraser’s dolphin            | 742              | 213.0                    | 1,665                  | 12.8              |
| Risso’s dolphin             | 482              | 142.1                    | 1,974                  | 7.2               |
| Blackfish <sup>5</sup>      | 5,034            | 1,484.9                  | 6,113                  | 24.3              |
| Short-finned pilot whale    | 2,561            | 755.5                    | 2,741                  | 27.6              |

<sup>1</sup>Scalar ratios were applied to “Authorized Take” values as described at 86 FR 5322, 5404 (January 19, 2021) to derive scaled take numbers shown here.

<sup>2</sup>Best abundance estimate. For most taxa, the best abundance estimate for purposes of comparison with take estimates is considered here to be the model-predicted abundance (Garrison *et al.*, 2023). For Rice’s whale, Atlantic spotted dolphin, and Risso’s dolphin, the larger estimated SAR abundance estimate is used.

<sup>3</sup>Includes 13 takes by Level A harassment and 246 takes by Level B harassment. Scalar ratio is applied to takes by Level B harassment only; small numbers determination made on basis of scaled Level B harassment take plus authorized Level A harassment take.

<sup>4</sup>Modeled take of 9 increased to account for potential encounter with a group of average size (Maze-Foley and Mullin, 2006).

<sup>5</sup>The “blackfish” guild includes melon-headed whales, false killer whales, pygmy killer whales, and killer whales.

Based on the analysis contained herein of TGS’s proposed survey activity described in its LOA application and the anticipated take of marine mammals, NMFS

finds that small numbers of marine mammals will be taken relative to the affected species or stock sizes (*i.e.*, less than one-third of the best available abundance estimate) and therefore the taking is of no more than small numbers.

### **Authorization**

NMFS has determined that the level of taking for this LOA request is consistent with the findings made for the total taking allowable under the incidental take regulations and that the amount of take authorized under the LOA is of no more than small numbers. Accordingly, we have issued an LOA to TGS authorizing the take of marine mammals incidental to its geophysical survey activity, as described above.

Dated: December 20, 2024.

**Kimberly Damon-Randall,**

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*National Marine Fisheries Service.*

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