Marine Mammal Protection Act Section 101(a)(5)(E) Fishery Evaluation Form

For Category I and II Commercial Fisheries

Purpose

Section 101(a)(5)(E) of the Marine Mammal Protection Act (MMPA) requires National Marine Fisheries Service (NMFS) to authorize the incidental take of marine mammals listed under the Endangered Species Act (ESA) in a commercial fishery for a period of up to three years if NMFS determines the following criteria have been met:

1. Incidental mortality and serious injury (M/SI) from commercial fisheries will have a negligible impact on the affected species/stock;
2. A recovery plan has been developed or is being developed for such species/stock; and
3. Where required under MMPA Section 118, a monitoring program has been established, vessels are registered, and a take reduction plan has been developed or is being developed for such species/stock.

This form documents NMFS' evaluation of whether a fishery can be authorized under MMPA Section 101(a)(5)(E). To determine if M/SI incidental to a specific commercial fishery will have a negligible impact on a specific stock(s), this evaluation employs the process and standards laid out in NMFS Procedure 02-204-02, *Criteria for Determining Negligible Impact under MMPA Section 101(a)(5)(E)*, and is based on the most recent final MMPA List of Fisheries (LOF) and the most recent Marine Mammal Stock Assessment Reports (SARs).

Commercial Fishery Information

Commercial Fishery: AK Bering Sea, Aleutian Islands Flatfish Trawl

Region: Alaska

Final List of Fisheries (LOF) Year: 2024 LOF Category: II Fishery Management: Federal

ESA-Listed Marine Mammal Stock(s) Seriously Injured or Killed Incidental to this Fishery:

1) Steller sea lion, Western U.S.
2) Humpback whale, Western North Pacific
3) Bearded seal, Beringia
4) Ringed seal, Arctic
5)
6)

ESA-Listed Marine Mammal Stock(s) Driving LOF Classification:

Steller sea lion, Western U.S.

Additional Fishery Information:

☑ Available on Fishery Fact Sheet

Fact Sheet Link: https://www.fisheries.noaa.gov/national/marine-mammal-protection/alaska-bering-sea-aleutian-islands-flatfish-trawl-mmpa-list

☐ Fishery Fact Sheet Not Available (if applicable)

Information from Other Source:

Criterion #1: Negligible Impact Determination

Stock #1 Information

Stock: Steller sea lion, Western U.S. Transboundary: Yes

N_{min}: 49,837.000 ☐ Not Applicable R_{max}: 0.1200

Data Source: Draft SAR Year: 2023

Negligible Impact Analysis

☑ Tier 1 analysis is not applicable because the stock is transboundary *Only conduct Tier 2 analysis if this option is selected*

☐ Tier 1 analysis is applicable *Continue below to Tier 1 Analysis if this option is selected*

Tier 1 Analysis

Average Annual Human-Caused M/SI

Including SIs averted (i.e., human intervention or self-release)

Date Range: _____ Total Human-Caused M/SI: _____

Tier 1 Analysis (i.e., NIT Threshold #1) Formula: $NIT_t = N_{min} \times 0.5R_{max} \times 0.1$

N_{min} Available:		N_{min} Unavailable:	
NIT_t: _____		N_{min} Threshold for NIT_t: _____	
Total Human-Caused M/SI > NIT_t Total Human-Caused M/SI ≤ NIT_t	☐ ☐	N_{min} likely > Threshold N_{min} for NIT_t N_{min} likely ≤ Threshold N_{min} for NIT_t	☐ ☐

Result from Tier 1 Analysis: _____

Tier 2 Analysis

Average Annual Human-Caused M/SI

Including SIs averted (i.e., human intervention or self-release)

Date Range: 2017-2021 Individual Comm. Fishery M/SI: 13

Individual M/SI unavailable or likely underestimated due to M/SI from unidentified fishing gear:

Yes

If yes, explain below:

The SAR also includes unattributed fishery-related M/SI (1.90) for the stock, which is not assigned to a specific commercial fishery. This unattributed fishery-related M/SI could be from any number of commercial, recreational, or tribal fisheries, including, the AK Bering Sea, Aleutian Islands Flatfish Trawl fishery. In accordance with NMFS Procedural Directive 02-204-02, because the data are not currently available to assign the unattributed fishery-related M/SI to a specific commercial fishery, we did not include unattributed mortality in the calculations for the NID Tier 2 analysis (NMFS 2020).

Tier 2 Analysis (i.e., NIT Threshold #2) Formula: $NIT_s = N_{min} \times 0.5R_{max} \times 0.013$

N_{min} Available:		N_{min} Unavailable:	
NIT_s: 38.87		N_{min} Threshold for NIT_s: _____	
Individual Fishery M/SI > NIT_s Individual Fishery M/SI ≤ NIT_s	☐ ☑	N_{min} likely > Threshold N_{min} for NIT_s N_{min} likely ≤ Threshold N_{min} for NIT_s	☐ ☐

Result from Tier 2 Analysis: Negligible impact

Criterion #1: Negligible Impact Determination

Stock #2 Information

Stock: Humpback whale, Western North Pacific Transboundary: Yes

N_{min}: 1,007.0000 ☐ Not Applicable R_{max}: 0.0670

Data Source: Final SAR Year: 2022

Negligible Impact Analysis

☑ Tier 1 analysis is not applicable because the stock is transboundary *Only conduct Tier 2 analysis if this option is selected*

☐ Tier 1 analysis is applicable *Continue below to Tier 1 Analysis if this option is selected*

Tier 1 Analysis

Average Annual Human-Caused M/SI

Including SIs averted (i.e., human intervention or self-release)

Date Range: _____ Total Human-Caused M/SI: _____

Tier 1 Analysis (i.e., NIT Threshold #1) Formula: $NIT_t = N_{min} \times 0.5R_{max} \times 0.1$

N_{min} Available:		N_{min} Unavailable:	
NIT_t: _____		N_{min} Threshold for NIT_t: _____	
Total Human-Caused M/SI > NIT_t Total Human-Caused M/SI ≤ NIT_t	☐ ☐	N_{min} likely > Threshold N_{min} for NIT_t N_{min} likely ≤ Threshold N_{min} for NIT_t	☐ ☐

Result from Tier 1 Analysis: _____

Tier 2 Analysis

Average Annual Human-Caused M/SI

Including SIs averted (i.e., human intervention or self-release)

Date Range: 2016-2020 Individual Comm. Fishery M/SI: 0.0

Individual M/SI unavailable or likely underestimated due to M/SI from unidentified fishing gear: Yes

If yes, explain below:

The SAR also includes unattributed fishery-related M/SI (0.001) for the stock, which is not assigned to a specific commercial fishery. This unattributed fishery-related M/SI could be from any number of commercial, recreational, or tribal fisheries, including, the AK Bering Sea, Aleutian Islands Flatfish Trawl fishery. In accordance with NMFS Procedural Directive 02-204-02, because the data are not currently available to assign the unattributed fishery-related M/SI to a specific commercial fishery, we did not include unattributed mortality in the calculations for the NID Tier 2 analysis (NMFS 2020).

Tier 2 Analysis (i.e., NIT Threshold #2) Formula: $NIT_s = N_{min} \times 0.5R_{max} \times 0.013$

N_{min} Available:		N_{min} Unavailable:	
NIT_s: 0.439		N_{min} Threshold for NIT_s: _____	
Individual Fishery M/SI > NIT_s Individual Fishery M/SI ≤ NIT_s	☐ ☑	N_{min} likely > Threshold N_{min} for NIT_s N_{min} likely ≤ Threshold N_{min} for NIT_s	☐ ☐

Result from Tier 2 Analysis: Negligible impact

Criterion #1: Negligible Impact Determination

Stock #3 Information

Stock: Bearded seal, Beringia

Transboundary: Yes

N_{min}: 273,676.00 ☐ Not Applicable R_{max}: 0.1200

Data Source: Final SAR Year: 2020

Negligible Impact Analysis

☑ Tier 1 analysis is not applicable because the stock is transboundary *Only conduct Tier 2 analysis if this option is selected*

☐ Tier 1 analysis is applicable *Continue below to Tier 1 Analysis if this option is selected*

Tier 1 Analysis

Average Annual Human-Caused M/SI

Including SIs averted (i.e., human intervention or self-release)

Date Range: _____ Total Human-Caused M/SI: _____

Tier 1 Analysis (i.e., NIT Threshold #1) Formula: $NIT_t = N_{min} \times 0.5R_{max} \times 0.1$

N_{min} Available:		N_{min} Unavailable:	
NIT_t: _____		N_{min} Threshold for NIT_t: _____	
Total Human-Caused M/SI > NIT_t Total Human-Caused M/SI ≤ NIT_t	☐ ☐	N_{min} likely > Threshold N_{min} for NIT_t N_{min} likely ≤ Threshold N_{min} for NIT_t	☐ ☐

Result from Tier 1 Analysis: _____

Tier 2 Analysis

Average Annual Human-Caused M/SI

Including SIs averted (i.e., human intervention or self-release)

Date Range: 2014-2018 Individual Comm. Fishery M/SI: 1.2

Individual M/SI unavailable or likely underestimated due to M/SI from unidentified fishing gear:

No, Tier 2 Analysis needed

If yes, explain below:

The SAR also includes unattributed fishery-related M/SI ( ) for the stock, which is not assigned to a specific commercial fishery. This unattributed fishery-related M/SI could be from any number of _____ including, the _____ fishery. In accordance with NMFS Procedural Directive 02-204-02, because the data are not currently available to assign the unattributed fishery-related M/SI to a specific commercial fishery, we did not include unattributed mortality in the calculations for the NID Tier 2 analysis (NMFS 2020).

Tier 2 Analysis (i.e., NIT Threshold #2) Formula: $NIT_s = N_{min} \times 0.5R_{max} \times 0.013$

N_{min} Available:		N_{min} Unavailable:	
NIT_s: 213.5		N_{min} Threshold for NIT_s: _____	
Individual Fishery M/SI > NIT_s Individual Fishery M/SI ≤ NIT_s	☐ ☑	N_{min} likely > Threshold N_{min} for NIT_s N_{min} likely ≤ Threshold N_{min} for NIT_s	☐ ☐

Result from Tier 2 Analysis: Negligible impact

Criterion #1: Negligible Impact Determination

Stock #4 Information

Stock: Ringed seal, Arctic

Transboundary: Yes

N_{min}: 158,507.00 ☐ Not Applicable R_{max}: 0.1200

Data Source: Final SAR Year: 2020

Negligible Impact Analysis

☑ Tier 1 analysis is not applicable because the stock is transboundary *Only conduct Tier 2 analysis if this option is selected*

☐ Tier 1 analysis is applicable *Continue below to Tier 1 Analysis if this option is selected*

Tier 1 Analysis

Average Annual Human-Caused M/SI

Including SIs averted (i.e., human intervention or self-release)

Date Range: _____ Total Human-Caused M/SI: _____

Tier 1 Analysis (i.e., NIT Threshold #1) Formula: $NIT_t = N_{min} \times 0.5R_{max} \times 0.1$

N_{min} Available:		N_{min} Unavailable:	
NIT_t: _____		N_{min} Threshold for NIT_t: _____	
Total Human-Caused M/SI > NIT_t Total Human-Caused M/SI ≤ NIT_t	☐ ☐	N_{min} likely > Threshold N_{min} for NIT_t N_{min} likely ≤ Threshold N_{min} for NIT_t	☐ ☐

Result from Tier 1 Analysis: _____

Tier 2 Analysis

Average Annual Human-Caused M/SI

Including SIs averted (i.e., human intervention or self-release)

Date Range: 2014-2018 Individual Comm. Fishery M/SI: 4.6

Individual M/SI unavailable or likely underestimated due to M/SI from unidentified fishing gear:

No, Tier 2 Analysis needed

If yes, explain below:

The SAR also includes unattributed fishery-related M/SI ( ) for the stock, which is not assigned to a specific commercial fishery. This unattributed fishery-related M/SI could be from any number of _____ including, the _____ fishery. In accordance with NMFS Procedural Directive 02-204-02, because the data are not currently available to assign the unattributed fishery-related M/SI to a specific commercial fishery, we did not include unattributed mortality in the calculations for the NID Tier 2 analysis (NMFS 2020).

Tier 2 Analysis (i.e., NIT Threshold #2) Formula: $NIT_s = N_{min} \times 0.5R_{max} \times 0.013$

N_{min} Available:		N_{min} Unavailable:	
NIT_s: 123.6		N_{min} Threshold for NIT_s: _____	
Individual Fishery M/SI > NIT_s Individual Fishery M/SI ≤ NIT_s	☐ ☑	N_{min} likely > Threshold N_{min} for NIT_s N_{min} likely ≤ Threshold N_{min} for NIT_s	☐ ☐

Result from Tier 2 Analysis: Negligible impact

Summary of Negligible Impact Determination(s)

Commercial Fishery: AK Bering Sea, Aleutian Islands Flatfish Trawl

Stock:	Negligible Impact:
1) Steller sea lion, Western U.S.	Yes
2) Humpback whale, Western North Pacific	Yes
3) Bearded seal, Beringia	Yes
4) Ringed seal, Arctic	Yes
5)	
6)	

Overall Negligible Impact Determination:

Based on criteria outlined in in NMFS Procedure 02-204-02, *Criteria for Determining Negligible Impact under MMPA Section 101(a)(5)(E)*, and the best scientific information and data available, the mortality and serious injury of ESA-listed marine mammals incidental to the fishery evaluated here will have a negligible impact on all relevant ESA-listed marine mammal stocks or species.

Criterion #2: Recovery Plan Status

Stock:	Recovery Plan Status:
1) Steller sea lion, Western U.S.	Already Developed
2) Humpback whale, Western North Pacific	Already Developed
3) Bearded seal, Beringia	Being Developed
4) Ringed seal, Arctic	Being Developed
5)	
6)	

Criterion #3: MMPA Section 118 Requirements

Monitoring program: Yes

Vessel registration: Yes

Take reduction plan: Achieved long-term goal of MMPA section 118(f)

References

Muto, M.M., V.T. Helker, B.J. Delean, N.C. Young, J.C. Freed, R.P. Angliss, N.A. Friday, P.L. Boveng, J.M. Breiwick, B.M. Brost, M.F. Cameron, P.J. Clapham, J.L. Crance, S.P. Dahle, M.E. Dahlheim, B.S. Fadely, M.C. Ferguson, L.W. Fritz, K.T. Goetz, R.C. Hobbs, Y.V. Ivashchenko, A.S. Kennedy, J.M. London, S.A. Mizroch, R.R. Ream, E.L. Richmond, K.E. W. Shelden, K.L. Sweeney, R.G. Towell, P.R. Wade, J.M. Waite, and A.N. Zerbini. 2021. Alaska marine mammal stock assessments, 2020. U.S. Department of Commerce, NOAA Tech. Memo. NMFS-AFSC-421. 398 p.

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