

PURPOSE

Section 101(a)(5)(E) of the Marine Mammal Protection Act (MMPA) states that the National Marine Fisheries Service (NMFS), shall for a period of up to three years allow the incidental taking of marine mammal species listed under the Endangered Species Act (ESA) while engaging in commercial fishing operations, if NMFS makes certain determinations. NMFS must determine, after notice and opportunity for public comment, that: (1) incidental mortality and serious injury (M/SI) will have a negligible impact on the affected species or stock; (2) a recovery plan has been developed or is being developed for such species or stock under the ESA; and (3) where required under section 118 of the MMPA, a monitoring program has been established, vessels engaged in such fisheries are registered in accordance with section 118 of the MMPA, and a take reduction plan has been developed or is being developed for such species or stock.

This document includes NMFS assessment of whether a fishery can be authorized under section 101(a)(5)(E) and presents a finding detailing how the fishery evaluated meets the requirements of this section. To determine if a M/SI incidental to a commercial fishery will have a negligible impact on the affected species or stock, this analysis 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)."

INSTRUCTIONS

Complete a Negligible Impact Determination (NID) analysis and 101(a)(5)(E) assessment for each commercial fishery evaluated. Follow the steps in the NID Procedural Directive ([NMFS Procedure 02-204-02](#) "Criteria for Determining Negligible Impact under MMPA Section 101(a)(5)(E)") to fill out a NID analysis species/stock worksheet for each ESA-listed stock/species, included on the most recent final MMPA [List of Fisheries](#) (LOF) interacting with that fishery. Use the most recent marine mammal Stock Assessment Reports (SAR), the LOF, and any other relevant information to complete the NID assessment. For each stock/species, include a short summary of the NID analysis (in the "species/stock NID justification"), and indicate whether a NID can be made for that stock. If additional space is needed, use the NID justification narrative section to complete your summary.

For the NID analysis, numeric precision with a scale of two decimal places is recommended. If a Tier 1 analysis is not conducted because a species/stock is transboundary or other reasons, select the N/A box and provide a brief explanation. If a Tier 2 analysis is not conducted, please select the N/A box and provide a brief explanation. If a Tier 2 is conducted under a special circumstance, please select that box and provide an explanation.

In the NID justification narrative, provide a brief summary (if needed) and justification for any deviations from the Procedural Directive, as well as a description of any special circumstances including:

1. An explanation if a species/stock does not conform to the PBR framework and an alternate NID approach is taken.
2. If sources other than the most recent SAR are used for annual average M/SI values.
3. A rationale, if the most recent 5-year average is not used for annual average M/SI values.
4. A detailed explanation if unattributed fishery M/SI is accounted for in the NID assessment.
5. If a minimum abundance estimate (N_{\min}) is unavailable for conducting a standard negligible impact analysis, provide an explanation.
6. Details of any special circumstances if the individual fishery M/SI is unavailable or underestimated.

Complete a 101(a)(5)(E) assessment for each commercial fishery evaluated and indicate whether the fishery meets the requirements for an authorization.

Incorporate documents by reference as appropriate, including web links, if possible. If applicable, reference and attach any supporting documents that were developed for the assessment, and include a list of any such documents. In the "Final NID Determination" and "MMPA Section 101(a)(5)(E) Authorization" sections, choose the appropriate language option given the outcome of the NID or 101(a)(5)(E) assessment. For additional information please refer to the [NID Procedure](#) or the latest [Guidelines for Preparing Stock Assessment Reports](#) (GAMMS).

Negligible Impact Determination Analysis: Fishery Information

Commercial Fishery Evaluated: AK Bering Sea, Aleutian Islands flatfish trawl

Fishery Region: Alaska

This fishery is included in the final 2020 List of Fisheries (LOF) as a Category I ☐ Category II ☒ fishery.

Fishery Management Type: Federal ☒ State ☐ Fed/State ☐ Other

ESA-listed marine mammal species/stocks with M/SI associated with this fishery:

1) Steller sea lion, Western U.S.

4) Ringed seal, Alaska

2) Humpback whale, Western North Pacific

5)

3) Bearded seal, Alaska

6)

Is an ESA-listed marine mammal species/stock driving the LOF categorization? Yes ☒ No ☐

If yes, which species/stocks: Steller sea lion, Western U.S. AND Humpback whale, Western North Pacific

Is this a new NID ☒ or an update to an existing (active) NID ☐ ?

If this is an update to an existing (active) NID, please detail a rationale for the modification:

If relevant, please provide additional background information for this fishery.

This fishery has been classified as category II on the MMPA List of Fisheries since 2005. The fishery is observed at 99-100%, therefore, it is expected that the M/SI estimates for this fishery accurately reflect real M/SI levels. Further, this makes it unlikely that any unattributed fisheries M/SI would be from the AK Bering Sea, Aleutian Islands flatfish trawl fishery. Therefore, unattributed M/SI was evaluated, but was not found to be concerning in the process of making a NID for this fishery.

Negligible Impact Determination Analysis: ESA-Listed Marine Mammal Species/Stock Information

Species/stock 1 of 4 : Steller sea lion, Western U.S.

Does species/stock conform to the Potential Biological Removal (PBR) framework? Yes ☒ No ☐

If no, is an alternate approach used? Yes ☐ No ☐ (If yes, include explanation in the Justification)

Based on the ☐ draft ☒ final 2019 Stock Assessment Report, and/or ☐ other sources:

The average annual M/SI, including SI of animals disentangled or released from fishing gear, (over 5 years, between 2013-2017) is:

Total Human Caused M/SI 247 All Comm. Fishery M/SI 36 Individual Comm. Fishery M/SI 8

Is there unattributed fishery M/SI for the species/stock? Yes ☒ No ☐

Was unattributed fishery M/SI accounted for in this NID? Yes ☒ No ☐ (Provide details in the Justification)

Is this a transboundary species/stock? Yes ☒ No ☐ If yes, check N/A for Tier 1; only conduct Tier 2 analysis.

Is a species/stock N_{min} available for conducting a standard negligible impact analysis? Yes ☒ No ☐

If yes, species/stock metrics are:

N_{min} 53,624

R_{max} 12%

NIT_t 322

NIT_s 41.83

If no, calculate threshold N_{min} for the species/stock based on the minimum population size needed to be below the NIT.

Threshold N_{min} (for NIT_t)

Threshold N_{min} (for NIT_s)

Tiered Analyses

Tier 1 Analysis: Does annual average total human caused M/SI exceed NIT_t ?

Yes ☐ No ☐ N/A ☒

If no, then all commercial fisheries are considered to have a negligible impact on this species/stock and a Tier 2 analysis is not necessary. If yes or N/A, proceed to Tier 2 analysis.

Tier 2 Analysis: Does annual average individual fishery M/SI exceed NIT_s ?

Yes ☐ No ☒ N/A ☐ Special Circumstances ☐

If no, then the individual commercial fishery is considered to have a negligible impact on this species/stock unless the individual fishery M/SI is unavailable or underestimated and likely to be non-zero.

Tier 1 Analysis: Does the minimum population size likely exceed the threshold N_{min} for NIT_t ?

Yes ☐ No ☐ N/A ☐

If yes, then all commercial fisheries are considered to have a negligible impact on this species/stock and a Tier 2 analysis is not necessary. If no or N/A, proceed to Tier 2 analysis.

Tier 2 Analysis: Does the minimum population size likely exceed the threshold N_{min} for NIT_s ?

Yes ☐ No ☐ N/A ☐ Special Circumstances ☐

If yes, then the individual commercial fishery is considered to have a negligible impact on this species/stock unless the individual fishery M/SI is unavailable or underestimated and likely to be non-zero.

Species/Stock NID Justification:

The Steller sea lion, Western U.S. stock has some M/SI that is unattributed fisheries, however, it is unlikely that those M/SI are associated with the AK Bering Sea, Aleutian Islands flatfish trawl fishery.

The Steller sea lion, Western U.S. stock is considered transboundary, so a Tier 2 analysis was used. The annual average individual fishery M/SI (8) does not exceed the NITs (41.83); thus, the Tier 2 a analysis is satisfied and the AK Bering Sea, Aleutian Islands flatfish trawl fishery is considered to have a negligible impact on this

Negligible Impact Determination Analysis: ESA-Listed Marine Mammal Species/Stock Information

Species/stock 2 of 4 : Humpback whale, Western North Pacific

Does species/stock conform to the Potential Biological Removal (PBR) framework? Yes ☒ No ☐

If no, is an alternate approach used? Yes ☐ No ☐ (If yes, include explanation in the Justification)

Based on the ☐ draft ☒ final 2019 Stock Assessment Report, and/or ☐ other sources:

The average annual M/SI, including SI of animals disentangled or released from fishing gear, (over 5 years, between 2013-2017) is:

Total Human Caused M/SI 2.6 All Comm. Fishery M/SI 0.7 Individual Comm. Fishery M/SI 0

Is there unattributed fishery M/SI for the species/stock? Yes ☒ No ☐

Was unattributed fishery M/SI accounted for in this NID? Yes ☐ No ☒ (Provide details in the Justification)

Is this a transboundary species/stock? Yes ☒ No ☐ If yes, check N/A for Tier 1; only conduct Tier 2 analysis.

Is a species/stock N_{min} available for conducting a standard negligible impact analysis? Yes ☒ No ☐

If yes, species/stock metrics are:

N_{min} 865 R_{max} 7%
 NIT_t 3 NIT_s 0.39

If no, calculate threshold N_{min} for the species/stock based on the minimum population size needed to be below the NIT.

Threshold N_{min} (for NIT_t)

Threshold N_{min} (for NIT_s)

Tiered Analyses

Tier 1 Analysis: Does annual average total human caused M/SI exceed NIT_t ?

Yes ☐ No ☐ N/A ☒

If no, then all commercial fisheries are considered to have a negligible impact on this species/stock and a Tier 2 analysis is not necessary. If yes or N/A, proceed to Tier 2 analysis.

Tier 2 Analysis: Does annual average individual fishery M/SI exceed NIT_s ?

Yes ☐ No ☒ N/A ☐ Special Circumstances ☐

If no, then the individual commercial fishery is considered to have a negligible impact on this species/stock unless the individual fishery M/SI is unavailable or underestimated and likely to be non-zero.

Tier 1 Analysis: Does the minimum population size likely exceed the threshold N_{min} for NIT_t ?

Yes ☐ No ☐ N/A ☐

If yes, then all commercial fisheries are considered to have a negligible impact on this species/stock and a Tier 2 analysis is not necessary. If no or N/A, proceed to Tier 2 analysis.

Tier 2 Analysis: Does the minimum population size likely exceed the threshold N_{min} for NIT_s ?

Yes ☐ No ☐ N/A ☐ Special Circumstances ☐

If yes, then the individual commercial fishery is considered to have a negligible impact on this species/stock unless the individual fishery M/SI is unavailable or underestimated and likely to be non-zero.

Species/Stock NID Justification:

The Humpback Whale, Western North Pacific stock is considered transboundary, so a Tier 2 analysis was used. The individual fishery M/SI is zero; the stock is included only due to legacy M/SI data, but does not have recent M/SI to analyze. The individual fishery M/SI does not exceed the NITs (0.39); thus, the Tier 2 analysis is satisfied and the AK Bering Sea, Aleutian Islands flatfish trawl fishery is considered to have a negligible impact on this stock/species.

Negligible Impact Determination Analysis: ESA-Listed Marine Mammal Species/Stock Information

Species/stock 3 of 4 : Bearded seal, Alaska stock

Does species/stock conform to the Potential Biological Removal (PBR) framework? Yes ☒ No ☐

If no, is an alternate approach used? Yes ☐ No ☐ (If yes, include explanation in the Justification)

Based on the ☐ draft ☒ final 2019 Stock Assessment Report, and/or ☐ other sources:

The average annual M/SI, including SI of animals disentangled or released from fishing gear, (over 5 years, between 2013-2017) is:

Total Human Caused M/SI 551 All Comm. Fishery M/SI 1.6 Individual Comm. Fishery M/SI 1

Is there unattributed fishery M/SI for the species/stock? Yes ☐ No ☒

Was unattributed fishery M/SI accounted for in this NID? Yes ☐ No ☐ (Provide details in the Justification)

Is this a transboundary species/stock? Yes ☒ No ☐ If yes, check N/A for Tier 1; only conduct Tier 2 analysis.

Is a species/stock N_{min} available for conducting a standard negligible impact analysis? Yes ☒ No ☐

If yes, species/stock metrics are:

N_{min} 273,676

R_{max} 12%

NIT_t 1642.06

NIT_s 213.47

If no, calculate threshold N_{min} for the species/stock based on the minimum population size needed to be below the NIT.

Threshold N_{min} (for NIT_t)

Threshold N_{min} (for NIT_s)

Tiered Analyses

Tier 1 Analysis: Does annual average total human caused M/SI exceed NIT_t ?

Yes ☐ No ☐ N/A ☒

If no, then all commercial fisheries are considered to have a negligible impact on this species/stock and a Tier 2 analysis is not necessary. If yes or N/A, proceed to Tier 2 analysis.

Tier 2 Analysis: Does annual average individual fishery M/SI exceed NIT_s ?

Yes ☐ No ☒ N/A ☐ Special Circumstances ☐

If no, then the individual commercial fishery is considered to have a negligible impact on this species/stock unless the individual fishery M/SI is unavailable or underestimated and likely to be non-zero.

Tier 1 Analysis: Does the minimum population size likely exceed the threshold N_{min} for NIT_t ?

Yes ☐ No ☐ N/A ☐

If yes, then all commercial fisheries are considered to have a negligible impact on this species/stock and a Tier 2 analysis is not necessary. If no or N/A, proceed to Tier 2 analysis.

Tier 2 Analysis: Does the minimum population size likely exceed the threshold N_{min} for NIT_s ?

Yes ☐ No ☐ N/A ☐ Special Circumstances ☐

If yes, then the individual commercial fishery is considered to have a negligible impact on this species/stock unless the individual fishery M/SI is unavailable or underestimated and likely to be non-zero.

Species/Stock NID Justification:

The Bearded seal, Alaska stock is considered transboundary, so a Tier 2 analysis was used. The annual average individual fishery M/SI (1) does not exceed the NITs (213.47); thus, the Tier 2 analysis is satisfied and the AK Bering Sea, Aleutian Islands flatfish trawl fishery is considered to have a negligible impact on this stock/species.

Negligible Impact Determination Analysis: ESA-Listed Marine Mammal Species/Stock Information

Species/stock 4 of 4 : Ringed seal, Alaska stock

Does species/stock conform to the Potential Biological Removal (PBR) framework? Yes ☒ No ☐

If no, is an alternate approach used? Yes ☐ No ☐ (If yes, include explanation in the Justification)

Based on the ☐ draft ☒ final 2019 Stock Assessment Report, and/or ☐ other sources:

The average annual M/SI, including SI of animals disentangled or released from fishing gear, (over 5 years, between 2013-2017) is:

Total Human Caused M/SI 700 All Comm. Fishery M/SI 2.4 Individual Comm. Fishery M/SI 2.4

Is there unattributed fishery M/SI for the species/stock? Yes ☐ No ☒

Was unattributed fishery M/SI accounted for in this NID? Yes ☐ No ☐ (Provide details in the Justification)

Is this a transboundary species/stock? Yes ☒ No ☐ If yes, check N/A for Tier 1; only conduct Tier 2 analysis.

Is a species/stock N_{min} available for conducting a standard negligible impact analysis? Yes ☒ No ☐

If yes, species/stock metrics are:

N_{min} 158,507

R_{max} 12%

NIT_t 951.04

NIT_s 123.64

If no, calculate threshold N_{min} for the species/stock based on the minimum population size needed to be below the NIT.

Threshold N_{min} (for NIT_t)

Threshold N_{min} (for NIT_s)

Tiered Analyses

Tier 1 Analysis: Does annual average total human caused M/SI exceed NIT_t ?

Yes ☐ No ☐ N/A ☒

If no, then all commercial fisheries are considered to have a negligible impact on this species/stock and a Tier 2 analysis is not necessary. If yes or N/A, proceed to Tier 2 analysis.

Tier 2 Analysis: Does annual average individual fishery M/SI exceed NIT_s ?

Yes ☐ No ☒ N/A ☐ Special Circumstances ☐

If no, then the individual commercial fishery is considered to have a negligible impact on this species/stock unless the individual fishery M/SI is unavailable or underestimated and likely to be non-zero.

Tier 1 Analysis: Does the minimum population size likely exceed the threshold N_{min} for NIT_t ?

Yes ☐ No ☐ N/A ☐

If yes, then all commercial fisheries are considered to have a negligible impact on this species/stock and a Tier 2 analysis is not necessary. If no or N/A, proceed to Tier 2 analysis.

Tier 2 Analysis: Does the minimum population size likely exceed the threshold N_{min} for NIT_s ?

Yes ☐ No ☐ N/A ☐ Special Circumstances ☐

If yes, then the individual commercial fishery is considered to have a negligible impact on this species/stock unless the individual fishery M/SI is unavailable or underestimated and likely to be non-zero.

Species/Stock NID Justification:

The Ringed seal, Alaska stock is considered transboundary, so a Tier 2 analysis was used. The annual average individual fishery M/SI (2.4) does not exceed the NITs (123.64); thus, the Tier 2 analysis is satisfied and the AK Bering Sea, Aleutian Islands flatfish trawl fishery is considered to have a negligible impact on this stock/species.

Negligible Impact Determination Analysis: Summary and Justification

NID SUMMARY TABLE

Species/stocks interacting with the commercial fishery evaluated	Does this species/stock meet the NID criteria?
1) Steller sea lion, Western U.S.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2) Humpback whale, Western North Pacific	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
3) Bearded seal, Alaska	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
4) Ringed seal, Alaska	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
5)	Yes <input type="checkbox"/> No <input type="checkbox"/>
6)	Yes <input type="checkbox"/> No <input type="checkbox"/>

NEGLECTIBLE IMPACT JUSTIFICATION SUMMARY

The AK Bering Sea, Aleutian Islands flatfish trawl fishery has documented M/SI of several ESA-listed marine mammal incidental to fishing operations. Four stocks were identified for this analysis, three of which had some recorded level of M/SI over the time period used for this analysis (2013-2017). In each case, those AK Bering Sea, Aleutian Islands flatfish trawl fishery M/SI levels fell below the prescribed thresholds for the respective stocks. Thus, the AK Bering Sea, Aleutian Islands flatfish trawl fishery is not expected to have an impact on the recovery of those stocks.

Negligible Impact Determination Analysis: Determination

FINAL NID DETERMINATION

Based on criteria outlined in NMFS Procedure 02-204-02 "Criteria for Determining Negligible Impact under MMPA Section 101(a)(5)(E)" and the best scientific information available as detailed herein and cited below, the mortality and serious injury of ESA-listed marine mammals incidental to the AK Bering Sea, Aleutian Islands flatfish trawl fishery will have a negligible impact on ESA-listed marine mammal stocks or species the purposes of issuing a permit under MMPA section 101(a)(5)(E), for a period of up to three years.

LIST OF ATTACHMENTS (if applicable)

LITERATURE CITED

Muto, M. M., V. T. Helker, B. J. Delean, R. P. Angliss, P. L. Boveng, J. M. Breiwick, B. M. Brost, M. F. Cameron, P. J. Clapham, S. P. Dahle, M. E. Dahlheim, B. S. Fadely, M. C. Ferguson, L. W. Fritz, 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. 2020. Alaska Marine Mammal Stock Assessments, 2019. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-AFSC-404, 395 p. Available online: <https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessment-reports-region>.

101(a)(5)(E) Assessment**MMPA SECTION 101(a)(5)(E)**

MMPA section 101(a)(5)(E) requires NMFS to authorize the incidental take of ESA-listed marine mammals in commercial fisheries if NMFS determines, after notice and opportunity for public comment, that:

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.

FISHERY EVALUATION UNDER MMPA SECTION 101(a)(5)(E) CRITERIA

Commercial Fishery: **AK Bering Sea, Aleutian Islands Flatfish Trawl**

Was a NID made for this fishery? Yes ☒ No ☐

Species/Stocks interacting with the commercial fishery evaluated	Is a recovery plan developed or underway for this species/stock?	
1) Steller sea lion, Western U.S.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
2) Humpback whale, Western North Pacific	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
3) Bearded Seal, Alaska	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
4) Ringed Seal, Alaska	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
5) <input type="text"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
6) <input type="text"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>

Is a monitoring program established for this fishery as required under MMPA section 118? Yes ☒ No ☐

Has this fishery met the take reduction plan requirements as required under MMPA section 118? Yes ☒ No ☐

If yes, is a take reduction plan complete ☐ underway ☐ or included ☒ on the priority list for development?

Have all requirements been met for NMFS to authorize the incidental take of ESA-listed marine mammals in this commercial fishery? Yes ☒ No ☐

If relevant, please provide additional information.

MMPA SECTION 101(a)(5)(E) AUTHORIZATION

Based on above criteria outlined under MMPA Section 101(a)(5)(E), and the best scientific information available as detailed herein and cited hereafter, the AK Bering Sea, Aleutian Islands flatfish trawl fishery meets the requirements for issuance of a permit under MMPA section 101(a)(5)(E), for a period of up to three years.

DATE:

June 23, 2020

LIST OF ATTACHMENTS (if applicable)

LITERATURE CITED

Muto, M. M. V. T. Helker, B. J. Delean, R. P. Angliss, P. L. Boveng, J. M. Breiwick, B. M. Brost, M. F. Cameron, P. J. Clapham, S. P. Dahle, M. E. Dahlheim, B. S. Fadely, M. C. Ferguson, L. W. Fritz, 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. 2020. (DRAFT) Alaska Marine Mammal Stock Assessments, 2019. U. S. Department of Commerce, NOAA Technical Memorandum NMFS-AFSC-XXX. X p.

Available at:

<https://www.fisheries.noaa.gov/national/marine-mammal-protection/draft-marine-mammal-stock-assessment-reports> (accessed June 23, 2020)