National Marine Fisheries Service 101(a)(5)(E) Assessment

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: HI deep-set longline/Western Pacific pelagic longline (HI deep-set component)

Fishery Region: Pacific Islands

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) False killer whale, Main Hawaiian Islands Insular
2) Humpback whale, Central North Pacific stock
3)
4)
5)
6)

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

If yes, which species/stocks: False killer whale, Main Hawaiian Islands Insular stock

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 is a federally managed limited access program that targets tuna. The fishery operates both within the U.S. EEZ and on the high seas. The vessel operator must notify NMFS prior to departure whether the vessel is undertaking a deep-set or shallow-set trip. The fishery is subject to the False Killer Whale Take Reduction Team and associated regulations under the False Killer Whale Take Reduction Plan.

Since the high seas “Western Pacific Pelagic (HI Deep-set component)” on the 2020 List of Fisheries is an extension of the Hawaii Deep-set (tuna target) fishery operating in U.S. waters, and not a separate fishery, the two components of the Hawaii Deep-Set Longline are considered a single fishery for the purposes of this document.

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

Species/stock 1 of 2 : False killer whale, Main Hawaiian Islands Insular 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 3 years, between 2013-2015) is:

Total Human Caused M/SI 0.0 All Comm. Fishery M/SI 0.0 Individual Comm. Fishery M/SI 0.0

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} 149 R_{max} 0.04

NIT_t 0.30 NIT_s 0.039

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:

False killer whale, Main Hawaiian Islands (MHI) Insular stock: The total annual average human caused M/SI for this stock (0.0) does not exceed NITt (0.30) thus, the Tier 1 analysis is satisfied and all commercial fisheries are considered to have a negligible impact on this stock.

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

Species/stock 2 of 2 : Humpback whale, Central North Pacific 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 25 All Comm. Fishery M/SI 9.5 Individual Comm. Fishery M/SI 0.9

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} 7,891 R_{max} .07

NIT_t 27.62 NIT_s 3.59

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.

<u>Species/Stock NID Justification</u>:

See Negligible Impact Justification Summary

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)	False killer whale, Main Hawaiian Islands Insular stock	Yes ☑ No ☐
2)	Humpback whale, Central North Pacific stock	Yes ☑ No ☐
3)		Yes ☐ No ☐
4)		Yes ☐ No ☐
5)		Yes ☐ No ☐
6)		Yes ☐ No ☐

NEGLIGIBLE IMPACT JUSTIFICATION SUMMARY

Regarding the years used for calculation of M/SI, False killer whale, Main Hawaiian Islands Insular stock:

Adjustments to bycatch estimation methods for False killer whales, Main Hawaiian Islands (MHI) Insular stock were implemented in 2013 to account of take reduction plan (TRP) measures. These measures include gear requirements, measures to improve captain and crew response to hooked and entangled false killer whales, and elimination of the seasonal contraction of the Longline Exclusion Zone (LLEZ) around the MHI. The TRP became effective December 31, 2012, with gear requirements effective February 27, 2013. In the most recent year for which abundances and M/SI averages are available, a 5-yr average for the most recent 5 years (2011-2015) is not provided for the MHI insular stock, as the fishery was largely excluded from the stock range through the expansion of the LLEZ, resulting in significant change in the conduct of the fishery with respect to this stock. Instead, the 3-year period following the TRP implementation (2013-2015) is presented. Therefore, the 3-year M/SI annual average, which is included in the final 2019 stock assessment report, is considered the best available science and used for this NID analysis.

Regarding Humpback whales, Central North Pacific stock:

As noted in the final 2019 SAR, The humpback whale ESA listing final rule (81 FR 62259, 8 September 2016) established 14 Distinct Population Segments (DPSs) with different listing statuses. Some of the listed DPSs partially coincide with the currently defined Central North Pacific stock. Because NMFS cannot manage one portion of an MMPA stock as ESA-listed and another portion of a stock as not ESA-listed, until such time as the MMPA stock delineations are reviewed in light of the DPS designations and Bettridge et al. (2015), NMFS continues to use the existing MMPA stock structure and considers the stock to be endangered and depleted for MMPA management purposes (e.g., selection of a recovery factor, stock status).

However, again as noted in the final 2019 SAR, Humpback whale mortality and serious injury in Hawaii-based fisheries involves whales from the Hawaii DPS; this DPS is not listed as threatened or endangered under the ESA. Therefore, a Tier 2 analysis was not conducted for the Hawaii DPS.

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 Hawaii deep-set longline/Western Pacific pelagic longline (HI deep-set component) 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

Bettridge, S., Baker, C.S., Barlow, J., Clapham, P., Ford, M.J., Gouveia, D., Mattila, D.K., Pace, R.M., Rosel, P.E., Silber, G.K., & Wade, P.R. 2015. Status review of the humpback whale (Megaptera novaeangliae) under the Endangered Species Act. U.S. Dep. Commer., NOAA Tech. Memo. NOAA-TM-NMFS-SWFSC-540, 2635 p. Available online: https://repository.library.noaa.gov/view/noaa/4883

Carretta, J. V., K. A. Forney, E. M. Oleson, D. W. Weller, A. R. Lang, J. Baker, M. M. Muto, B. Hanson, A. J. Orr, H. Huber, M. S. Lowry, J. Barlow, J. E. Moore, D. Lynch, L. Carswell, and R. L. Brownell Jr. 2020. U.S. Pacific Marine Mammal Stock Assessments: 2019, U.S. Department of Commerce, NOAA Technical Memorandum NMFS-SWFSC-629. Available online: https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessment-reports-region.

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.

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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: Hawaii deep-set longline/Western Pacific pelagic longline (HI deep-set component)

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

	Is a recovery plan developed or underway for this species/stock?
1) False killer whale, Main Hawaiian Islands Insular stock	Yes ☑ No ☐
2) Humpback whale, Central North Pacific stock	Yes ☑ No ☐
3)	Yes ☐ No ☐
4)	Yes ☐ No ☐
5)	Yes ☐ No ☐
6)	Yes ☐ No ☐

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.

A recovery plan for the False Killer Whale, Main Hawaiian Islands Insular stock, is currently in development and expected to be completed in 2020. The Species Status Assessment and Recovery Plan were released for peer review in 2019 and a final plan is expected in 2020.

The fishery is subject to the False Killer Whale Take Reduction Team (75 FR 2853; January 19, 2010) and associated regulations under the False Killer Whale Take Reduction Plan.

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 Hawaii deep-set longline/Western Pacific pelagic longline (HI deep-set component) 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:

LIST OF ATTACHMENTS (if applicable)

LITERATURE CITED

Carretta, J. V., K. A. Forney, E. M. Oleson, D. W. Weller, A. R. Lang, J. Baker, M. M. Muto, B. Hanson, A. J. Orr, H. Huber, M. S. Lowry, J. Barlow, J. E. Moore, D. Lynch, L. Carswell, and R. L. Brownell Jr. 2020. U.S. Pacific Marine Mammal Stock Assessments: 2019, U.S. Department of Commerce, NOAA Technical Memorandum NMFS-SWFSC-629.
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Notice of establishment of a False Killer Whale Take Reduction Team and meeting; request for comment. (75 FR 2853)
https://www.federalregister.gov/documents/2010/01/19/2010-835/false-killer-whale-take-reduction-team-meeting