WESTERN PACIFIC REGIONAL FISHERY MANAGEMENT COUNCIL

ACTION PLAN TEAM WORKING DRAFT

Specification of Annual Catch Limits and Accountability Measures for CNMI BMUS in Fishing Years 2026, 2027, 2028, and 2029

With Environmental Assessment

Regulatory Identification Number (RIN) 0648-XXXX

Prepared by the Western Pacific Regional Fishery Management Council

Table of Contents

Table of Tables

Table of Figures

1 Introduction

1.1 Background information

The fishery ecosystem plan for the Mariana Archipelago (FEP) governs fisheries for bottomfish management unit species (BMUS) in federal waters of the exclusive economic zone (EEZ; generally, 3-200 nmi) around the Commonwealth of the Northern Mariana Islands (CNMI). The Western Pacific Fishery Management Council (WPFMC, or the Council) developed the FEP, and the National Marine Fisheries Service (NMFS) implemented it under the authority of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act, or MSA). In the CNMI, bottomfish fisheries harvest an assemblage, or complex, of species that include emperors, snappers, groupers, and jacks.

In accordance with the Magnuson-Stevens Act, the FEP and its implementing regulations at 50 CFR 665.4, NMFS must specify an annual catch limit (ACL) and implement accountability measures (AMs) for BMUS. The Council recommends ACLs in consideration of the best available scientific, commercial, and other information about the fishery for that stock or stock complex. The ACL may not exceed the acceptable biological catch (ABC) recommended by the Council's Scientific and Statistical Committee (SSC).

1.2 Proposed Action

The proposed action is to specify ACLs, and AMs for the CNMI BMUS managed under the Mariana Archipelago FEP for fishing years 2026 through 2029. The proposed ACLs and AMs were developed in accordance with the Council's ACL process as described in the FEP. This process includes methods by which an ACL may be reduced from the ABC based on social, economic, ecological, and management uncertainties through a SEEM analysis (WPRFMC 2020b). An ACL may not exceed an ABC set by the SSC, in accordance with implementing regulations for National Standard (NS) 1 of the Magnuson-Stevens Act (50 CFR 600.310).

1.3 Purpose and Need

The purpose and need for this action are the same as described in the 2021 environmental assessment (EA) (NMFS 2021) implementing ACLs for the CNMI bottomfish fishery, Section 1.3. The purpose of this action is to comply with the requirements of the Magnuson-Stevens Act and the provisions of the FEP and implementing regulations, which require NMFS to implement ACLs and AMs for Pacific Island BMUS, as recommended by the Council and based on the best scientific, commercial, and other information available for the subject fishery. The need for this action is to prevent overfishing and provide long-term sustainability of fishery resources while allowing fishery participants to continue to benefit from their utilization. The proposed action specifies AMs to correct or mitigate overages of the ACL should they occur.

1.4 Action Area

The action area is the same as described in the 2021 EA, Section 1.4. The action area includes all waters and associated marine resources within the EEZ around the CNMI.

1.5 Best Scientific Information Available

In May 2025, NMFS Pacific Islands Fisheries Science Center (PIFSC) completed a stock assessment update for bottomfish in the CNMI utilizing data from 2000 through 2023 (Bohaboy and Mathews 2025). In April 2025, a Western Pacific Stock Assessment Review (WPSAR) meeting held virtually concluded the stock assessment is "complete with no consequential deviations from the 2019 benchmark assessment (Langseth et al., 2019), represents 'best scientific information available (BSIA),' and hence is appropriate for management decision-making purposes and informing the setting of risk-based annual catch limits" (Chaloupka et al., 2025). The stock assessment concluded that BMUS in the CNMI were likely not overfished nor experiencing overfishing in 2023. The assessment results included projections of stock biomass and catch over the next five years that the Council and NMFS can use to inform ACLs for the CNMI BMUS. Detailed information, including the full description of data sources and modeling approaches, diagnostics of assessment model performance, assessment results, and discussion of similarities and differences with the 2019 benchmark stock assessment can be found in Bohaboy and Matthews (2025).

1.6 Overview of ACL and AM Development Process

Federal regulations at 50 CFR 665.4 (76 FR 37285, June 27, 2011) require NMFS to implement an ACL and AM(s), as recommended by the Council, based on the best scientific, commercial, and other information available for the fishery. In accordance with the Magnuson-Stevens Act and the FEP, there are three required elements in the development of an ACL as shown in Figure 1: calculating the ABC, determining an ACL that may not exceed the ABC, and developing AMs.

First, the Council's SSC calculates an ABC that is set at or below the stock's overfishing limit (OFL). The OFL is an estimate of the catch level above which overfishing is occurring and corresponds with the maximum fishing mortality threshold (MFMT). In accordance with Federal regulations at 50 CFR 600.310 implementing National Standard 1 of the Magnuson-Stevens Act, the probability of overfishing (P*, pronounced P-star) cannot exceed 50 percent and should be a lower value. Thus, the ABC is the maximum amount the fishery can catch that provides at least a 50 percent chance, or better, of not overfishing the stock.

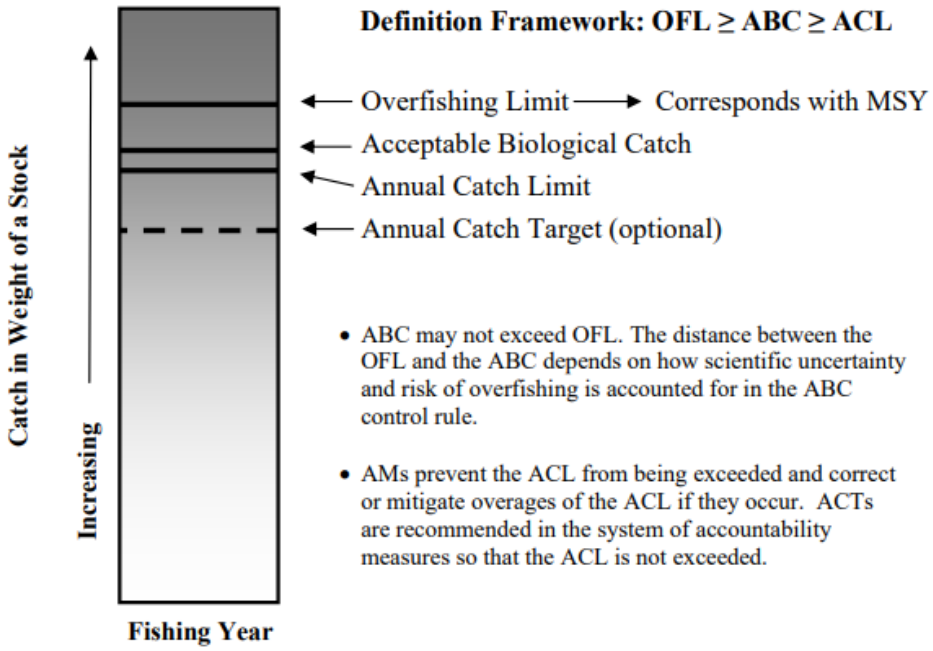

Figure 1. Relationship between OFL, ABC, ACL, and ACT.

Second, the Council must recommend an ACL that does not exceed the ABC recommended by the SSC. An ACL set below the ABC further reduces the probability that actual catch will exceed the ABC or OFL and result in overfishing. The SSC may reduce the ABC below the OFL considering factors evaluated in a P* analysis. The Council may then reduce the ACL below the ABC in consideration of social, economic, ecological, and management (SEEM) factors in a SEEM analysis (see Hospital et al., 2019 for SEEM considerations). While the P* analysis considers management uncertainty arising from underreporting and misreporting of catch, the SEEM analysis is more forward-looking and considers uncertainty arising from concerns about compliance and/or management capacity.

The third and final element in the ACL process is the development of AMs. There are two categories of AMs, in-season AMs and post-season AMs. In-season AMs prevent an ACL from being exceeded within a fishing year and may include closing the fishery, closing specific areas, changing bag limits, setting an annual catch target (ACT), or other methods to reduce catch. Post-season AMs reduce the ACL and/or ACT in subsequent years if the ACL is exceeded to mitigate potential impacts to fish stocks. Additionally, National Standard 1 and the FEP describe performance standards that identify conditions when a system of ACLs and AMs should be reevaluated. Generally, if any fishery exceeds an ACL more than once in a four-year period, as a performance standard, the Council must re-evaluate the ACL process for that fishery and adjust the system as necessary to improve its performance and effectiveness in ensuring sustainability of the fishery (WPFMC and NMFS 2011). The Council can also choose a higher performance standard to provide more conservative management for vulnerable stocks.

1.7 Public Review and Involvement

NMFS and the Council provided several opportunities to the public to provide input on the development of the proposed ACL and AMs for the CNMI BMUS. At its 155th meeting in June 2025, the Council's SSC considered and discussed the outcomes of the peer review from the report of the WPSAR Panel Chair, Dr. Milani Chaloupka. In the same meeting, PIFSC presented the final 2025 stock assessment update for the CNMI BMUS stock (Bohaboy and Matthews 2025), incorporating recommendations from the WPSAR review (Chaloupka et al., 2025). The SSC considered this stock assessment update as BSIA for the CNMI BMUS fishery for the purpose of determining stock status and setting harvest limits. At its 203rd meeting in June 2025, the Council received a presentation from PIFSC on the assessment update, accepted the SSC BSIA recommendation, and directed staff to develop proposed ABC and ACLs for initial action at its 204th meeting in September 2025.

At its 204th meeting on September 17, 2025, the Council considered and discussed issues relevant to specifying ACLs and AM for the CNMI BMUS fishery, including the ABC recommendations from the SSC at its 157th meeting held September 9-11, 2025. At its 157th meeting, the SSC recommended setting the ABCs based on the 2020 P* analysis at 40 percent risk of overfishing, equaling 72,000 lb. At its 204th meeting in September 2025, the Council accepted the SSC's recommendation of setting the ABC based on the P* analysis reduction, took initial action to recommend an ACL equal to the ABC of 72,000 lb, and recommended an ACT based on the P* and SEEM reduction scores corresponding to a risk of overfishing level of 35 percent at 66,000 lb.

All Council and SSC meetings were open to the public and advertised through notices in the *Federal Register* (90 FR 21289, May 19, 2025, 90 FR 40821, August 21, 2025) and on the Council's website. The public had an opportunity to provide comments on the stock assessment update and the Council's proposed action to specify ACLs and AM for the CNMI bottomfish fishery at these meetings. There were no public comments.

1.8 NEPA Compliance

We prepared this EA in accordance with the National Environmental Policy Act (NEPA; 42 U.S.C. 4321, et seq.) and related authorities, and NOAA's "Policy and Procedures for Compliance with the National Environmental Policy Act and Related Authorities Companion Manual for NOAA Administrative Order (NAO) 216-6A - Effective Jan 13, 2017" (Companion Manual).

1.9 List of Preparers

Western Pacific Fishery Management Council
Angela Dela Cruz, CNMI Island Coordinator, WPFMC, Preparer
Zach Yamada, Fishery Analyst, WPFMC, Preparer
Thomas Remington, Council Contractor, Lynker, Preparer

NMFS PIRO Sustainable Fisheries Division
Keith Kamikawa, Fishery Management Specialist, PIRO SFD, Preparer

Tori Spence, Title, PIRO SFD, Preparer
Brett Schumacher, Fish and Wildlife Administrator, PIRO SFD, Reviewer

2 Descriptions of Alternatives Considered

The Council and its SSC used the approved process, described previously (see Section 1.6 of this EA) and detailed in WPFMC and NMFS (2011), to develop its ACL recommendations for the CNMI bottomfish fishery for 2026 through 2029. The process began with the most recent stock assessment update (Bohaboy and Matthews 2025) based on contemporary fisheries information and biology of the CNMI BMUS, which resulted in estimation of the OFL. The Council's WPSAR process and its SSC provided a review of the stock assessment, and these reviews determined the assessment update to be the BSIA for management. Subsequently, the SSC applied the P* to recommend the ABC. The Council then specified the ACL and considered AMs to prevent overfishing. The action alternatives under consideration are based upon the best available scientific, commercial, and non-commercial catch and other information about the fishery.

2.1 Development of Alternatives

2.1.1 *Estimation of OFL*

PIFSC used estimated posterior distributions of assessment model parameters in forward projections to estimate the probability of overfishing (P^*, i.e., the probability that H is greater than H_{MFMT}) from 2026 to 2029 under a range of future catches. PIFSC accounted for uncertainty in the distribution of estimates of posterior model parameters. The projected total catch scenarios ranged from 0 to 90,000 lb per year in 1,000-lb increments, and PIFSC applied these scenarios beginning in 2026, assuming each value for the future annual catch will be constant through all projection years. In addition to catch, PIFSC calculated corresponding quantities of interest, including stock biomass, harvest rate, and probability of the stock being overfished ($B/B_{MSY} <$ 0.7). The future catch corresponding to a 50 percent risk of overfishing can be considered the OFL (Table 1).

Table 1. CNMI BMUS probabilities of overfishing (percent) in fishing years 2026 to 2029.

P*	2026	2027	2028	2029
0.50	90,000	88,000	86,000	84,000
0.49	90,000	87,000	84,000	82,000
0.48	88,000	85,000	83,000	81,000
0.47	87,000	84,000	81,000	80,000
0.46	85,000	83,000	80,000	79,000
0.45	84,000	81,000	79,000	78,000
0.44	82,000	80,000	77,000	76,000
0.43	80,000	78,000	76,000	76,000
0.42	78,000	76,000	76,000	74,000
0.41	77,000	76,000	74,000	73,000

P*	2026	2027	2028	2029
0.40	76,000	74,000	73,000	72,000
0.39	74,000	72,000	71,000	70,000
0.38	72,000	71,000	70,000	69,000
0.37	71,000	70,000	69,000	68,000
0.36	69,000	68,000	68,000	67,000
0.35	67,000	67,000	66,000	66,000
0.34	66,000	65,000	65,000	64,000
0.33	64,000	64,000	64,000	63,000
0.32	63,000	62,000	62,000	62,000
0.31	61,000	61,000	61,000	61,000
0.30	59,000	60,000	59,000	59,000
0.29	59,000	59,000	58,000	58,000
0.28	56,000	57,000	57,000	56,000
0.27	55,000	55,000	55,000	55,000
0.26	53,000	53,000	54,000	54,000
0.25	52,000	52,000	52,000	53,000
0.24	49,000	51,000	51,000	51,000
0.23	48,000	49,000	50,000	50,000
0.22	46,000	47,000	48,000	48,000
0.21	44,000	45,000	46,000	47,000
0.20	42,000	43,000	45,000	45,000
0.19	39,000	42,000	43,000	44,000
0.18	38,000	39,000	41,000	42,000
0.17	35,000	38,000	39,000	40,000
0.16	33,000	35,000	38,000	39,000
0.15	31,000	33,000	35,000	37,000
0.14	28,000	31,000	33,000	35,000
0.13	26,000	29,000	31,000	33,000
0.12	23,000	26,000	29,000	31,000
0.11	21,000	24,000	26,000	29,000
0.10	19,000	22,000	24,000	26,000

Source: Bohaboy and Matthews (2025).

2.1.2 *Stock Status*

Under the FEPs the Council and NMFS consider BMUS as overfished if the stock biomass (B) falls below the Minimum Stock Size Threshold (MSST). The FEP defines MSST as 0.7 times the biomass necessary to produce maximum sustainable yield (MSY) on a continuing basis (i.e., MSST = $0.7 \times B_{MSY}$). Overfishing occurs when the fishing mortality rate (F) or discrete harvest rate (H = catch / exploitable biomass, also known as the harvest rate) is greater than the MFMT. The MFMT varies depending on whether the stock is overfished. If the stock biomass is above

the MSST (i.e., it is not overfished), then the MFMT equals the harvest rate that produces maximum sustainable yield (H_{MSY}). If the stock is overfished (i.e., biomass is below the MSST such that $B < 0.7 \times B_{MSY}$), then H_{MFMT} declines from H_{MSY} in proportion to the ratio of biomass to the MSST.

In 2023, the most recent year for which stock status information is available, the relative harvest rate (H_{2023}/H_{MFMT}) was 0.38, and the relative biomass (B_{2023}/B_{MSY}) was 0.96 (Bohaboy and Mathews 2025, see Table 7). The stock assessment update indicated that the CNMI bottomfish complex in 2023 was not overfished and was not experiencing overfishing (Figure 2). Unlike the 2019 benchmark assessment, which suffered from limited data and high uncertainty in the 2017 stock estimates, the 2025 stock assessment update benefited from a greater number of creel survey interviews between 2018 and 2023, especially from 2020 to 2022. This improved data quality, combined with lower overall catch estimates, reduced uncertainty in the estimated terminal year stock status. In 2023, the total estimated catch was 12,600 lb, which is well below the OFL of 84,000 lb.

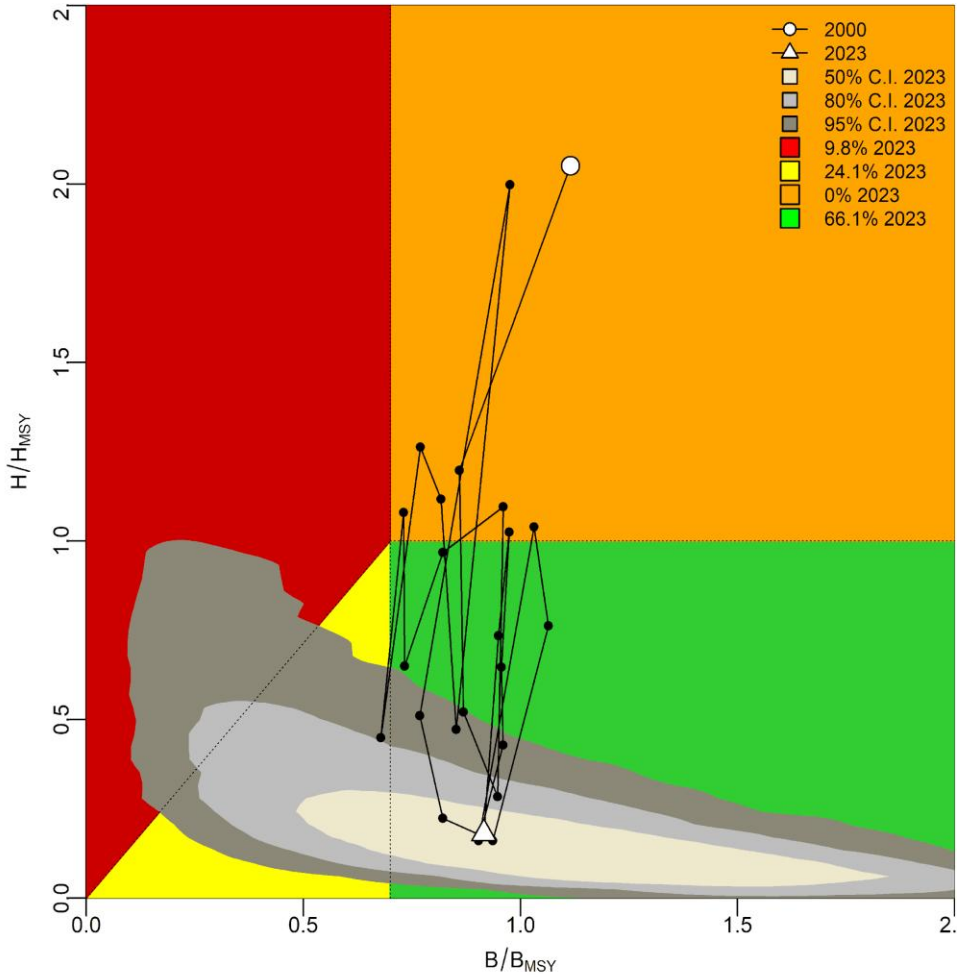

Figure 2. Kobe plot of relative biomass and relative exploitation rate from the best fitting production model for CNMI from 2000 to 2023. Source: Bohaboy and Matthews (2025).

The MSY for CNMI BMUS decreased between the two assessments. It is not clear what is driving the recent trend of the decline in the estimated intrinsic growth rate (r) and carrying capacity (k) resulting in the decline in MSY. The H/H_{MSY} ratio and the probability that overfishing is occurring also decreased. The biomass for CNMI BMUS decreased by 105,400 lb, and the biomass at MSY and B/B_{MSY} also decreased. Thus, the probability that the stock is overfished decreased. The OFL in the terminal year decreased by 13,000 lb.

Table 2 shows the total estimated catch of CNMI BMUS over the recent 10 years. The catch estimate varies over time, with the average over the last three years being 24,843 lb; this corresponds to approximately 30 and 33 percent of the current ACL and ACT, respectively.

Table 2. Recent history of ACL and ACT for CNMI bottomfish fishery. For each ACT and ACL specified, as an AM, the fishery will have a post-season overage adjustment based on a three-year running average of total estimated catch.

Year	Catch (lb)	ACL/ACT (lb)	Proportion of ACL/ACT caught
2015	13,366	228,000	5%
2016	73,314	228,000	26%
2017	95,247	228,000	31%
2018	3,425	NA	NA
2019	29,411	NA	NA
2020	46,221	84,000/78,000	55%/59%
2021	77,701	84,000/78,000	93%/99%
2022	56,543	84,000/78,000	67%/72%
2023	13,089	82,000/75,000	16%/17%
2024	4,898	82,000/75,000	6%/7%
$\text{Average}_{2022\text{-}2024}$	24,843	-	-
$\text{Average}_{2015\text{-}2024}$	41,322		

Source: WPFMC (2025).

2.1.3 *Calculation of ABC, ACL, and ACT*

Scientific Uncertainties

The omnibus FEP amendment that established the ACL specification process requires the SSC to review the stock's scientific information and assign it a tier in the ABC control rule (WPFMC and NMFS 2011). The Council considers the CNMI BMUS stock complex a tier 1-2 stock. Therefore, the Council uses a P* analysis to quantify the scientific uncertainty in determining the appropriate risk level to set the ABC. The SSC may recommend an ABC that differs from the result of the control rule calculation based on factors such as data uncertainty, recruitment variability, declining trends in population variables, and other factors determined relevant by the SSC, but must explain its rationale.

To determine a P* score for the scientific uncertainty for each assessed stock, the working group scored four scientific uncertainty dimensions: 1) assessment information; 2) uncertainty

characterization; 3) stock status; and 4) productivity-susceptibility. The Assessment information dimension considers catch history, catch per unit effort, species-specific data, sources of mortality accounted for, and inclusion of fishery-independent, tagging, and spatial data. The stock assessment update (Bohaboy and Matthews 2025) did not use new information that changes the score for the Assessment Information dimension of the P* analysis. The update added catch values from the boat-based creel surveys from 2018 to 2023. Thus, the Assessment Information dimension retained a reduction of 3.3 percent. The Uncertainty Characterization score also did not change with the assessment update. The uncertainty surrounding the lack of process error in the projection of OFL remains the same, while the uncertainty surrounding the single point estimate of biomass from the 2020 P* analysis decreased due to the inclusion of additional years of data (WPFMC 2020a). The assessment update reduced the biomass estimate from 2020. Thus, maintaining the score for this dimension is precautionary. The Stock Status dimension did not change and remained as not overfished and not experiencing overfishing. However, fishing mortality was below MFMT compared to the 2019 stock assessment when fishing mortality approached the MFMT. Therefore, stock status was revised from reduction of 1 percent to 0. There was no new life history information incorporated in the assessment update. The level of fishery susceptibility remains the same, noting the catch trend was decreasing over time (WPFMC 2020a).

Table 3. P* scores for setting the 2020 ABC.

P* Dimensions and Criteria	2020
Assessment Information	**-3.3**
Reliable catch history	*0.5 : unreported and recreational catch*
Standardized CPUE	*0.0 : improved standardization*
Species specific data	*1.0 : species complex assessment*
All sources of mortality accounted for	*0.0 : all known uncertainty accounted for*
Fishery independent data	*1.0 : not included*
Tagging data	*1.0 : not included*
Spatial analysis	*1.0 : not included*
Uncertainty Characterization	**-2.5 : narrowed to 2 uncertainties**
Stock Status	**-0.0 : revised based on BSIA species complex**
Productivity/Susceptibility	**-4.2 : same P and S**
TOTAL BUFFER	**-10**

Social, Economic, Ecological and Management Uncertainty

The SEEM analysis in 2020 for the benchmark assessment (WPFMC 2020b) discussed the importance of the social and commercial dimension to the fishery, but there are insufficient ecological studies done on these species. Additionally, the fishery is weather dependent and Federal management applies only to Federal waters while territorial waters may remain open even if the fishery attains the ACL and ACT. Therefore, the SEEM working group recommended no further reduction for the Social, Economic, and Ecological dimensions when setting the ACL

and a 5 percent reduction for the management dimension when setting the ACT (WPFMC 2020b).

Table 4. SEEM scores for setting the ABC in 2020, indicating no change in the criteria scores.

SEEM Dimensions	2020
Social	*-0.0 : no reduction*
Economic	*-0.0 : no reduction*
Ecological	*-0.0 : no reduction*
Management & Monitoring	*-5.0 : uncertainty in complementary management and creel survey reporting*
TOTAL BUFFER	**-5.0**

2.2 Description of Alternatives

The alternatives in this document are the options the Council considered at its 205th meeting in September 2025. The SSC and Council developed the ABC, ACL, and ACT recommendations in accordance with the Magnuson-Stevens Act, Federal regulations at 50 CFR 665.4, and the ACL implementation mechanism of the FEP described in Section 1.6. The Council's website contains reports of the SSC and Council deliberations.

2.2.1 *Features Common to All Alternatives*

Each alternative assumes continuation of all existing Federal and local resource management programs and compliance with laws and regulations. Monitoring would continue, including monitoring of the fishery by the Council and NMFS and other members; non-regulatory monitoring of catch by the local resource management agencies with assistance from NMFS PIFSC's Western Pacific Fisheries Information Network (WPacFIN); and review of information provided to NMFS through logbooks submitted by fishermen. Each of the action alternatives includes ACLs and AMs based on the work of the Council and SSC that conformed with the requirements of the Magnuson-Stevens Act and the process included in the FEP and implementing regulations as described in Section 1.

2.2.2 *Alternative 1: No Action – Do not specify ACL or AMs*

Under Alternative 1, the Council would not recommend the specification of an ACL or AMs for the CNMI BMUS for fishing years from 2026 to 2029. Alternative 1 serves as the no-management action and environmental baseline alternative for this EA. This alternative would not comply with the Magnuson-Stevens Act, provisions of the FEP, and implementing regulations, which require NMFS to specify an ACL and AMs for all federally managed fish stocks and stock complexes. However, we include this alternative in the draft EA because it represents the no-management action alternative, which allows us to compare the effects of the action alternatives to the environmental baseline.

Expected Fishery Outcome

Under this alternative, the Council does not expect that not specifying an ACL or AM for the CNMI BMUS fishery would result in changes effects on the conduct of the fishery, including gear types used, areas fished, level of catch or effort, target and non-target stocks, or protected species. The Council expects this continuity because, based upon the best available commercial and scientific information, the CNMI bottomfish fishery historically harvests less than the stock complex's MSY, and has not been constrained by ACLs in recent years. Based on recent ACLs, total estimated catches of CNMI bottomfish have consistently remained below the implemented ACLs (Table 2). Noting that the CNMI bottomfish fishery did not operate under an ACL for 2018 and 2019 while the Council and NMFS reclassified certain BMUS as ECS, this catch history indicates that the fishery has performed similarly whether or not ACLs and AMs are in place and regardless of the level of implemented ACLs. Additionally, there has never been an in-season closure as an AM for this fishery, so ACLs did not functionally limit the fishery. The Council expects future catch to be similar to catch in recent years. Therefore, the expected fishery outcome under Alternative 1 would not be likely to have adverse effects on the conduct of the bottomfish fishery or related fish populations in the CNMI.

2.2.3 *Alternative 2: Status quo – Specify the ACL and Act based on the 2024 package*

Under this alternative, the Council would recommend ACLs and ACTs for the CNMI bottomfish fishery for fishing years 2026 to 2029 based on the results of the 2019 benchmark stock assessment and the associated P* and SEEM analysis. However, this alternative does not comply with National Standard 2 requiring the use of BSIA. As a post-season AM, if the average total catch from the most recent three years exceeds the ACL, NMFS would reduce the ACL in the following fishing year by the amount of the overage. If the ACL was exceeded more than once during the 2026 to 2029 period, the Council would re-evaluate CNMI bottomfish management as required under Magnuson-Stevens Act implementing regulations.

Expected Fishery Outcome

Under Alternative 2, the CNMI BMUS would be subject to an ACL of 82,000 lb for the 2026 to 2029 fishing years based on the 2019 benchmark stock assessment (Langseth et al., 2019). The fishery has consistently landed below the ACL except for an unusually high catch in 2012. Fishery operations have remained consistent since ACLs were first implemented. The average annual catch from 2022 to 2024 was 24,843 lb, which is 34 percent of the 74,000 lb ACT. Even if the fishery performs close to the highest recent catch of 95,247 lb during the 2017 fishing year, the fishery would continue with no overage adjustment for the complex. If the most recent three year average of BMUS in the fishery were to exceed the 82,000 lb ACL, NMFS would reduce the ACL in the next fishing year by the amount of the overage to prevent overfishing.

2.2.4 *Alternative 3: Specify the ACL based on the SSC recommended ABC and ACT based on results from the SEEM analysis (Preliminary Preferred)*

Under Alternative 3, the Council would recommend specification of ACLs for the CNMI bottomfish fishery based on the results of the 2025 stock assessment update and revised P* and SEEM analyses. This alternative would also utilize the results of the CNMI P* and SEEM analyses taking into consideration the management and monitoring uncertainty to further the risk of overfishing by five percent to specify the ACL at 72,000 lb (P* = 40 percent) and set an ACT of 66,000 lb (P* = 35 percent).

The previous ACLs for 2024-2025 were based on this 39 percent risk of overfishing but corresponded to a higher catch level. However, this alternative assumes a revised level of scientific uncertainty with the same level of monitoring, and management uncertainty is still applicable even with the fishery having not exceeded the ACL at any point in 2024 or 2025.

The post-season AM under Alternative 3 would apply as described in Alternative 2. In contrast to Alternative 2, Alternative 3 is consistent with all requirements of the Magnuson-Stevens Act, the FEP, and implementing regulations.

Expected Fishery Outcome

Under Alternative 3, fishing for CNMI BMUS would be subject to an ACL of 72,000 lb and ACT of 66,000 lb for the 2026 to 2029 fishing years based on the 2025 stock assessment update (Bohaboy and Matthews 2025). The fishery is not expected to change the way it fishes or where it fishes except in the years when catch is relatively high (e.g., 2012, 2021). The fishery has consistently landed below the proposed ACL except for those years (i.e., 2012,2021) when the fishery landed an order of magnitude higher compared to all other years. Fishery operations have remained consistent since ACLs were first implemented. The average annual catch from 2022 to 2024 was 24,843 lb, which is only 37 percent of the ACT of 66,000 lb. Given the current state of CNMI's bottomfish fleet, there is a lower chance that total catch in 2026-2029 would approach the ACL under this alternative. NMFS could implement the post-season AM if the most recent three-year catch average exceeds the proposed ACL.

Since there is insufficient data to allow NMFS to implement an in-season closure to prevent the ACL from being exceeded, the AM under this alternative would be the same as those described under Alternative 2. Therefore, impacts would be similar to those described in Alternative 2.

2.2.5 *Alternative 4: Specify ACL and ACT lower than P* and SEEM analysis*

Under this alternative, the Council would recommend specifying an ACL and ACT lower than the revised 2020 P* and SEEM analysis for the 2026 to 2029 fishing years. Catch limit options are 2 to 10 percent lower than the ACLs and ACTs indicated by the results of the revised P* and SEEM analysis.

Table 5. Possible ACLs and ACTs under Alternative 4 based on percent reductions from the probability of overfishing as determined by the revised P* and SEEM analyses for CNMI BMUS. The number in the parentheses represents the probability of overfishing, or P*.

Option	ACL	ACT
ACL at P* and SEE	72,000 (40)	66,000 (35)
ACL at P* and SEE -2%	69,000 (38)	63,000 (33)
ACL at P* and SEE -5%	66,000 (35)	61,000 (30)
ACL at P* and SEE -8%	62,000 (32)	55,000 (27)
ACL at P* and SEE -10%	59,000 (30)	53,000 (25)

This alternative would operate as described in Alternatives 2 and 3, with a lower ACL and ACT based on the results of the 2025 stock assessment update (Bohaboy and Matthews 2025). This

alternative provides a more conservative approach to account for scientific and management uncertainties not identified in the P* and SEEM analyses.

Expected Fishery Outcome

Under Alternative 4, the allowable catch would depend on the ACL selected by the Council. Using the information from the 2025 assessment update resulted in lower allowable catch levels compared to the previous stock assessment. However, the fishery is not likely to reach the ACLs if the fishery performance is similar to the past 20 years. The Council does not expect the fishery to change the way it fishes or where it fishes except in the years when catch is relatively high (e.g., 2012, 2021). The fishery has consistently landed below the proposed ACL except for the years (i.e., 2012, 2021) when the fishery landed an order of magnitude higher compared to all other years. Fishery operations have remained consistent since ACLs were first implemented. The average annual catch from 2022 to 2024 was 24,843 lb, which is 37 percent of the 66,000 lb ACT. Given the current state of CNMI's bottomfish fleet, there is a low chance that total catch in any year from 2026 to2029 would approach the ACL under this alternative. As a post-season AM, if the average catch from the most recent three years exceeds the ACL, NMFS would reduce the ACL in the following year by the amount of the overage.

Since there is insufficient data that would allow NMFS to timely implement an in-season closure to prevent the ACL from being exceeded, the AM under this alternative would be the same as those described under Alternatives 2 and 3. Therefore, the impacts to fishermen would be similar to those described in Alternatives 2 and 3.

3 Description of the Affected Environment

This section describes bottomfish fishing in the CNMI, as well as biological resources, socioeconomic resources, and other features of the environment that could be affected by the CNMI bottomfish fishery. Among the factors discussed are target and non-target species, bycatch, protected species, the fishing community and associated revenues, essential fish habitat (EFH) and habitat areas of particular concern (HAPC), marine protected areas (MPAs), and other vulnerable ecosystems. Chapter 4 evaluates the effects of the three action alternatives against the baseline.

3.1 Overview of the Fishery

The FEP manages 13 of bottomfish in the CNMI as BMUS (Table 1). Many people that participate in the bottomfish fishery are either subsistence or part-time commercial fishermen that operate vessels less than 25 ft long. Commercial and non-commercial fisheries for bottomfish occur in nearshore waters from 0-3 nm, although some fishermen make longer trips to specific bank areas around Guam and the CNMI (Brodziak et al., 2012). Fishermen tend to sell about half their catch to friends, neighbors, and co-workers.

The CNMI bottomfish fishery can be broken down into two sectors: deep-water (>500 ft) and shallow-water (100-500 ft) fisheries. The shallow-water bottomfish stock complex is comprised primarily of reef-dwelling species and the deepwater bottomfish stock complex consists primarily of groupers and snappers. The shallow-water fishery has a lower associated operating cost as it occurs closer to shore in nearshore waters, with most fishing trips made by small vessels. The commercially oriented vessels tended to be longer than 25 ft, concentrating effort on the deepwater bottomfish complex on offshore banks.

Fishermen commonly use hand lines, home-fabricated hand reels, and electric reels for small-scale fishing operations, and larger vessels employ electric reels and hydraulics. Fishing trips are often restricted to daylight hours as the smaller vessels rely on land features for guidance to a fishing area. Federal and local regulations prohibit bottom trawls, bottom gillnets, explosives, and poisons (50 CFR Parts 665.406; Northern Mariana Islands Administrative Code (NMIAC) § 85-30.1-401).

3.2 Affected Physical Resources

Fishing for bottomfish in the CNMI is not known to affect air quality, noise, water quality, view planes, or other associated physical resources given the offshore nature of the fishery and relatively small size of vessels used (see Section 3.1).

3.3 Target and Non-Target Fish Species

Information on target and non-target species comes from the most recent benchmark CNMI bottomfish stock assessment (Langseth et al., 2019) and stock assessment update (Bohaboy and Matthews 2025). These assessments found that the CNMI BMUS complex was not overfished and overfishing was not occurring in 2017 and 2023, respectively.

Bottomfish fishing is target-specific, with most of the catch being retained by fishermen. In the CNMI, almost all of the fishes caught are considered food fishes, and available data show that approximately 0.1% of the total catch from the non-charter bottomfish fishery sector is bycatch (WPFMC 2025). However, like other U.S. Pacific Island fisheries, discards, if they occur, are usually due to legal requirements, cultural reasons (i.e., taboo), damage from shark depredation, or practical reasons (e.g., ciguatera poison). The Council provides additional bycatch information in the CNMI bottomfish fishery in the Mariana Archipelago Annual Stock Assessment and Fishery Evaluation (SAFE) Report (WPFMC 2025).

3.4 Protected Species

Section 3.5 of the 2021 EA describes the baseline with respect to potential interactions between the CNMI bottomfish fishery and protected species, including marine mammals, sea turtles, and seabirds, and this information is incorporated by reference and summarized there. The section generally describes ESA requirements and consultations, ESA-listed species with the potential to interact with vessels in the fishery (see Table 15 in the 2021 EA), valid biological opinions (BiOps), and ongoing Section 7 consultations for the fishery. The section continues with information about the Marine Mammal Protection Act (MMPA), including the potential for interactions with the fishery.

Following are highlights of other information incorporated by reference from the 2021 EA and updated information, as referenced below, that support this EA:

- Sea Turtles: The 2021 EA concluded that fishing would not substantially change fishing activity in the CNMI bottomfish fishery such that there would be adverse effects to listed sea turtles that have not already been considered in prior consultations of the fishery under the ESA.

- Marine Mammals: NMFS previously evaluated the potential impacts of the CNMI bottomfish fishery to ESA-listed marine mammals and determined that the fishery is not

likely to adversely affect any species or critical habitat in the action area. NMFS documented its determinations in a BiOp for bottomfish fisheries on March 8, 2002, and a Letter of Concurrence (LOC) for bottomfish fisheries on June 3, 2008 (NMFS 2002; NMFS 2008). The MMPA prohibits, with certain exceptions, taking of marine mammals in the U.S. and by persons aboard U.S. flagged vessels (i.e., persons and vessels subject to U.S. jurisdiction). Additionally, the ESA lists five whale species known to occur in the EEZ around CNMI (see note under Table 12 in the 2021 EA).

- Oceanic Whitetip Sharks: On January 30, 2018, NMFS published a final rule listing oceanic whitetip sharks as threatened species under the ESA (83 FR 4153). Logbooks and voluntary reports document rare interactions with this species by the fishery. The Finding of No Significant Impact (FONSI) associated with the 2021 EA concluded that NMFS determined that the CNMI bottomfish fishery is not likely to jeopardize this species and does not expect the fishery to have a substantial effect on the overall population size of oceanic whitetip sharks under all alternatives considered and is not likely to reduce appreciably the likelihood of both survival and recovery of the species in the wild (NMFS 2019).

- Giant Manta Rays: On January 22, 2018, NMFS published a final rule listing giant manta rays as threatened species under the ESA (83 FR 2916). There are no recorded interactions between the fishery and giant manta rays, and NMFS expects the bottomfish fishery to have discountable or insignificant effects on the giant manta ray population. On June 5, 2019, NMFS reinitiated informal consultation under ESA to seek concurrence that these fishing activities are not likely to adversely affect this species. The FONSI associated with the 2021 EA concluded that fishing is not expected to have a substantial effect on the overall population size of the giant manta ray under all alternatives considered and is not likely to appreciably reduce the likelihood of both survival and recovery of the species in the wild (NMFS 2019).

- Seabirds: Most of the seabirds found in CNMI forage far from the islands and are unlikely to interact with the bottomfish fishery because of the methods used to deploy and retrieve fishing tackle. There have been no reports of interactions between the CNMI bottomfish fishery and seabirds; therefore, it is unlikely that the fishery, as currently conducted under the recommended action, would affect seabirds. There has been no ESA new listing for seabirds since the 2021 EA.

- ESA-Listed Reef Building Corals: On September 10, 2014, NMFS listed 20 species of reef-building corals as threatened under the ESA (79 FR 53851). One of the listed coral species (*A. globiceps)* is known to occur in waters around the CNMI from 0-20 m deep. None of the species have common names. On November 27, 2020, NMFS published a proposed rule in the *Federal Register* (85 FR 76262) to designate critical habitat for the seven threatened corals in U.S. waters in the Indo-Pacific pursuant to Section 4 of the ESA. On November 30, 2023, NMFS published a new proposed rule (88 FR 83644) replacing the 2020 proposed rule due to substantial revisions based on public comments and new information regarding the interpretation of the records of the listed corals and application to critical habitat. On August 15, 2025, NMFS published a final rule designating critical habitat for five threatened Indo-pacific coral species. Final critical habitat includes 18 specific areas in the Western Pacific, including 7 units in the CNMI around Rota, Aguijan, Tinian, Saipan, Anatahan, Pagan and

Maug. At this point in time, there is insufficient information to determine the proposed designation's potential impact on the CNMI bottomfish fishery.

- On August 26, 2022, NMFS published a BiOp (NMFS 2022) finding that the CNMI bottomfish fishery is not likely to adversely affect giant manta rays, or chambered nautilus. For oceanic whitetip sharks, NMFS determined that the continued operation of CNMI bottomfish activities is likely to adversely affect the threatened sharks but are not likely to jeopardize their continued existence. The CNMI bottomfish fishery does incidentally take oceanic whitetip sharks, and to monitor the amount of take, NMFS established an Incidental Take Statement (ITS) of one interaction over five consecutive calendar years. If the fishery exceeds the ITS, NMFS will reinitiate formal consultation. Additionally, NMFS published a proposed rule to apply protective regulations under section 4(d) of the ESA (89 FR 41917, May 14, 2024).

- On July 19, 2023, NMFS and USFWS published a proposed rule (88 FR 137) to designate 14 habitat units of critical habitat designation for green sea turtles in the CNMI. The proposed rule called for comments to be received by October 17, 2023. At this point in time, there is insufficient information to determine the proposed designation's potential impacts on the CNMI bottomfish fishery. If the proposal is finalized, NMFS would re-initiate consultation under Section 7 of the ESA to determine the impact of fishing activities on critical habitat and any necessary management measures.

- On July 25, 2024, NMFS published a proposed rule (89 FR 143) to list six species of giant clams as endangered and four species as threatened. Three of the proposed endangered species (bear paw clam, true giant clam, smooth giant clam) and four of the proposed threatened species (small giant clam, fluted giant clam, boring giant clam, and Noah's giant clam) are known to occur in waters around CNMI. At this point in time, there is insufficient information to determine the proposed listings of giant clam potential impacts on the CNMI bottomfish fishery. If the proposal is finalized, NMFS would re-initiate consultation under Section 7 of the ESA to determine the impact of fishing activities on critical habitat and any necessary management measures.

- The proposed action under consideration would not change the manner in which the fishery operates with respect to areas fished, gear used, or methods employed, so interactions with protected species are not anticipated to change in frequency or intensity from those analyzed in the 2021 EA. None of the alternatives under consideration are expected to change the fishery in a way that would result in new or additional effects, so effects on protected resources are expected to continue to be insignificant under all action alternatives.

3.5 Habitats and Vulnerable Ecosystems

3.5.1 Essential Fish Habitat

The Magnuson-Stevens Act defines essential fish habitat (EFH) as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity" (Magnuson-Stevens Act § 3(10)). This includes the marine areas and their chemical and biological properties that organisms use. Substrate includes sediment, hard bottom, and other structural relief underlying the water column along with their associated biological communities. NMFS considers all EFH

in determining whether a proposed fishery management action may affect EFH. EFH consultations would be required for all activities that may adversely affect EFH for MUS.

In addition to, and as a subset of EFH, the Council considered the following in designating habitat areas of particular concern (HAPC): the importance of the ecological function of the habitat, the sensitivity of habitat to anthropogenic degradation, the potential for or existence of development activities to stress the habitat, and/or the rarity of the habitat type. The FEPs define HAPC for bottomfish species in Guam and the CNMI, Hawaii, American Samoa, and the Pacific Remote Island Areas.

Table 6 summarizes the designated areas of EFH and HAPC for the Mariana Archipelago FEP BMUS by life stage. Similar methods are used to fish for bottomfish in American Samoa and Hawaii, and studies of bottomfish habitat in Hawaii have not found adverse impacts to habitat from bottomfish fishing activities (Kelley and Moffit 2004; Kelley and Ikehara 2006). Also, to prevent and minimize adverse bottomfish fishing impacts to EFH, each western Pacific FEP prohibits the use of explosives, poisons, bottom trawl and other non-selective and destructive fishing gear.

Table 6. Essential Fish Habitat (EFH) and Habitat Areas of Particular Concern (HAPC) for CNMI BMUS.

Mariana Archipelago BMUS	EFH	HAPC
Lehi (*Aphareus rutilans*) Giant trevally (*Caranx ignobilis*) Black trevally (*C. lugubris*) Ehu (*Etelis carbunculus*) Onaga (*E. coruscans*) Redgill emperor (*Lethrinus rubrioperculatus*) Blueline snapper (*Lutjanus kasmira*) Yellowtail snapper (*Pristipomoides auricilla*) Opakapaka (*P. filamentosus*) Yelloweye snapper (*P. flavipinnis*) Kalekale (*P. sieboldii*) Gindai (*P. zonatus*) Lunartail grouper (*Variola louti*)	**Eggs and larvae:** the water column extending from the shoreline to the outer limit of the EEZ down to a depth of 400 m (200 fathoms, fm). **Juvenile/adults:** the water column and all bottom habitat extending from the shoreline to a depth of 400 m (200 fm).	All slopes and escarpments between 40-280 m (20 and 140 fm).

3.6 Socio-economic Setting

3.6.1 Fishing Communities

The Magnuson-Stevens Act defines a fishing community as "...a community that is substantially dependent upon or substantially engaged in the harvest or processing of fishery resources to meet social and economic needs, and includes fishing vessel owners, operators, and crew, and fish processors that are based in such communities" (16 U.S.C. 1802 (16)). NMFS further specifies in the National Standard guidelines that a fishing community is "...a social or economic group whose members reside in a specific location and share a common dependency

on commercial, recreational, or subsistence fishing or on directly related fisheries dependent services and industries (for example, boatyards, ice suppliers, tackle shops)." National Standard 8 of the Magnuson-Stevens Act requires that conservation and management measures shall, consistent with the conservation requirements of this Act (including the prevention of overfishing and the rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities in order to (a) provide for the sustained participation of such communities and (b) to the extent practicable, minimize adverse economic impacts on such communities.

The Council, in 1998, identified Guam and the CNMI as fishing communities and requested the Secretary of Commerce concur with this determination. Guam was recognized in regulation as a fishing community under the Magnuson-Stevens Act on April 19, 1999 (64 FR 19067). The CNMI was recognized in regulation as a fishing community under the Magnuson-Stevens Act on April 19, 1999 (64 FR 19067).

Fishing communities in Guam and the CNMI benefit from the ability of bottomfish fishermen to share fish with their respective communities. For example, in the CNMI, bottomfish fishermen typically sell over half of their catch to friends, neighbors, and co-workers (WPFMC 2025).

CNMI's bottomfish fishery consists primarily of local boats less than 25 ft in length that fish within a 50-mile radius of Saipan. The shallow-water fishery is mostly commercial but also includes subsistence fishermen. Commercial fishermen primarily operate the larger vessels are and focus on the deepwater complex. Historically, while some trips have lasted for more than a day, fishing trips are often restricted to daylight hours unless they are fishing in the northern islands. CNMI's bottomfish fishery continues to show a high turnover with changes in the number of participants in the fishery. Monitoring the CNMI bottomfish fishery is dependent on the boat- and shore-based creel survey program, the commercial purchase system, and the Federal logbooks. The number of unique vessels landing BMUS (i.e., tallied during creel surveys) fluctuates from a high of 51 vessels in 2005 to a low of two vessels in 2018 and 2024. We note that the CNMI DFW could not complete creel surveys throughout the calendar year, and these tallies are likely underestimated. Although only two unique vessels were observed landing BMUS in 2024, there were four federally permitted vessels and the average number of unique vessels in the fishery as tallied during creel surveys has been 16 over the past 10 years. The creel surveys tallied a total of two fishing trips landing BMUS in 2024 (i.e., lower than the 10-year average if 20 trips), comprising a total of 36 hours of fishing (i.e., compared to the 10-year average of 263 trips; WPFMC 2025).

Table 7 shows that, between 2022 and 2024, the CNMI bottomfish fishery caught an average of 24,752 lb of BMUS annually, of which an average of 86 percent were sold. Based on the recent 10 years (i.e., 2015-2024), the CNMI bottomfish fishery caught an average of 41,158 lb of BMUS annually, of which an average of 69 percent were sold. In 2024, an estimated 7,177 lb were sold worth $35,745, with an average price per pound of $4.98. Assuming that the two observed vessels engaged in commercial fishing for BMUS have equal fish sales, we estimate each commercial fishing vessel to have sold 3,588 lb valued at $17,872 in 2024. Using the most recent available data, the average cost of a bottomfish trip in the CNMI in 2023 of $30 was higher than 2022 at $41 due to lower fuel usage per trip (i.e., decreased length of fishing trips)

and lower fuel price. However, we note that fishing effort is not equal among vessels, and commercial highliners could earn considerably more in a year than most non-commercial fishermen.

Table 7. Summary of commercial bottomfish activity in the CNMI (Source: WPFMC 2025).

Year	Total Estimated Catch (lb)	Estimated Pounds Sold (lb)	Estimated Adjusted Revenue ($)	Percent of Catch Sold	Adjusted Fish Price ($/lb)
2015	13,156	4,122	$24,591	31%	$5.97
2016	73,206	18,230	$87,052	25%	$4.77
2017	95,137	11,925	$60,234	13%	$5.06
2018	3,426	7,260	$39,173	212%	$5.40
2019	29,346	15,720	$101,419	54%	$6.45
2020	46,102	20,094	$102,533	44%	$5.10
2021	76,954	40,902	$234,779	53%	$5.74
2022	56,385	32,205	$188,759	57%	$5.86
2023	13,011	7,036	$37,681	54%	$5.36
2024	4,861	7,177	$35,745	148%	$4.98
Average2022-2024	24,752	15,473	$87,395	86%	$5.40
Average2015-2024	41,158	16,467	$91,197	69%	$5.47

3.7 Management Setting

The Council currently manages fisheries in Federal waters in accordance with the approved FEPs, and PIRO is responsible for implementing fishery regulations that implement the FEPs. PIFSC conducts research and reviews fishery data provided through logbooks and fishery monitoring systems administered by territorial resource management agencies such as DAWR. The Council, PIRO, and PIFSC collaborate with local agencies in the administration of fisheries of the Western Pacific through other activities including coordinating meetings, conducting research, developing information, processing fishery management actions, training fishery participants, and conducting educational and outreach activities for the benefit of fishery communities.

NOAA's Office of Law Enforcement (OLE) is responsible for enforcement of the nation's marine resource laws, including those regulating fisheries and protected resources. OLE Pacific Islands Division oversees enforcement of Federal regulations in Guam and enters into Joint Enforcement Agreements with the territory.

The U.S. Coast Guard's (USCG) Fourteenth District (Honolulu) jurisdiction is the EEZ and high seas in the western and central Pacific. At over 10 million square miles, its area of responsibility is the largest of any USCG District. The USCG patrols the region with airplanes, helicopters, and surface vessels.

Federal regulations at 50 CFR 665.4 require NMFS to specify ACLs and AMs for each stock or stock complex of MUS identified in an FEP, as recommended by the Council, and in consideration of the best available scientific, commercial, and other information about the fishery for that stock or stock complex (76 FR 37285, June 27, 2011). NMFS and the Council have managed this fishery through the specification of ACLs and AMs since 2012, in coordination with the CNMI DFW. Since July 2024, the fishery has been subject to an ACL and ACT of 82,000 lb and 75,000 lb, respectively (89 FR 61357). For information regarding data collection, see section 3.3 of the FEP.

3.8 Resources Eliminated from Detailed Study

[Reserved]

4 Potential Effects of the Alternatives

This section describes the potential environmental and management effects that could result from the alternatives considered and described in Section 2. The analysis relies on the information described in Section 3 to evaluate the potential impacts of the management. The resources that are included for analysis are: physical resources; protected resources; public health and safety; biodiversity and ecosystem function; scientific, historic, archeological, and cultural resources; target and non-target species; socioeconomic setting; and management setting. Cumulative effects and effects from environmental change are also considered in Section 4.6.

4.1 Effects Common to All Alternatives

All alternatives under consideration pertain to the amount of allowable harvest of CNMI bottomfish in fishing years 2026 to 2029. Decisions to establish an ACL and AMs under any of the alternatives would not establish precedence or narrow decisions about future specifications. None of the proposed alternatives would affect the Council or NMFS' ability to establish effective ACLs and AMs for federally managed fisheries in the future.

Therefore, the effects described in sections 4.1.1 through 4.1.5 are considered to be the same under all alternatives. Subsequently, effects that may differ between alternatives are considered separately for each alternative in Sections 4.2 through 4.4.

4.1.1 Effects on Bycatch Species

Given the low bycatch rate in the most recent fishery performance data available (WPFMC 2025), there is no current concern regarding effects of the CNMI bottomfish fishery on bycatch species. The Council does not expect fishery performance to change under any of the proposed alternatives in a way that would influence bycatch rates.

4.1.2 Effects on Physical Resources

There are no known significant impacts to air quality, noise, water quality, view planes, or terrestrial resources from past or current bottomfish fishing activity in the CNMI. The fishery does not have adverse effects on unique features of the geographic environment, and fishing behavior and effort are not expected to change under any alternative in a manner that would result in effects on physical resources (see Section 3.3).

4.1.3 Effects on Protected Resources

Bottomfish fishing around the CNMI typically occurs using vertical lines with electric or spin-casting reels depending on the fishing depth being targeted. None of the alternatives would fundamentally change the way the fishery is conducted with respect to areas fished, gear used, or methods employed. Therefore, no alternative is expected to result in adverse impacts on marine mammals, sea birds, species protected under the ESA or critical habitat for ESA-listed species in a manner that has not been previously considered.

Table 6 lists the consultation history for all ESA-listed species that occur in the area of operation for the fishery. All recent, valid consultations for the fishery have determined that the CNMI bottomfish fishery is not likely to adversely affect any ESA-listed species. The 2021 EA also addressed the new ESA listings of the oceanic whitetip shark, giant manta ray, and chambered nautilus and determined that the CNMI bottomfish fishery is not likely to adversely affect these species.

The CNMI bottomfish fishery is also not known to affect marine mammal or seabird species through gear interactions or disruptions in or adverse effects on prey (NMFS 2021). Furthermore, NMFS classifies the CNMI bottomfish fishery as a Category III fishery under Section 118 of the MMPA (89 FR 77789, September 24, 2024) because it has no known incidental takings of marine mammals.

The CNMI bottomfish fishery is not known to adversely affect habitat. Similar methods are used to fish for bottomfish in American Samoa, Guam and Hawai‘i, and studies of bottomfish habitat in Hawai‘i have not found adverse impacts to habitat from bottomfish fishing activities (Kelley and Moffit 2004; Kelley and Ikehara 2006). Also, to prevent and minimize adverse bottomfish fishing impacts to EFH, of the FEPs prohibits the use of explosives, poisons, bottom trawl, and other non-selective and destructive fishing gear. No alternative under consideration would result in substantial changes to the way fishers conduct the bottomfish fishery in the CNMI; therefore, the alternatives are not expected to result in adverse effects on bottomfish EFH or HAPC.

Bottomfish fishing is Federally managed in the Marianas Trench Marine National Monument (Monument), where commercial fishing is prohibited in the Islands Unit of the Monument and non-commercial fishing must be authorized under a permit. This marine protected area (MPA) would not be affected by the proposed action, so adverse effects to them would be unlikely under all alternatives considered. None of the proposed alternatives would change the way bottomfish fishing is conducted with respect to these MPAs, so continued operation of the fishery under the status quo or action alternatives would not result in adverse impacts to the Monument.

Table 6. ESA-listed species and their determinations under the relevant ESA consultations for the CNMI bottomfish fishery. See Appendix A of the NMFS 2022 BiOp on the bottomfish fishery of CNMI for the consultation history by ESA-listed species that occur in the area of operation for the fishery.

Consultation	Species	Determination
NMFS 2002	Loggerhead sea turtle, Leatherback sea turtle, Olive ridley sea turtle, Green sea turtle, Hawksbill sea turtle, Blue whale,	Not likely to adversely affect

Consultation	Species	Determination
	Fin whale, Sei whale, Sperm whale, Northern right whale	
NMFS 2015	Scalloped hammerhead sharks and five coral species with no common name (*Acropora globiceps*, *A. retusa*, *A. speciosa*, *Euphyllia paradivisa*, *Isopora crateriformis*)	Not likely to adversely affect
NMFS 2022	Giant manta ray, Chambered nautilus, Oceanic Whitetip shark	Not likely to adversely affect

4.1.4 Effects on Biodiversity and Ecosystem Functions

There are no identified effects to marine biodiversity and/or ecosystem function from the CNMI bottomfish fishery to date. Bottomfish species are not known to have critical ecosystem roles, such as other tropical species such as parrotfishes or reef-building corals, and the fishery is not known to have large effects on biodiversity or ecosystem function. None of the alternatives under consideration would result in substantial changes to the fishery with respect to gear, effort, or participation. To date, there have been no identified adverse effects from the CNMI bottomfish fishery in the CNMI on marine biodiversity and/or ecosystem function. Under all of the alternatives, the proposed action would not result in changes to the fishery; therefore, all alternatives considered would not affect marine biodiversity and/or ecosystem function.

4.1.5 Effects on Scientific and History, Archeological, and Cultural Resources

Historical and archaeological resources may be found in Federal waters of CNMI in the future, but there are no known districts, sites, highways, structures, or objects that are listed in or eligible for listing in the National Register of Historic Places in the areas in which the Federal bottomfish fishery operates. Shipwrecks may exist in areas where the fishery operates, but the fishery is not known to adversely affect shipwrecks. Bottomfish fishermen tend to avoid fishing in, anchoring on, and anchoring near known shipwrecks to avoid losing gear.

Sites with unique scientific resources have not been identified in CNMI. Fishing is generally restricted in these areas, including fishing for bottomfish, so this fishery would not affect MPAs. While fishing may occur in areas of potential scientific, cultural, or historical interest, the fishery is not currently known to cause loss or destruction to any such resources, and fishing operations are not expected to significantly change under the implementation any of the alternatives for the proposed modifications to the ACL and/or AMs (Section 2.2). Because management under the alternatives is not expected to result in changes to the conduct of the fishery that would affect resources of scientific, historic, cultural, or archaeological importance, none of the alternatives are expected to result in large adverse impacts to these resources.

4.1.6 Implementation of ACLs and AMs for other Pacific Island Fisheries

The proposed modification to the ACL and AMs for the CNMI bottomfish fishery would not conflict with or reduce the efficacy of existing bottomfish resource management by any local resource management agency, NMFS, or the Council. Additionally, the proposed management would also not conflict with ACL and AM implementations for the other Western Pacific bottomfish fisheries in American Samoa or Hawaii because these fisheries are geographically

separated and bottomfish fishery participants do not fish in different territories. As such, management in one island area (*e.g.*, Guam) would not adversely affect the stock status of bottomfish, fishery operations, or management in another island area (e.g., American Samoa or Hawaii).

4.2 Alternative 1 (No Action)

The analysis in this subsection presents the anticipated effects of Alternative 1, which would not implement ACLs or AMs for the CNMI bottomfish fishery in fishing years 2026 to 2029. We expect that the fishery would continue as it has in recent years, with an average catch of 24,843 lb, or about 34 percent of the OFL specified in the 2025 assessment (Bohaboy and Matthews 2025).

4.2.1 Biological Resources

Under Alternative 1, the Council would not recommend specifying an ACL for 2026 through 2029 for BMUS in the CNMI. Though bottomfish catch in the CNMI has fluctuated in recent years, including when no ACL was specified in 2018 or 2019, the level of catch under this alternative is expected to remain well below the ABC, ACL and ACT levels identified in Alternatives 2, 3, and 4. Applicable fishery programs would continue to collect catch and other fishery data. Bottomfish fishing would continue to be target-specific, catching and landing primarily bottomfish, as described above. As a result, catches of non-target species would remain low. The CNMI bottomfish stock complex is expected to remain healthy and would not become overfished or be subject to overfishing under this alternative. However, the lack of an ACL and AMs under Alternative 1 would not provide regulatory managers with the ability to prevent overfishing and ensure the long- term sustainability of the resource.

4.2.2 Socio-Economic Setting

Under Alternative 1, the Council would not recommend the specification of an ACL for 2026 through 2029 for BMUS in the CNMI. The level of catch in this fishery has fluctuated in recent years, including in 2018 and 2019 when no ACLs or AMs were specified, and especially in consideration of relatively low estimated catches in 2023 and 2024. Given the history of this fishery, we do not expect the lack of ACLs or AMs under Alternative 1 to cause any change with respect to fishing gear, effort, participation, intensity or areas fished. Thus, we do not expect this alternative to result in large adverse effects to fishermen or fishing operations in the CNMI. The fishery would continue to be subject to management oversight, collection of data, and enforcement. However, without ACLs or AMs, there would not be management review of fishery performance relative to a catch limit to support long-term sustainability of the resource.

In the absence of ACLs and AMs in the CNMI, we expect the bottomfish fishery to continue catching bottomfish in the manner and amounts described in Sections 2 and 3 of this EA. Catches would continue to be monitored through the programs administered by the CNMI DFW with assistance from WPacFIN. However, the lack of ACLs and AMs would provide more limited regulatory ability to ensure the long-term sustainability of either fishery as compared to established catch limits and management measures. With less review of fishing, there would be the potential for future disruptions to the community if the bottomfish resources are not sustainably managed.

The bottomfish fishery operating under the FEP is not known to experience or cause other public health or safety-at-sea issues. The proposed ACLs and AMs would not result in any change to the fishery that would pose an additional risk to human safety at sea.

4.2.3 Management Setting

Under this No Action Alternative, the CNMI fishery would continue to catch bottomfish in the manner that is described above. The lack of an ACL and AMs under Alternative 1 would not affect administration and enforcement because there are no in-season AMs in this fishery that would require administrative action or enforcement. Fishing effort and catch would continue to be reported, and we anticipate that effort and catches would remain consistent with recent trends. Without ACLs and AMs, there would be no AM requiring administrative action or enforcement, which may result in relatively less administrative cost and burden than the action alternatives in years of high catch. In this case, if the high effort were to persist over years, the fishery could become unsustainable. This outcome is unlikely given recent fishery information, so we consider this alternative to have no adverse effect on the management setting. However, the FEP requires fisheries for management unit species to have ACLs and AMs, among other requirements, and thus adopting this no-action Alternative would violate the Magnuson-Stevens Act, implementing regulations, and the FEP. Despite this, the no-action Alternative is an essential feature of the impact analysis, as it serves as a measure of baseline effects to which the effects of all action alternatives can be compared.

4.3 Potential Effects of Alternative 2 (Status Quo)

The analysis in this subsection presents the anticipated effects of Alternative 2, under which the Council would recommend ACLs and ACTs of 82,000 lb and 74,000 lb, respectively, for fishing years 2026 to 2029 for the CNMI bottomfish fishery based on the results of the 2019 benchmark stock assessment and the associated P* and SEEM analyses.

4.3.1 Biological Resources

As described in Section 4.2.1, bottomfish catch in the CNMI has fluctuated in recent years, including when no ACLs were specified in 2018 or 2019. The Council expects the level of catch under this alternative is expected to remain well below the ABC, ACL and ACT levels. Applicable fishery programs would continue to collect catch and other fishery data. Bottomfish fishing would continue to be target-specific, catching and landing primarily bottomfish, as described above. As a result, catches of non-target species would remain low as described in Section 3.4. The CNMI bottomfish stock complex is expected to remain healthy and would not become overfished or be subject to overfishing under this alternative.

4.3.2 Socio-economic setting

As described in Alternative 1 (Section 4.2.2), we do not expect any changes to the manner in which the fishery operates with respect to areas fished, gear used, or methods employed. Overall, we expect Alternative 2, consistent with the no-action alternative, to have small-scale, short-term, minor beneficial effects on socio-economic setting in most years.

4.3.3 Management Setting

Under Alternative 2, NMFS would establish ACLs and AMs for 2026 through 2029 for CNMI, as recommended by the Council. PIFSC, in collaboration with CNMI DFW and the Council, will continue to monitor catch data as they become available. This alternative is not expected to

change the conduct of either fishery in any way relative to the no action alternative, because there are no in-season management measures proposed. Fishing effort and catch would continue to be reported, and we anticipate that effort and catches would remain consistent with recent trends. However, because NMFS and the Council would review the performance of the fisheries and implement downward adjustments if an ACL is exceeded, this alternative would be associated with some additional fishery administration and enforcement effort relative to Alternative 1.

4.4 Potential Effects of Alternatives 3 and 4

The analysis in this subsection presents the anticipated effects of Alternative 3 and 4, which would implement ACLs, ACTs and post-season AM for the CNMI bottomfish fishery for fishing years 2026 to 2029 based on the 2025 stock assessment update (Bohaboy and Matthews). As AMs under both alternatives, if the most recent three-year average catch of CNMI BMUS exceeds the proposed ACL, NMFS would implement a revised ACL for the CNMI bottomfish fishery in the subsequent year that is reduced by the amount of the overage. Alternative 3 would set the ACL and ACT based on the results of the revised 2020 P* and SEEM analyses, whereas Alternative 4 takes a more cautious approach and sets the ACT and ACL at levels lower than the revised P* and SEEM analyses results. Given that these alternatives are similar with respect to setting the ACT, ACLs and AMs, both Alternative 3 and 4 are expected to have the same effects on the human environment; although we note where we expect any differences below.

4.4.1 Biological Resources

Alternatives 3 and 4 would specify ACLs and ACTs of CNMI BMUS that are below the OFL estimated for BMUS in the 2025 stock assessment update and equal to and below the ABC set by the SSC. Alternative 3 considers scientific and management uncertainty through the P* and SEEM analysis. Alternative 4 considers scientific and management uncertainty and takes a more precautionary approach to prevent overfishing by setting the catch limits lower than suggested by the P* and SEEM analyses.

Though bottomfish catch in the CNMI has fluctuated in recent years, including when no ACL was specified in 2018 or 2019, the level of catch under this alternative is expected to remain well below the ABC, ACL and ACT levels identified in Alternatives 3 and 4. Applicable fishery programs would continue to collect catch and other fishery data. Bottomfish fishing would continue to be target-specific, catching and landing primarily bottomfish, as described above. As a result, catches of non-target species would remain low. The CNMI bottomfish stock complex is expected to remain healthy and would not become overfished or be subject to overfishing under this alternative.

4.4.2 Socio-economic setting

As described in Alternative 1 (Section 4.2.2), we do not expect any changes to the manner in which the fishery operates with respect to areas fished, gear used, or methods employed. The average annual catch from 2022 to 2024 was 24,843 lb, which is only 37 percent of the proposed ACT of 66,000 lb. Given the current state of CNMI's bottomfish fleet, there is a lower chance that total catch in fishing years from 2026 to 2029 would approach the ACL under these alternatives. If the fishery were to attain the ACL, NMFS would implement the post-season AM if the most recent three-year catch average exceeds the proposed ACL. Overall, we expect

Alternative 3 and 4, consistent with the no-action alternative, to have small-scale, short-term, minor beneficial effects on socio-economic setting in most years.

4.4.3 Management Setting

Under Alternative 3 and 4, NMFS would establish ACLs and AMs for 2026 through 2029 for the CNMI as recommended by the Council. PIFSC, in collaboration with CNMI DFW and the Council, will continue to monitor catch data as they become available. This alternative is not expected to change the conduct of either fishery in any way relative to the No Action Alternative, because there are no in-season management measures proposed. Fishing effort and catch would continue to be reported, and we anticipate that effort and catches would remain consistent with recent trends. However, because NMFS and the Council would review the performance of the fisheries and implement downward adjustments if an ACL is exceeded, these alternatives would be associated with some additional fishery administration and enforcement effort relative to Alternative 1.

4.5 Other Potential Effects

4.5.1 Highly uncertain effects, unique or unknown risks

Given recent catch history in the fishery, it is unlikely that operation of the CNMI bottomfish fishery would risk effects to the human environment.

The proposed action is part of continued management of the CNMI BMUS under a system of ACLs and AMs that was first used in 2012. The Council will consider a range of alternatives where the ACL has been defined conservatively, based on BSIA, and in accordance with approved procedures and methods. The AMs associated with the alternatives offer additional assurance against uncertain effects and were developed by fishery managers and scientists. Effects on the human environment from operation of the CNMI bottomfish fishery and management of this fishery under ACLs and AMs are known and have been considered in the development and recommendation of management alternatives.

4.6 Potential Cumulative Effects of the Alternatives

Cumulative effects refer to the combined effects on the human environment that result from the incremental impact of the proposed action, and its alternatives, when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Further, cumulative effects can result from individually minor but collectively significant actions taking place over a period of time. The cumulative effects analysis examines whether the direct and indirect effects of the alternatives considered on a given resource could interact with the direct and indirect effects of other past, present and reasonably foreseeable actions on that same resource.

Past, present and reasonably foreseeable management actions for the CNMI bottomfish fishery that may relate to the proposed action include:

- Managing the fishery since 2012 with ACLs and AMs intended to prevent effects of the fishery exceeding a catch limit.
- Ongoing monitoring of the fishery.

- Annual review of the fishery performance by the SSC and the Council, including review of catch limits and any modifications that may be called for in light of new information.
- NMFS and the Council implementation of a pilot mobile application to collect catch and effort data from fishermen and vendors participating in the CNMI bottomfish fishery. Current data collection methods (i.e., creel surveys, commercial receipt programs) are labor intensive and, due to limited resources in these island areas, may not provide the breadth of data needed to comprehensively monitor fish catch or provide data in near real time. This pilot project will assess the feasibility of electronic reporting to improve overall data collection with respect to access, quality, and timeliness to meet fisheries monitoring objectives and improve stock assessments. Improved reporting of catches would not interact with the proposed ACLs and AMs or fishery management in any way that would change the environmental effects analyzed in this EA.

4.6.1 Cumulative Effects Related to Effects on Target and Non-Target Species

Target Species

The implementation of a multi-year ACL and AM for the CNMI bottomfish fishery is not expected to result in cumulative environmental effects to the health of either stock. This is because the proposed action would set the respective ACLs below the OFLs from the 2025 stock assessment update at a level that includes consideration of scientific and other uncertainties through the P* and SEEM processes.

The ACL proposed under action Alternatives 3 through 4 have built in buffers to account for uncertainty. We do not anticipate that any of the proposed alternatives would have a risk of large unknown effects that could result in adverse cumulative effects. The Council and its SSC applied a qualitative method to develop the P* estimates. The Council calculated P* (risk of overfishing) using BSIA and including scientific uncertainty for four dimensions: 1) assessment information, 2) assessment uncertainty, 3) stock status, and 4) productivity and susceptibility (WPFMC and NMFS 2011). Implementing this buffer reduces the potential for large adverse cumulative effects of the proposed ACLs and AMs on sustainability of the fishery.

The Council and its SSC also applied a qualitative analysis related to other concerns and management uncertainties considering four factors: 1) Social, 2) Economic; 3) Ecological, and 4) Management uncertainty (SEEM) considerations (WPFMC and NMFS 2011). This analysis did suggest minor management uncertainty, specifically uncertainty in non-commercial catch estimates, so the ACL is set lower than the ABC. In addition, specification of ACTs in consideration of the factors in the SEEM analysis reduces the potential for unexpected adverse effects of the proposed ACLs and AMs on sustainability of the fishery due to any of these factors.

Implementation of ACLs and AMs under any proposed action alternative is not expected to result in substantial cumulative environmental effects to the health of bottomfish stocks relative to the no action alternative. In CNMI, under the action alternatives, it is unlikely that annual bottomfish catch 2026 through 2029 would approach the ACL or ACT. However, if the three-year average catch exceeded its ACL, then that amount would be reduced in the following fishing year to offset the overage. The ACL and AMs together would result in continued

sustainable management of the bottomfish fisheries in Federal waters and help prevent cumulative effects.

Bycatch in the CNMI bottomfish fishery is negligible (WPFMC 2025) and not believed to affect any species. It is not expected that substantial changes would occur in the fishery under any proposed action alternative compared to the No Action Alternative, so effects on other species are not anticipated from implementation of the proposed ACLs and AMs. NMFS, the Council, and the CNMI DFW would also continue to monitor catch. For these reasons, management of the fisheries under the proposed ACLs and AMs is not expected to result in cumulatively large and adverse effects to non-target species.

Non-Target Species and Bycatch

Under all alternatives, fishing is expected to remain within levels considered during consultations and no additional effects to protected species are expected. The fishery would continue to be authorized and conducted in accordance with Section 7 of the ESA and the MMPA. The analysis of effects of the CNMI bottomfish fishery under each of the alternatives found that the fishing is not likely to have significant effects on the survival or recovery of any listed species, largely because the fishery has low levels of interactions with these listed species. NMFS analysis of effects on ESA- and MMPA-listed species took into consideration outside actions that affect the same species. In general, continued management of the fishery under the full suite of management measures, including the proposed ACLs and AMs for the next several years, would not change the fishery in any way that is likely to have the potential for large and adverse cumulative effects on listed species.

4.6.2 Cumulative Effects Related to Fishery Participants and Communities

Management of the CNMI bottomfish fishery using ACLs and AMs is not known to have large adverse effects on the socio-economic setting. Social and economic considerations were incorporated into the development of the ACLs through the Council deliberation process and public comment periods, and none of the proposed ACLs or ACTs are expected to have adverse cumulative effects to the socio-economic setting given the nature of the fishery for BMUS in the CNMI.

4.6.3 Cumulative Effects Related to Effects on the Management Setting

The proposed action is a continuation of ongoing, long-term management of the CNMI bottomfish fishery. This fishery has been managed by NMFS and the Council through the specification of ACLs and AMs since 2012, in coordination with the CNMI DFW. Implementation of the proposed ACLs and AMs for the 2026, 2027, 2028, and 2029 fishing years will not change the ongoing management environment and will not add a cumulative effect to the management setting in a substantial way (see Sections 4.2.3, 4.3.3, 4.4.3). None of the proposed ACLs or AMs are expected to result in substantial cumulative adverse effects on the cost of administering the fishery (including monitoring catches, implementing the ACLs, closing the fishery, or enforcing regulations). Because of the lack of large changes in management, none of the proposed alternatives possesses the potential to have substantial cumulative effects on fishery participants in terms of compliance with the fishery requirements.

4.6.4 Other Considerations

4.6.4.1 Changes in the Environment

Changes in the environment of CNMI BMUS from changes in global climate can affect physical and biological conditions of the ocean that in turn can affect marine species. Among the changes being studied include water temperatures and pH, vertical stratification, changes in circulation patterns, thermal expansion, sea level changes, and changes to storm frequency and severity. These changes can affect production, species migrations and distribution, behavior, nutrients, and food web shifts; and could result in positive or negative effects to specific species (Doney 2006; Kleypas et al., 2006; Pörtner et al., 2014; Polovina et al., 2011). Changes to these properties may affect marine species differently through complex physical, physiological, and ecological interactions (Pörtner et al., 2014; Sydeman et al., 2015). Impacts from changes in ocean temperature or pH specific to fishes such as CNMI BMUS have not been identified, and may be difficult to discern from other impacts. However, regardless of which alternative is selected, monitoring of physical conditions and biological resources by a number of agencies would continue to occur and would allow fishery managers to make adjustments in fishery management regimes in response to changes in the environment or stock status. Attention to trends in fishery performance and appropriate management measures will be key to offsetting negative effects of environmental changes (Gaines et al., 2018). Appropriate fishing mortality controls, such as those proposed here, are a way to mitigate environmental impacts.

We do not expect the efficacy of the proposed ACLs and AMs in providing for sustainable levels of fishing for CNMI bottomfish to be adversely affected by changes in environmental conditions. Recent catches relative to OFL estimates and a 2025 stock assessment helped to inform the development of the ACLs and AMs. NMFS will be developing a new stock assessment that will provide updated information on the CNMI bottomfish fishery in 2030 or 2031. Monitoring would continue, and, if monitoring shows overfishing is occurring, ACLs and other fishery management provisions could be adjusted in the future.

Because the proposed management actions represent a continuation of fairly intensive fishery management, including both monitoring for harvest limits as well as interactions with protected species; and because the fishery is managed under a suite of fishery management measures that provide continued research, monitoring, and evaluation, the potential effects of changes in the environment are not expected to combine with the proposed ACLs and AMs to result in a cumulatively large and adverse effect on any marine resource.

4.7 Other Actions Including Connected Actions

The proposed action is intended to manage the fishery sustainably and includes AMs. The fishery will continue to be monitored to track and evaluate catch relative to the ACL and ACT, and the Council may recommend implementing AMs to prevent and mitigate effects on fish stocks if necessary. No additional mitigation is required to limit the degree of effect of the proposed action or alternatives to be less than minor or insignificant.

Other foreseeable actions

<u>Guam and CNMI Military Relocation</u>

The U.S. Department of the Navy's (DON) and U.S. Marine Corps continue implementing the Guam and CNMI Military Relocation Program, which involves transferring approximately 8,000 Marines and dependents from Okinawa to Guam. Associated infrastructure, training areas and logistical support are being developed in Guam and the CNMI to accommodate this relocation. These include upgrades to transportation and port facilities, housing and supply chains that may directly increase vessel traffic and port usage in the region.

The Revised Draft Environmental Impact Statement (RDEIS) for the CNMI Joint Military Training (CJMT) project was released in June 2025. RDEIS proposed establishing and operating live-fire ranges, aviation landing zones and associated support facilities within the Military Lease Area (MLA) on Tinian. Under the CJMT Preferred Alternative, expanded ground-based and combined-arms training would occur approximately 15% more frequently than current levels.

While proposed activities are primarily land-based, access restrictions associated with safety zones and range operations could limit public entry to the northern portion of Tinian, where several traditions and recreational cliffside fishing sites are located. The RDEIS identifies temporary maritime safety zones extending offshore from the northern and northwestern coasts of Tinian during live-fire or range operations. These danger zones and safety arcs would be activated intermittently to ensure safety during live-fire training events. When active, these closures could temporarily restrict vessel access to adjacent nearshore waters, including areas used by smell-scale bottomfish vessels that fish along the deep slope near the island or transit between launch sites on Tinian and offshore fishing grounds. Such restrictions could disrupt access to productive fishing areas for part of the year, depending on training schedules. Although the RDEIS indicates that closures will be short-term and coordinated through public notices, their implementation may still have localized effects on CNMI bottomfish fishers. These impacts are expected to be limited in scope and duration but could contribute to short-term displacement or increased travel time to reach open fishing areas.

In May 2025, the Department of the Navy released the updates Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement (SEIS/OEIS) for the Mariana Islands Training and Testing (MITT) project which would evaluate continued and expanded at-sea testing and training through 2030 in the MITT Study Area. This area encompasses offshore waters up to 200 nautical miles in Guam and the CNMI but operational intensity is focused near Guam and Farallon De Medinilla (FDM).

As construction and associated human activities have the potential to affect the nearshore marine environment, measures to minimize and mitigate effects of these activities on the human environment are being addressed through ongoing consultations between the military, the Governments of Guam and the CNMI and other Federal agencies. Because of the reduced scale and the expected mitigation of effects and the fact that bottomfish fishing occurs offshore, the potential effects of the buildup on bottomfish and bottomfish habitat are not expected to result in adverse effects to the fishery or interact with the proposed ACLs and AMs to reduce their efficacy in ensuring the fishery is sustainably managed.

Marianas Trench Marine National Monument

NOAA and the USFWS, in cooperation with the Commonwealth of the Northern Mariana Islands Government, have prepared a draft management plan for the proper care and management of the Monument. The plan defines agency management roles and responsibilities and lays out the goals, objectives, and proposed management activities for the next 15 years. The plan includes an EA to evaluate the potential impacts of implementing the final management plan published on June 3, 2024.

5 References

Brodziak, J., J. O'Malley, B. Richards, and G. DiNardo. 2012. Stock assessment update of the status of bottomfish resources of American Samoa, the Commonwealth of the Northern Mariana Islands and Guam, 2010. National Marine Fisheries Service, Pacific Islands Fisheries Science Center, Internal Report IR-12-022. Honolulu, Hawaii. 126 p.

Bohaboy, E.C., and Matthews, T. (2025). *Stock assessment update of the bottomfish management unit species of the Commonwealth of the Northern Mariana Islands, 2025.* (NMFS-PIFSC Technical Memorandum Series, NMFS-PIFSC-179). Pacific Islands Fisheries Science Center.

Chaloupka, M., Itano, D., Leon Guerrero, K. 2025. Western Pacific Stock Assessment Review Panel Summary of "Stock assessment update of the bottomfish management unit species of the Commonwealth of the Northern Mariana Islands, 2025." Honolulu, Western Pacific Regional Fishery Management Council.

Department of Navy (DON). 2015. Guam and Commonwealth of the Northern Mariana Islands military relocation (2012 Roadmap Adjustments). Final EIS. Pearl Harbor, Hawaii.

Doney, S.C. 2006. The dangers of ocean acidification. Scientific American, 294(3): 58-65.

Gaines, S.D., C. Costello, B. Owashi, T. Mangin, J. Bone, J.G. Molinos, M. Burden, H. Dennis, B.S. Halpern, C.V. Kappel, and K.M. Kleisner. 2018. Improved fisheries management could offset many negative effects of climate change. Science advances, 4(8): 1378.

Hospital J, Schumacher B, Ayers A, Leong K, Severance C. 2019. A Structure and Process for Considering Social, Economic, Ecological, and Management Uncertainty Information in Setting of Annual Catch Limits: SEEM. PIFSC Internal Report IR-19-011.

Kelley, C. and R. Moffit. 2004. The impacts of bottomfishing on the Raita and West St. Rogatien reserve preservation areas in the northwestern Hawaiian Islands coral reef ecosystem reserve. Unpublished report, Hawaii Undersea Research Laboratory. Honolulu, HI. 49 p.

Kelley, C. and W. Ikehara. 2006. The impacts of bottomfishing on Raita and West St. Rogatien Banks in the Northwestern Hawaiian Islands. Atoll Research Bulletin, 543: 305-317.

Kleypas, J.A., R.A. Feely, V.J. Fabry, C. Langdon, C.L. Sabine, and L.L. Robbins. 2006. Impacts of ocean acidification on coral reefs and other marine calcifiers: a guide for future research. Workshop Report, National Science Foundation, National Oceanic and Atmospheric Administration, and the U.S. Geological Survey.

Langseth B, Syslo J, Yau A, Carvalho F. 2019. Stock assessments of the bottomfish management unit species of Guam, the Commonwealth of the Northern Mariana Islands, and American Samoa, 2019. NOAA Tech Memo. NMFS-PIFSC-86, 177 p. (+ supplement, 165 p.). doi:10.25923/bz8b-ng72.

Pörtner, H.O., D.M. Karl, P.W. Boyd, W. Cheung, S.E. Lluch-Cota, Y. Nojiri, D.N. Schmidt, P.O. Zavialov, J. Alheit, J. Aristegui, and C. Armstrong. 2014. Ocean systems. In Climate

change 2014: impacts, adaptation, and vulnerability. Part A: global and sectoral aspects. contribution of working group II to the fifth assessment report of the intergovernmental panel on climate change (pp. 411-484). Cambridge University Press.

Sydeman, W.J., E. Poloczanska, T.E. Reed, and S.A. Thompson. 2015. Climate change and marine vertebrates. Science, 350(6262): 772-777.

National Marine Fisheries Service (NMFS). 2019. Biological Evaluation: Potential effects of bottomfish fisheries in American Samoa, Guam and Northern Mariana Islands on oceanic whitetip shark, giant manta ray, and chambered nautilus. NMFS PIRO, Honolulu, HI. June 5, 2019. 33 pp.

NMFS. 2021. Environmental Assessment for Annual Catch Limit Specifications and Accountability Measures for Guam and the CNMI Bottomfish, including a Regulatory Impact Review. April 14, 2021. 103 p.

NMFS. 2022. Endangered Species Act (ESA) Section 7(a)(2) Biological Opinion. Reinitiation of Endangered Species Act Section 7 consultation on the bottomfish fisheries of American Samoa, Guam, the Northern Mariana Islands, and the Main Hawaiian Islands as managed under the American Samoa, Mariana Archipelago, and Hawaii Archipelago Fishery Ecosystem Plans. National Marine Fisheries Service, Pacific Islands Region, Protected Resources Division. PIRO-2019-01148.

Western Pacific Fishery Management Council (WPFMC) and NMFS 2011. Amendment 2 to the Mariana Archipelago FEP. Omnibus amendment for the western Pacific region to establish a process for specifying annual catch limits and accountability measures. Including an environmental assessment. Honolulu, HI.

WPFMC. 2009. Fishery Ecosystem Plan for the Mariana Archipelago. Honolulu, HI. September 24, 2009.

WPFMC, 2020a. CNMI P* Working Group Report. Western Pacific Regional Fishery Management Council. Honolulu, Hawaii 96813

WPFMC, 2020b. CNMI SEEM Working Group Report. Western Pacific Regional Fishery Management Council. Honolulu, Hawaii 96813

WPFMC, 2025. Annual Stock Assessment and Fishery Evaluation Report for the Mariana Archipelago Fishery Ecosystem Plan 2024. Remington T, Pardee C DeMello J, Ishizaki A. (Eds.). Western Pacific Regional Fishery Management Council. Honolulu, Hawaii 96813. 269 p.