# 3.11 Socioeconomic Resources and Environmental Justice

# **Gulf of Alaska Navy Training Activities**

# **Draft Supplemental Environmental Impact Statement/**

# **Overseas Environmental Impact Statement**

## **TABLE OF CONTENTS**

3.11	Socioeconomic Resources and Environmental Justice			
	3.11.1	Affected	Environment	3.11-1
		3.11.1.1	Existing Conditions	3.11-1
		3.11.1.2	Standard Operating Procedures and Mitigation Measures	3.11-13
	3.11.2	Alternati	ves Analysis	3.11-13
		3.11.2.1	No Action Alternative	3.11-14
		3.11.2.2	Alternative 1	3.11-14
	3.11.3	Conclusio	on	3.11-15

## **List of Tables**

There are no tables in this section.

## **List of Figures**

Figure 3.11-1: 2019 Commercial Groundfish Harvest by Species in Alaska State Waters3.11	4
Figure 3.11-2: 2019 Commercial Groundfish Harvest Value by Species in Alaska State Waters3.11	4
Figure 3.11-3: 2015–2019 Commercial Gulf of Alaska Groundfish and Halibut Harvest in Relation	
to the TMAA3.11	5
Figure 3.11-4: 2015–2019 Commercial Crab Harvest by Species in Alaska State Waters3.11	7
Figure 3.11-5: 2015–2019 Commercial Crab Harvest Value by Species in Alaska State Waters3.11	7
Figure 3.11-6: 2015–2019 Commercial Shellfish Harvest by Species in Alaska State Waters3.11	8
Figure 3.11-7: 2015–2019 Commercial Shellfish Harvest Value by Species in Alaska State Waters3.11	9
Figure 3.11-8: 2015–2019 Commercial Salmon Harvest by Species in Alaska State Waters3.11-2	10
Figure 3.11-9: 2015–2019 Commercial Salmon Harvest Value by Species in Alaska State Waters3.11-2	11
Figure 3.11-10: 2010–2018 Total Catch Estimates for Recreational Marine Fishing in Alaska	
State Waters3.11-2	12
Figure 3.11-11: 2010–2018 Total Catch Estimates for Ocean Salmon and Other Fish Species in	
Alaska State Waters3.11-2	12

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#### 3.11 Socioeconomic Resources and Environmental Justice

#### 3.11.1 Affected Environment

For purposes of this Supplemental Environmental Impact Statement (SEIS)/Overseas Environmental Impact Statement (OEIS), the Study Area remains the same as that identified in the March 2011 Gulf of Alaska (GOA) United States (U.S.) Department of the Navy (Navy) Training Activities Final Environmental Impact Statement (EIS)/OEIS and the July 2016 GOA Navy Training Activities Final SEIS/OEIS. The Study Area includes the Temporary Maritime Activities Area (TMAA). The TMAA is beyond 12 nautical miles (NM) from shore and outside of the U.S. Territorial Sea. The Proposed Action is to conduct an annual exercise, historically referred to as Northern Edge, over a maximum time period of up to 21 consecutive days during the months of April to October.

Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, was issued on February 11, 1994. This EO requires each federal agency to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States and its territories and possessions. An analysis of environmental justice should also include an analysis of effects from the Proposed Action on children as described in EO 13045, Protection of Children from Environmental Health Risks and Safety Risks. Executive Order 13045 requires that federal agencies prioritize assessing environmental health risks and safety risks that may disproportionately impact children. The Council on Environmental Quality has emphasized the importance of incorporating environmental justice review in the analyses conducted by federal agencies under the National Environmental Policy Act (NEPA) and of developing protective measures, as appropriate for the action, that reduce or avoid disproportionate environmental effects on minority and low-income populations and the health and safety of children.

#### 3.11.1.1 Existing Conditions

Concerns regarding socioeconomic resources (including transportation and circulation) and environmental justice remain the same as those issues previously identified in the 2011 GOA Final EIS/OEIS and 2016 GOA Final SEIS/OEIS. Further, the Navy's standard operating procedures to prevent or lessen socioeconomic impacts on the local community—as described in the 2011 GOA Final EIS/OEIS and 2016 GOA Final SEIS/OEIS—remain applicable in this SEIS/OEIS.

#### **Socioeconomic Resources**

As discussed in the 2011 GOA Final EIS/OEIS and 2016 GOA Final SEIS/OEIS, military, commercial, institutional, and recreational activities take place in the TMAA; there are no continuously restricted zones in this area (U.S. Department of the Navy, 2011, 2016). However, as noted in the 2013 Special Local Notice to Mariners (NTMs), Navy operating areas are in "use on a continuing basis by Navy ships and aircraft," and because of the "frequency and variety of exercises conducted in the [operating areas] and the difficulty in scheduling them far in advance due to uncertainties of weather, it is not possible to issue individual NTMs each time an exercise is scheduled" (U.S. Coast Guard, 2013b). The U.S. Coast Guard (USCG) does utilize a broadcast NTMs system, which is used to let mariners, pilots, fishermen, and other commercial users of the area know when Navy training is scheduled or occurring.

In addition to NTMs and Notices to Airmen, the Navy has participated in public outreach and community events since 2016, such as post-Northern Edge coastal community meetings, Navy band events, Alaska Federation of Natives Convention, Alaska Marine Science Symposium, Alaska Forum on the

Environment, ComFish, and Pacific Marine Exposition in Anchorage, Cordova, Seward, and Fairbanks, Alaska; and Seattle, Washington. Advanced notice and public outreach efforts related to future training activities in the TMAA had been scheduled for fall and winter of 2020 and winter and spring of 2021 prior to the planned 2021 Northern Edge Activity. The Navy is still participating in these but, due to the COVID-19 pandemic, these efforts have become virtual events.

Following a review of recent literature, the Navy has determined that the existing conditions with respect to military, commercial, and general aviation air traffic along with military and civilian marine traffic have not changed appreciably since the release of the 2011 GOA Final EIS/OEIS and the 2016 GOA Final SEIS/OEIS. Additionally, during the early planning phases before an exercise commences, the military and the local Federal Aviation Administration officials (Anchorage Air Route Traffic Control Center) work in close coordination to schedule and mitigate any potential conflicts to the commercial and general aviation communities. As stated in the 2011 GOA Final EIS/OEIS and the 2016 GOA Final SEIS/OEIS, the Navy's scheduled activities are published for access by all vessels and operators by use of NTMs issued by the USCG and Notices to Airmen issued by the Federal Aviation Administration. Additionally, to ensure the broadest dissemination of information about hazards to commercial and recreational vessels within the region, the Navy provides schedule conflicts along with other USCG concerns at U.S. Department of Homeland Security Navigation Center, Local Notice to Mariners<sup>1</sup>.

#### **Environmental Justice**

As stated in the 2011 GOA Final EIS/OEIS and the 2016 GOA Final SEIS/OEIS, with the exception of Cape Cleare on Montague Island, which is located over 12 NM from the northern point of the TMAA, the nearest shoreline (Kenai Peninsula) is located approximately 24 NM north of the TMAA's northern boundary (U.S. Department of the Navy, 2011, 2016). The approximate middle of the TMAA is located 140 NM offshore. The TMAA consists of open water surface and subsurface operating areas, and overlying airspace with no population centers present. Additionally, no new or additional Navy training activities in the TMAA are being proposed in this SEIS/OEIS that would disproportionately affect any minority populations or low-income populations. Though the types of activities and level of events in the Proposed Action are the same as in the previous documents (Alternative 1 in both the 2011 GOA Final EIS/OEIS and 2016 GOA Final SEIS/OEIS), there have been changes in the platforms and systems used as part of those activities. As such, the information and analysis regarding environmental justice presented in the 2011 GOA Final EIS/OEIS and 2016 GOA Final SEIS/OEIS are still valid.

#### 3.11.1.1.1 Commercial Shipping

As discussed in the 2011 GOA Final EIS/OEIS and 2016 GOA Final SEIS/OEIS, the TMAA is traversed by large and small marine vessels, with several commercial ports occurring near the TMAA. Three of these ports were ranked in the top 150 U.S. ports by tonnage in 2018, the latest year in which summary statistics are available; Anchorage (81st), Nikishka (76th), and Valdez (21st) (U.S. Army Corps of Engineers, 2018b). Commercially used waterways are controlled by the use of directional shipping lanes for large vessels (e.g., cargo, container ships, and tankers). In 2017 there were 7,934 commercial ship transits (both inbound and outbound) from the ports and harbors of Valdez, Anchorage, Homer, Seward, Kodiak, and Cordova (U.S. Army Corps of Engineers, 2018a). Ships that travel from major ports to the lower 48 states and Hawaii, as well as marine traffic between coastal ports, enter the TMAA briefly. According to USCG District 17, Juneau, Alaska, no incidents have occurred between commercial shipping

<sup>&</sup>lt;sup>1</sup> See http://www.navcen.uscg.gov/?pageName=InmDistrict&region=17.

and Navy activities. While the Navy does not publish daily NTMs, USCG District 17, Juneau, Alaska communicates any active Navy training activity to shipping vessels through broadcast NTMs on very high frequency-FM Channel 16 (U.S. Coast Guard, 2013a).

#### 3.11.1.1.2 Commercial and Recreational Fishing

#### 3.11.1.1.2.1 Commercial Fishing

Commercial fishing was discussed in the 2011 GOA Final EIS/OEIS and 2016 GOA Final SEIS/OEIS, and the GOA supports one of the most sustainable fisheries in the world (National Marine Fisheries Service, 2020a). This section describes some of the most important commercial and recreational fisheries to the Alaska economy, including groundfish, crab, shellfish, salmon, and Pacific herring. Throughout this section, the term "harvest weight" or "harvest" refers to the weight of fish caught.

#### Groundfish

The term groundfish includes 141 species in the GOA, including walleye pollock (the most commercially harvested fish in the United States), sablefish, and Pacific cod along with an aggregate of flatfish (including but not limited to Pacific halibut species) and rockfish species (Alaska Fisheries Science Center, 2019). Landings data from 2019 show that walleye pollock had the greatest harvest and highest value, with 3.26 billion pounds landed (85 percent of the total), representing a total value of \$503 million (71 percent of value) (Figure 3.11-1 and Figure 3.11-2) (National Marine Fisheries Service, 2020c). Pacific cod had the second-highest harvest and value in 2019, with 463 million pounds harvested and a value of \$118 million (Figure 3.11-1 and Figure 3.11-2). Combined, these two species accounted for over 98 percent of the total groundfish harvest in the Gulf of Alaska in 2019 (National Marine Fisheries Service, 2020c).

Commercial fishing regions, as defined by the Alaska Department of Fish and Game (ADFG), which are closest to or overlap the TMAA include the Cook Inlet, Kodiak, and Prince William Sound/Copper River regions. Several groundfish species' seasons are open year round, while others vary throughout the year depending on the region (Alaska Department of Fish and Game, 2020b). However, the areas of highest harvest for groundfish in the TMAA (> 19.5 million pounds harvested from 2015 to 2019) occur in less than one-quarter of the area where groundfish data were available in the TMAA (Figure 3.11-3) (Alaska Department of Fish and Game, 2020b, 2020d; National Marine Fisheries Service, 2020c).

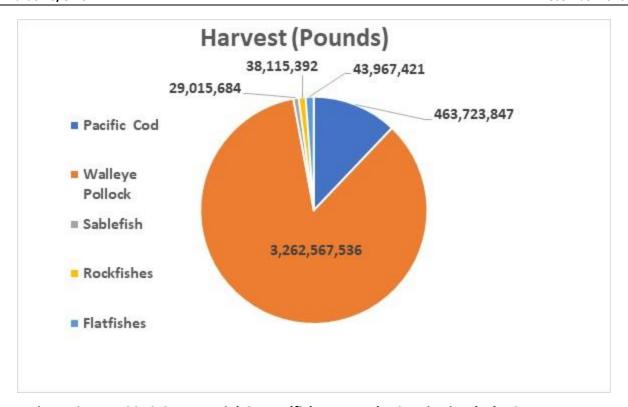


Figure 3.11-1: 2019 Commercial Groundfish Harvest by Species in Alaska State Waters



Figure 3.11-2: 2019 Commercial Groundfish Harvest Value by Species in Alaska State Waters

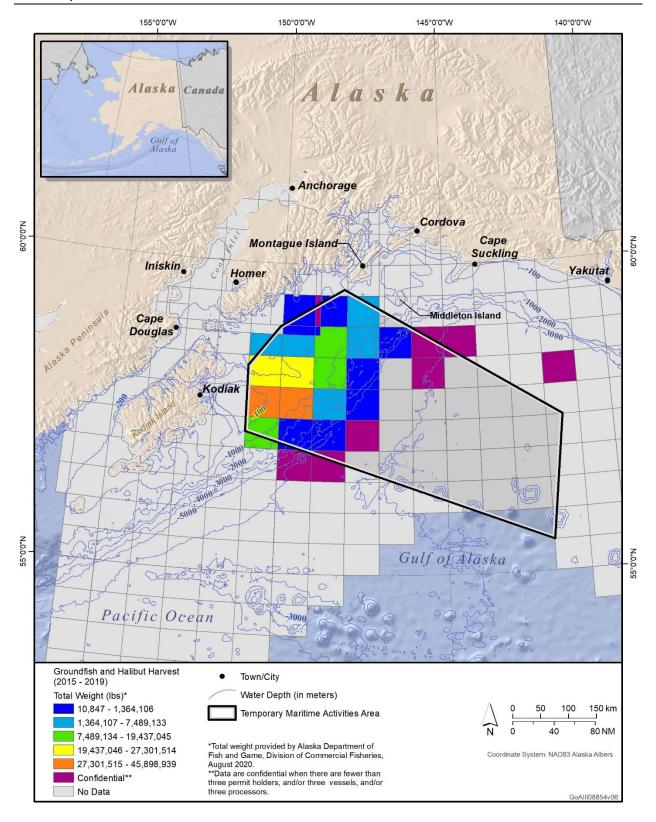


Figure 3.11-3: 2015–2019 Commercial Gulf of Alaska Groundfish and Halibut Harvest in Relation to the TMAA

#### Crab

Crab are defined as shellfish by the ADFG; however, for this analysis, crab are analyzed separately from all other non-crab shellfish (see subsection "Shellfish"). Seven species of crab are commercially harvested in Alaska state waters, including three species of king crab (red, blue, and golden), tanner crab, snow crab, Dungeness, and hair crab (Alaska Department of Fish and Game, 2019b; National Marine Fisheries Service, 2020b). In general, Alaskan crab harvest increased from 2001 to 2012, then decreased from 2012 to 2017 (Alaska Department of Fish and Game, 2019b; National Marine Fisheries Service, 2020b). Since 2017, overall crab harvest in Alaska has been increasing (Alaska Department of Fish and Game, 2019b; National Marine Fisheries Service, 2020b). As shown in Figure 3.11-4, snow crab is the most-harvested species in terms of weight, with king crab being the second-most harvested. Even though snow crab has had the greatest annual harvest since the release of the 2016 GOA Final SEIS/OEIS, king crab has had the highest value (Figure 3.11-5) (National Marine Fisheries Service, 2020b). Since 2017, the Dungeness crab fishery has been steadily increasing in both harvest and value (Figure 3.11-4 and Figure 3.11-5). In 2019, the Southeast region set records for its third-largest harvest weight and largest harvest value of Dungeness crab on record, showing that their crab population is healthy according to a shellfish biologist at the ADFG (Denning, 2020). Decreases in tanner and king crab harvest have been largely attributed to changing environmental conditions, including ocean acidification, overfishing, habitat disturbance from trawling, and increasing ocean temperatures (Alaska Department of Fish and Game, 2020c, 2020e; Kraegel, 2019; National Marine Fisheries Service, 2020b). Bitter crab disease, which is a parasite that tends to cause mortality one to one-and-a-half years after infection, may also contribute to the decrease in tanner crab harvest (Alaska Department of Fish and Game, 2020e).

Commercial crab harvest has very little overlap with the TMAA. The Kodiak region is the only commercial fishing region close to or overlapping the TMAA (Alaska Department of Fish and Game, 2020b). Dungeness and tanner crab are the only crab species commercially harvested within the Kodiak region. The Dungeness crab season runs from May to December (Alaska Department of Fish and Game, 2020b) and has some overlap with the May to October window when training activities could occur. In contrast, the tanner crab season typically runs from February to March (Alaska Department of Fish and Game, 2020b) and does not overlap with the proposed window for training activities (Alaska Department of Fish and Game, 2020b).

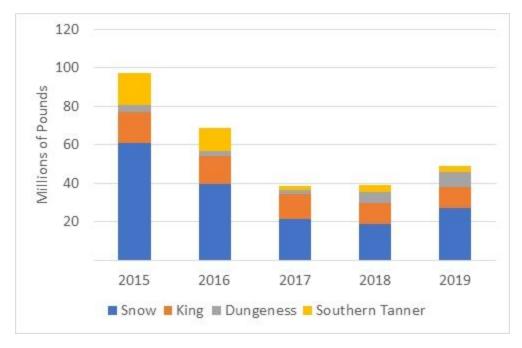


Figure 3.11-4: 2015–2019 Commercial Crab Harvest by Species in Alaska State Waters

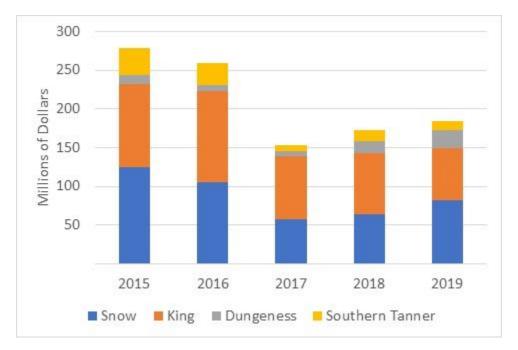


Figure 3.11-5: 2015–2019 Commercial Crab Harvest Value by Species in Alaska State Waters

#### Shellfish

According to the ADFG, crabs, shrimp, clams, scallops, octopuses, and squids are commercially harvested in the GOA under the term "shellfish" and "miscellaneous shellfish." However, for this analysis, with the exception of crab (see above), all other shellfish species are combined into one group, referred to as "shellfish."

Squid species in the family Loliginidae represent the largest single portion of the total shellfish harvest between 2015 and 2019, with the exception of 2019 when no data were available (Figure 3.11-6). In contrast, squids represent a very small portion of the total value of shellfish (Figure 3.11-7). Pacific geoducks represent the largest portion of the harvest value, with penaeid shrimps also making up a significant portion of the overall value (National Marine Fisheries Service, 2020e).

Weathervane scallops are the only scallop commercially harvested in the GOA. Statewide, the harvest per season has been generally decreasing since the mid-1990s, with minor peaks in 1999/2000, 2005/2006, and 2009/2010 seasons (Armstrong et al., 2019). Decreases in harvests occurred in 1995/1996, 2004/2005, and 2008/2009 seasons. Between 2016 and 2019 the fishery remained relatively stable (Armstrong et al., 2019). There is some overlap of scallop harvesting seasons with the training activities window in the TMAA. However, these seasons also run for several months outside of this time frame and are much longer than the 21-day-period training activities that would occur (Alaska Department of Fish and Game, 2020b). It should also be noted that none of the general harvest areas for weathervane scallops overlap with the TMAA, and only a small portion of exploratory scallop fishery waters in the Prince William Sound registration area would overlap the TMAA (Armstrong et al., 2019).

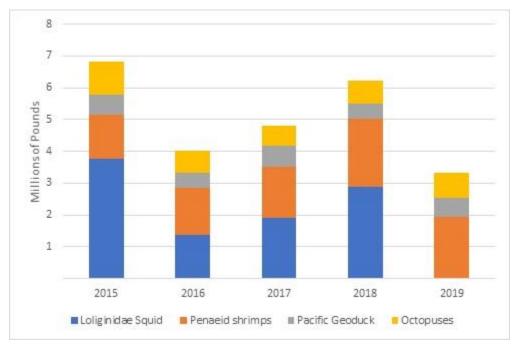


Figure 3.11-6: 2015–2019 Commercial Shellfish Harvest by Species in Alaska State Waters

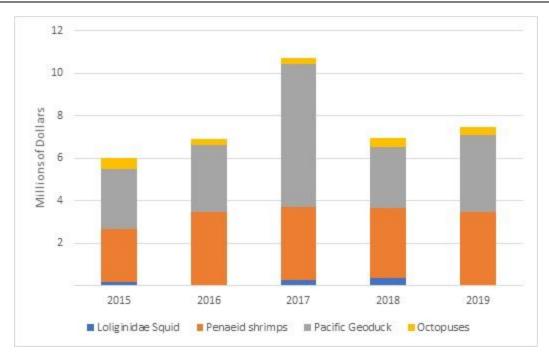


Figure 3.11-7: 2015–2019 Commercial Shellfish Harvest Value by Species in Alaska State Waters

#### Salmon

Across Alaska, trends in commercial harvest and the ability to meet escapement goals amongst the five native Alaskan salmon species (Chinook, coho, chum, pink, and sockeye salmon) have varied over time (Munro, 2019). For chum and coho salmon, harvest and meeting escapement goals have been stable. Sockeye salmon harvest has been variable through time, with a recent increase being driven by large runs to Bristol Bay, yet escapement goals are consistently met. Variability in the abundance of pink salmon runs between even and odd-year broodlines is increasing, as reflected in both commercial harvest and the ability to meet escapement goals. Chinook salmon runs in Alaska have declined in the last decade, leading to restrictions throughout Alaska for commercial, sport and subsistence fisheries. Despite these restrictions, meeting escapement goals has been challenging and has led to listing of several Alaskan stocks as "stocks of concern" (Munro, 2018).

Over the past five years, pink and sockeye salmon have accounted for the greatest harvest, with sockeye salmon catch being highest in 2016 and 2018, and pink salmon catch being highest in 2015, 2017, and 2019 (Figure 3.11-8). Despite pink salmon having the highest catch in 2015, 2017, and 2019, sockeye salmon consistently had the highest value (Figure 3.11-9). Coho, sockeye, and chum salmon harvests have fluctuated but have been relatively stable over the past five years, with sockeye, coho, and chum showing slightly upward trends while Chinook shows a slightly downward trend (National Marine Fisheries Service, 2020d, 2020f).

The mechanisms driving these observed patterns are not well understood. It is hypothesized that some of these changes, particularly in stocks from GOA, may be related to environmental factors (Munro, 2019). It is believed that environmental changes in habitat conditions such as increasing temperatures, above-or-below normal rainfall, and increasing melting of glaciers have strong negative effects on salmon breeding and recruitment (Jones et al., 2020), which could negatively affect annual harvests and

could account for the years of low harvest. Estimates of freshwater and marine survival based on juvenile tagging studies indicate that marine survival for brood years since 2001 have declined to below average despite above-average freshwater survival. This information has helped develop management strategies that resulted in heavily restricted fishing for southeast Alaska Chinook salmon over the past two years (Munro, 2019). There is no science-based evidence that trends in salmon harvests (National Marine Fisheries Service, 2020d, 2020f) are positively or negatively correlated with bi-annual Navy training activities in the TMAA. Salmon fishing seasons occur April through October and range from one-and-a-half to four months in waters within or adjacent to the TMAA (Alaska Department of Fish and Game, 2020b). Commercial and recreational fishing of salmonids is concentrated in on-shelf environments near the coast, and only a small northwest portion of the TMAA is located in an on-shelf environment.

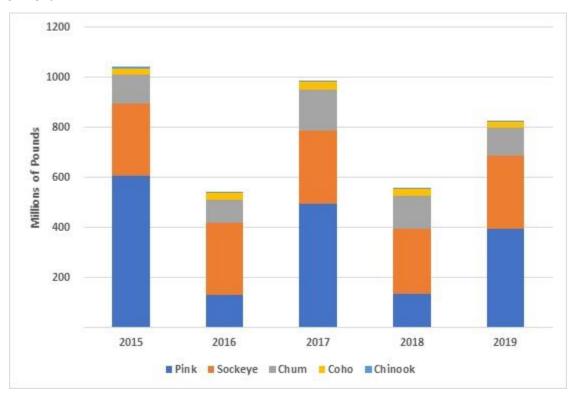


Figure 3.11-8: 2015–2019 Commercial Salmon Harvest by Species in Alaska State Waters

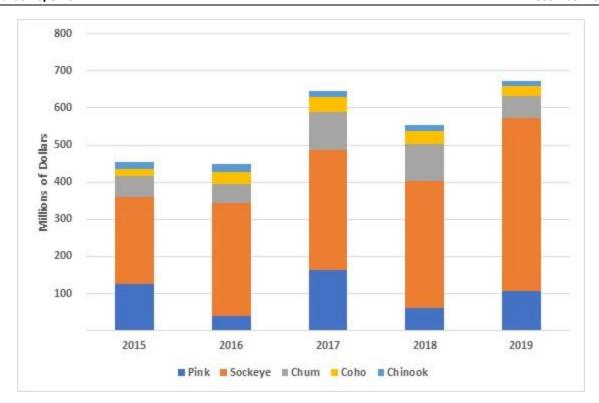


Figure 3.11-9: 2015–2019 Commercial Salmon Harvest Value by Species in Alaska State Waters

### **Pacific Herring**

Pacific herring is the only commercially harvested forage fish species in Alaska. Forage fish are ecologically important as both consumers of zooplankton, and as prey for fish, seabirds, and marine mammals (McGowan et al., 2019). According to the ADFG, all commercial herring fishing occurs in inlets, sounds, and bays, all of which are located well within 12 NM of the coast and thus do not overlap with the TMAA (Alaska department of Fish and Game, 2016).

#### 3.11.1.1.2.2 Recreational Fishing

The status and projected trends of socioeconomic resources described in this section represent the affected environment prior to the global coronavirus pandemic and subsequent dramatic declines in economies around the world, including in the United States. State and local governments either limited business operations or mandated the closure of certain businesses across multiple economic sectors. The travel and tourism industry, which many people in the Gulf of Alaska are dependent on for employment and income, has been particularly hard hit. The analysis in this section shows that training activities would not significantly impact tourism and related recreational activities in the Study Area. Tourism in the GOA has grown consistently in recent years, adapting to fluctuations in domestic and international travel, and in concert with ongoing training activities.

Recreational fishing is defined for the purposes of this discussion as charter fishing and fishing for purposes other than commercial benefit or subsistence. According to Alaska Department of Commerce's *Economic Impact of Alaska's Visitor Industry* (2018), the second-largest contributor of direct visitor industry revenues to the Alaska state government in 2017 was from fishing licenses and tags, valued at \$25.5 million. As shown in Figure 3.11-10, there has been an overall downward trend in recreational

catch since 2010, as well as a decrease in recreational value for fish species other than salmon caught recreationally (Figure 3.11-11) (Alaska Department of Fish and Game, 2020a). These decreases, primarily in Chinook salmon catches, are largely attributed to strict fishery management in many parts of Alaska as a result of low juvenile recruitment (Alaska Department of Fish and Game, 2019a). Despite the stricter fishery management and downward trend of recreational fishing catch, Alaska state income from recreational fishing has been stable since the release of the 2016 GOA Final SEIS/OEIS (Alaska Department of Commerce, 2018). In addition to this, only a small northwest portion of the TMAA is located in an on-shelf environment. Recreational and commercial fishing of salmonids is concentrated in on-shelf and river environments near the coast or inland.

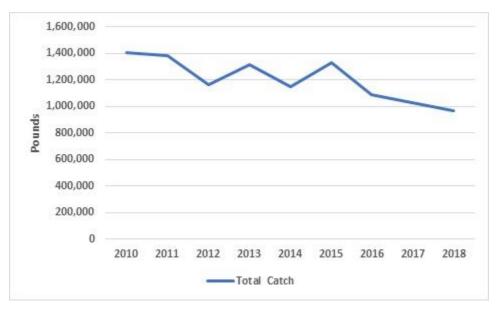


Figure 3.11-10: 2010–2018 Total Catch Estimates for Recreational Marine Fishing in Alaska State Waters

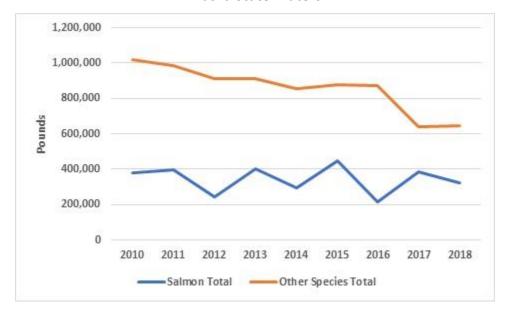


Figure 3.11-11: 2010–2018 Total Catch Estimates for Ocean Salmon and Other Fish Species in Alaska State Waters

#### 3.11.1.1.3 Tourism and Recreation

Tourism and recreation were described and analyzed in the 2011 GOA Final EIS/OEIS and 2016 GOA Final SEIS/OEIS. Areas around the TMAA on the Kenai Peninsula, Kodiak Island, Prince William Sound, and Resurrection Bay are used for tourism and recreation. In 2018, over 2 million tourists visited Alaska between May and September alone. The Alaska Department of Commerce's Economic Impact of Alaska's Visitor Industry (2018) does not list Navy activities as a source of decreased tourism volume of revenue. Summer tourism rates for Alaska have increased steadily since 2010, increasing by a total of 32 percent from 2010 to 2018 (McDowell Group, 2019). Cruises account for more than half of the number of visitors to Alaska annually, making it one of the most popular tourism activities in the state (McDowell Group, 2019).

There were 68,616 recreational vessels (motorized and non-motorized) registered in the state of Alaska in 2018 (Alaska Division of Motor Vehicles, 2018). Since the release of the 2016 GOA Final SEIS/OEIS the number of registered recreational vessels decreased by 1,528 or 2.2 percent. The decreasing trend in vessel registrations, a proxy for recreational vessel use, is relatively small.

Overall, recreation and tourism in Alaska has increased steadily since the 2011 GOA Final EIS/OEIS and 2016 GOA Final SEIS/OEIS were released. Although tourism rates have been steadily increasing since 2010, the information and analysis presented in the 2011 GOA Final EIS/OEIS and 2016 GOA Final SEIS/OEIS remains valid, because the majority of tourism activities would not use waters in the TMAA, and the proposed training activities would be unlikely to occur in the same place and at the same time as recreational activities.

#### 3.11.1.2 Standard Operating Procedures and Mitigation Measures

As described in Section 2.3.3 (Standard Operating Procedures), the Navy implements standard operating procedures for safety and mission success, many of which are recognized as providing a benefit to socioeconomic resources. For example, the Navy schedules training activities to minimize conflicts with the use of sea space and airspace throughout the TMAA to ensure safety and avoid interaction with non-military activities (e.g., commercial and recreational fishing) during training. As described in Chapter 5 (Mitigation), the Navy also implements mitigation measures to avoid or reduce potential impacts on marine resources, including fishery resources that have a high socioeconomic value in the TMAA.

#### 3.11.2 Alternatives Analysis

The Navy conducted a review of new literature, to include laws, regulations, and publications pertaining to socioeconomic resources (including transportation and circulation) and environmental justice. Based on the information presented above, new information relating to existing environmental conditions and socioeconomic trends was found; however, the new information does not indicate an appreciable change to the existing environmental conditions as described in the 2011 GOA Final EIS/OEIS and 2016 GOA Final SEIS/OEIS. Additionally, no new information was found that indicates an appreciable change to the existing environmental conditions as they relate to environmental justice as described in the 2011 GOA Final EIS/OEIS and 2016 GOA Final SEIS/OEIS. As discussed in Section 1.3 (Proposed Action), the Proposed Action in this SEIS/OEIS is consistent with the Proposed Action from the 2011 GOA Final EIS/OEIS and 2016 GOA Final SEIS/OEIS. This SEIS/OEIS analyzes the impacts on socioeconomic resources from the Proposed Action under the No Action Alternative and Alternative 1 (the Proposed Action).

#### 3.11.2.1 No Action Alternative

Under the No Action Alternative, proposed Navy training activities would not occur in the TMAA, referred to as the TMAA. The impacts associated with Navy training activities would not be introduced into the marine environment. Therefore, existing environmental conditions would either remain unchanged or would improve slightly after cessation of ongoing Navy training activities.

#### 3.11.2.2 Alternative 1

#### **Socioeconomic Resources**

Alternative 1 for this SEIS/OEIS remains consistent with the description of Alternative 1 in the 2011 GOA Final EIS/OEIS and the 2016 GOA Final SEIS/OEIS.

No adverse impacts on commercial/recreational fishing, fisheries research/management, civilian access, or tourism would occur as a result of the activities proposed. Furthermore, after a review of the best available science, including but not limited to the National Marine Fisheries Service landings data, there is no science-based evidence that Navy activities in the TMAA have a significant effect on socioeconomic resources in the region. Commercial fishing is not expected to be significantly impacted because while some commercial fishing seasons may overlap with the maximum 21-consecutive-day training period during April-October, commercial fishing seasons that do conflict with this timeframe are typically longer than (at least double) the 21-day training period (Alaska Department of Fish and Game, 2020b). In addition to this, the TMAA is located far enough offshore (>12 NM) that it is not expected to significantly impact commercial and recreational fishing. Reasons for this include the following: (1) the largest commercial fishery in Alaska state waters, groundfish, is largely open year round, and groundfish species' seasons in regions that overlap or are adjacent to the TMAA that are not year round are over double the length of the 21-day window training activities could occur (Alaska Department of Fish and Game, 2020b); (2) the only fishing region, as defined by the ADFG, which allows crab harvesting and overlaps with the TMAA is the Kodiak region (Alaska Department of Fish and Game, 2020b), and the only crab season that overlaps with the window training activities could occur is Dungeness, which is a relatively shallow water, on-shelf, coastal fishery and has demonstrated to be healthy (Denning, 2020); (3) general areas of effort for the scallop fishery do not overlap the TMAA, and only a small portion of the Prince William Sound exploratory scallop fishing waters overlap the northern tip of the TMAA (Armstrong et al., 2019); (4) the Pacific herring fishery has no overlap with the TMAA (Alaska department of Fish and Game, 2016); and (5) the commercial and recreational salmon fisheries are concentrated near the coasts (<12 NM).

Based on the information presented above, the existing baseline conditions have not changed appreciably in the TMAA since the release of either the 2011 GOA Final EIS/OEIS or the 2016 GOA Final SEIS/OEIS. Further, no new Navy training activities are proposed in the TMAA; therefore, as determined in the 2011 GOA Final EIS/OEIS and 2016 GOA Final SEIS/OEIS, no significant impacts are expected to occur to socioeconomic resources under Alternative 1. Thus, a detailed re-analysis of this alternative with respect to socioeconomic resources (including transportation and circulation) is not warranted.

#### **Environmental Justice**

Alternative 1 for this SEIS/OEIS remains consistent with the description of Alternative 1 in the 2011 GOA Final EIS/OEIS and the 2016 GOA Final SEIS/OEIS. The existing baseline conditions have not changed appreciably since the release of either the 2011 GOA Final EIS/OEIS or the 2016 GOA Final SEIS/OEIS. Furthermore, no new Navy training activities are proposed in the TMAA in this SEIS/OEIS. Given the

geographic location of the TMAA (>12 NM offshore with no population centers), a detailed re-analysis of this alternative with respect to environmental justice is not warranted.

#### 3.11.3 Conclusion

#### **Socioeconomic Resources**

As described above, there is new information on existing environmental conditions since the analysis in the 2016 GOA Final SEIS/OEIS. However, this new information does not significantly change the affected environment, which forms the environmental baseline of the analysis in the 2011 GOA Final EIS/OEIS and 2016 GOA Final SEIS/OEIS. Additionally, no new activities are contemplated in the foreseeable future, as reflected in this SEIS/OEIS, that would significantly impact socioeconomic resources (including transportation and circulation) in the TMAA. Therefore, conclusions for socioeconomic resources made for Alternative 1 analyzed in the 2011 GOA Final EIS/OEIS and 2016 GOA Final SEIS/OEIS remain unchanged in this SEIS/OEIS. There are no significant impacts related to socioeconomic resources (including transportation and circulation) that would occur. For a summary of effects of the action alternative on socioeconomic resources under both the NEPA and EO 12114, please refer to Table 3.12-1 in the 2011 GOA Final EIS/OEIS.

#### **Environmental Justice**

As described above, there is no information on existing environmental conditions that significantly changes the affected environment, which forms the environmental baseline of the analysis in the 2011 GOA Final EIS/OEIS and 2016 GOA Final EIS/OEIS. Additionally, the geographic location of the TMAA is offshore with no population centers, and no new Navy training activities are being proposed in this SEIS/OEIS, so there would be no disproportionately high and adverse human health or environmental effects on any minority populations and low-income populations. Therefore, conclusions for environmental justice made for Alternative 1 in the 2011 GOA Final EIS/OEIS and 2016 GOA Final SEIS/OEIS remain unchanged in this SEIS/OEIS. For a summary of effects of the action alternative on environmental justice under both the NEPA and EO 12114, please refer to Table 3.13-1 in the 2011 GOA Final EIS/OEIS.

<b>GOA Navy Training Activities</b>
Draft SEIS/OEIS

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