Alaska Bycatch Task Force

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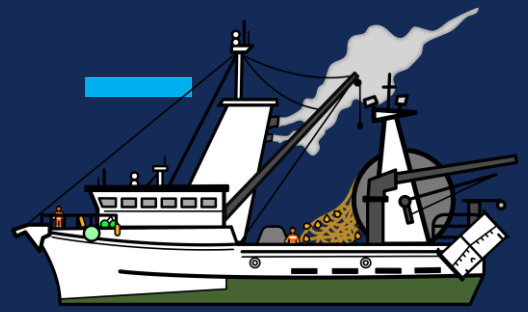
Senior Scientist and Campaign Manager

October 12, 2022

OCEANA

Gulf of Alaska Trawl Vessel Bycatch



68 Trawl catcher vessels

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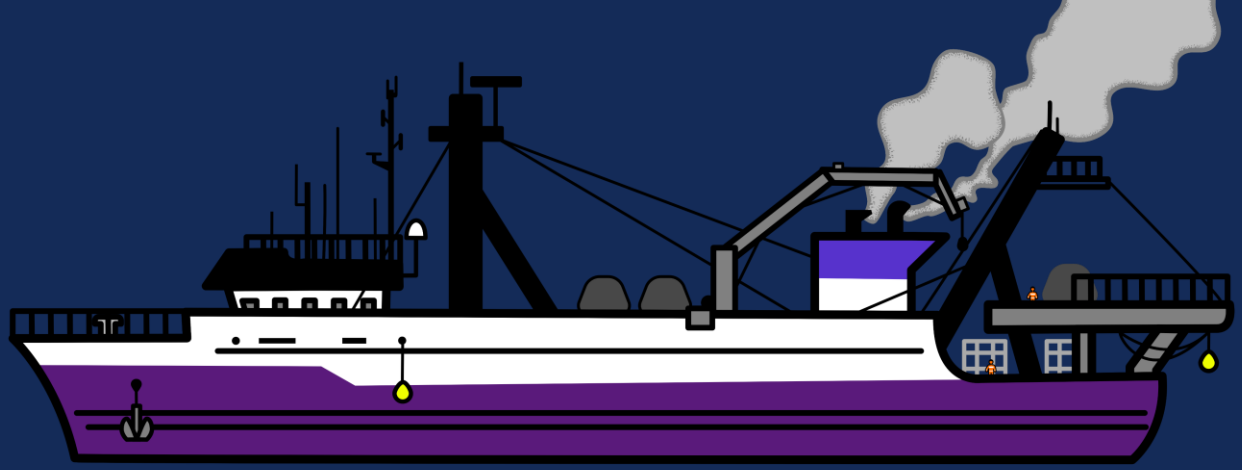


11 Factory trawlers

Average* 24 million lbs of discarded bycatch per year including:

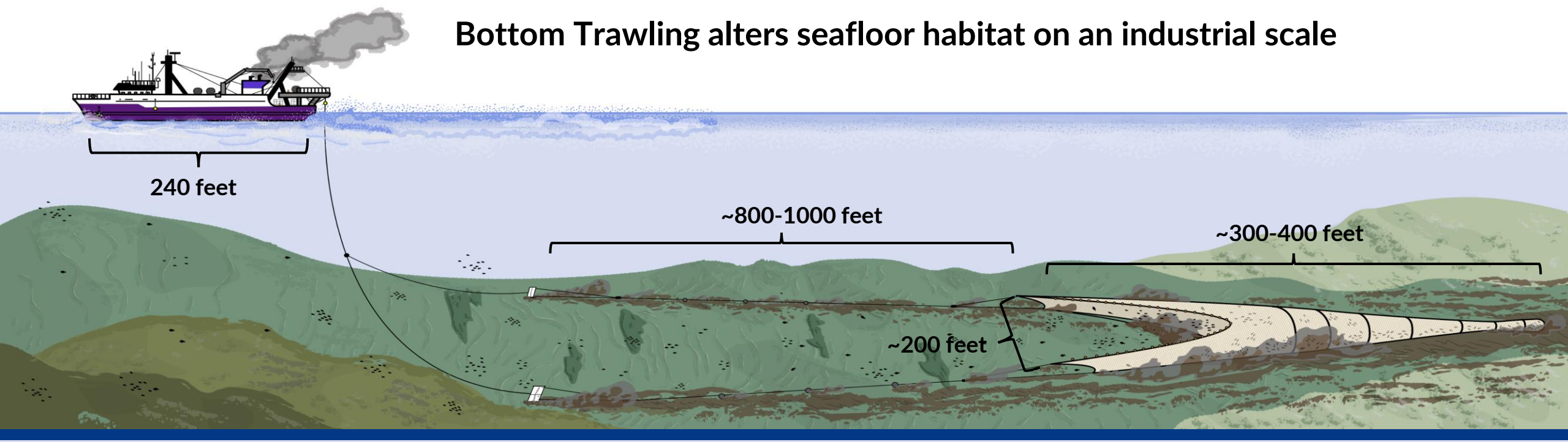
- 5.5 million lbs. of rockfish
- 4.6 million lbs. of flatfish
- 3.1 million lbs. of pollock
- 2.7 million lbs. of halibut
- 1.6 million lbs. of sablefish
- 1.2 million lbs. of sharks
- 0.9 million lbs. of Pacific cod

- 21,000 Chinook salmon
- 100,000 tanner crab

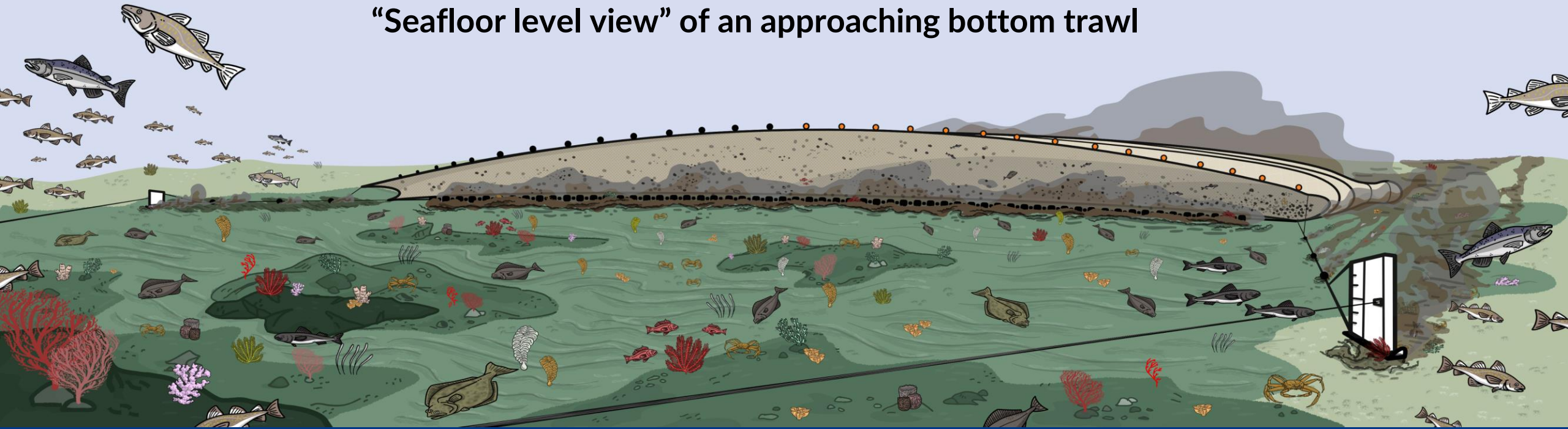
- 150,000 lbs. of habitat-forming invertebrates

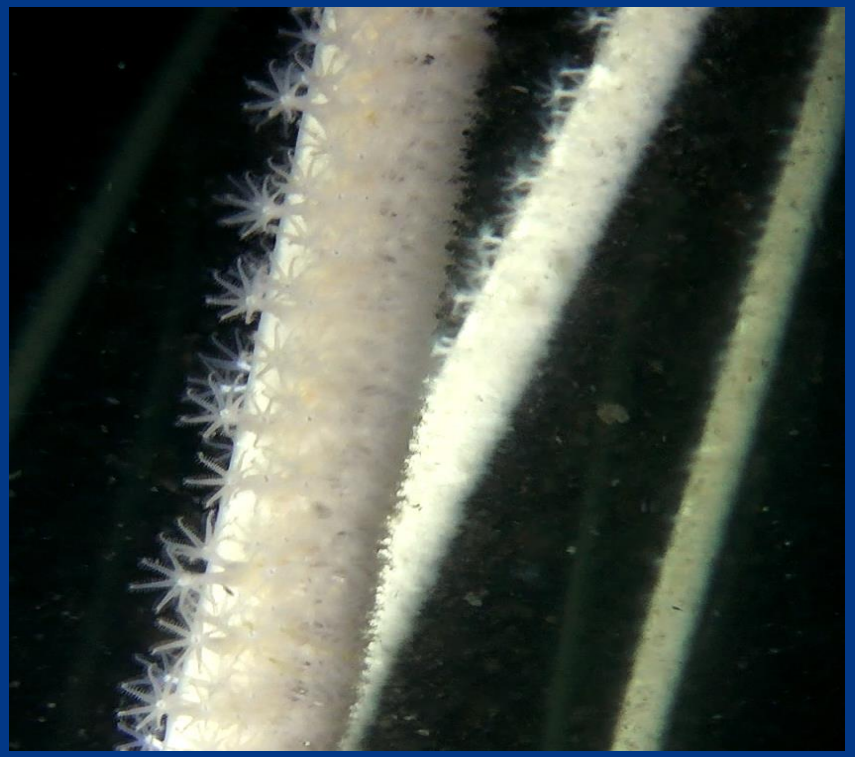
*Avg. 2015-2019

Bottom Trawling alters seafloor habitat on an industrial scale



“Seafloor level view” of an approaching bottom trawl





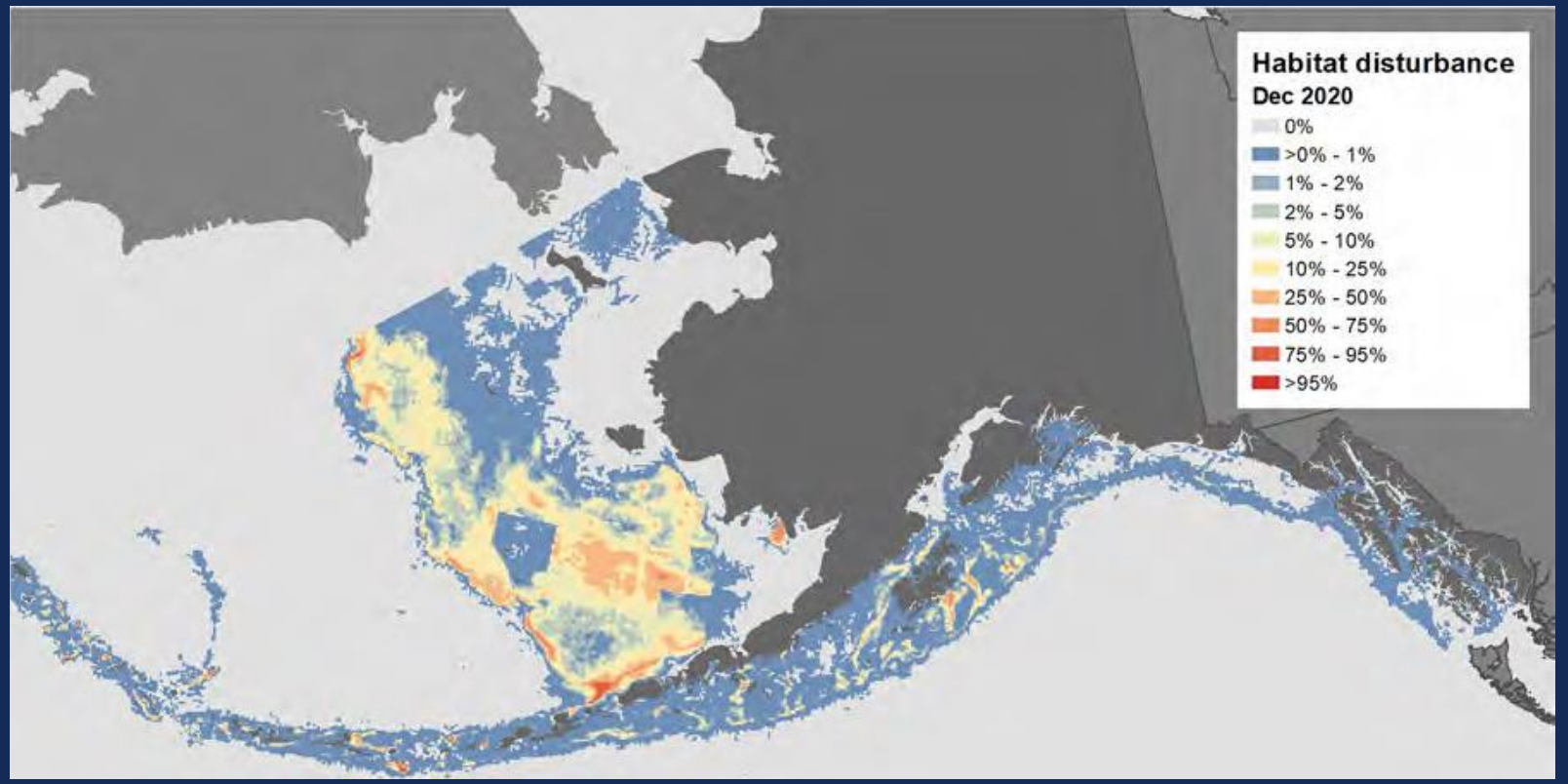
Seafloor Habitat

Trawling (non-pelagic and pelagic trawl) is the largest source of fishery habitat disturbance

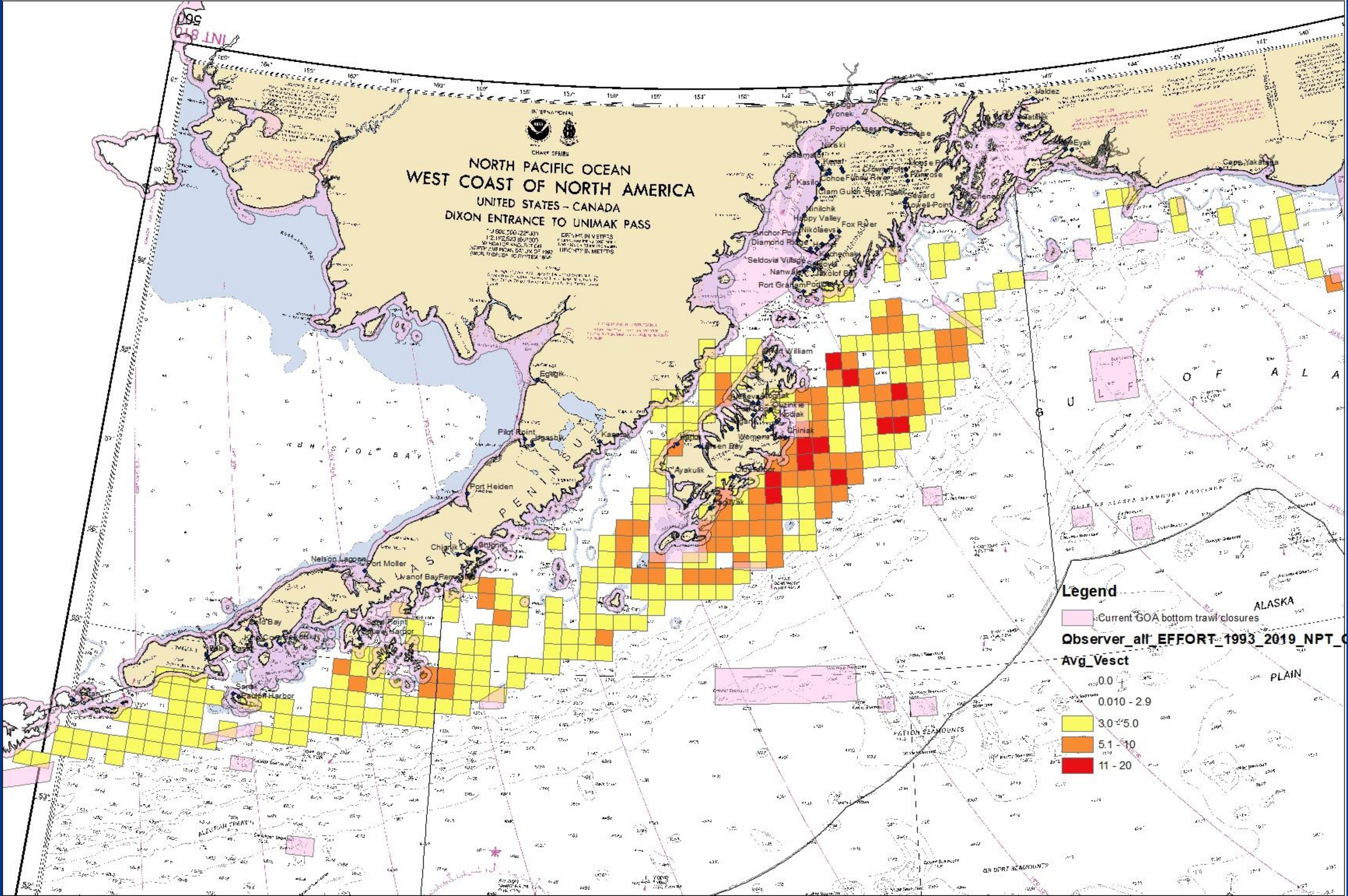
Trawl disturbance footprint =

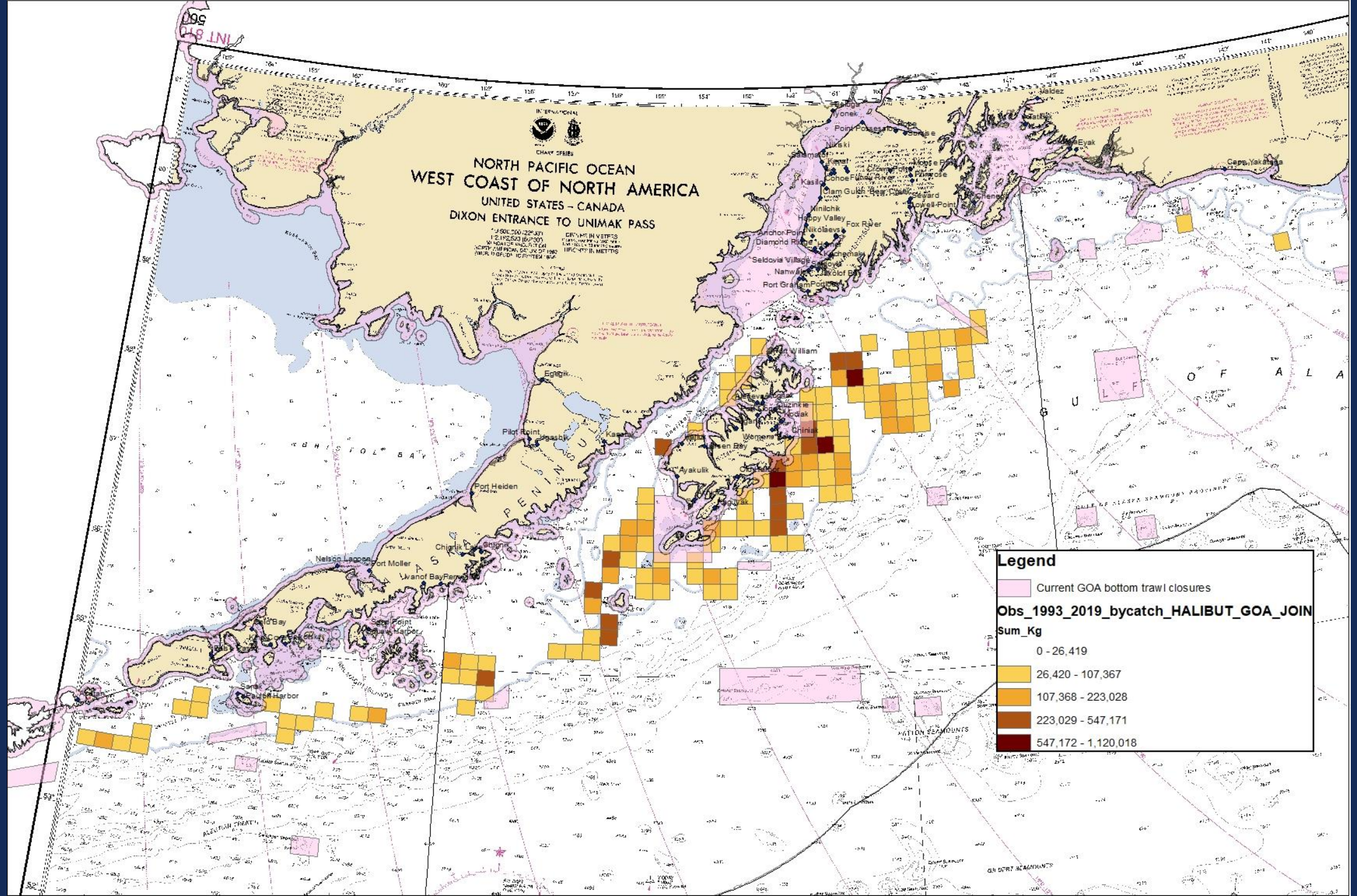
165,077 miles^2 in the North Pacific

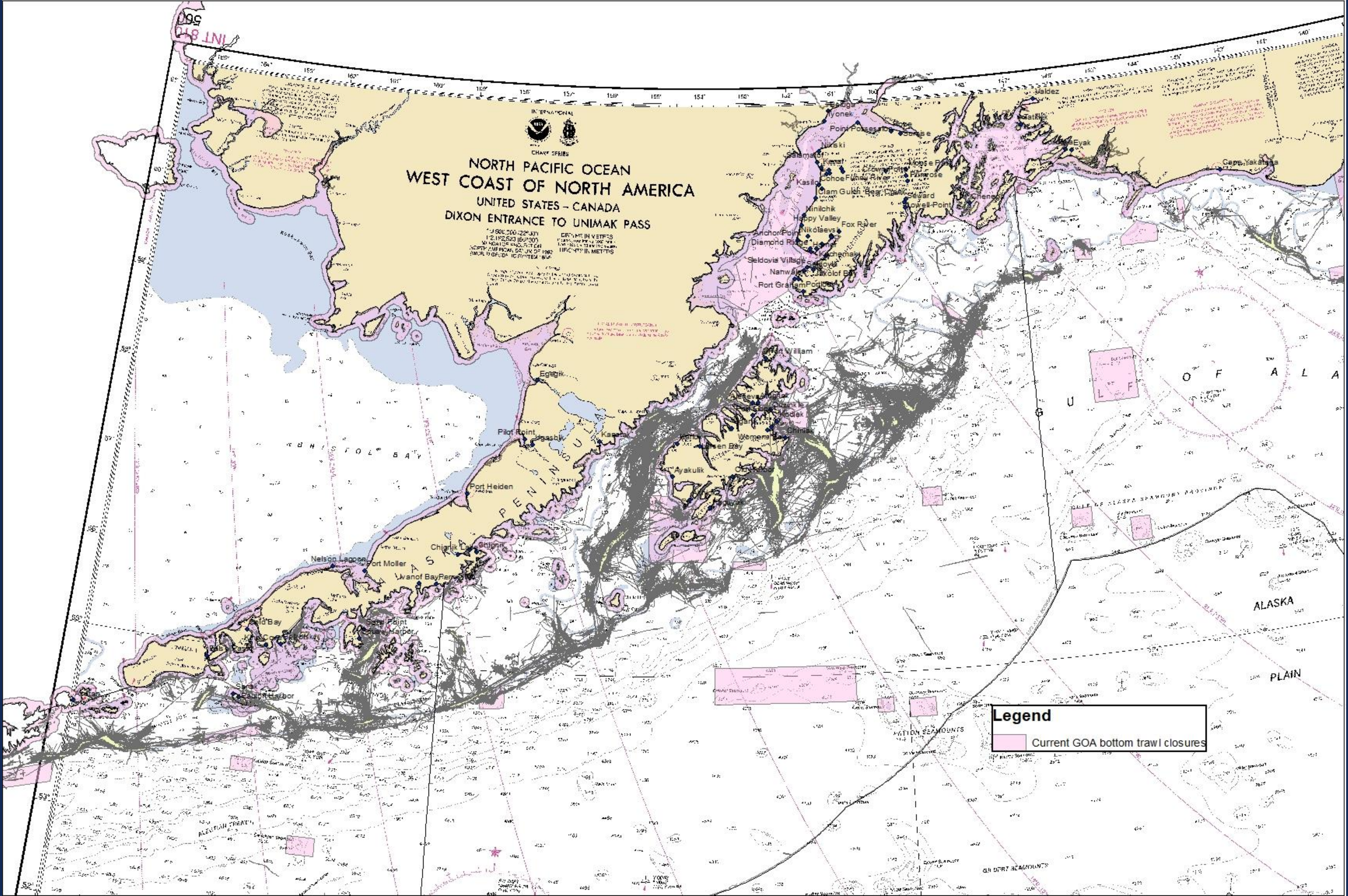
(97.4% of the habitat impact footprint)



See Table 1. Fishing area contact adjusted footprint (CAF) by region and sector. D8 2022 Evaluation of Fishing Effects on Essential Fish Habitat (npfmc.org)

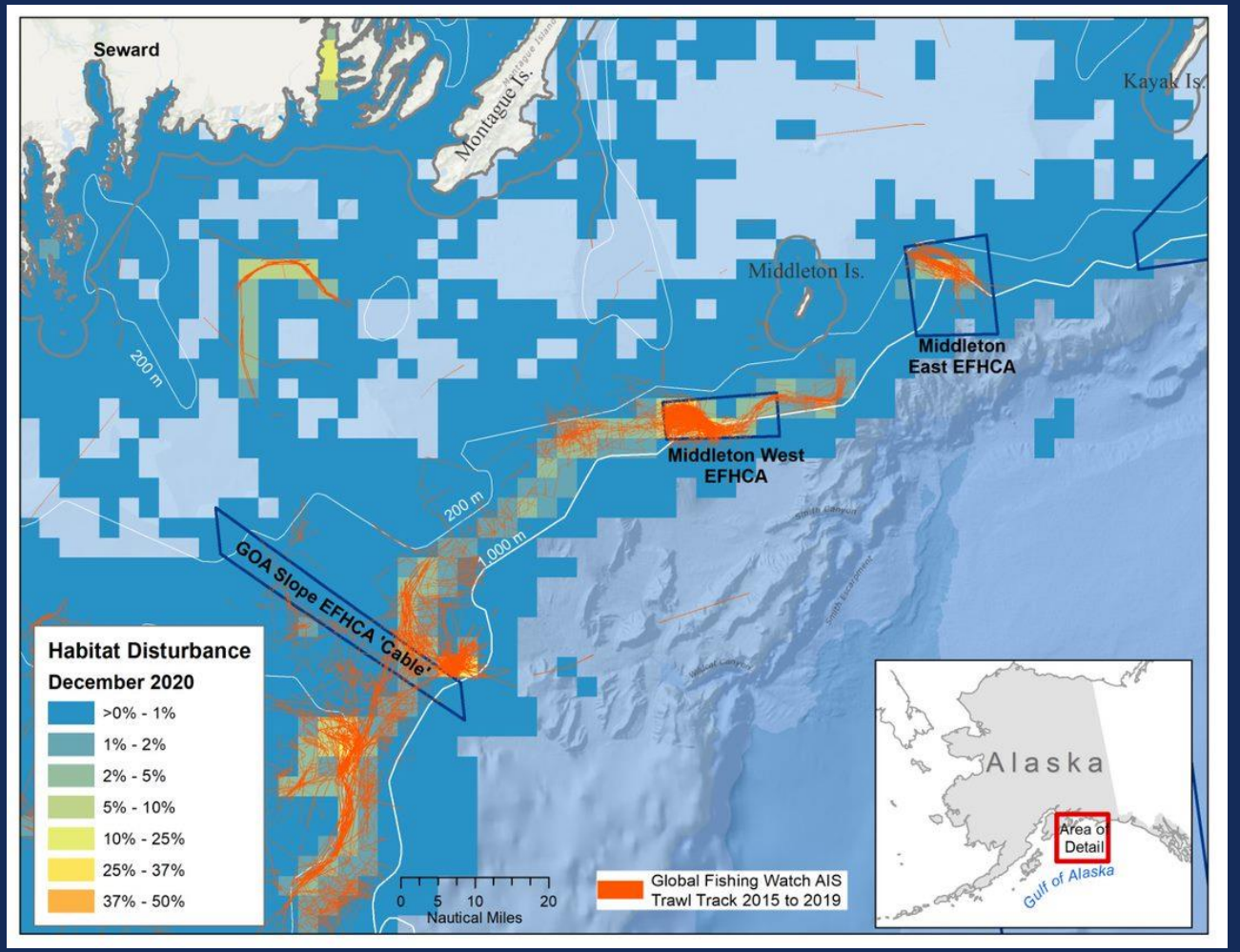

NORTH PACIFIC OCEAN
WEST COAST OF NORTH AMERICA
UNITED STATES – CANADA
DIXON ENTRANCE TO UNIMAK PASS
GULF OF ALASKA
BRISTOL BAY
ALASKA PENINSULA
Legend
Current GOA bottom trawl closures
Observer_all_EFFORT_1993_2019_NPT_C
Avg_Vesct
0.0
0.010 - 2.9
3.0 - 5.0
5.1 - 10
11 - 20


NORTH PACIFIC OCEAN
WEST COAST OF NORTH AMERICA
UNITED STATES – CANADA
DIXON ENTRANCE TO UNIMAK PASS
Legend
Current GOA bottom trawl closures
Obs_1993_2019_bycatch_HALIBUT_GOA_JOIN
Sum_Kg
0 - 26,419
26,420 - 107,367
107,368 - 223,028
223,029 - 547,171
547,172 - 1,120,018


NORTH PACIFIC OCEAN
WEST COAST OF NORTH AMERICA
UNITED STATES – CANADA
DIXON ENTRANCE TO UNIMAK PASS
Legend
Current GOA bottom trawl closures
Valdez
Cape Yakataga
Kodiak
Chiniak
Port Heiden
Pilot Point
Egegik
Port Moller
Nelson Lagoon
Seldovia Village
Anchor Point
Ninilchik
Happy Valley
Fox River
Kasilof
Kenai
Nikiski
Tyonek
Point Possession
Ayakulik
Port Graham
Nanwalek
GULF OF ALASKA
ALASKA
PLAIN


BC
Spawning Grounds
Hypothetical Spawning Grounds
Nursery Grounds
Hypothetical Nursery Grounds
Seasonal Migrations
Hypothetical Larval Migrations
Ontogenetic Juvenile Migrations
Hypothetical Juvenile Migrations
Ontogenetic Adult Migrations
Hypothetical Adult Migrations

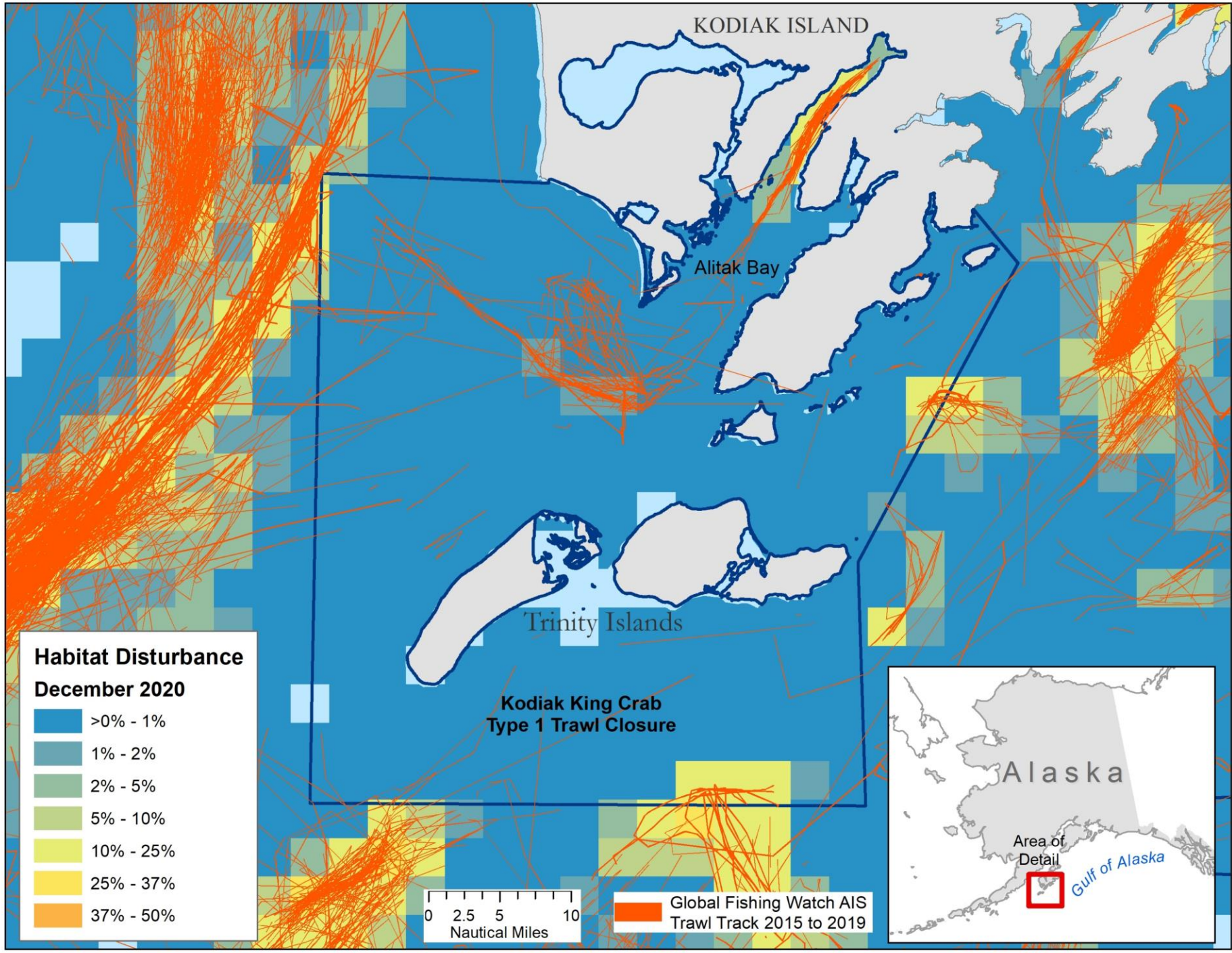
‘Pelagic’ trawling with seafloor contact in habitat protection areas



Trawl tracks from Global Fishing Watch satellite data of vessels with federal groundfish trawl permits (2015-2019) and estimated habitat disturbance in Gulf of Alaska Slope Habitat Conservation Areas. Data sources: Fishing Effects Model Habitat Disturbance Output, NMFS. Trawl tracks, Global Fishing Watch. Map by Oceana.

Trawl Impacts are occurring in areas closed to bottom trawling

Estimated habitat disturbance in Trawl Closure Areas. Data sources: Fishing Effects Model Habitat Disturbance Output, NMFS. Map by Oceana.



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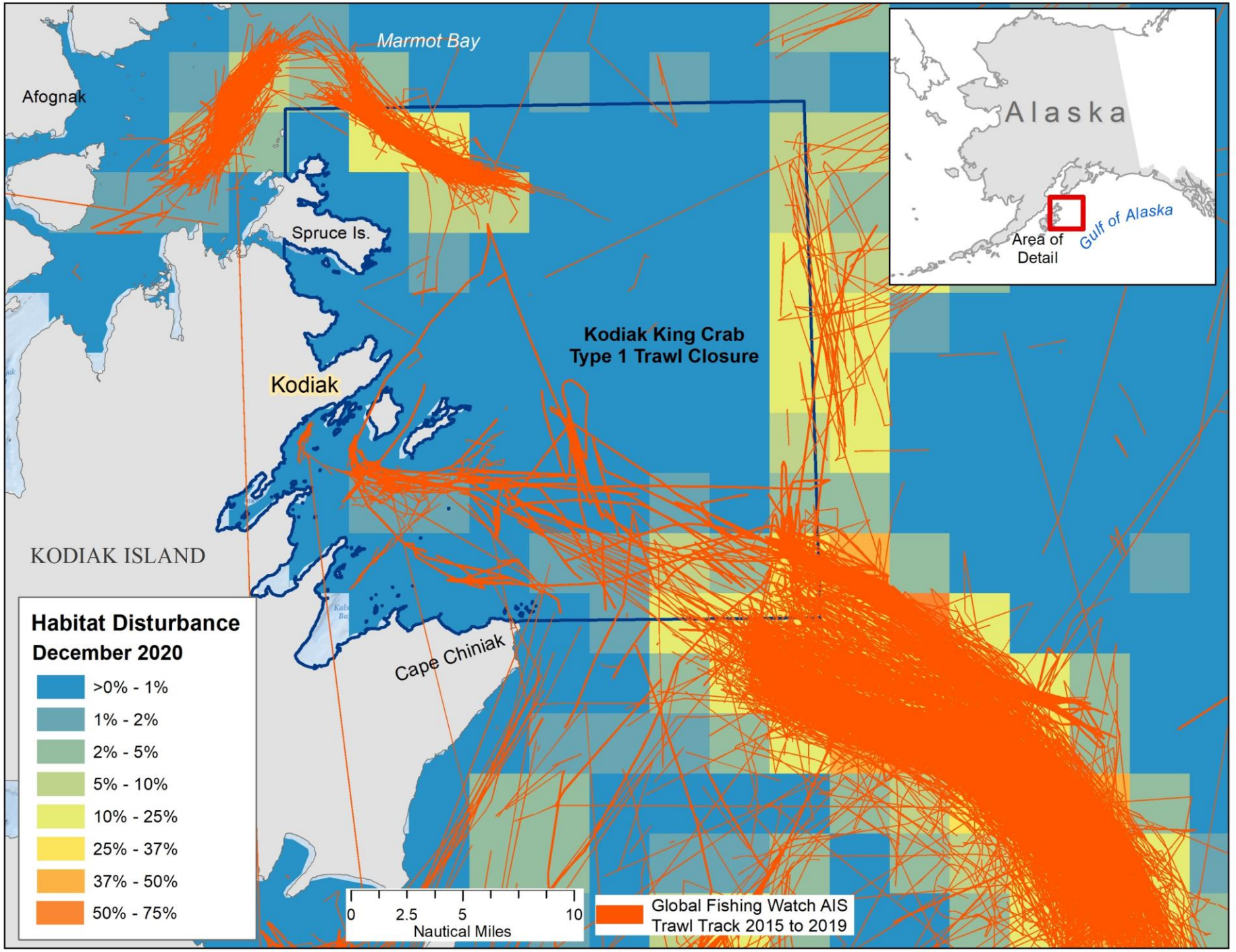
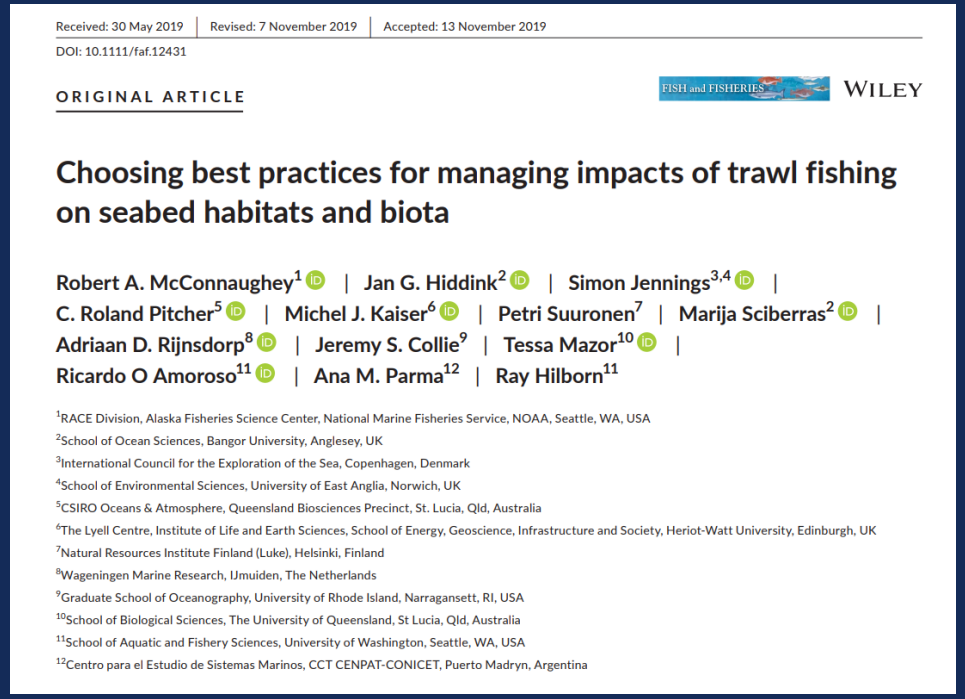


Begin Process to Consider Measures to Minimize, Mitigate, and Prevent Impacts to Habitat



Received: 30 May 2019 | Revised: 7 November 2019 | Accepted: 13 November 2019

DOI: 10.1111/faf.12431

ORIGINAL ARTICLE

FISH and FISHERIES WILEY

Choosing best practices for managing impacts of trawl fishing on seabed habitats and biota

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Tools for managing impacts include freezing trawl footprint, protections by habitat type, bycatch quotas, gear design, reduced effort

The Gulf of Alaska is the last place on the west coast still largely open to bottom trawling

Minimizing the footprint of bottom trawling in the Gulf of Alaska would prevent increased habitat impacts and bycatch

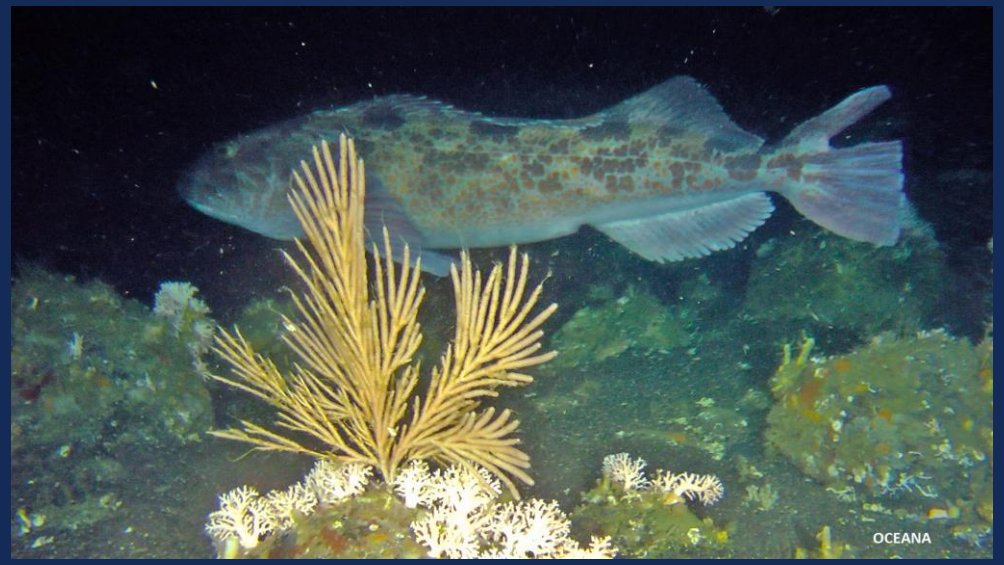
Impacts to Long-lived Habitat is not Disclosed

$Millions$ has been spent by NMFS and others documenting deep-sea corals across a range of depths and substrates – long-lived corals and sponges are important habitat at depths less than 300 meters

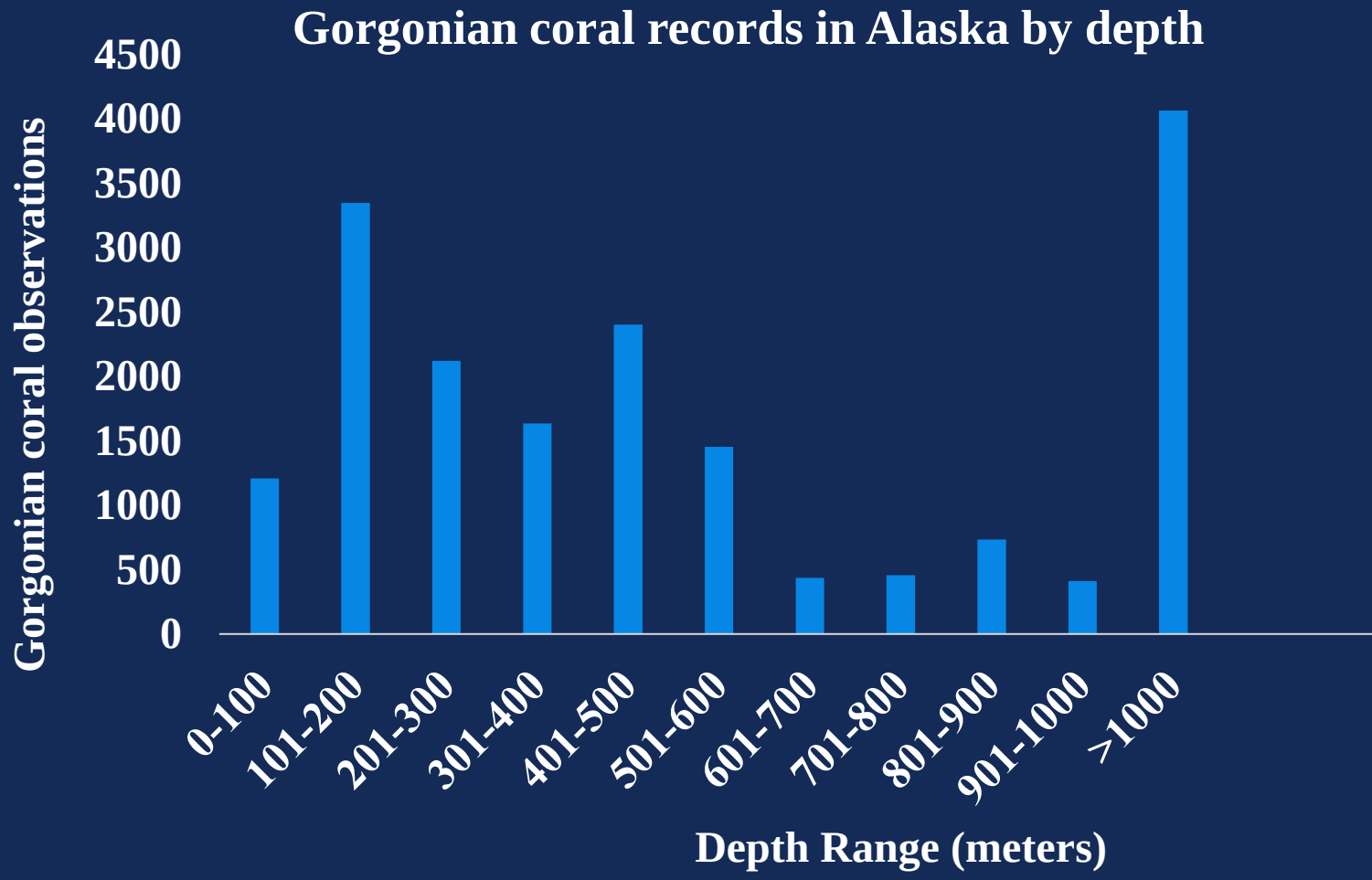
*Best-available Science is being ignored

Juvenile pollock in coral habitat, 200 meters depth

6,681 of 18,278 Gorgonian coral records in Alaska are in depths less than 300 meters



Gorgonian coral in lingcod habitat. Gulf of Alaska, 80 meters depth



NOAA National Database for Deep-Sea Corals. https://deepseacoraldata.noaa.gov/; NOAA Deep Sea Coral Research & Technology Program.

Aleutian Coral Gardens,
200 meters depth

Bering Sea, Zhemchug Ridges,
100 meters depth

What Are Deep Sea Corals?

- Oldest living animals (100s to 1000s of years)
- Colonies of thousands of tiny animals
- Found below euphotic zone
- Slow growth (1 cm per year)
- Climate and Ocean indicators
- Extremely sensitive to disturbance (trawled coral gardens will not recover in our lifetime, if ever)
- At risk from ocean warming, ocean acidification, and mechanical disturbance

Bubblegum corals