

# **IPHC Fishery-independent setline survey (FISS)**

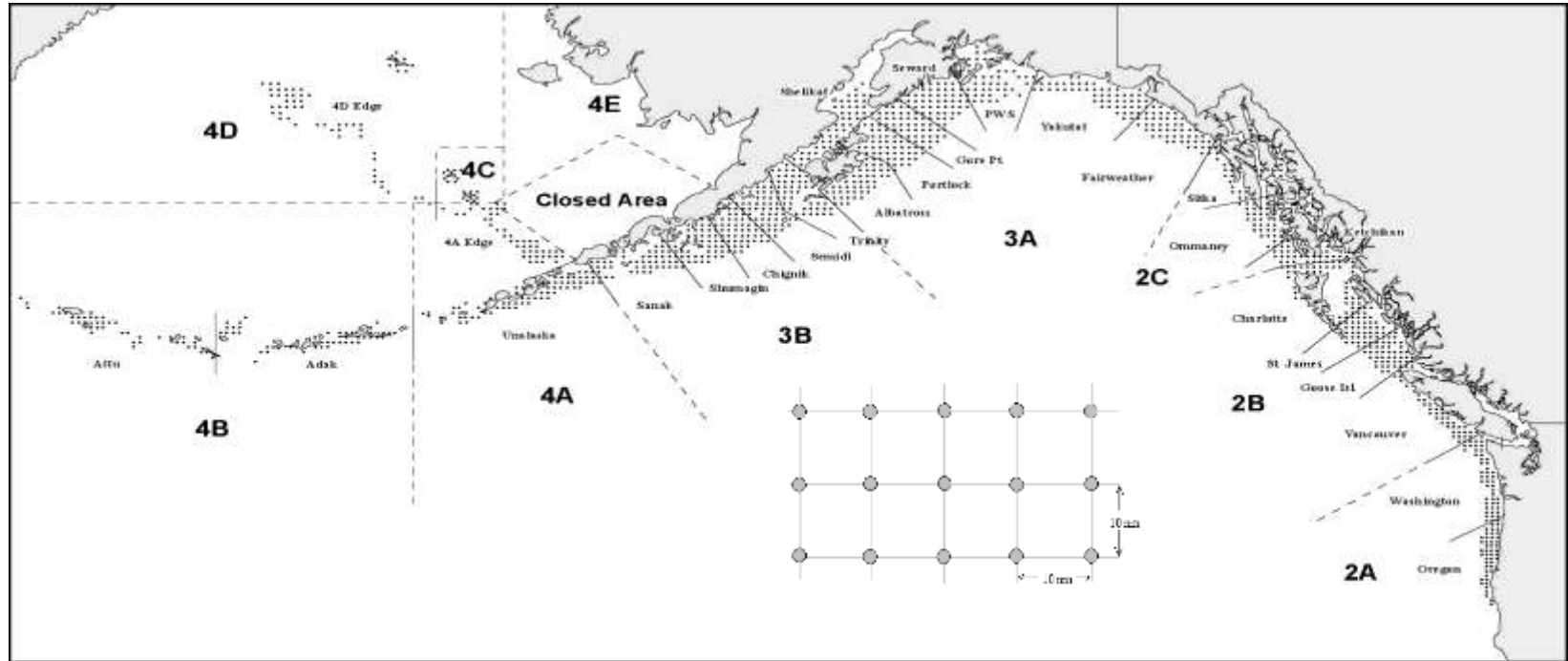
Agenda Item 6.1  
IPHC-2017-IM093-06



INTERNATIONAL PACIFIC  
HALIBUT COMMISSION

# Standardization

## Fixed station positions



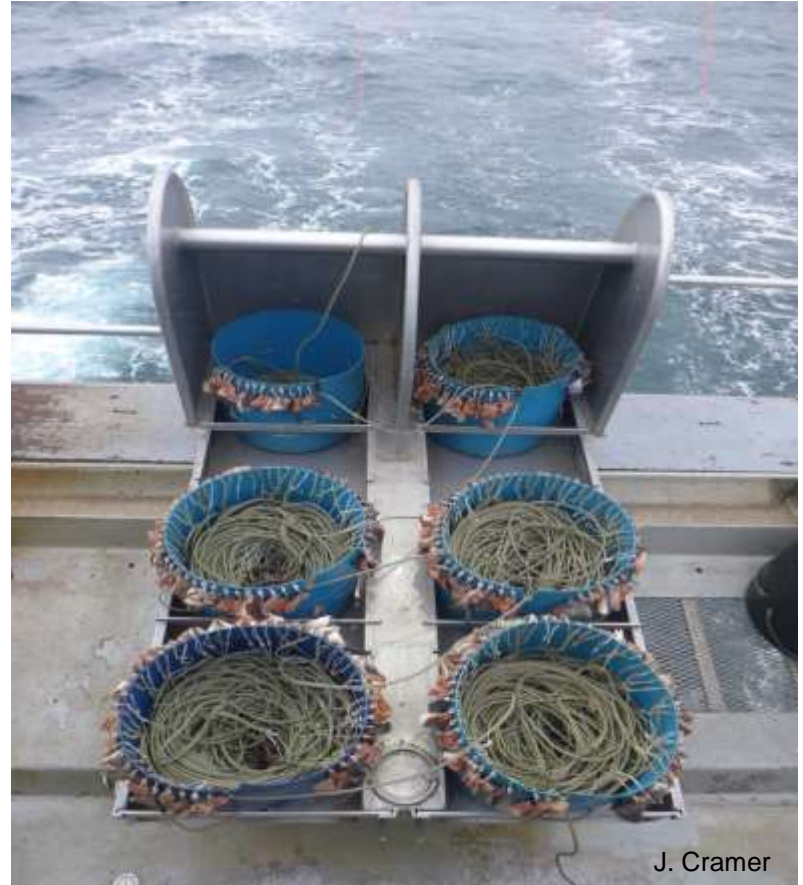
# Standardization

## Gear

- Fixed gear
- 1,800 foot skates

## Each skate

- 100 #3 (16/0) circle hooks threaded through the front of the hook on 24"-18" gangions
- 18' spacing
- 5-10 lb weights between skates



J. Cramer



# Standardization

## Bait

- Frozen chum salmon
- Number 2 semi bright or better
- Cut 1/4 to 1/3 pound



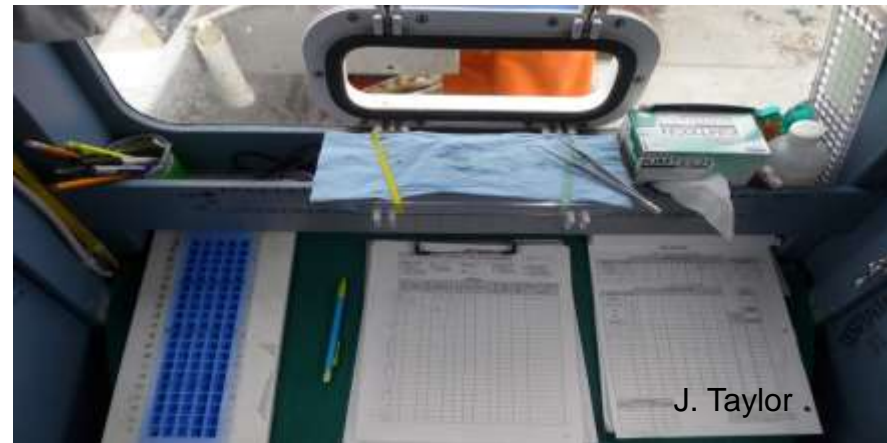


# Primary objective

Standardized, fishery-independent data for Pacific halibut stock assessment

- WPUE, sex specific length-at-age, age composition
- Data on undersized Pacific halibut
- Pacific halibut distribution and abundance trends (changes in sex, length, maturity, and age over the grounds)





# New in 2017:

## Electronic data recording coastwide



- First year tablets coastwide (all areas except Reg. Area 2A, 2016 pilot year with 6 vessels)
- Improved data quality, timeliness of data availability, redirect staff time from data entry/verification
- Samplers pleased with tablets; Team continuing to take feedback and refine



# Secondary objectives

## Platform for specialized data collection projects

- Genetics, condition factor
- Oceanographic data
- Prior hooking injuries
- Marine mammal / Seabird occurrence / interactions
- Environmental Contamination (ADEC)
- *Ichthyophonus*
- Archive otolith collection
- Tagging: Pop-up Archival Transmitting (PAT) tags, wire tags, internal tags





# Secondary objectives

## Platform for specialized data collection projects

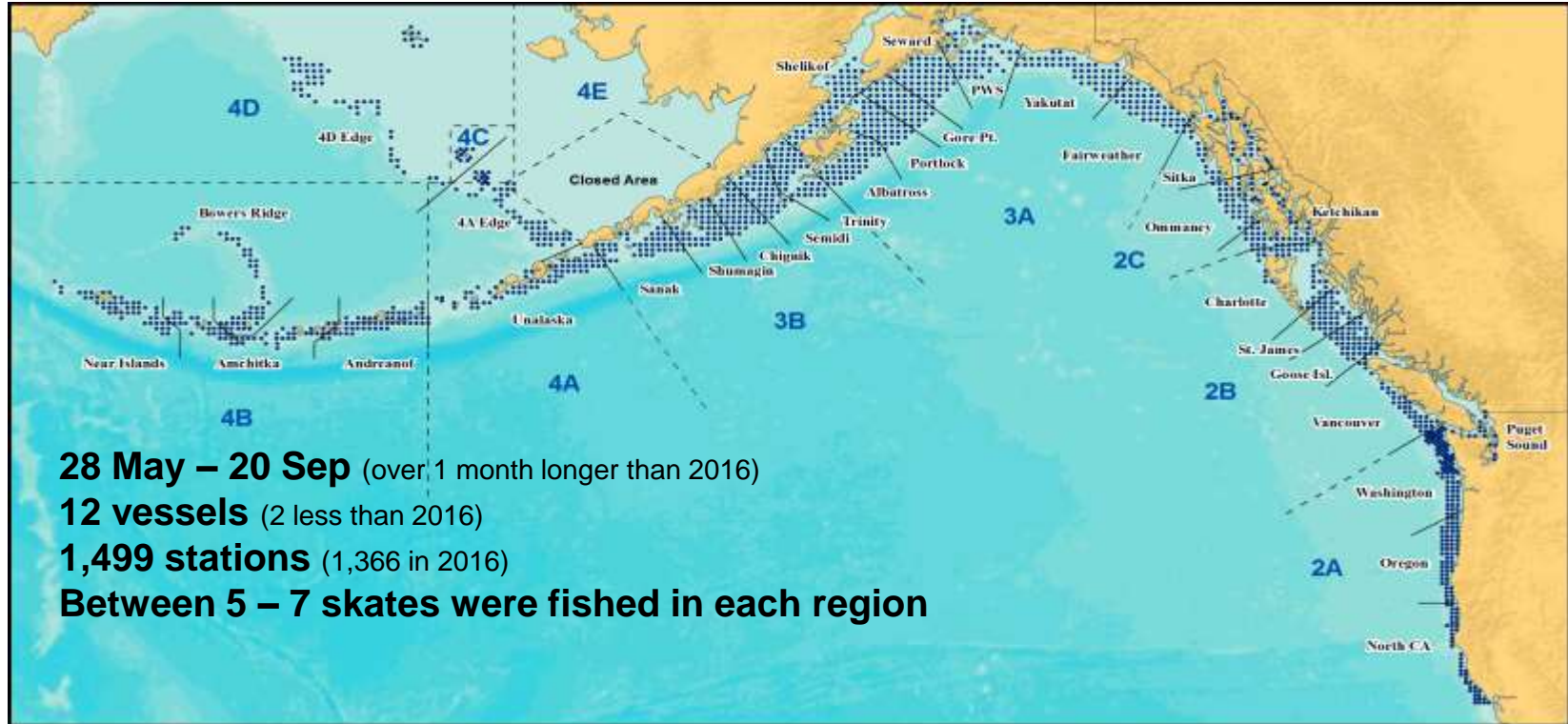
- NMFS
  - Pacific cod sampling
  - Electronic monitoring system tests
  - Shark sampling (Spiny dogfish, Six gill, Sleeper shark)
  - IPHC on NMFS trawl survey
- DFO
  - Rockfish biological samples
  - 100% hook occupancy
  - Shark sampling
- CDFW, ODFW, WDFW
  - Rockfish sampling cooperation



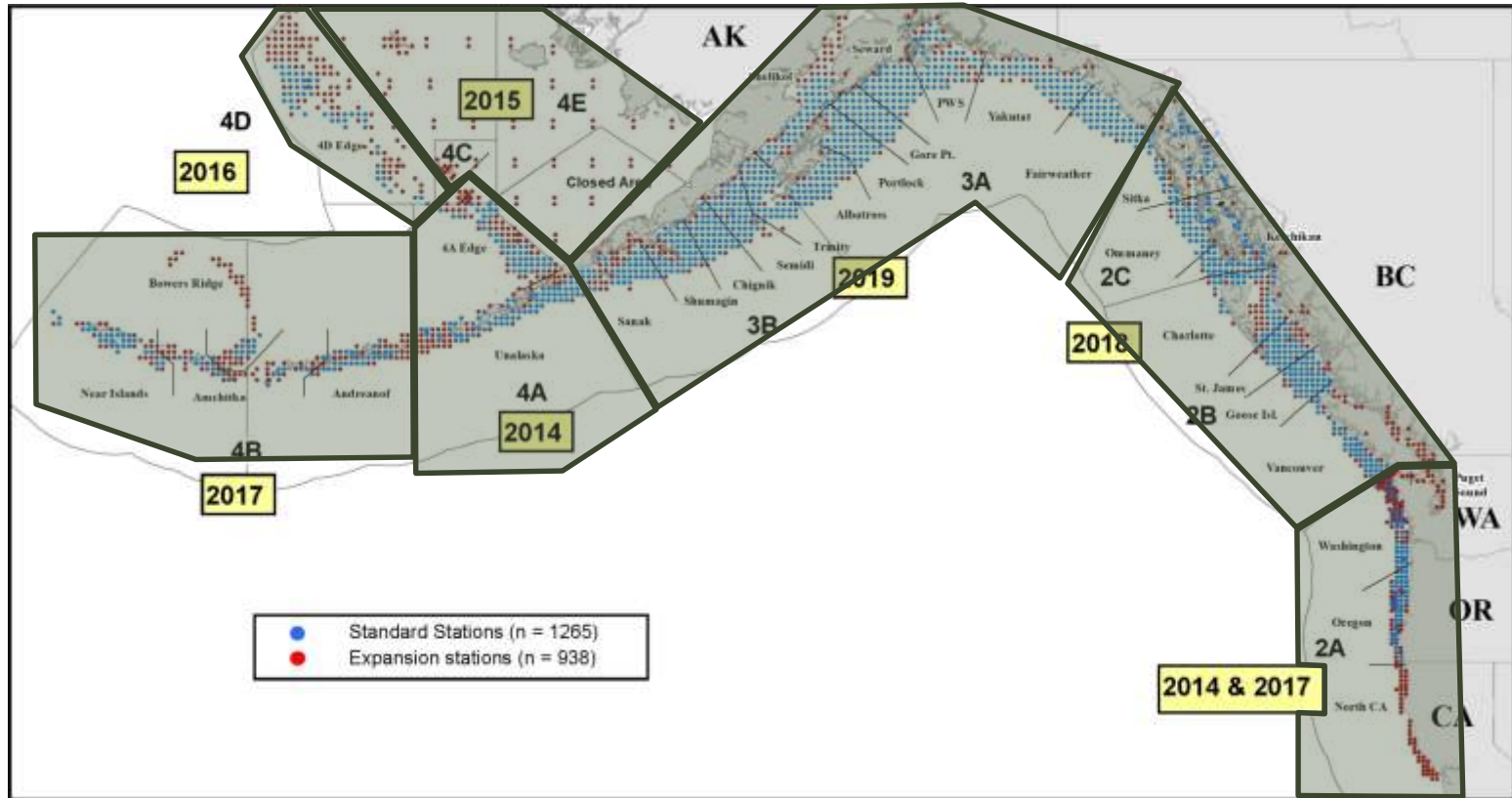
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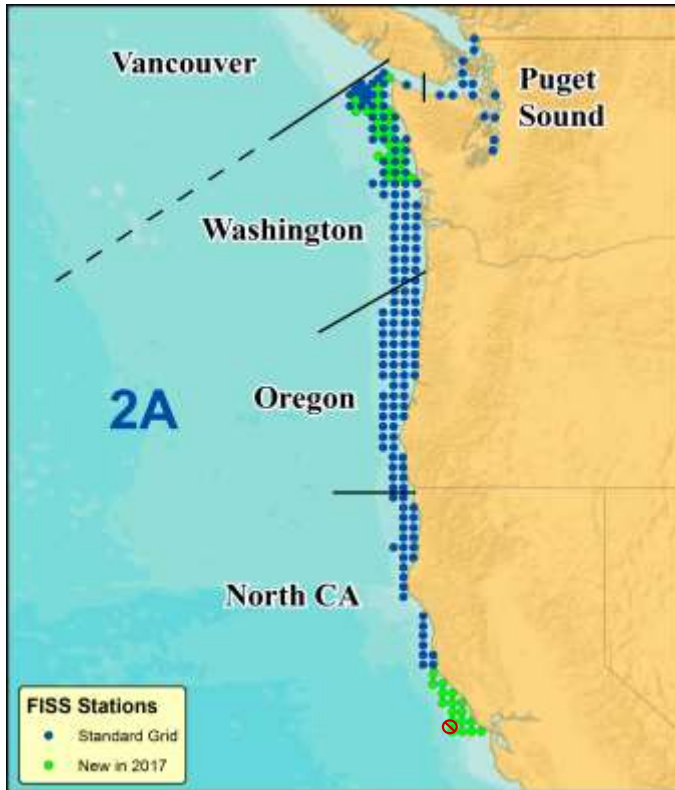
# 2017 Setline Survey



# Setline Survey stations 2014-19



# 2017 Setline survey expansion in 2A



## 212 Total stations with 81 Expansions

Puget Sound – 14 expansion

WA – 49 standard grid stations

8 rockfish index

13 expansion stations

26 new dense grid

OR – 47 standard grid

13 expansion stations

N. CA -27 previously fished expansion

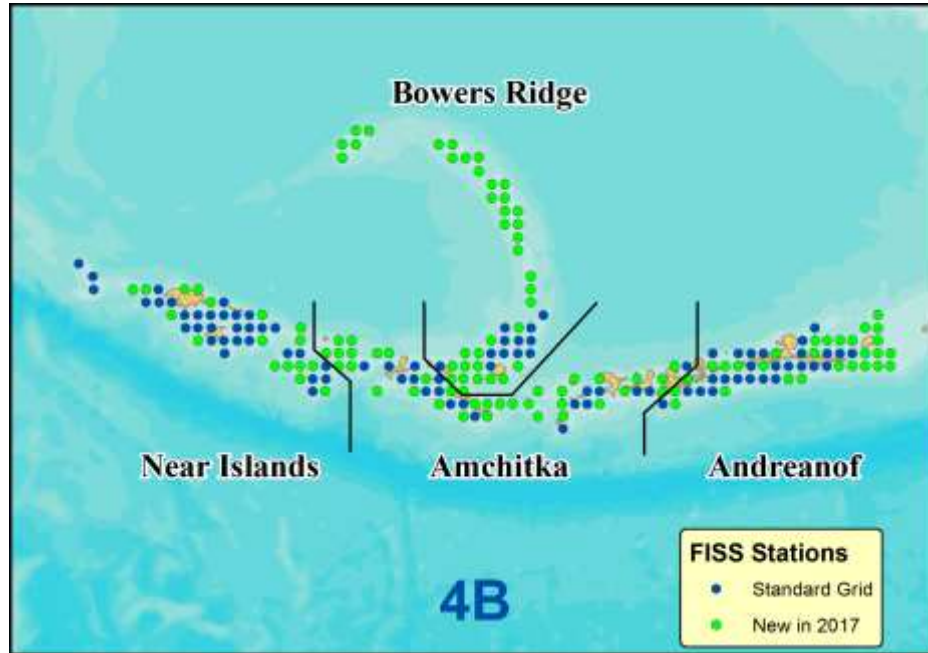
15\* new expansion

(\*2 not permitted because of habitat closures)





# 2017 Setline survey expansion in 4B



## 113 NEW stations, 202 total

Near Islands - 49 (17 new)

Amchitka - 49 (31 new)

Bowers Ridge - 50 (37 new)

Andreanof - 54 (28 new)



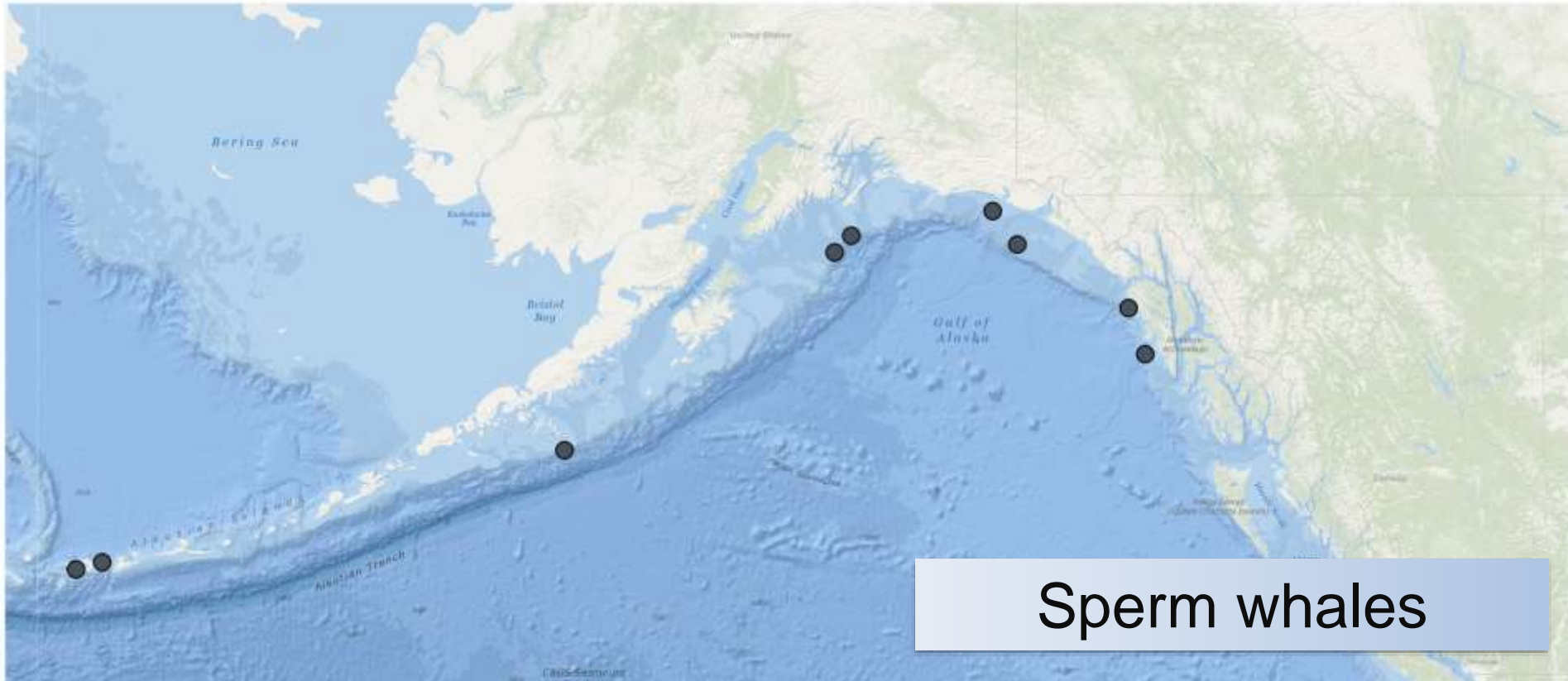
# Whale sightings during hauling in 2017

Reg Area	Whale	No. sets with whales during hauling*	Total stations in Reg Area	Percent of total stations
<b>2A</b>	None	0	213	0%
<b>2B</b>	None	0	166	0%
<b>2C</b>	Sperm whale	2	123	2%
<b>3A</b>	Killer whale	1	374	0%
	Sperm whale	5		1%
<b>3B</b>	Sperm whale	1	231	0%
<b>4A</b>	Killer whale	13	110	12%
<b>4B</b>	Killer whale	5	202	2%
	Sperm whale	2		1%
<b>4CDE</b>	Killer whale	4	80	5%
		<b>33</b>	<b>1,499</b>	<b>2%</b>

\*Whales seen within 100m of gear during hauling or suspected of interacting with gear.



# Whale sightings during hauling in 2017



# Whale sightings during hauling in 2017





# 2018 Setline survey expansion & station vetting

## Reg. Area 2B expansion (103 expansion stations proposed)

- Areas of concern (MPAs, RCAs)
- Species of concern (yelloweye, bocaccio)

## DFO/IPHC coordination

- Staff met in Mar, May, Aug (re: MPA decision), and Nov 2017 for planning and to outline information needs

## Reg. Area 2C expansion (55 expansions proposed)

- Working with Glacier Bay National Park on stations within boundaries



# 2018 Survey Expansion: 2B

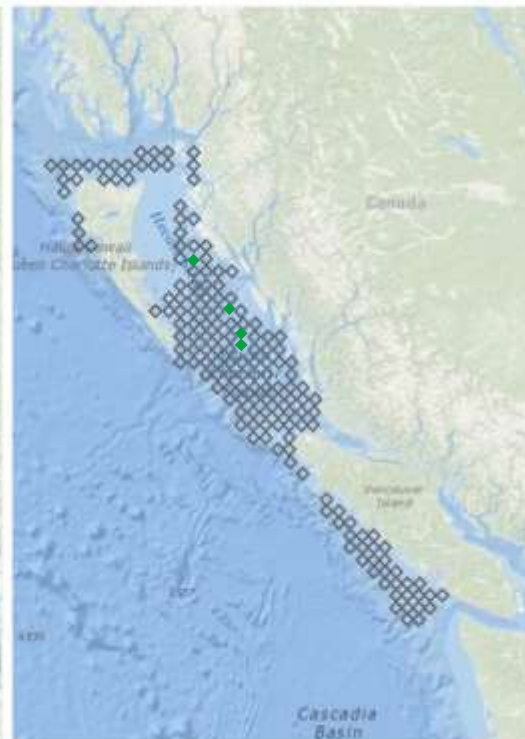
2B All



2B Expansion stations



2B Existing stations



# 2018 Survey Expansion: 2C

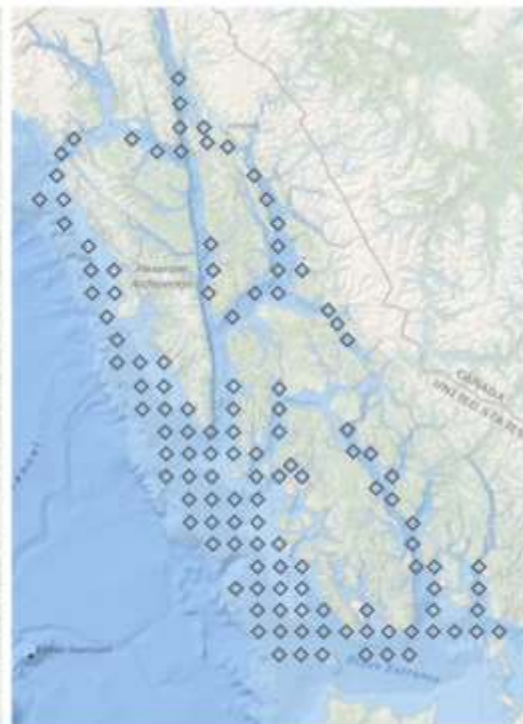
2C All



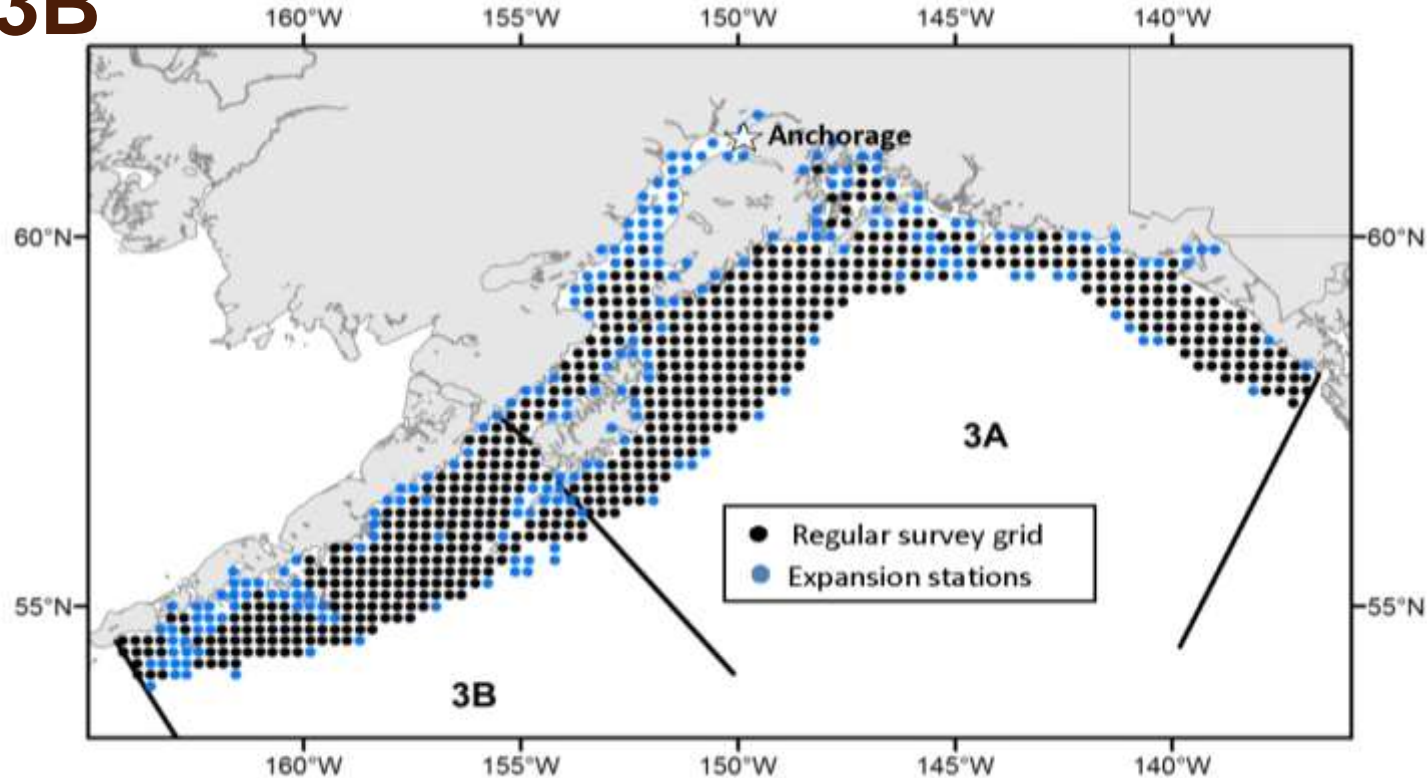
2C Expansion stations



2C Existing stations



# Proposed 2019 Setline survey expansion in 3A/3B







**Please stand by as we bring up the next presentation**

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