

ADF&G STAFF ORAL PRESENTATION ALASKA BOARD OF FISHERIES

Dungeness Crab Commercial Fisheries



Joe Stratman, Shellfish Biologist
Division of Commercial Fisheries
Alaska Department of Fish and Game, Southeast Region



Outline

- Dungeness life history
- Fishery history
- Management features and gear
- Management plan
- Recent fishery trends
- Port sampling
- Commercial Dungeness crab fishery proposals



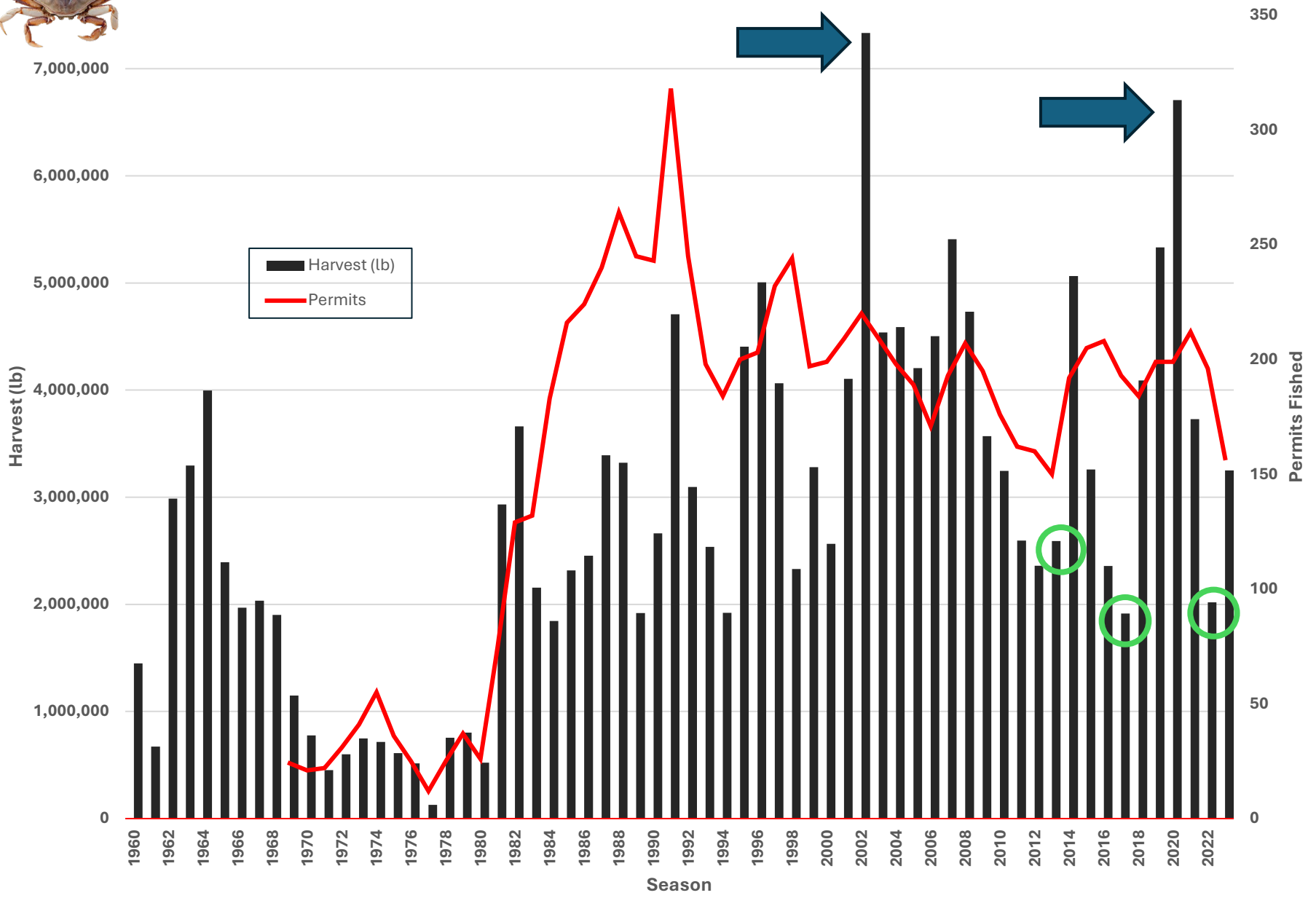
Life History

- Live in sandy, muddy substrate, less than 27 m
- Sexual maturity: 3 yrs
- Males legal size: 4-5 yrs
- Males molt: March-July
- Females molt: mid Aug-Sept
- Mating: mid Aug-Sept
- Eggs hatch: April-June
- Planktonic larvae after hatching
- Larvae settle to the bottom and molt to first juvenile stage
- Lifespan: 8-13 yrs





Registration Area A (Southeast) Dungeness Crab Harvest and Effort





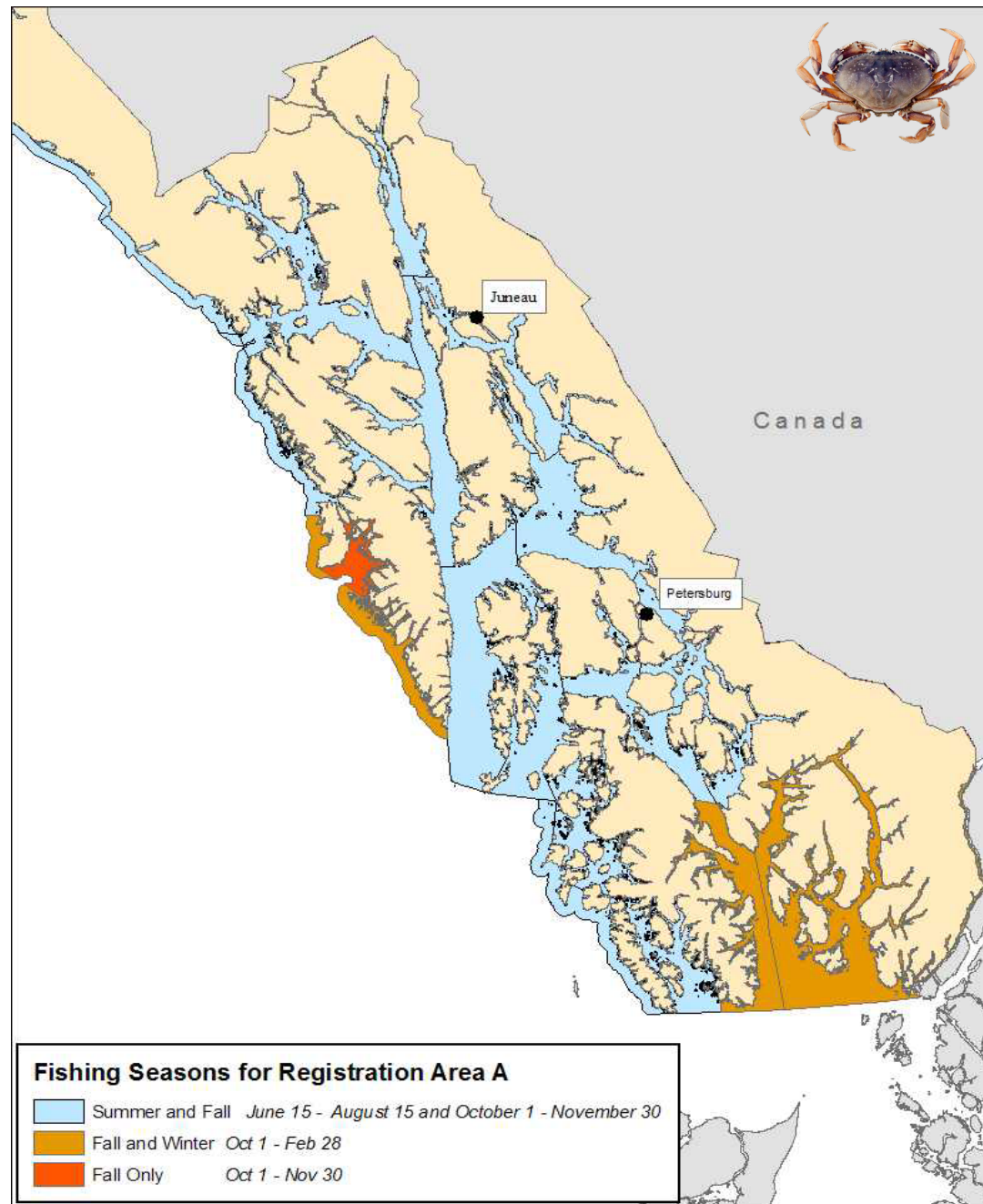
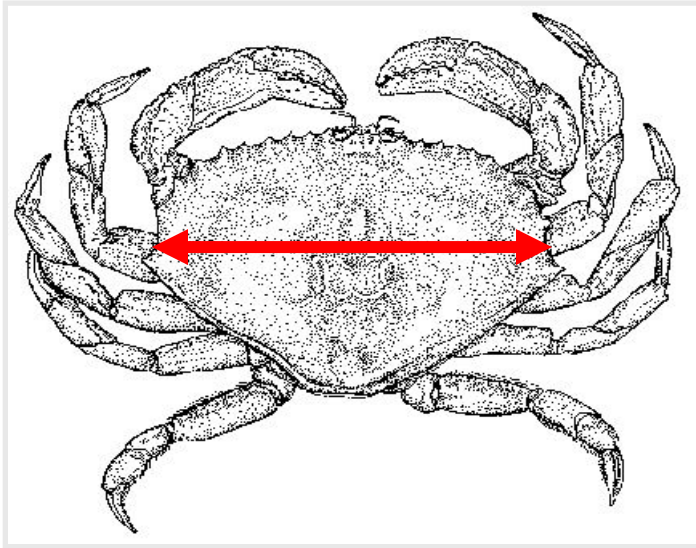
Dungeness Gear

- Rings, Pots, Dive Gear
- Rigid tunnel eyes ≤ 30 inches in perimeter
- Two circular escape rings $4 \frac{3}{8}$ inch (11cm) and escape mechanisms



Management Features and Controls

- Male only, 6.5 inches or greater
- Superexclusive
- Limited Entry: 75, 150, 225, and 300 pot permits
- Seasonal openings
- Management plan, no stock assessment
- No long-term gear storage in water and fishery stand-down provision





Predictive model to determine season length

$$y = mx_1 + nx_2 + ox_3 + b$$

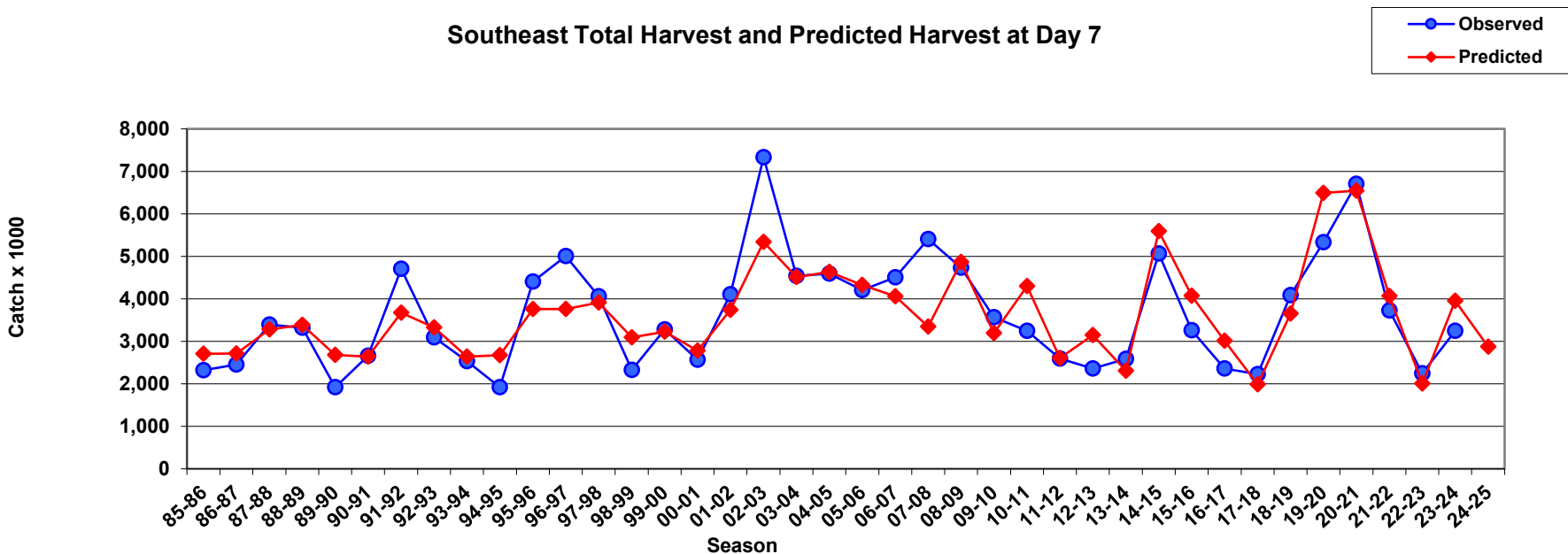
y: Predicted Catch

x_1 : week 1 catch

x_2 : week 1 permits

x_3 : % of previous year's total catch in week 1

Southeast Total Harvest and Predicted Harvest at Day 7





Juneau

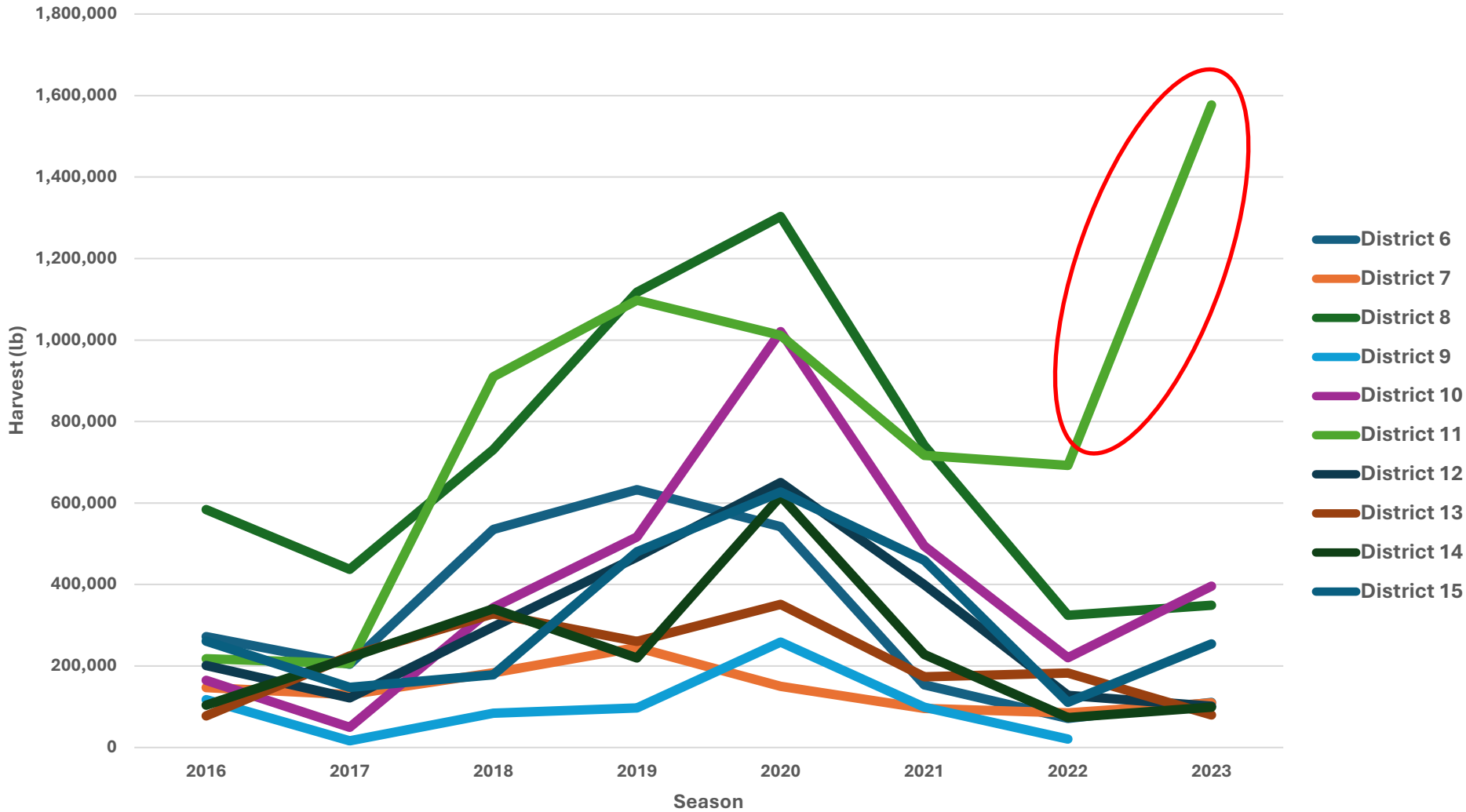
Sitka

Petersburg

Commercial Dungeness Harvest by District



Harvest by District



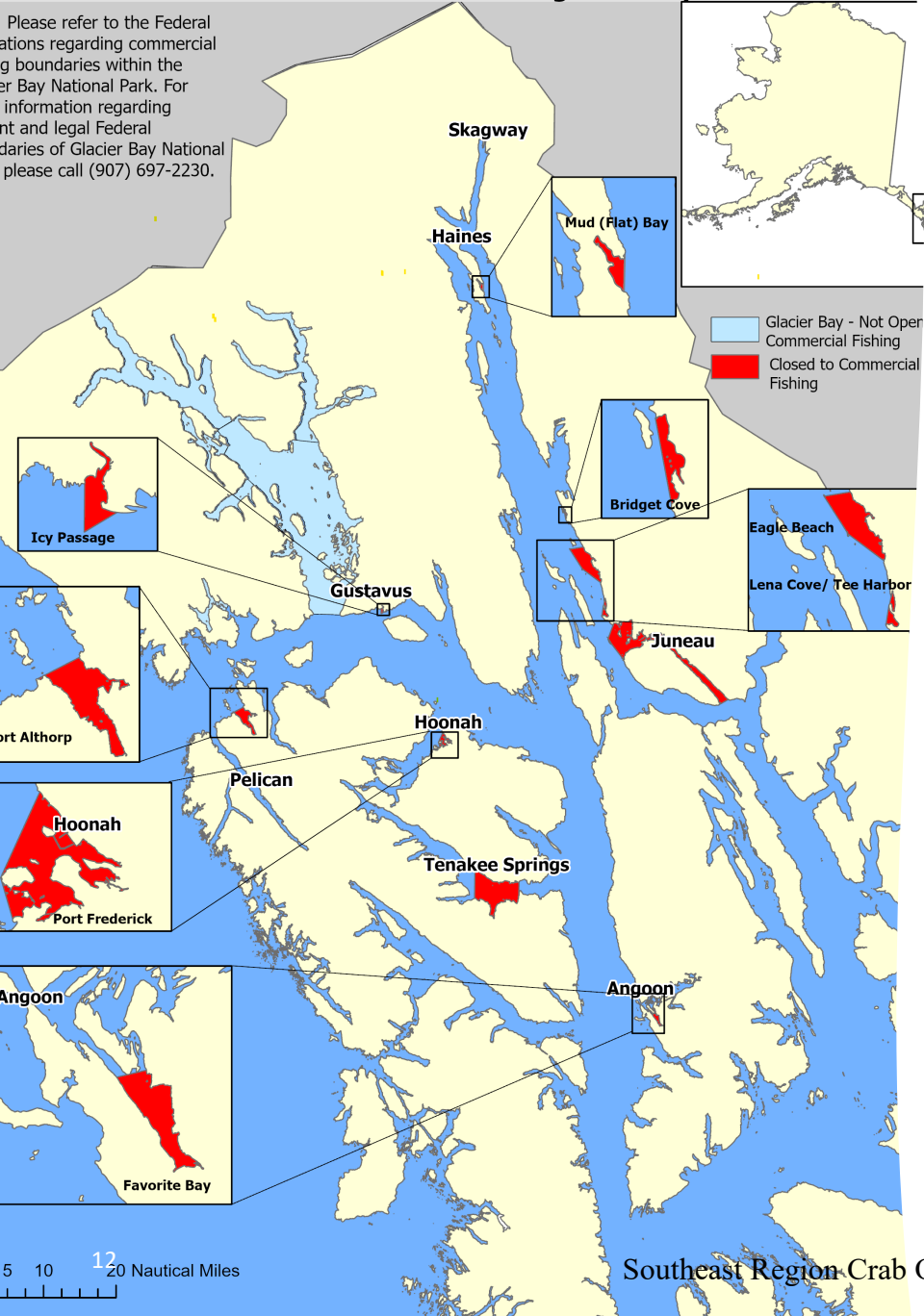
Fishery Consolidation Factors

- Alaska Board of Fisheries decisions have closed areas to commercial Dungeness crab fishing
- Bark deposition in bays that has negatively affected Dungeness crab habitat
- Nearshore development projects
- National Park Service excluding commercial Dungeness crab permit holders from Glacier Bay
- Sea otter predation



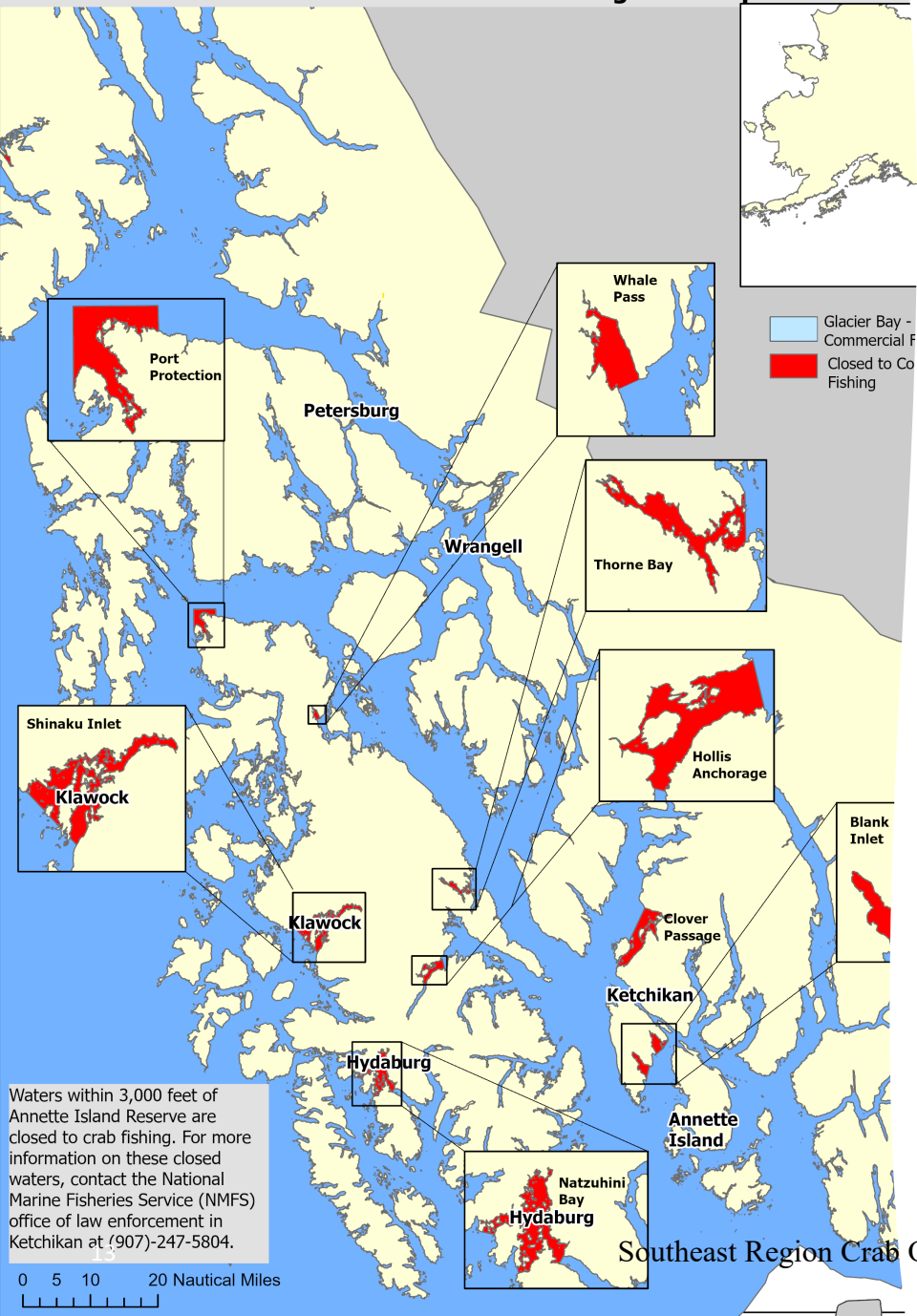
Areas of Registration Area A Closed to Commercial Dungeness Crab Fishing Refer to 5 AAC 32.150 for Legal Descriptions

Please refer to the Federal regulations regarding commercial fishing boundaries within the Glacier Bay National Park. For information regarding current and legal Federal boundaries of Glacier Bay National Park please call (907) 697-2230.



Areas Closed to Commercial Dungeness Crab Fishing Northern Southeast

**Waters of Registration Area A Closed to Commercial Dungeness Crab
Refer to 5 AAC 32.150 for Legal Descriptions**



Areas Closed to Commercial Dungeness Crab Fishing Southern Southeast

Waters within 3,000 feet of Annette Island Reserve are closed to crab fishing. For more information on these closed waters, contact the National Marine Fisheries Service (NMFS) office of law enforcement in Ketchikan at (907)-247-5804.



Port Sampling

Dungeness Crab Management

Legal Size

- **Proposal 250:** reduce the minimum size limit for male Dungeness crab from six and one-half-inches to six and one-quarter inches in subsistence and personal use fisheries in Region I



Dungeness Crab Management

Fishing Seasons for Registration Area A

- **Proposal 251:** change the start date for the commercial Dungeness crab fishery from June 15 to July 1.



Dungeness Crab Management

Operation of Other Gear in Registration Area A

- **Proposal 252:** allow a vessel participating in a Registration Area A Dungeness crab fishery to operate groundfish coil spring pots to catch bait



Dungeness Crab Management



Operation of Other Gear in Registration Area A

- **Proposals 253, 254, 256, & 257:** allow a person or vessel to participate in the Registration Area A commercial Dungeness crab fishery if they operated commercial shrimp pots in the 14 days immediately before the opening of the commercial Dungeness crab fishery
- **Proposal 255:** allow a person or vessel to participate in the Registration Area A commercial Dungeness crab fishery if they operated commercial, personal use, or subsistence shrimp pots in the 14 days immediately before the opening of the commercial Dungeness crab fishery



Dungeness Crab Management

Repeal Commercial Fishery Closures

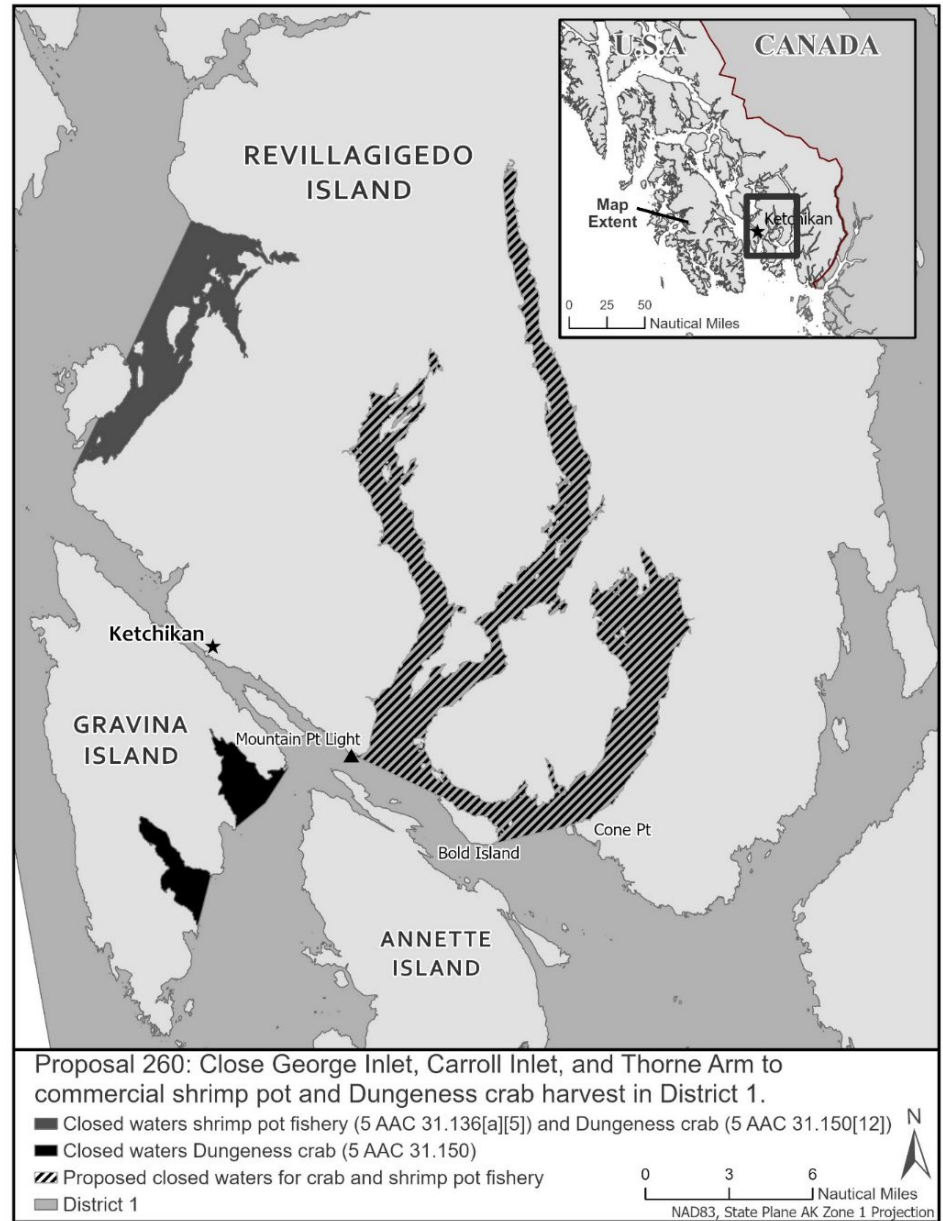
- **Proposal 258:** open some or all areas to commercial Dungeness crab fishing in Registration Area A
- **Proposal 259:** open all waters closed to commercial Dungeness crab fishing in Registration Area A between October 1 and November 30



Dungeness Crab Management

Establish Area Closures for Commercial Fishing

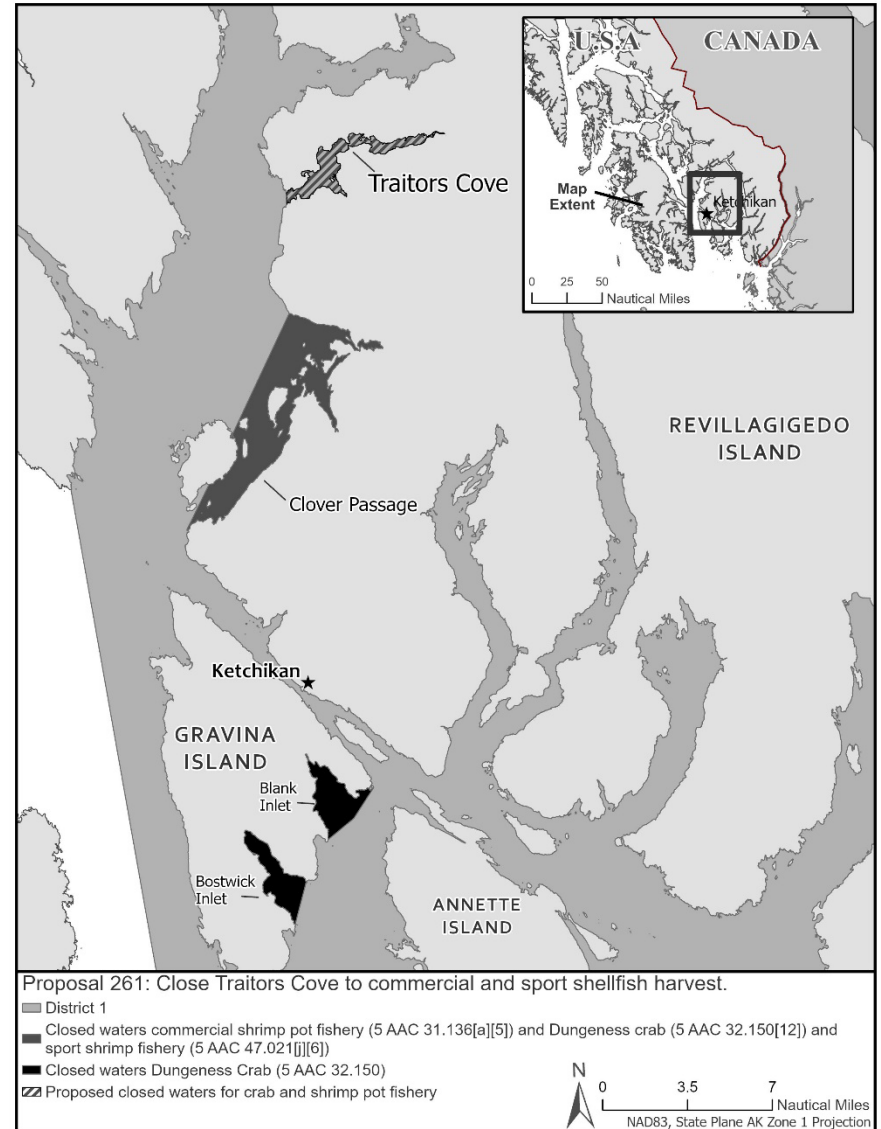
- **Proposal 260:** close George Inlet, Carroll Inlet, Thorne Arm to commercial Dungeness crab, king crab, Tanner crab, and commercial shrimp fishing



Dungeness Crab Management

Establish Area Closures for Commercial Fishing

- **Proposal 261:** close Traitors Cove to commercial and sport shellfish harvest.



Thank You!



Dungeness crab

Questions?