

# Current Status and Harvest Trends of Rockfish in the Prince William Sound Area



## **Brittany Blain-Roth**

Prince William Sound Area Manager  
Division of Sport Fish  
ADF&G Anchorage Office

## **Martin Schuster**

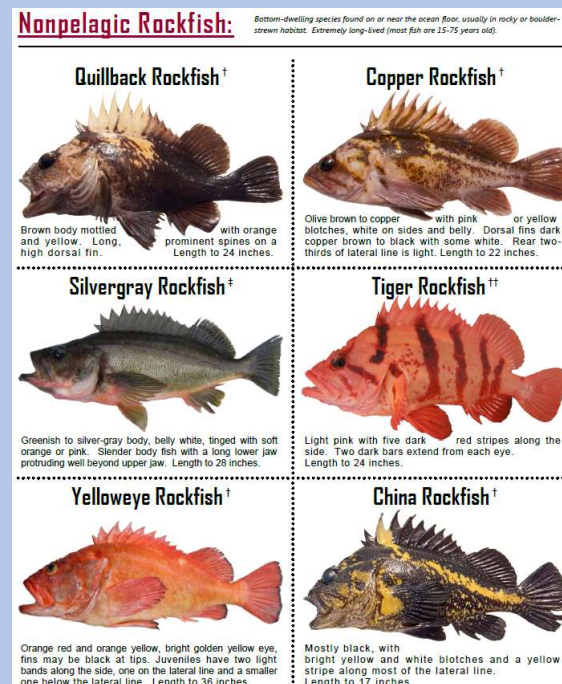
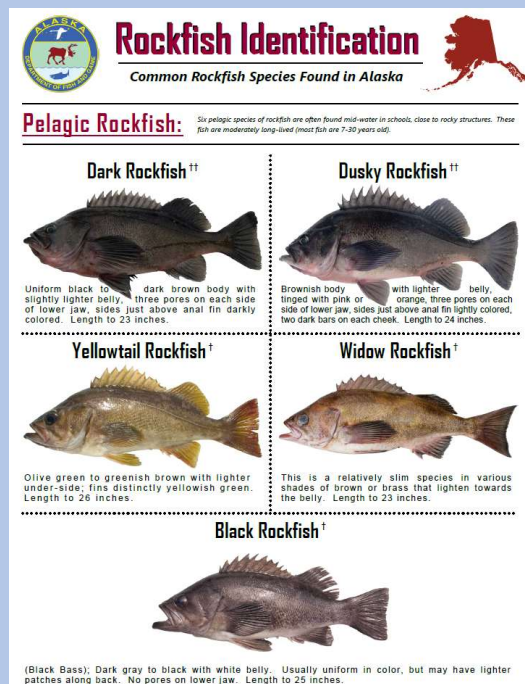
Prince William Sound Area Manager  
Division of Commercial Fisheries  
ADF&G Homer Office

# Rockfish

- Over 40 species

## Assemblages:

- Pelagic (Pelagic Shelf) (black rockfish)
- Nonpelagic (Demersal Shelf/Slope) (yelloweye rockfish)



# Rockfish Life History: Challenges to Management

- Long-lived
  - Black rockfish: 20 – 40 years (differ by sex)
  - Yelloweye rockfish: 60 to 100+ years
- Late to mature and skip spawn
  - Black rockfish*
    - Different maturity timing between sexes
      - Males mature earlier (5-6 years) than females (10-15 years)
      - Older females missing from the harvest data
  - Yelloweye rockfish*
    - 50% mature at 17 years old; nearly all mature at 30 years old
- Closed Swimbladder
  - Issues with resubmerging and discard mortality
- Slow growing
  - Black rockfish: females grow faster than males
- High fecundity (up to 3 millions eggs)
- Give live birth
  - Most rockfish release larvae in the summer
  - Black rockfish release larvae in the winter



Yelloweye rockfish with barotrauma



# ADF&G Statewide Rockfish Initiative (SRI)

## **Purpose:**

- Interdivisional statewide effort to develop short & long-term management & assessment strategies for black and yelloweye rockfish

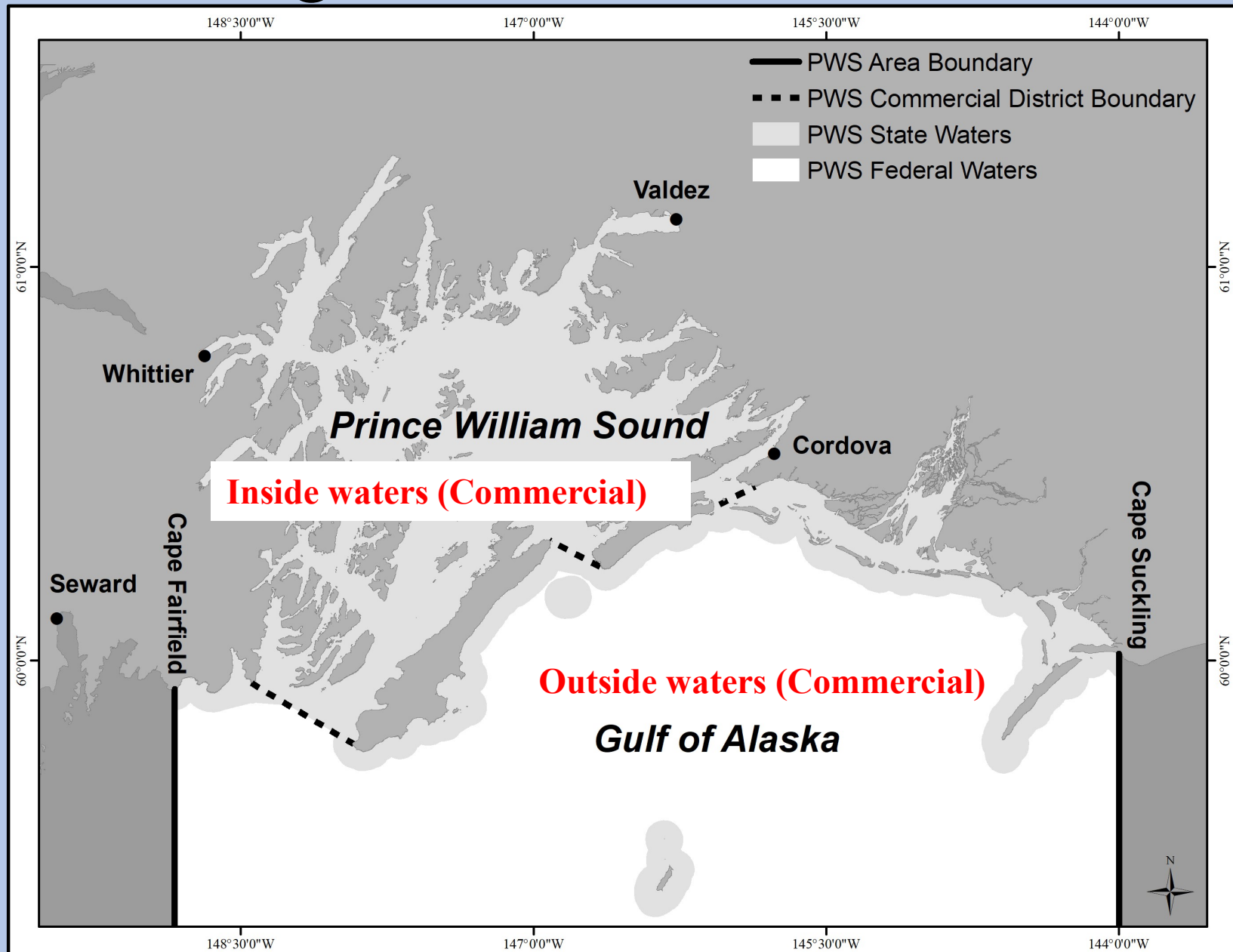
## **Issue:**

- No overarching management or assessment strategies
- Lack of abundance and harvest rate information
- Vulnerable to overharvest and require long recovery periods
- Growing level of concern – harvest trends, changes in size & age

## **Management Priorities:**

- Manage all fisheries under an appropriate harvest level or harvest rate
- Maintain optimum spawning populations

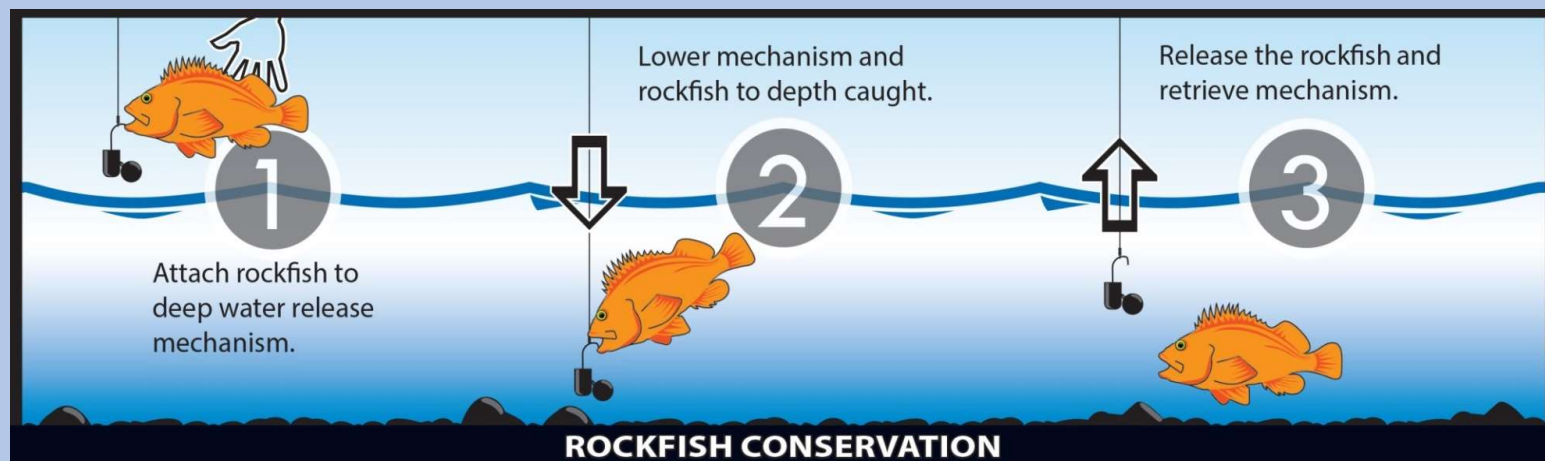
# Prince William Sound Management Area and Districts



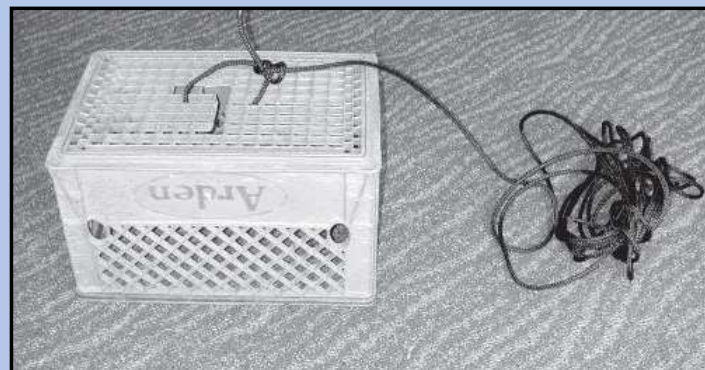
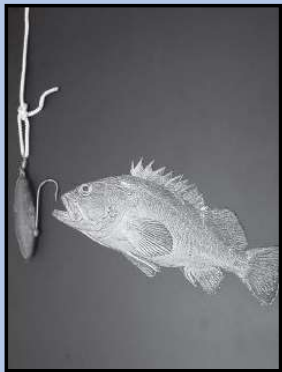


# Sport Fishery

- No management plan or Guideline Harvest Level (GHL)
- Managed by assemblage since 1995 (pelagic and nonpelagic)
- Bag and possession limits:
  - 4 rockfish per day (bag limit), 8 in possession of which only 1 nonpelagic per day and 1 in possession
- Gear: Mandatory use of a Deepwater Release Mechanism (statewide 2020)



# Deepwater Release Options



# Commercial Fishery

## Regulations

### Prince William Sound Rockfish Management Plan (5 AAC 28.265)

- All harvest occurs as bycatch to directed groundfish and Halibut fisheries
  - Bycatch allowances based on fishery
    - Pollock (0.50%)
    - Pacific cod (5%)
    - Halibut and lingcod (10%)
    - Sablefish (20%)
- 150,000 pound GHL for all rockfish species combined
- 5-day trip limit (all fisheries)
  - 3,000 pounds
- Mandatory retention



# Subsistence Fishery

## Regulations

- Amount necessary for subsistence of 7,500-12,500 rockfish (5 AAC 01.645(e))
- Gear limited to single hand troll, single hand-held line, or single longline, none of which may have more than 5 hooks
- Bag and possession limits vary by season
  - May 1 to September 15: 4 per day, 8 in possession, only 2 nonpelagic rockfish
  - September 16 to April 30: 8 per day, 8 in possession, only 2 nonpelagic rockfish

# How do we get our harvest data?

## Commercial Fisheries

- Fish Ticket harvest information
- Port sampling



## Subsistence

- Household Surveys

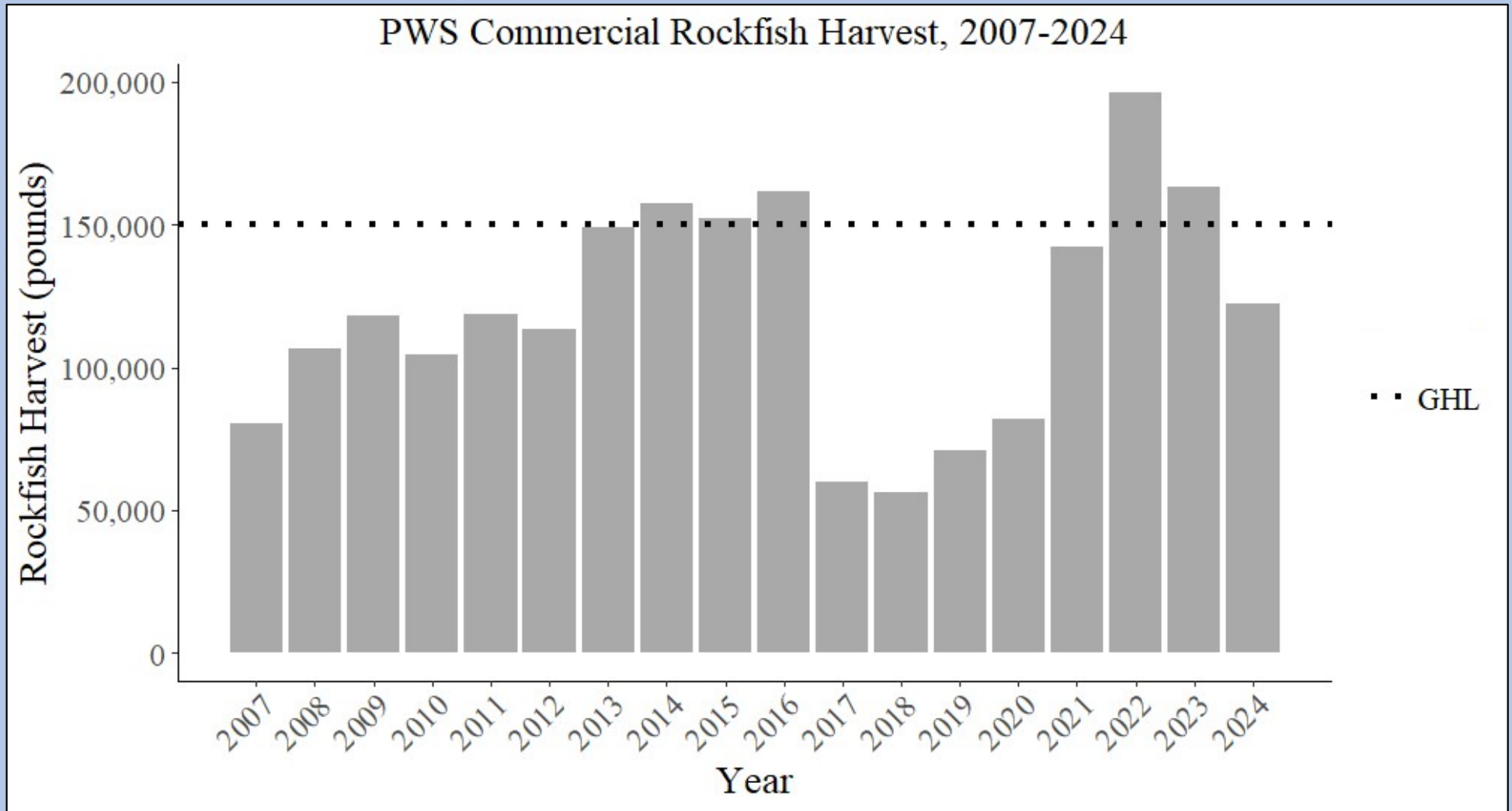
## Sport Fisheries

- Charter Logbook
- Statewide Harvest Survey
- Port sampling



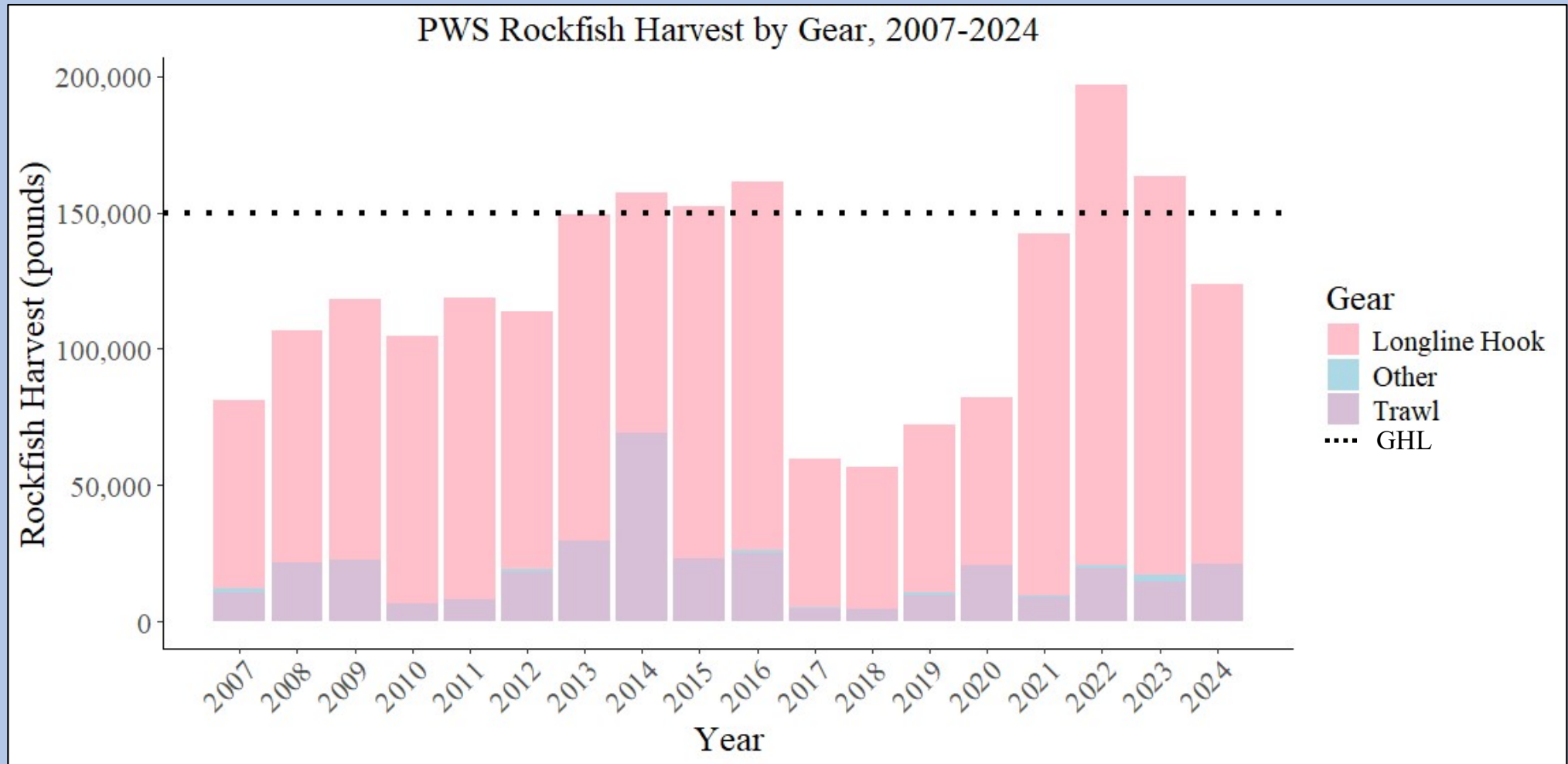
# PWS Commercial Rockfish

## Harvest



# PWS Commercial Rockfish

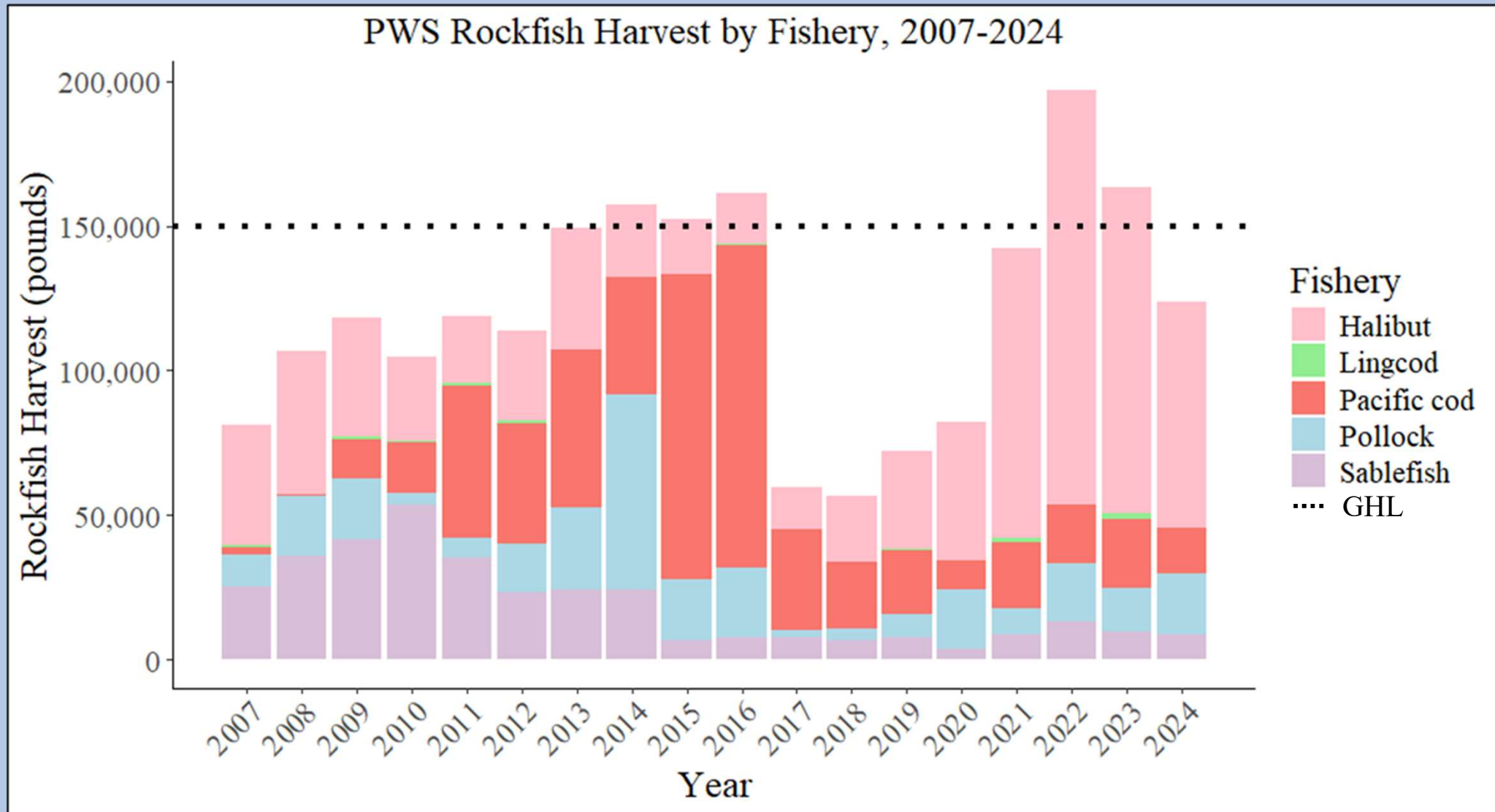
## Harvest





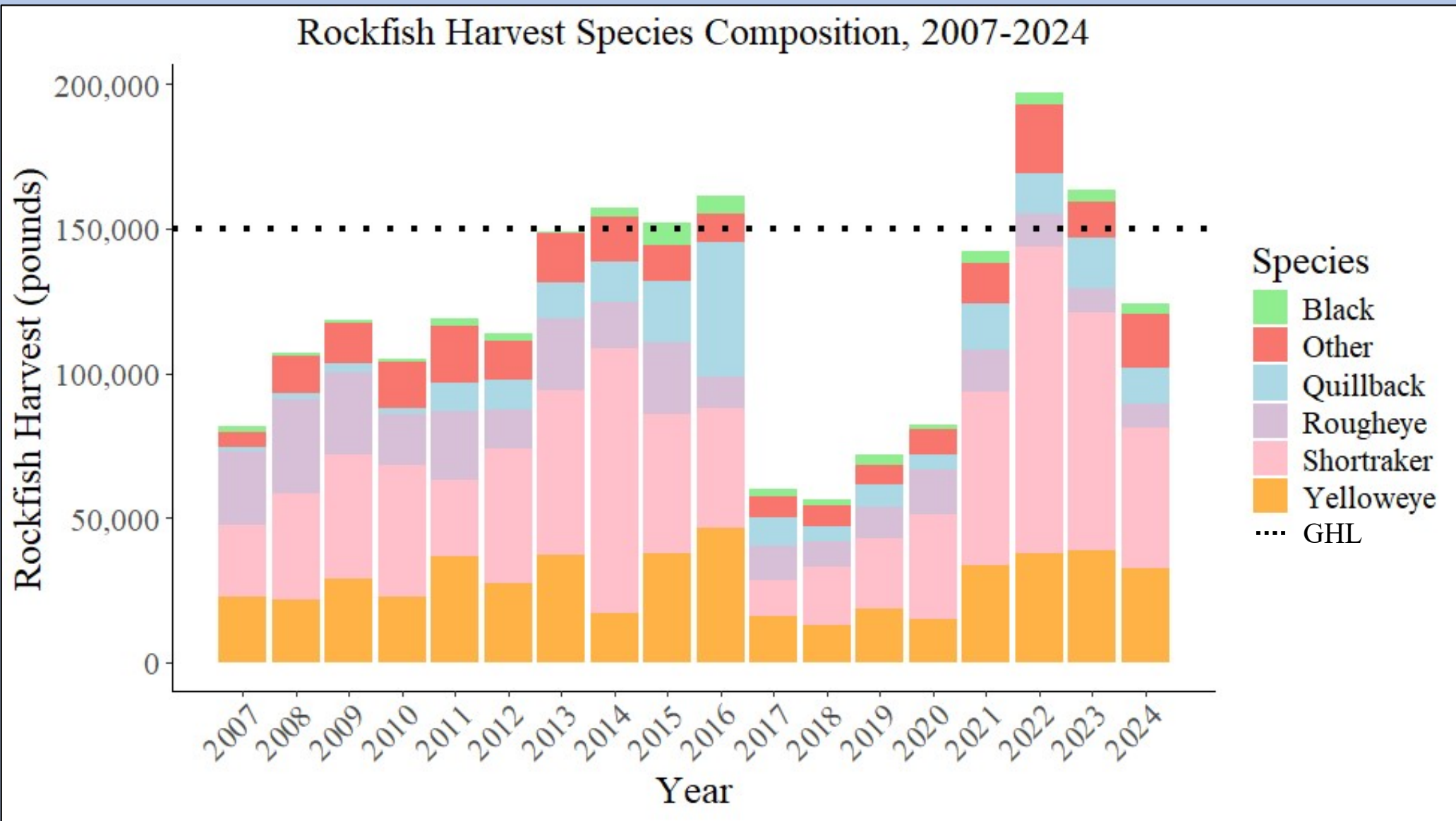
# PWS Commercial Rockfish

## Harvest



# PWS Commercial Rockfish

## Harvest

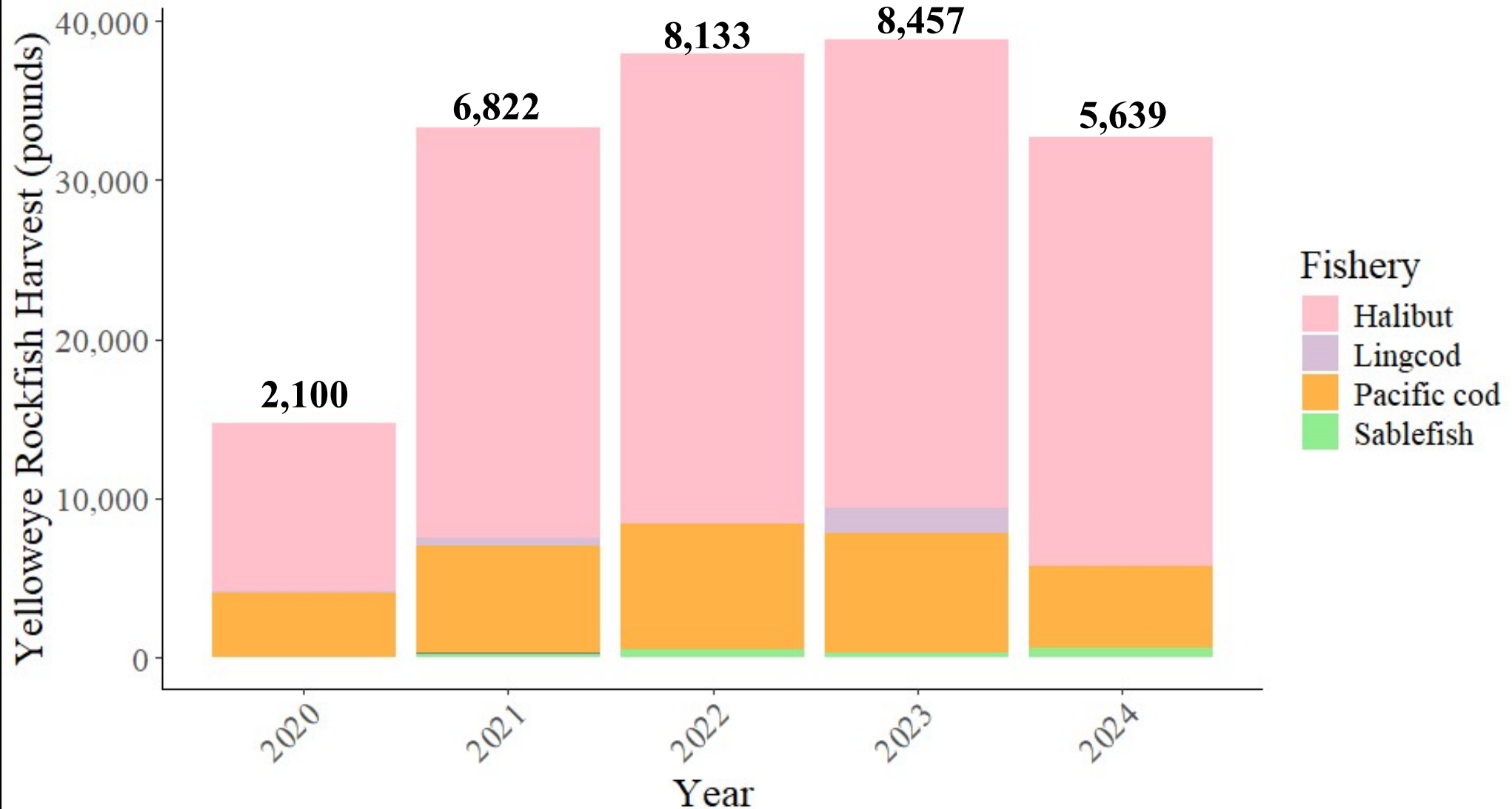




# Yelloweye Rockfish

## Commercial Harvest

PWS Yelloweye Rockfish Harvest by Fishery, 2020-2024

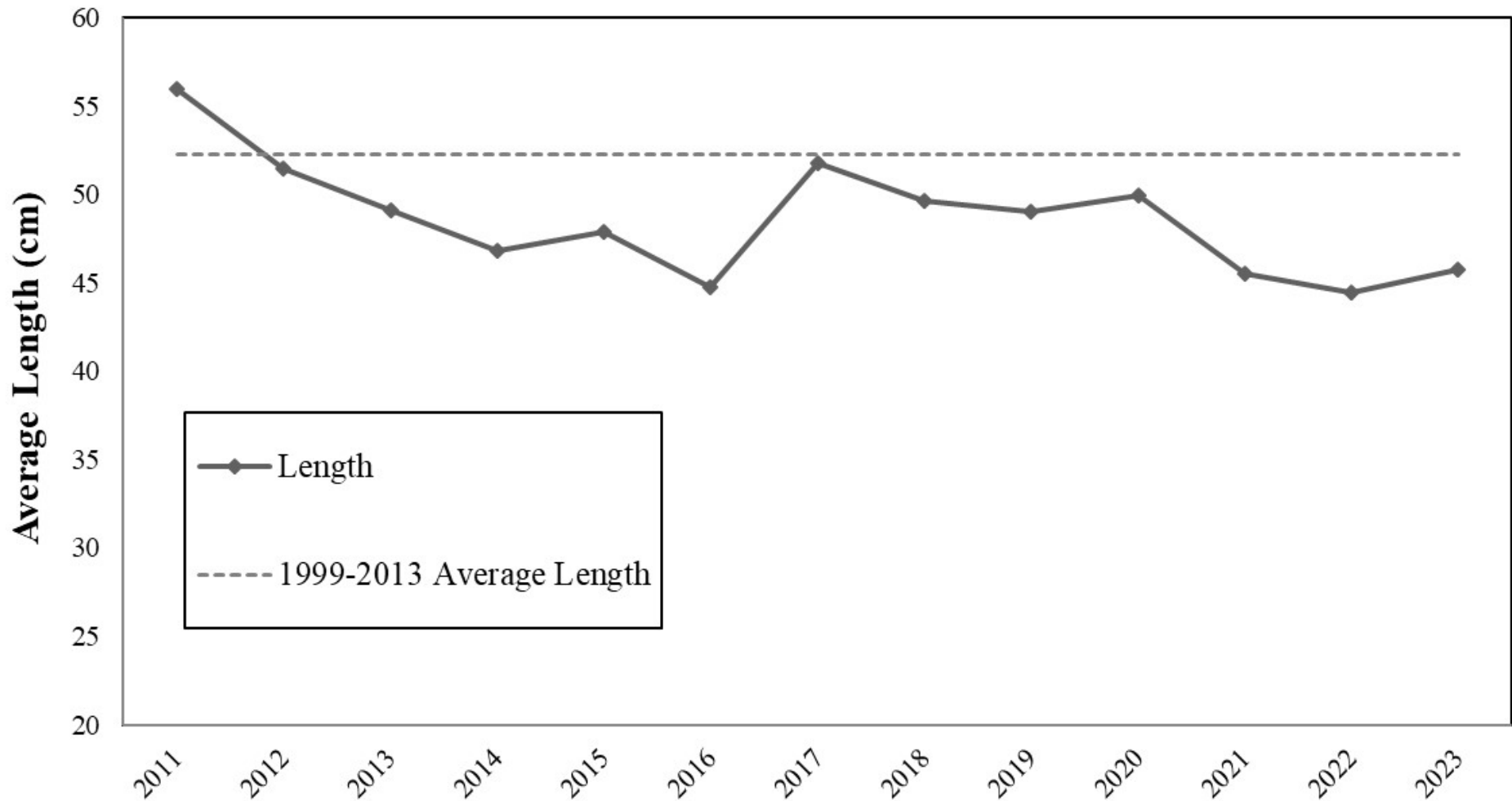




# Yelloweye Rockfish

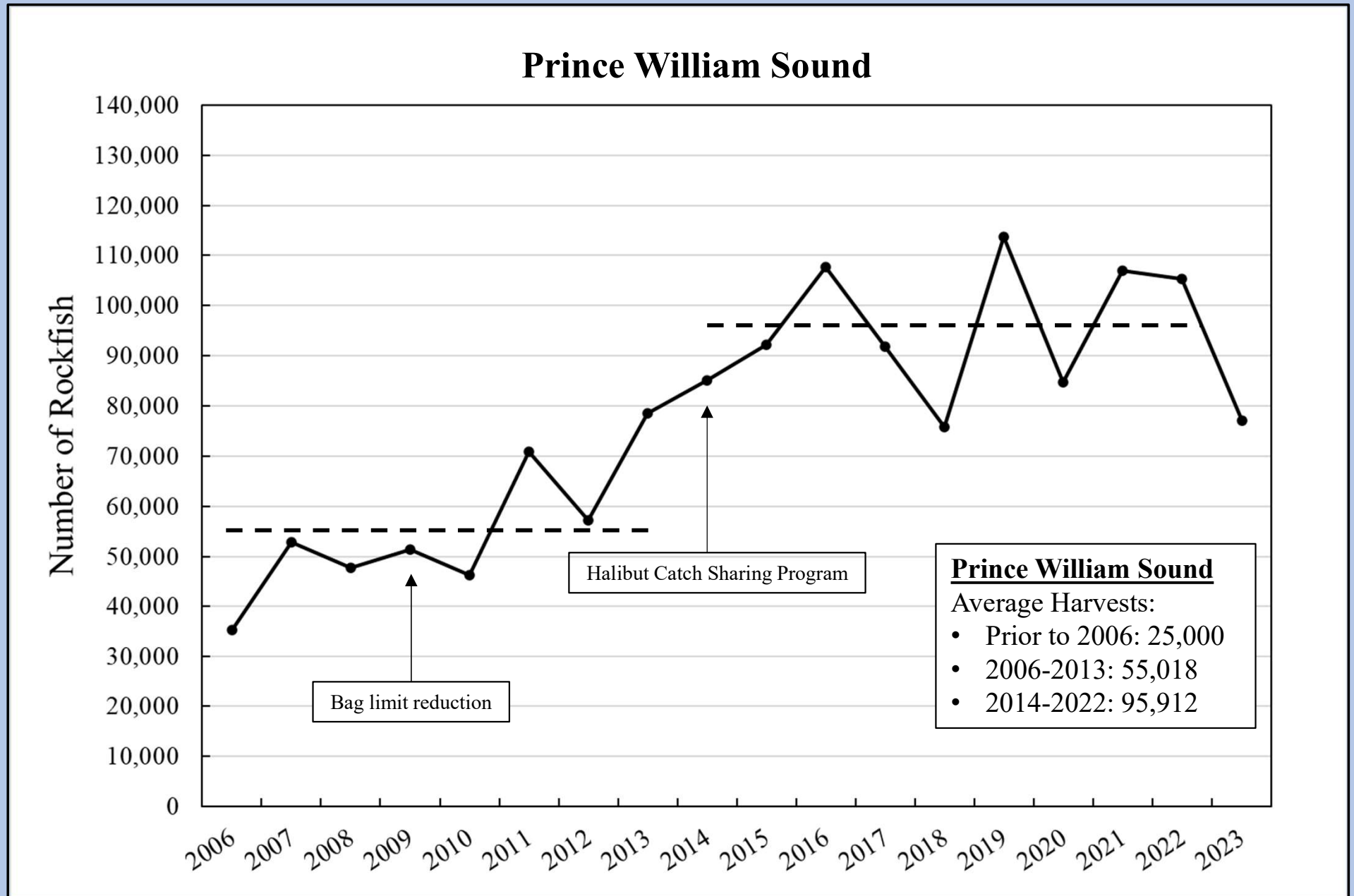
## Commercial Harvest

**Mean Length of Yelloweye Rockfish 2011-2023**



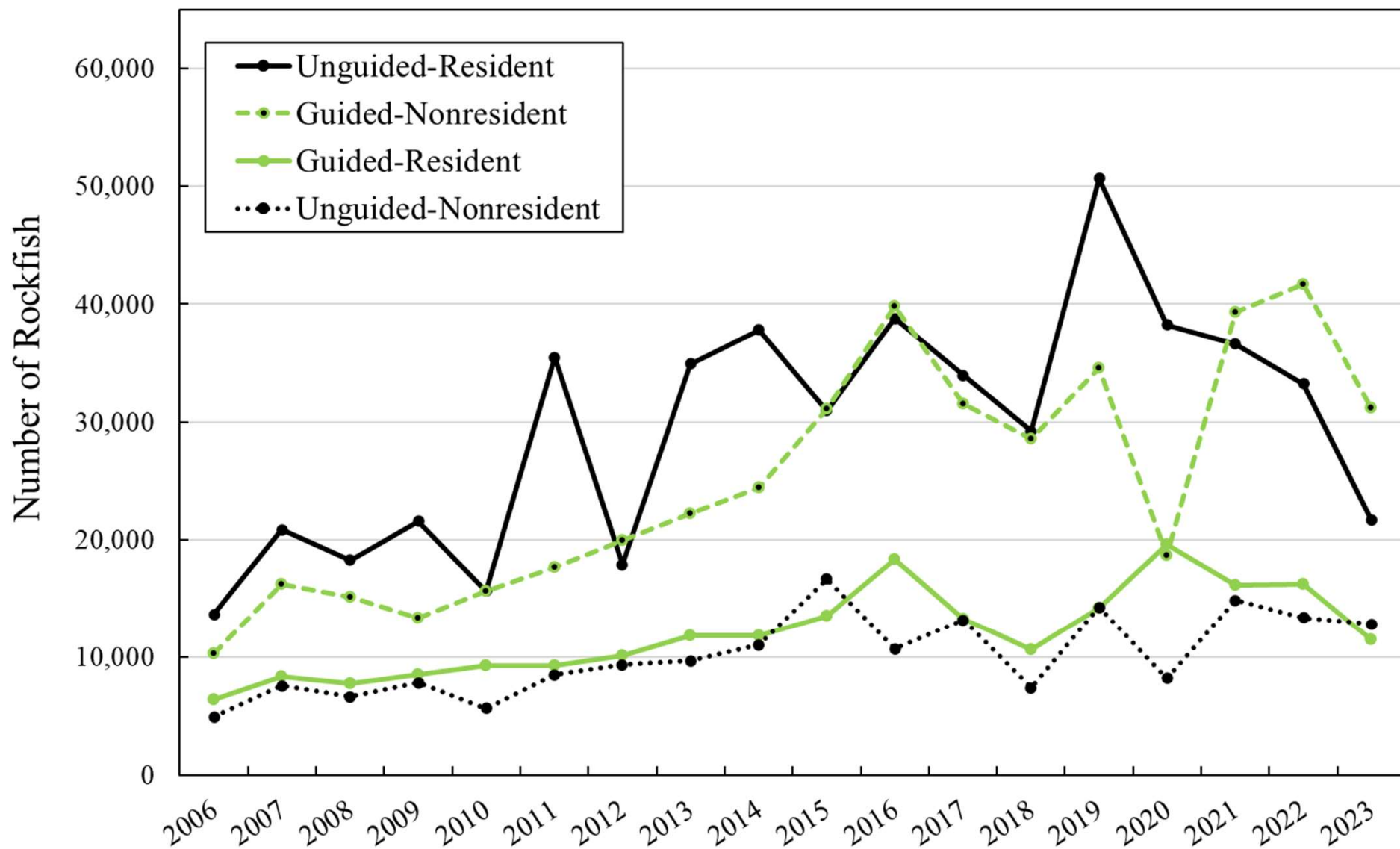


# Sport Fishery Harvest—Total Rockfish

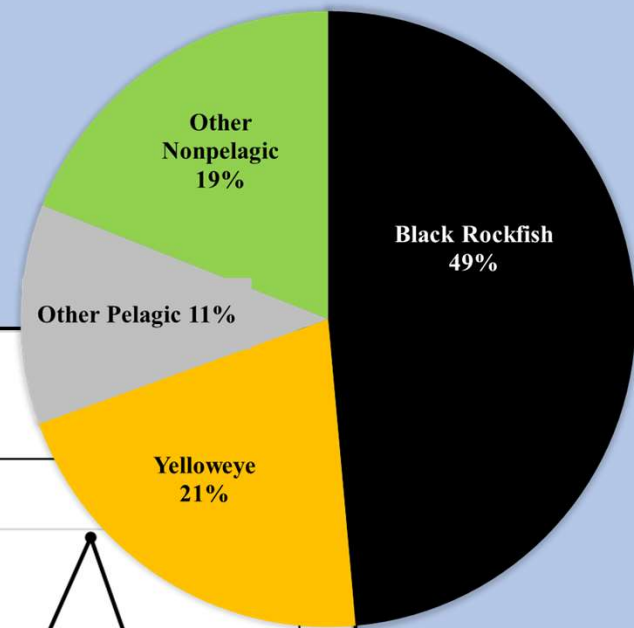
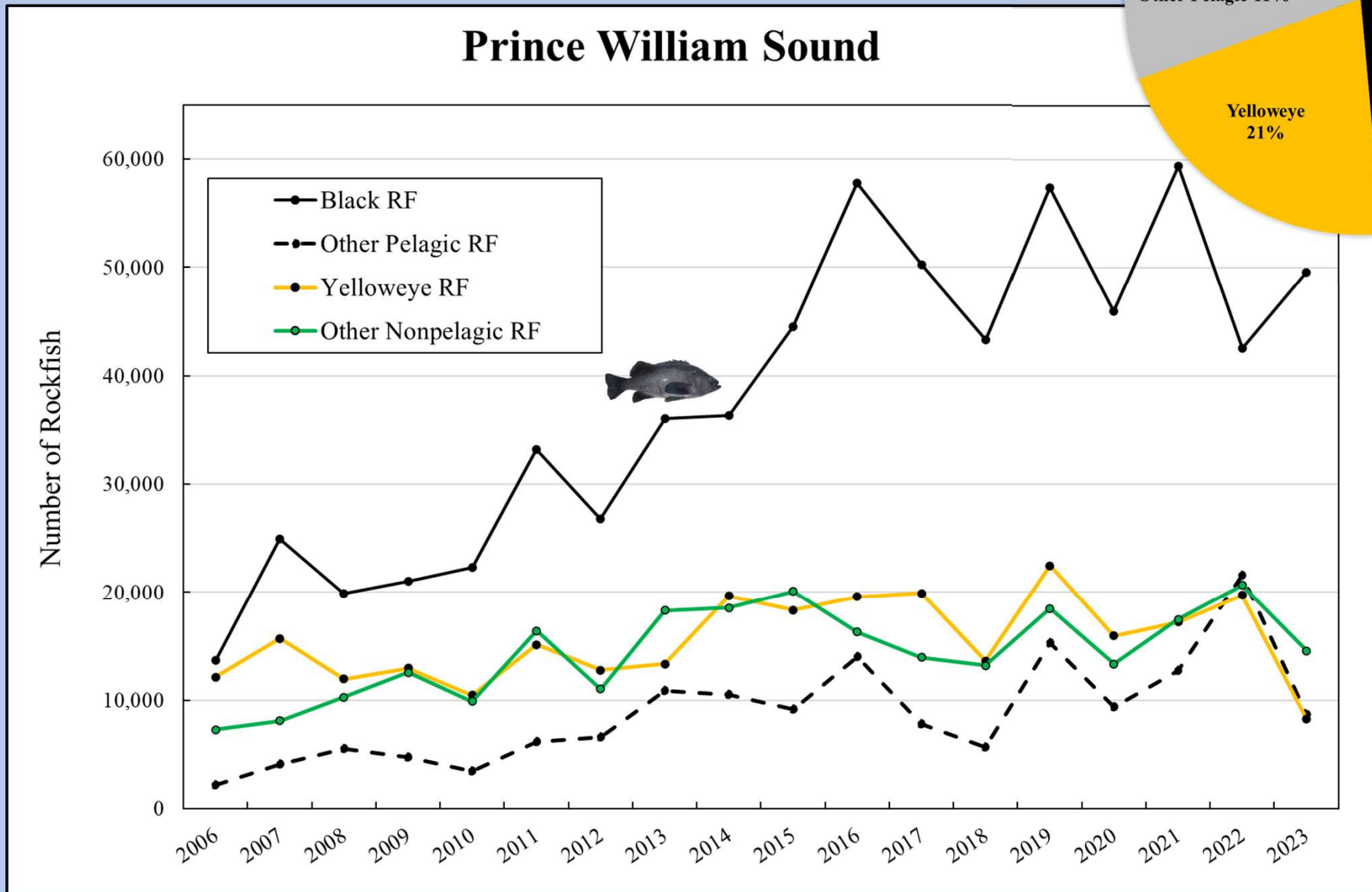


# Sport Rockfish Harvest by User & Residency

## Prince William Sound



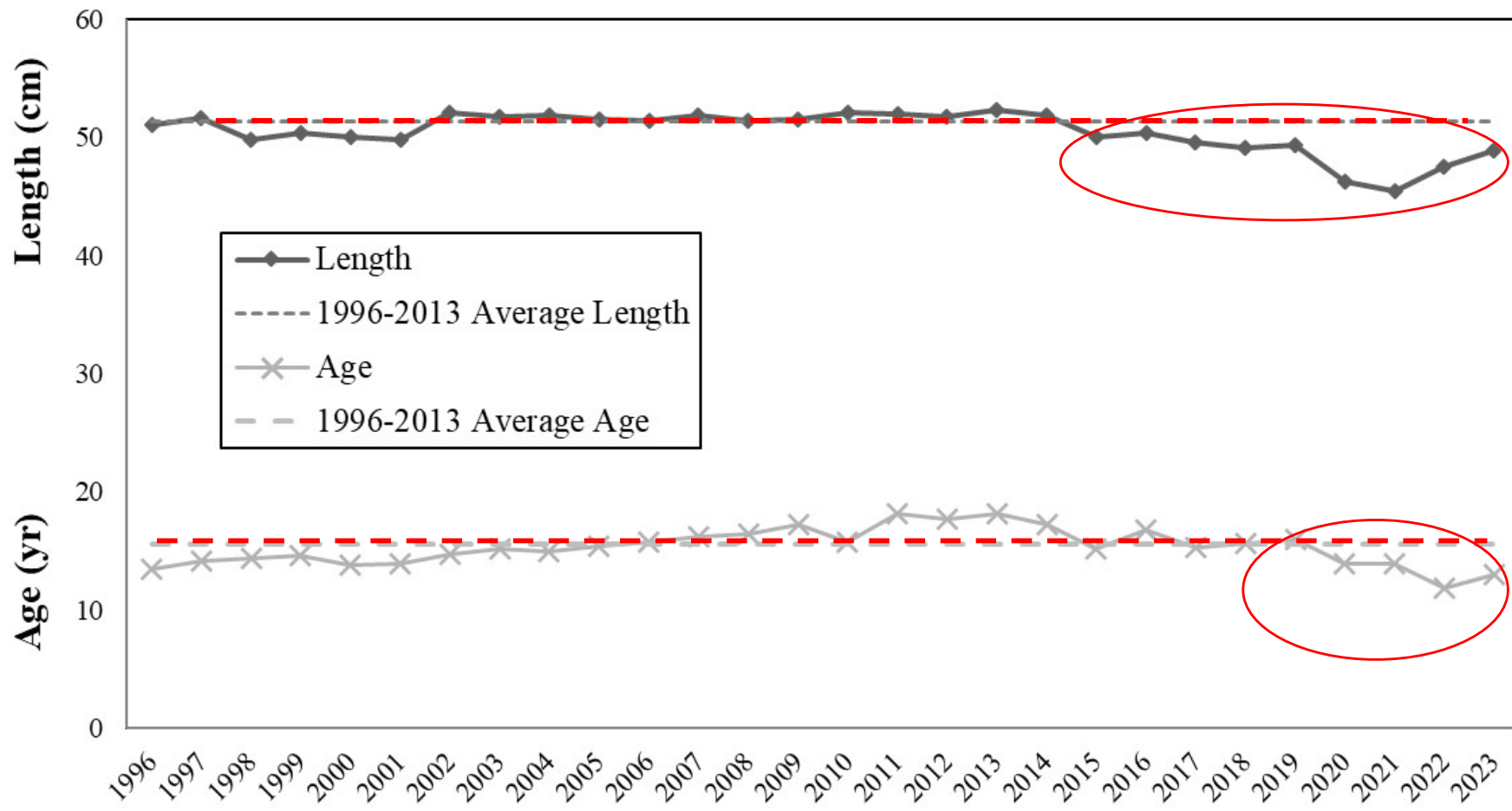
# Sport Fish Rockfish Harvest: By Species





# Black Rockfish–Sport Harvest Length & Age Compositions

## Prince William Sound





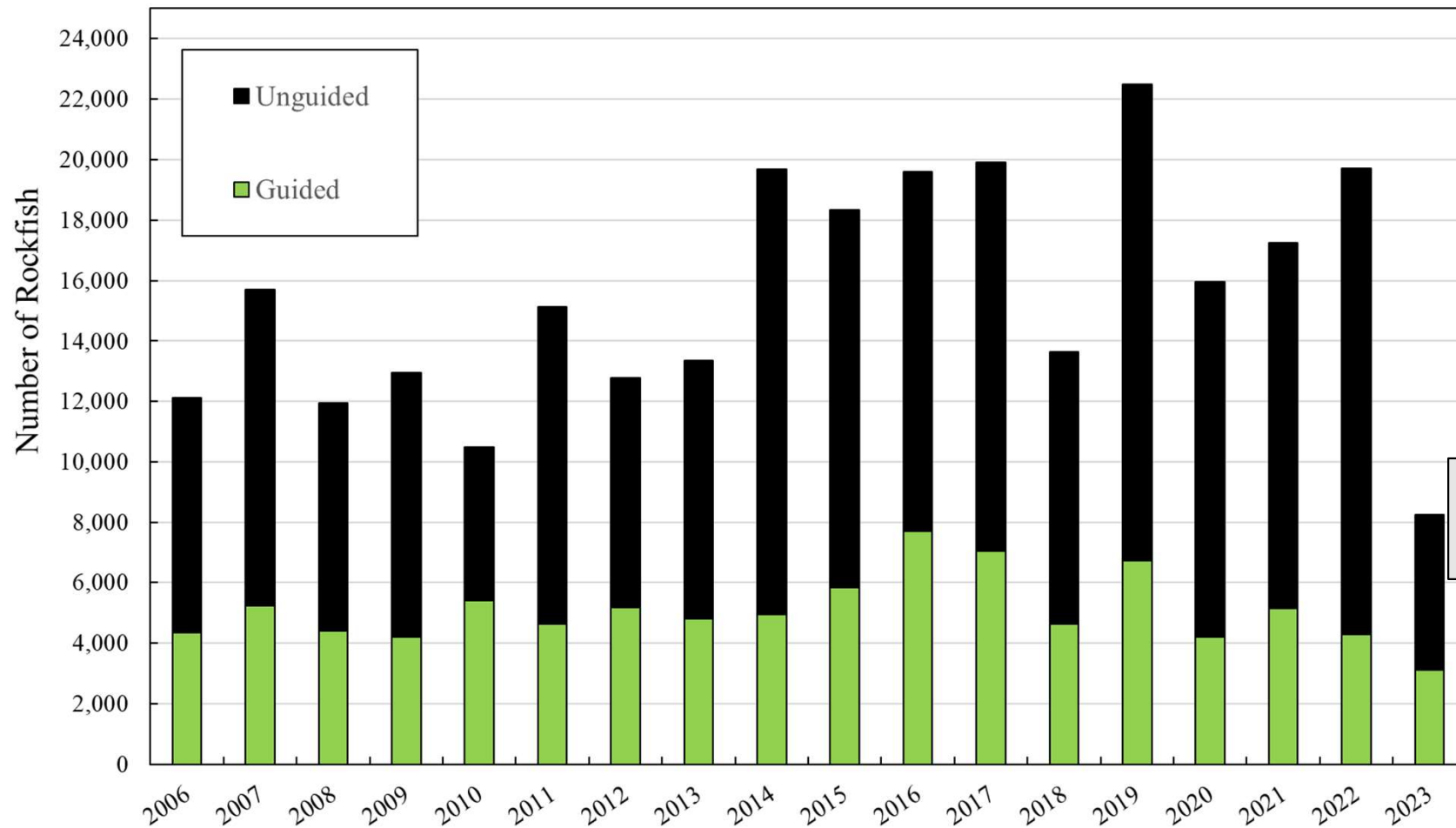


# Yelloweye Rockfish–Sport Harvest

## Prince William Sound

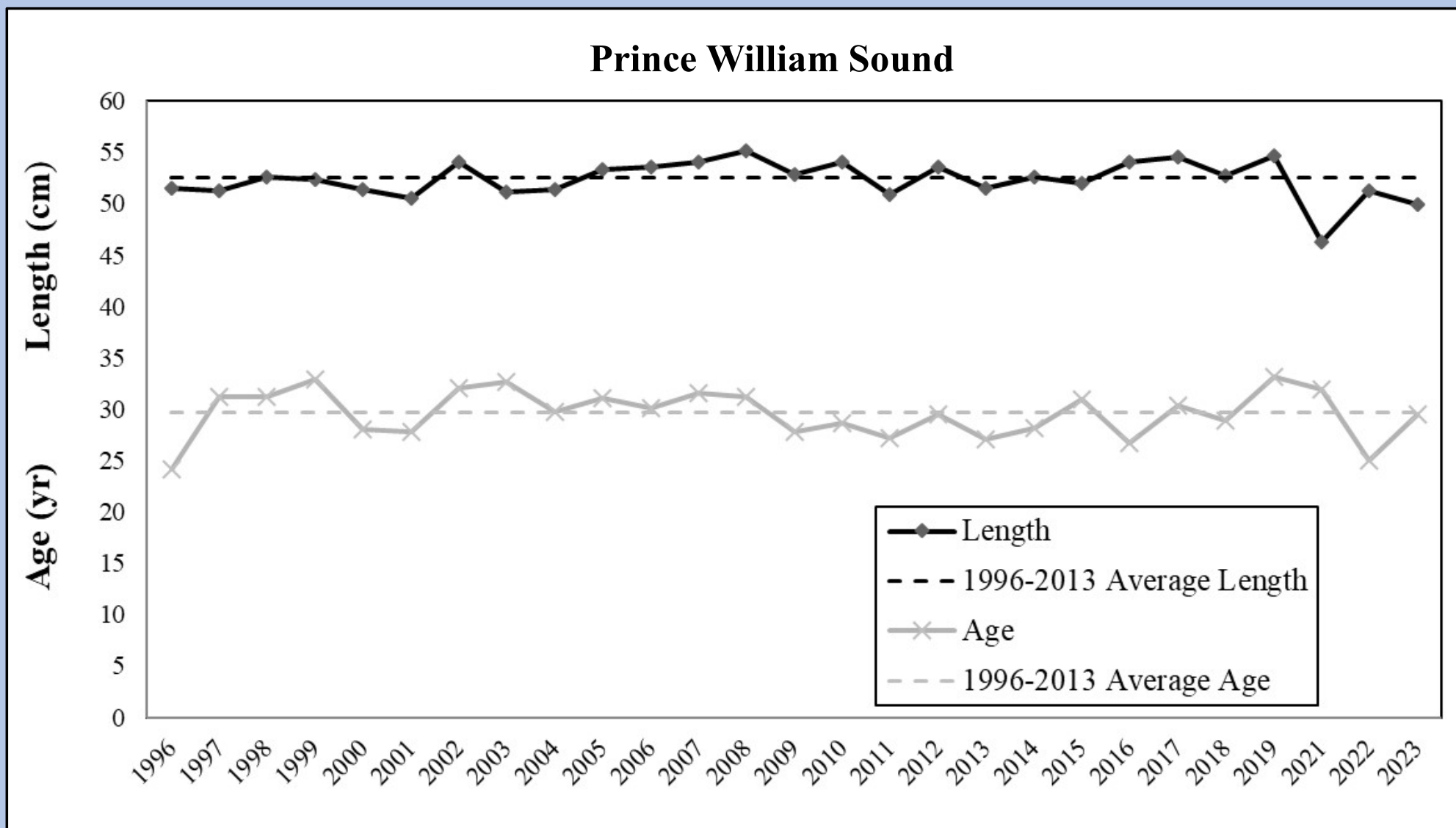
### Average Harvests

- 2006-2013: 13,061
- 2014-2022: 18,518



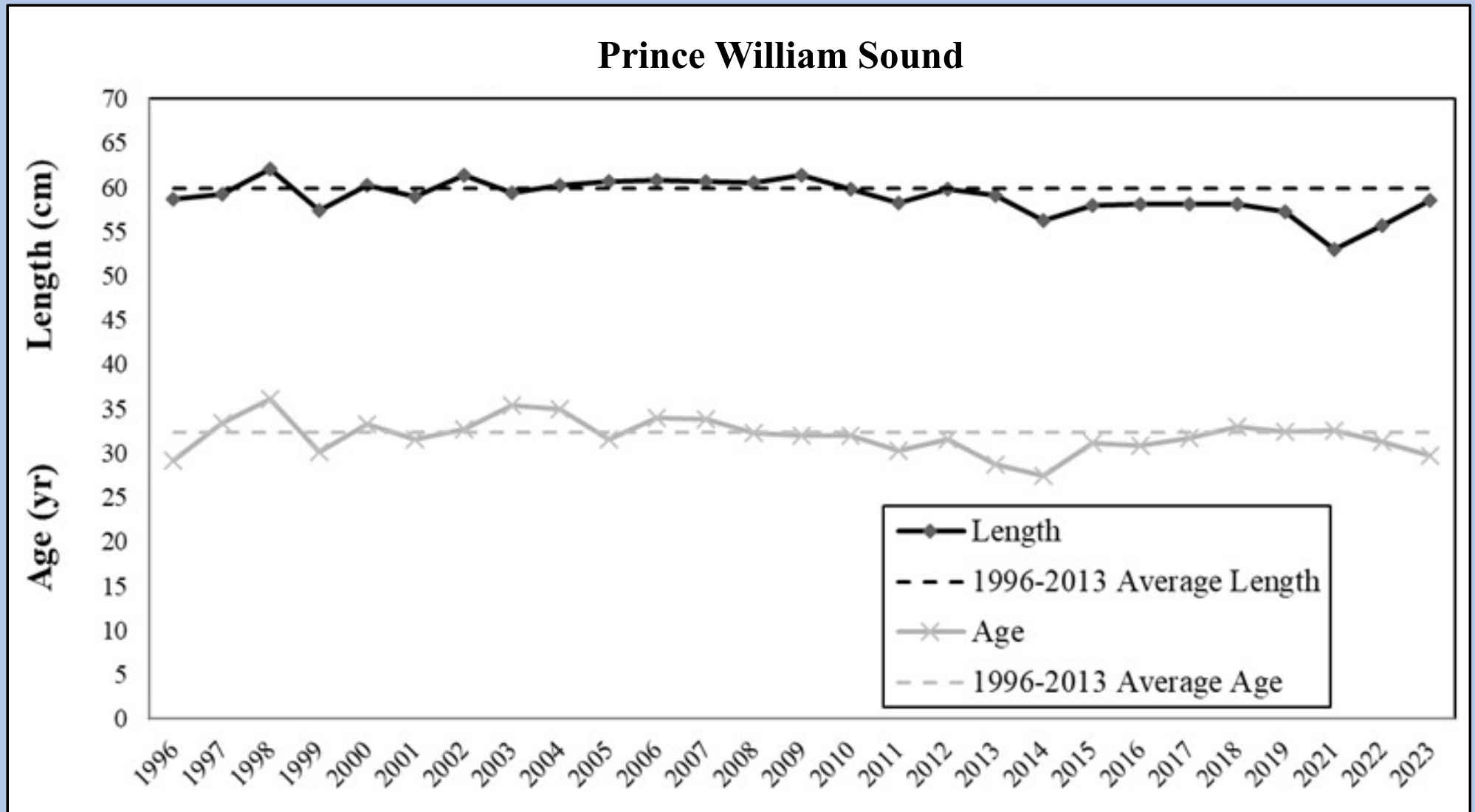


# Yelloweye Rockfish–Sport Harvest Length & Age Compositions: **Inside waters**



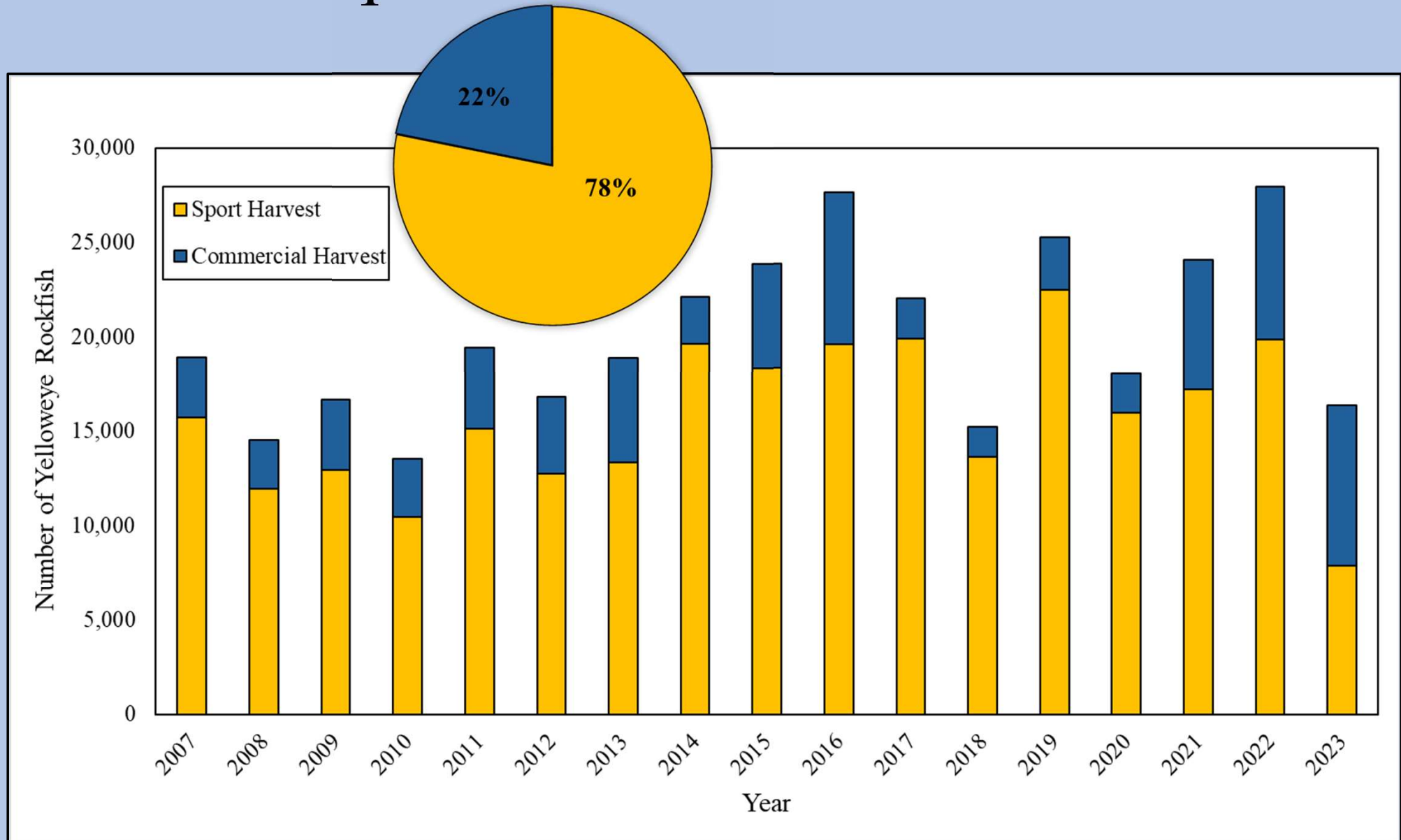


# Yelloweye Rockfish–Sport Harvest Length & Age Compositions: **Outside waters**





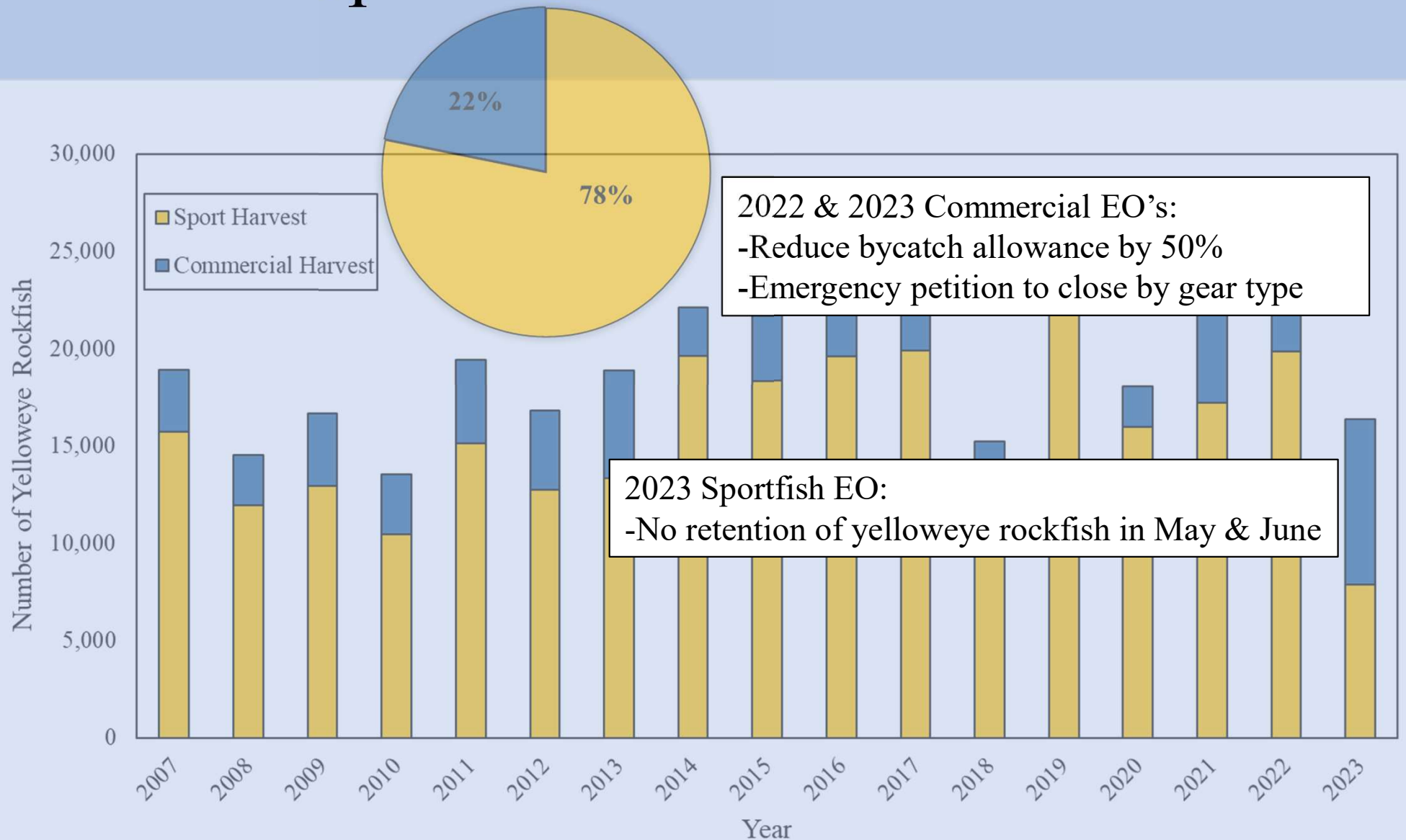
# Total Yelloweye Rockfish Harvest: Sport & Commercial Fisheries







# Total Yelloweye Rockfish Harvest: Sport & Commercial Fisheries





# Yelloweye Rockfish –PWS *Inside* Preliminary Stock Assessment

Department Goal: Develop harvest guidelines that conserve yelloweye rockfish fisheries while providing harvest opportunity based on the sustained yield principle

## **Preliminary Stock Assessment Results:**

- Stock assessment indicates downward trends in mean length and age from the commercial and sport harvests
- Removals have likely been above sustainable levels in most years since 2000

## **What we have done:**

- Sport: reduced harvest with a seasonal closure for yelloweye rockfish in 2023 & 2024
- Commercial: reduced bycatch allowance for all species combined and filed emergency petition and proposal for permanent change during this meeting

## **By the next PWS BOF meeting:**

- Finalize stock assessment
- Determine sustainable harvest levels (all fisheries combined)
- Develop a PWS yelloweye rockfish management plan (all fisheries combined)
- Continue to allow harvest opportunity in the sport fishery and bycatch allowance in the commercial



# Sport Fishery Summary



- Annual rockfish harvest is above historical harvest levels
- Effort towards rockfish has increased
- Length and ages are showing declines in the port sampling data
- 2023 & 2024 Management Actions
  - *Emergency Order*: Reduced the bag and possession limits for all rockfish in 2023 & 2024 (concurrent with North Gulf Coast and Lower Cook Inlet)
  - *Emergency Order*: Yelloweye seasonal (spawning) closure: May & June 2023, April–June 2024
  - Preliminary harvest estimates
    - Estimated harvest reduction:
      - 2023 Rockfish: 18%
      - 2023 Yelloweye rockfish: 28%
      - 2024: data not final
- Sport Proposals
  - Proposals: 27& 29: Department proposals to reduce bag limit & provide delegation of authority for yelloweye
  - Proposal 28: Different bag limits for inside and outside waters
  - Proposal 82: Split area into inside/outside for different bag limits



# Commercial Fishery Summary



- Rockfish management and harvest by fishery
  - Longline hook fisheries harvest most rockfish
  - Halibut fishery
- Management Actions
  - Reduction of bycatch allowances from 2022–2024
  - Delegation of authority to close areas by gear type in 2023
- Authority to close areas by gear type
  - Proposal 5



# Future Work



- Finalizing a yelloweye rockfish stock assessment model to identify sustainable harvest levels
- Develop comprehensive inter-divisional management strategies for rockfish
- Continue and expand port sampling observations of sport and commercial harvest
- Initiate fishery independent surveys (if funding available)

# Questions?



## Additional information available:

- Statewide Rockfish Initiative: [www.adfg.alaska.gov/rockfish](http://www.adfg.alaska.gov/rockfish)
- Sport Fisheries in the Prince William Sound Management Area, 2023 to Inform the Alaska Board of Fisheries in 2024
- Commercial Fisheries Prince William Sound Area Groundfish Management Report, 2021-2023