

# Prince William Sound Commercial and Noncommercial Shrimp Pot Fisheries

Martin Schuster

Division of Commercial Fisheries

Groundfish and Shellfish Area Management Biologist

Prince William Sound and Cook Inlet

Donald Arthur

Division of Sport Fish

Assistant Area Management Biologist

Prince William Sound and North Gulf Coast



This report can be found in RC 3 Tab 6



# Outline

- Proposals
- Life history
- Shrimp pot survey
- Total allowable harvest (TAH) and guideline harvest level (GHL)
- Commercial management
- Noncommercial management
- Surplus production estimates and the 2025 fishery



# 2025 Shrimp Pot Proposals

- Develop comprehensive PWS shrimp pot management plan and form a PWS shrimp task force (299)
- Restrict noncommercial harvest to commercial shrimp management areas (300)
- Modify or remove PWS total allowable harvest (TAH) (301, 302, and 303)
- Delay commercial and noncommercial season by 2 weeks (304)
- Restrict number of pots on noncommercial vessels (305)
- Require daily reporting in commercial fishery (306)
- Change start time on opening day of fishery (307)
- Reduce commercial pot limit to 25 pots (308)
- Remove commercial area rotation (310)
- Allow catcher vessels to operate as tenders (311)



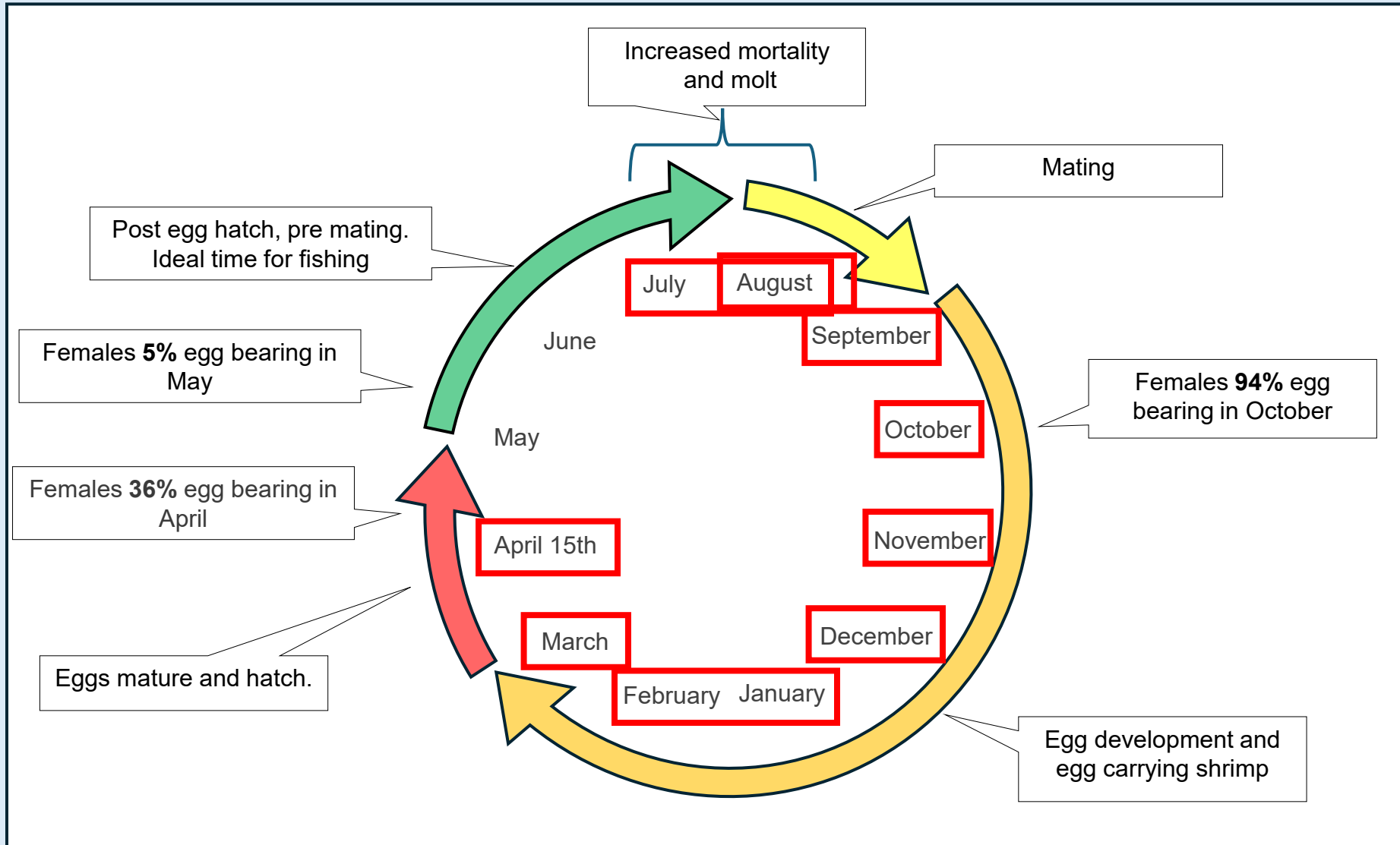
# Spot Shrimp Life History

- Life span of 7 to 10 years
- Sexually mature at 3 to 5 years
  - Marketable size at 3 to 4 years
- Protandrous hermaphrodites
  - Begin life as males
  - Transition to female later in life
    - Average age of transition between 5 and 6 years





# Spot Shrimp Life History

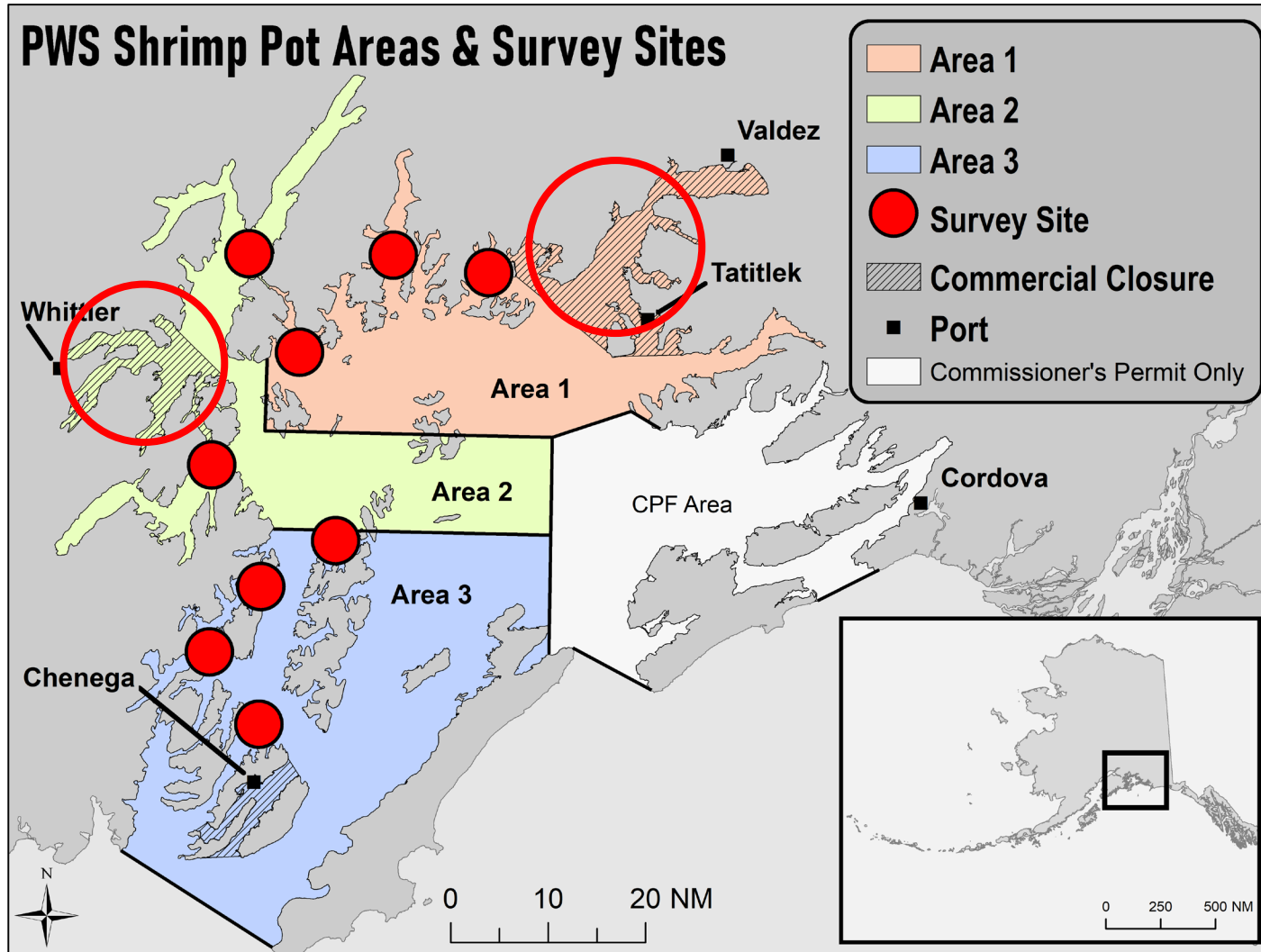


# PWS Shrimp Pot Survey

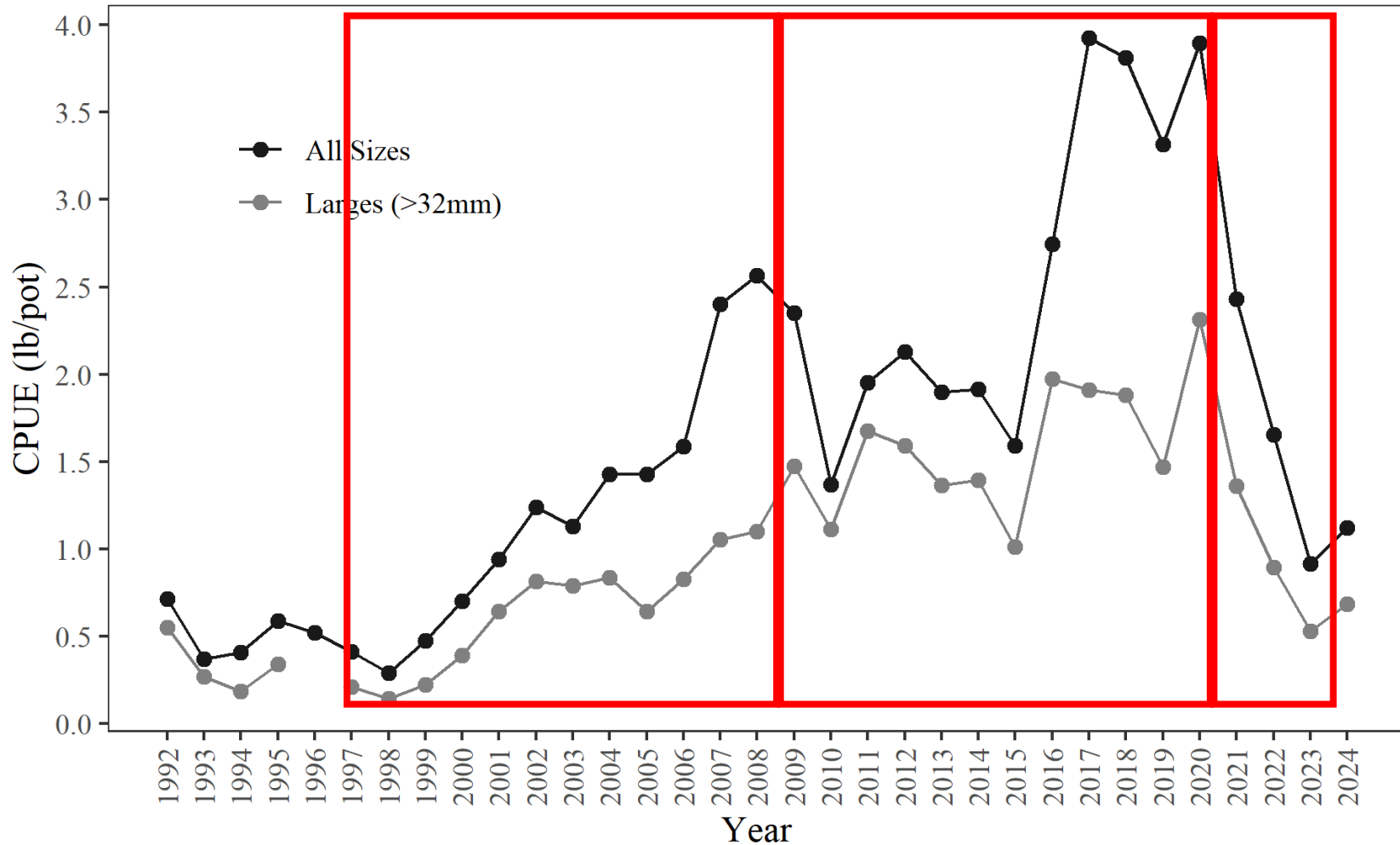
- R/V Solstice
- Annually since 1992
- October 12-23
- 9 Survey sites
  - 4 stations at each site
  - 11 pots at each station
- Spot shrimp sampling
  - Catch per unit effort
  - Biological information
    - Sex, size, and presence of eggs



# PWS Shrimp Pot Survey Area

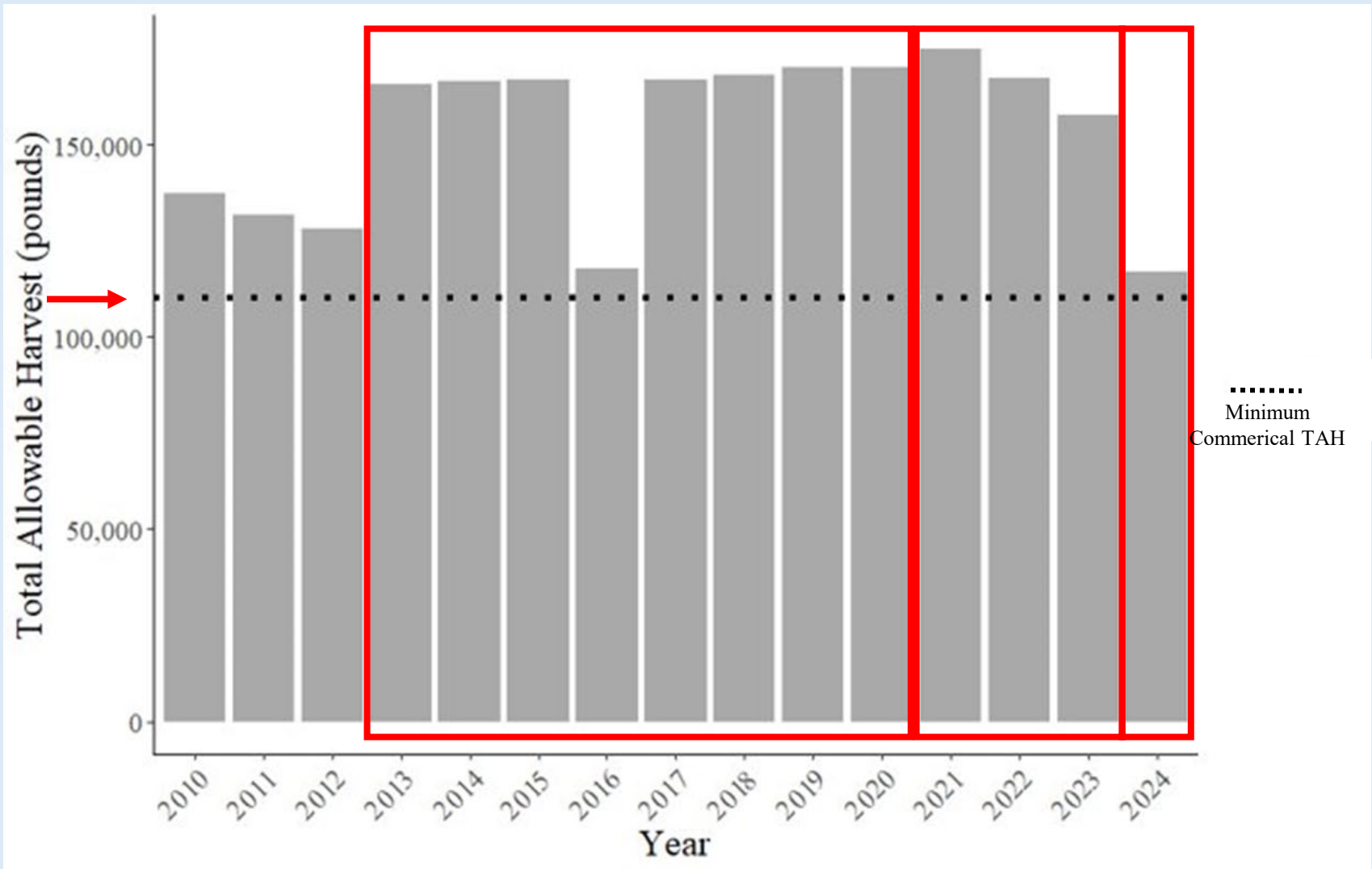


# PWS Shrimp Pot Survey Results

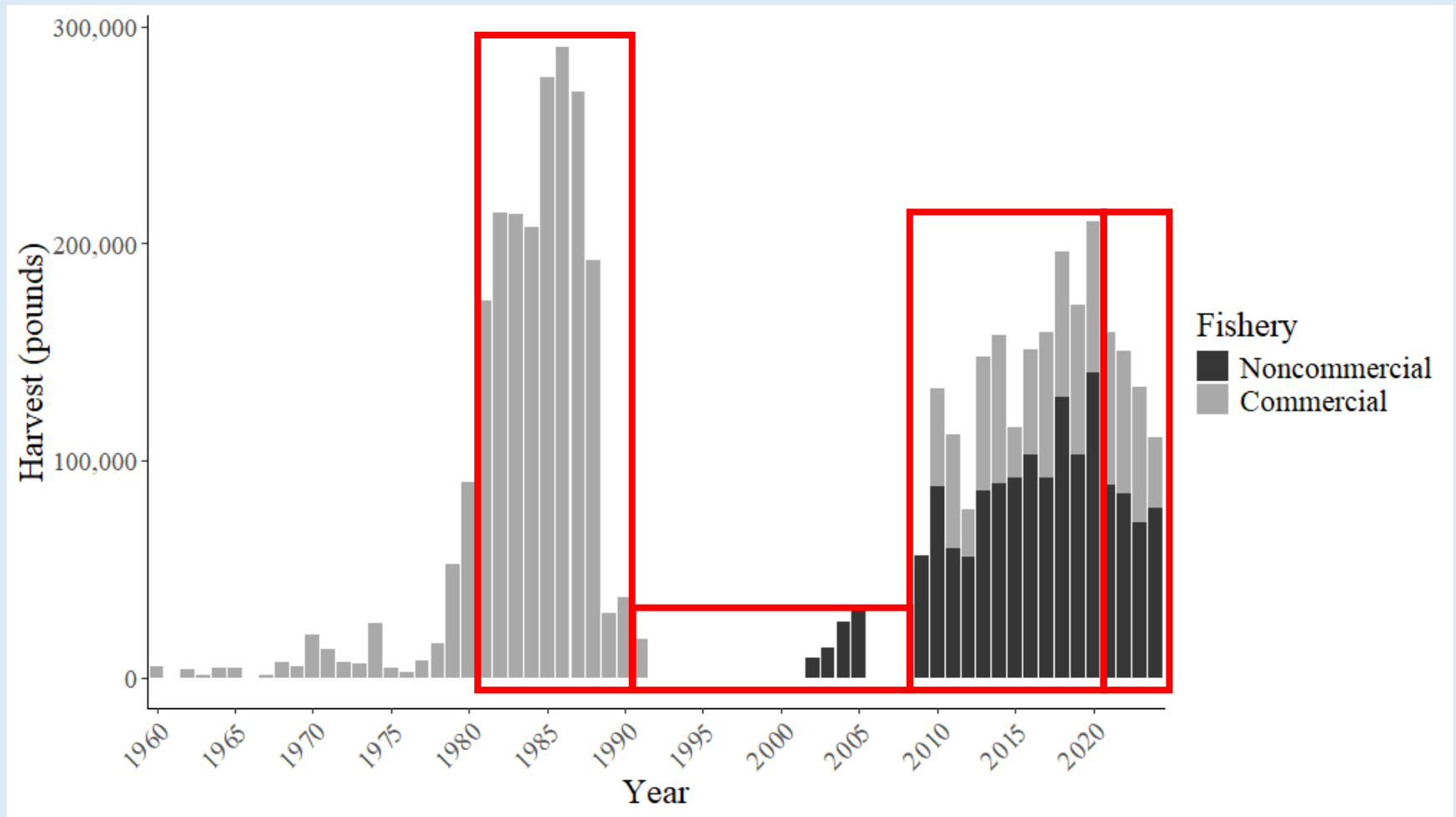


# Total Allowable Harvest

Estimated by Surplus Production Model

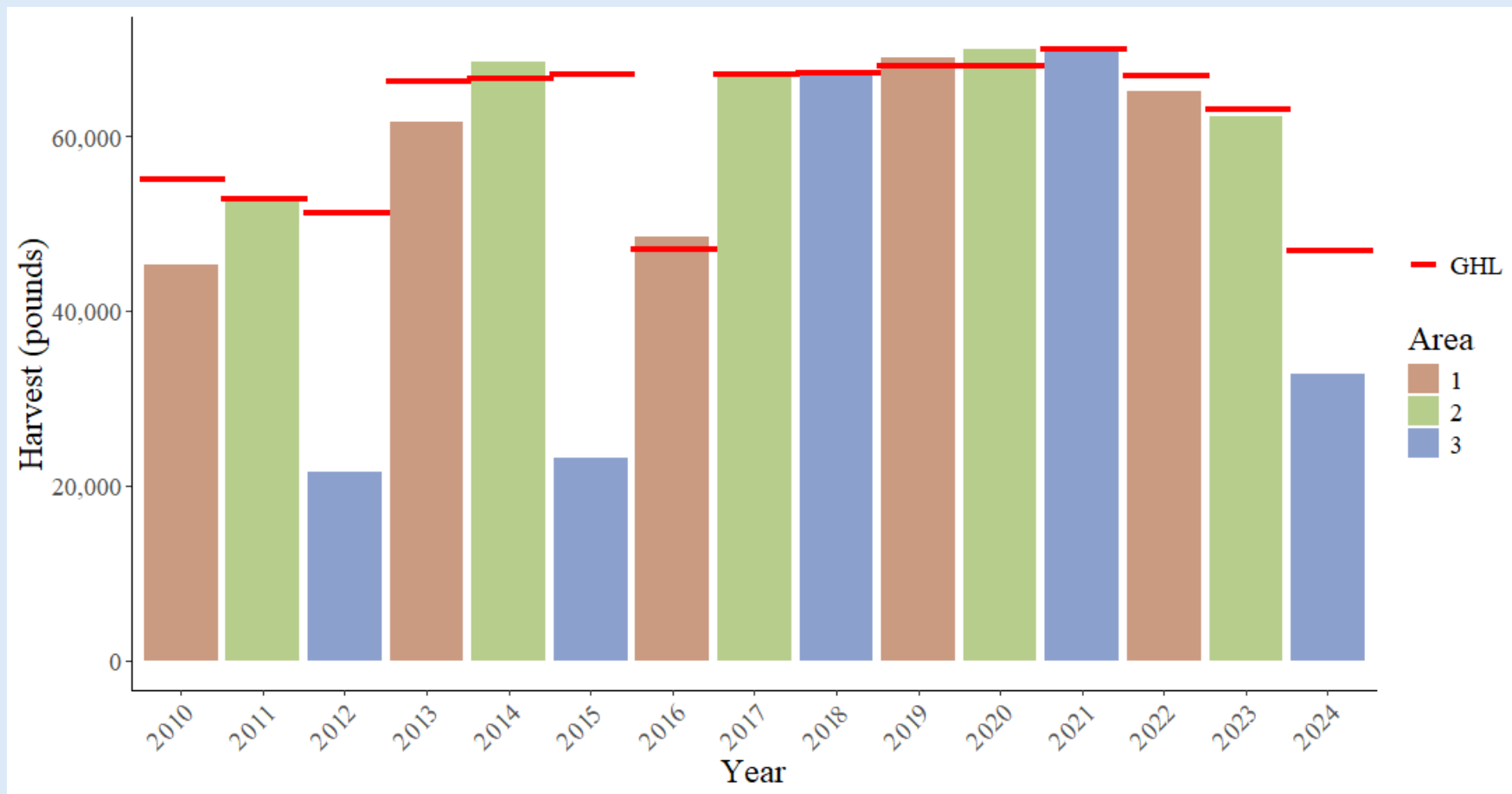


# Prince William Sound Shrimp Harvest

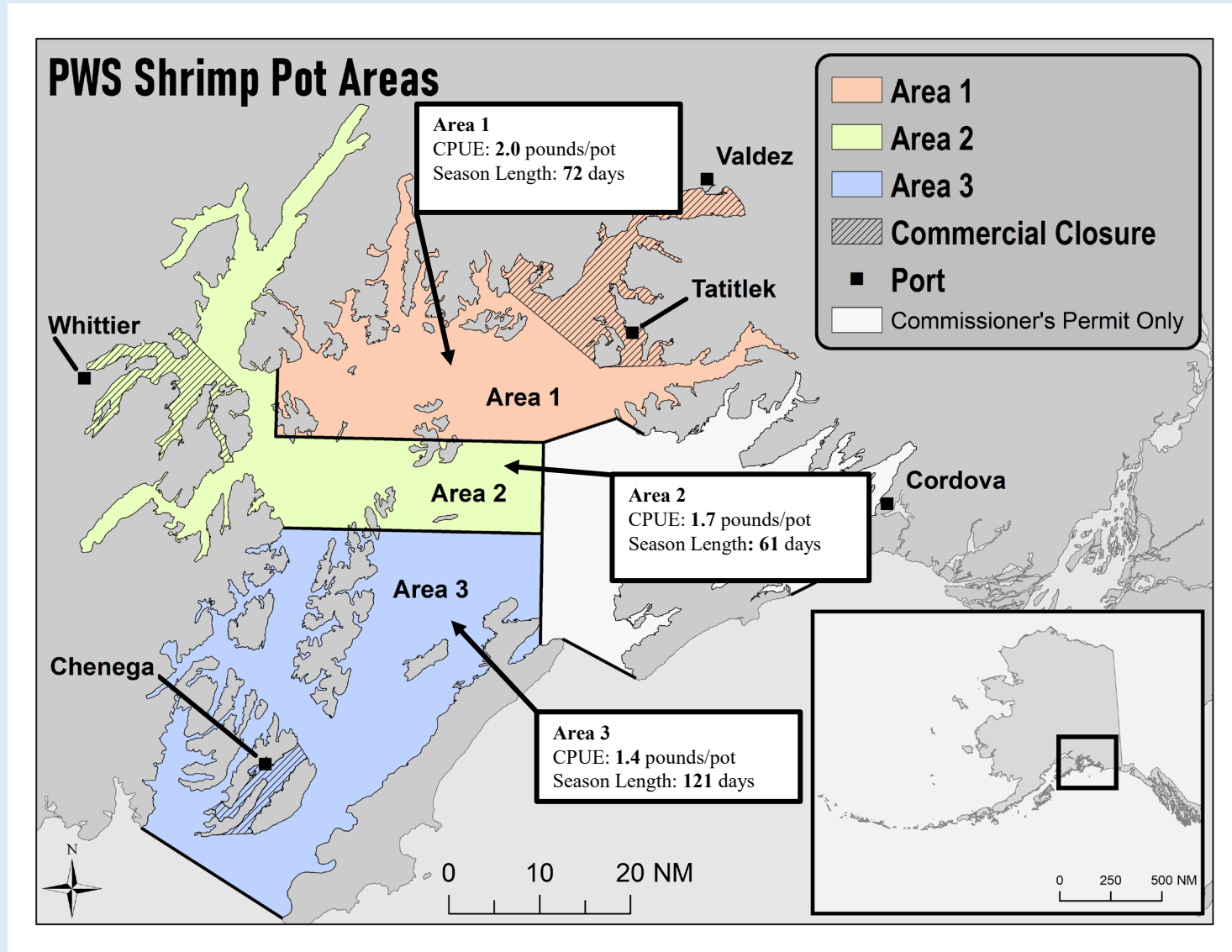




# Commercial Spot Shrimp Harvest and GHL



# Commercial Shrimp Pot Area Productivity



# Commercial Shrimp Management

- Season April 15 to September 15 (5 AAC 31.210)
- Gear restrictions (5 AAC 31.223)
  - 100 pot limit, set by EO at 25 to 35
  - Fishing hours 8 AM to 4 PM
- Reporting requirements (5 AAC 31.245)
  - Call-ins
  - Logbook
- Commercial GHL (5 AAC 31.214)
  - Commercial fishery receives 40% of TAH
  - No commercial fishery if TAH under 110,000 pounds
  - No more than 50% of commercial GHL from one statistical area
- Triennial area rotation (5 AAC 31.210)



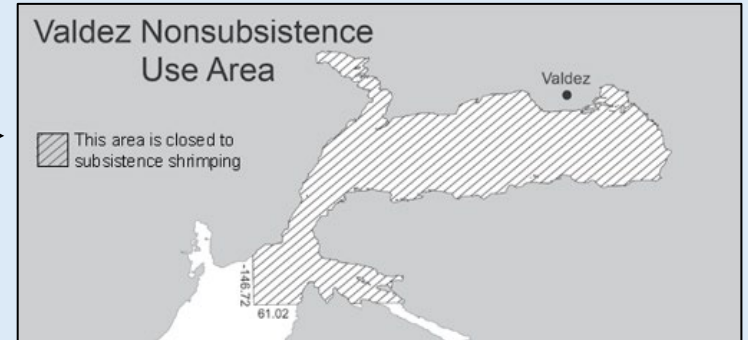


# Prince William Sound Noncommercial Shrimp Pot Fishery



# PWS Noncommercial Shrimp Pot Fishery


- Subsistence & Sport
  - ANS: 9,000 – 15,000 lb
  - Valdez non-subsistence use area →
- No threshold
- GHL is 60% of TAH
- Season dates: April 15 - September 15
- 5 pots/vessel
- Harvest Recording Form
- Preseason Management



# PWS Noncommercial Shrimp Pot Fishery

## Permit Requirements

- Permit is required.
- Same permit for all noncommercial users.
- Permit is free and available online.
- Must be filled out prior to leaving the fishing site.
- Shrimp is reported as gallons of whole shrimp.
- Required to report online by Oct. 15.
- Failure to report process (adopted in 2022).

 **Alaska Department of Fish and Game**  
2024 Prince William Sound Shrimp Permit

This permit is valid through **September 15<sup>th</sup>, 2024**

Permit Number \_\_\_\_\_

Last Name \_\_\_\_\_ First Name \_\_\_\_\_ M.I. \_\_\_\_\_ Residency \_\_\_\_\_

Mailing Address \_\_\_\_\_ Permit Type \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_ Phone Number \_\_\_\_\_ Sport Fishing License # \_\_\_\_\_

E-Mail Address \_\_\_\_\_ Driver's License # \_\_\_\_\_ State \_\_\_\_\_

Names of other household members authorized to fish this permit: \_\_\_\_\_

This permit is valid for the period April 15<sup>th</sup> – September 15<sup>th</sup>, 2024

► You must have this permit with you while taking shrimp in the waters of Prince William Sound (from Cape Fairfield to Cape Suckling).  
► If you share pots with a friend or relative, be careful to report harvest on ONLY one permit.  
► Harvest information must be recorded prior to leaving the fishing site or concealing the shrimp from view.

► The permit holder is responsible for reporting harvest online by October 15 even if the permit holder did not fish.  
► Failure to report is a violation, and the permit holder **WILL NOT** be eligible to receive a permit the following season.

To Report Online:  
Scan the QR code or visit us at <https://www.adfg.alaska.gov/Harvest/>

Permit Holder Signature \_\_\_\_\_ Date \_\_\_\_\_

► Record each set of pots you shrimped and record your harvest, even if you did not catch anything.

Report in GALLONS of whole shrimp (shrimp heads attached):  
Examples: 0.5 = 1/2 gallon whole shrimp (shrimp heads on)  
5 = 5 gal, 0.25 = 1/4 gal, 1.75 = 1 3/4 gal

DATE (Pots Set)	LOCATION shrimp was harvested from in Prince William Sound Examples include: specific bay, fjord, canal, arm, etc.	NUMBER OF POTS FISHED	TIME SOAKED	WHOLE SHRIMP HARVESTED
1. MM DD		Pots	Hours	Gallons
2. MM DD				
3. MM DD				
4. MM DD				
5. MM DD				
6. MM DD				
7. MM DD				
8. MM DD				
9. MM DD				
10. MM DD				
11. MM DD				
12. MM DD				

Please continue on another piece of paper if you need more lines to report your harvest.

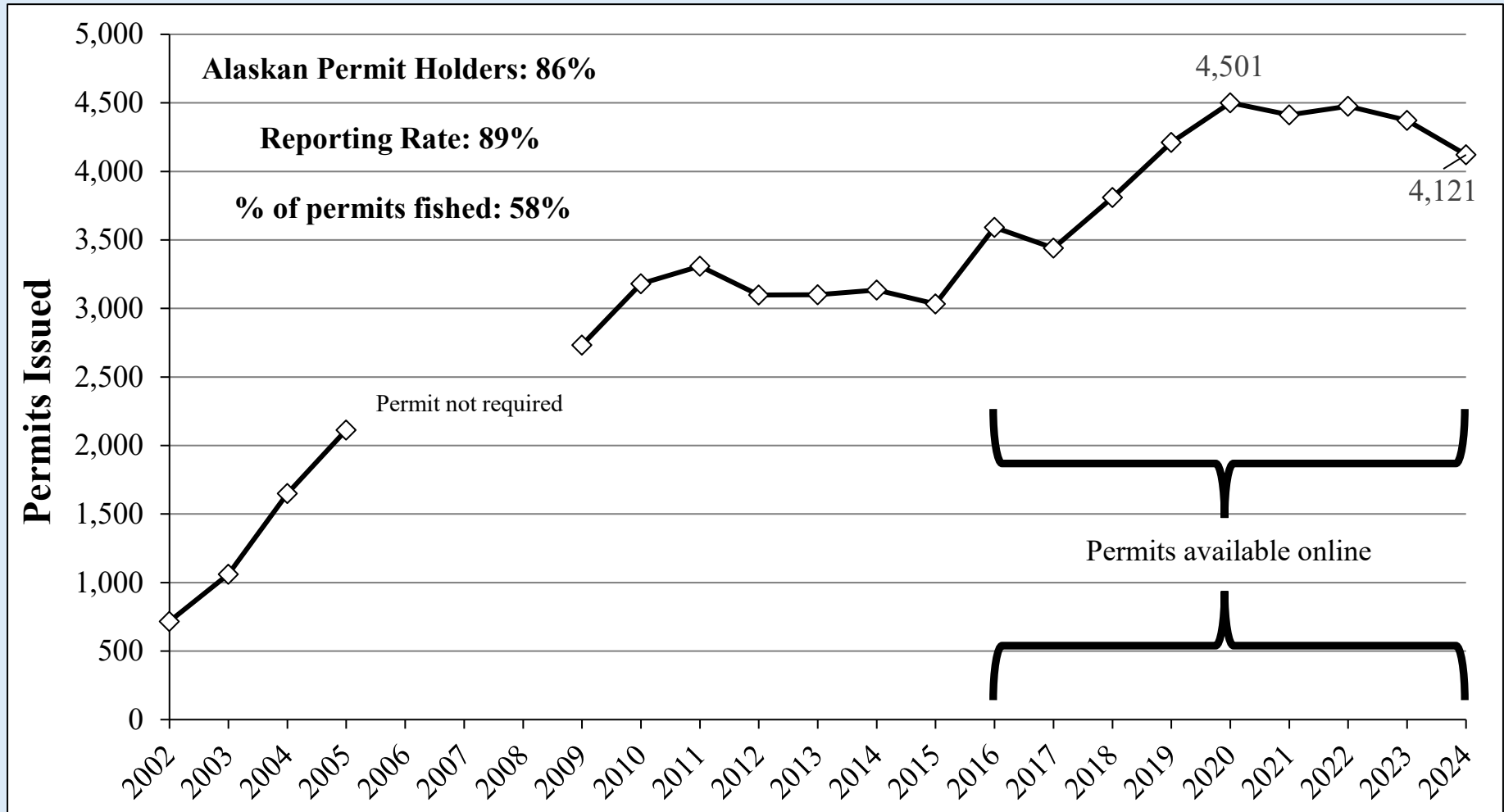
Harvest must be recorded as you are actively shrimping on your paper permit. Final reports of each individual set made, and associated harvest, must be submitted online by October 15.





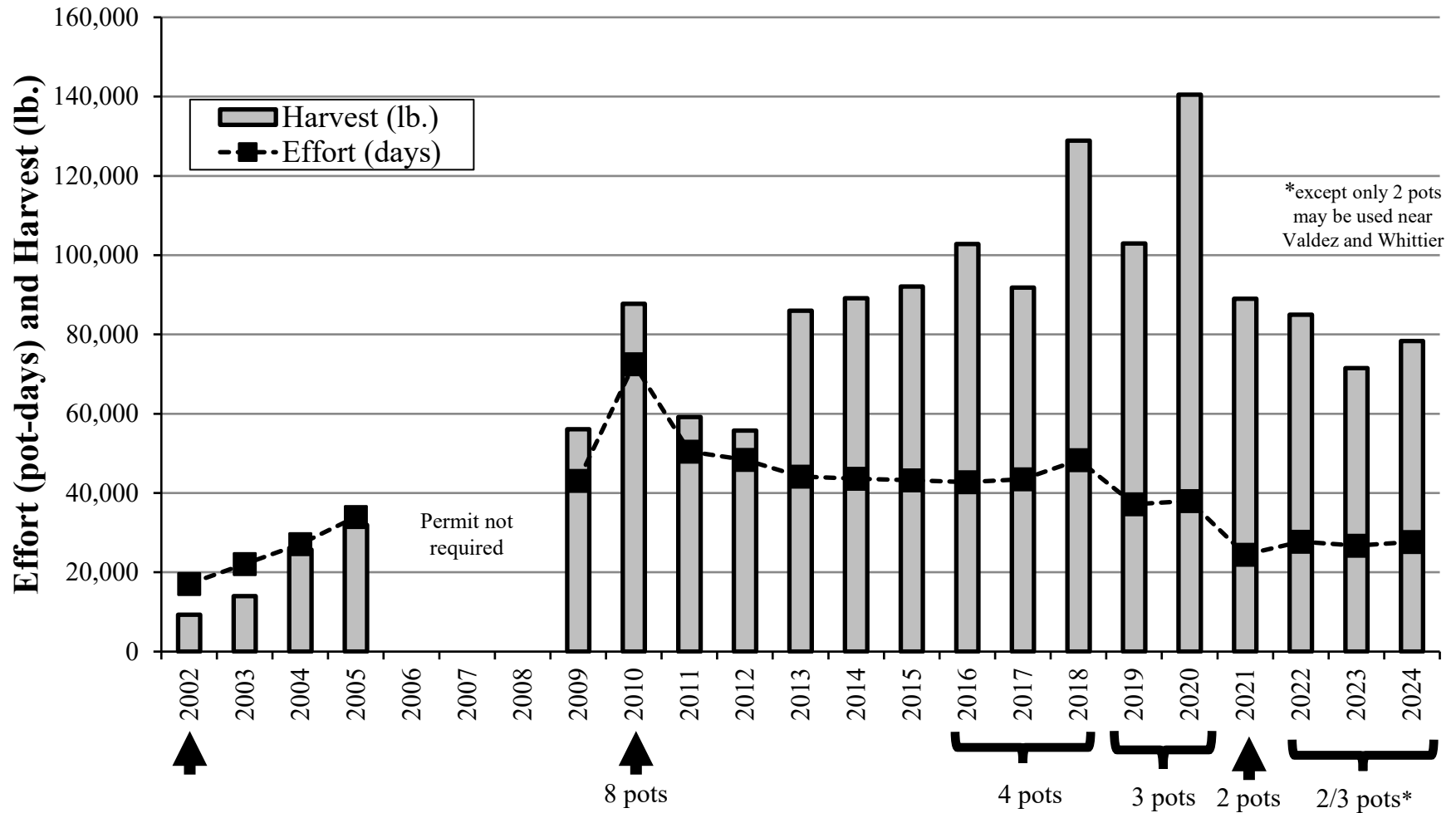
# PWS Noncommercial Shrimp Pot Fishery

## Permits issued



# PWS Noncommercial Shrimp Pot Fishery

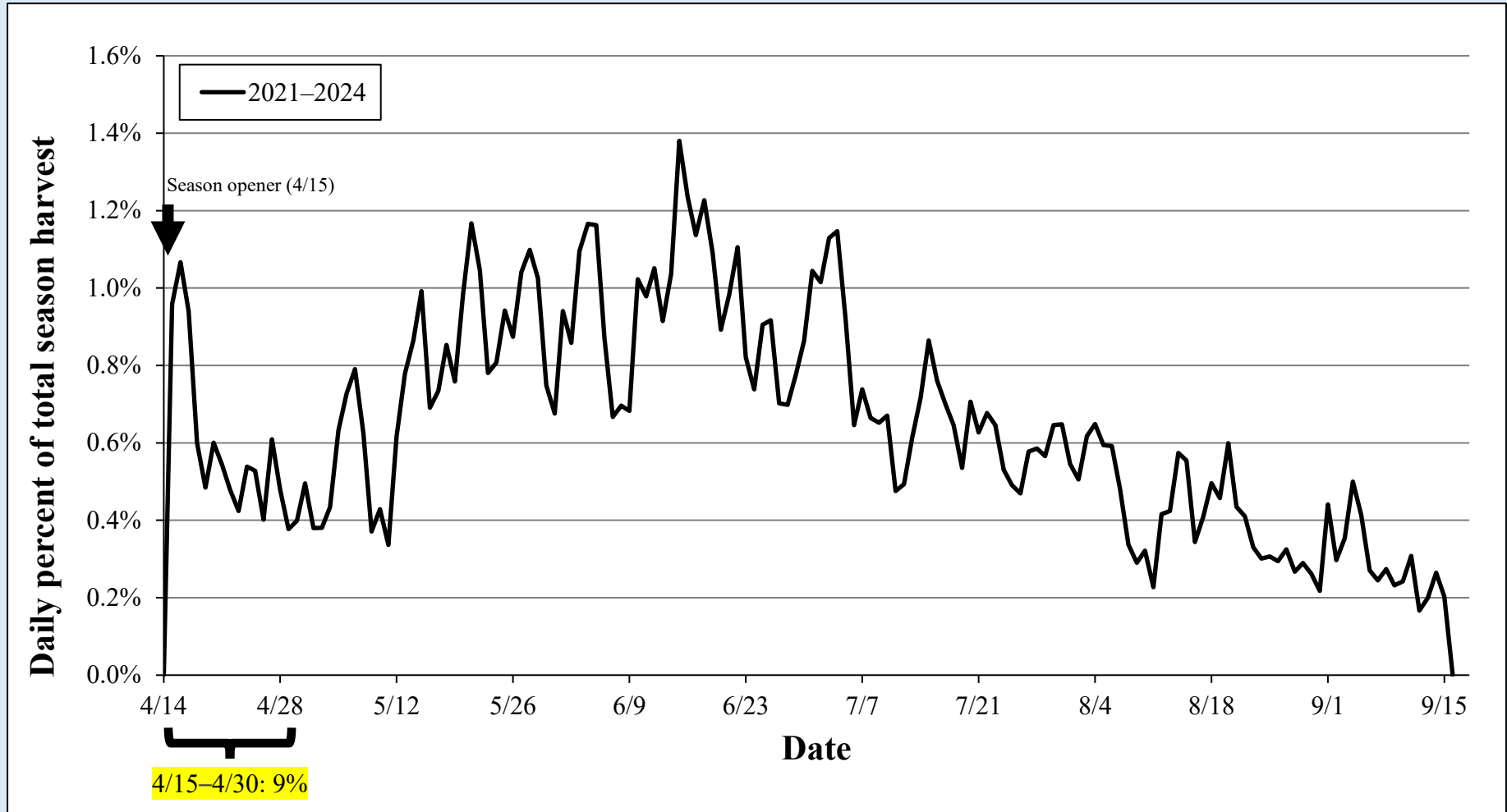
## Harvest and Effort



# PWS Noncommercial Shrimp Pot Fishery

## Harvest by Date

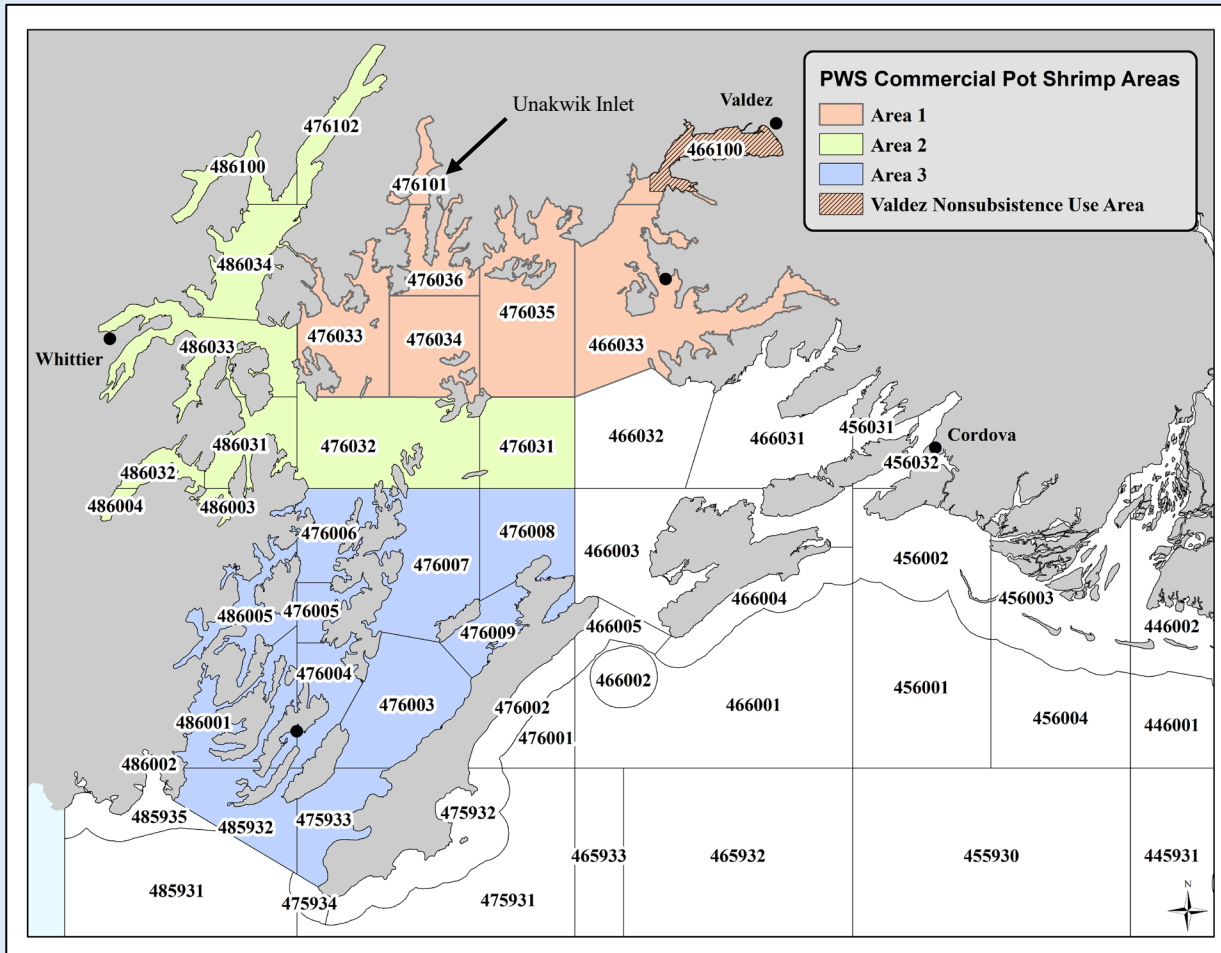
Proposals 304 & 307



# PWS Noncommercial Shrimp Pot Fishery

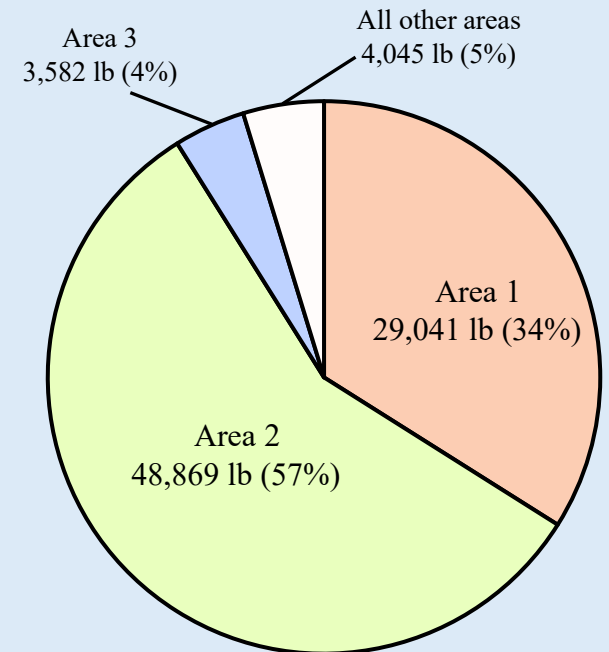
## Harvest by Area

Proposal 300



### Average Harvest in pounds (%)

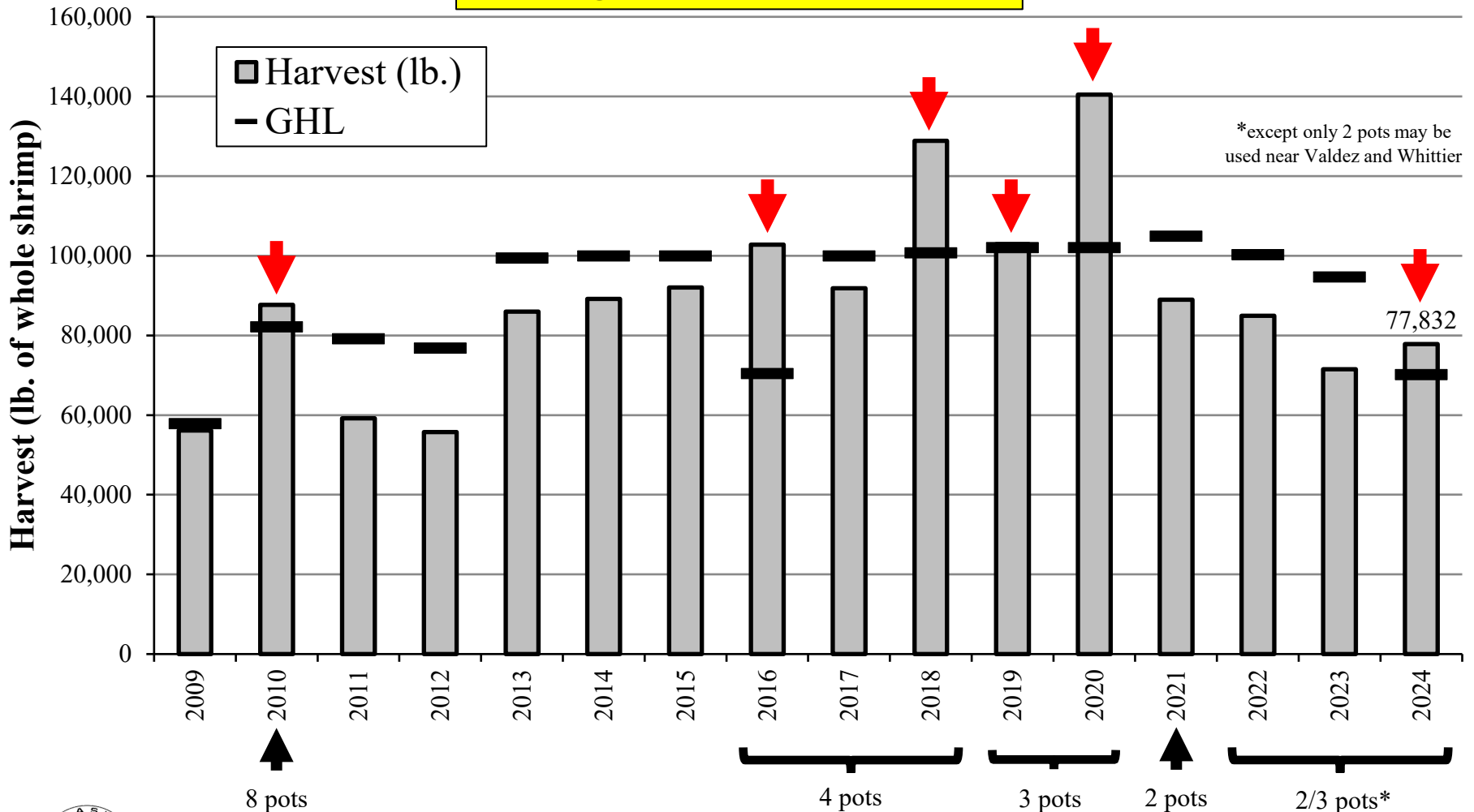
[2010–2024]



# PWS Noncommercial Shrimp Pot Fishery

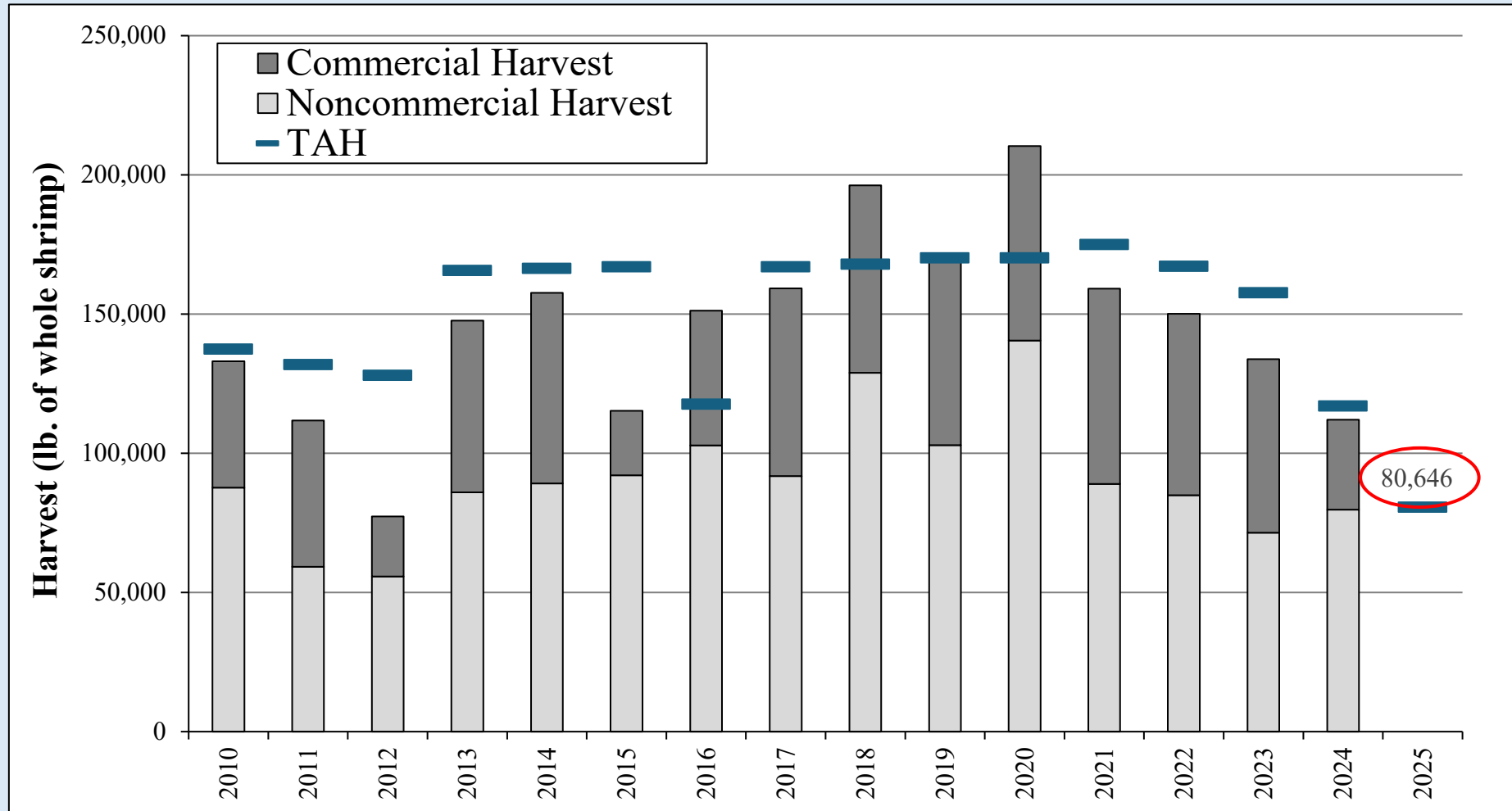
## Harvest and GHL

Average GHL Harvested = 99%



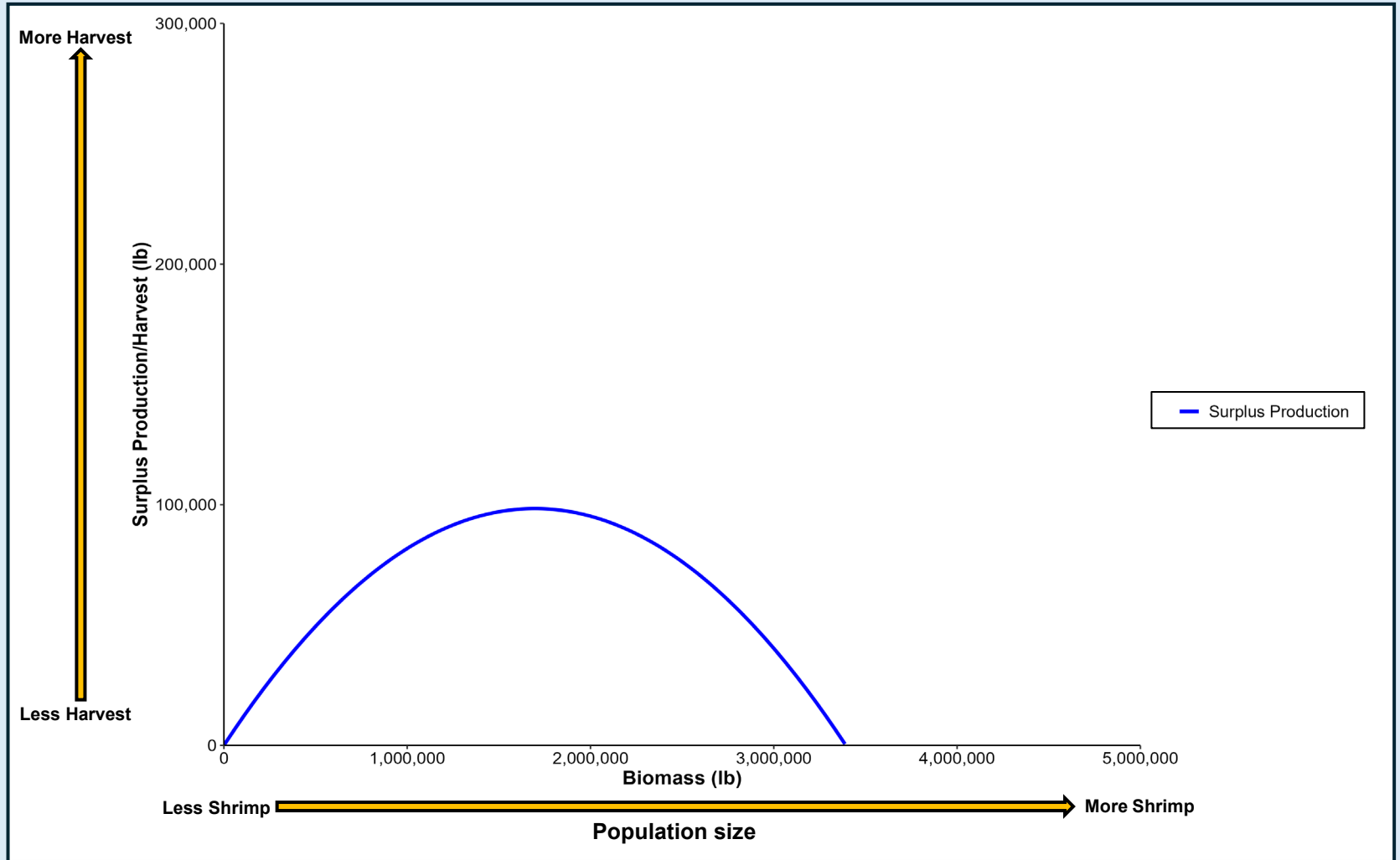
# PWS Shrimp Pot Fisheries

## Harvest and TAH



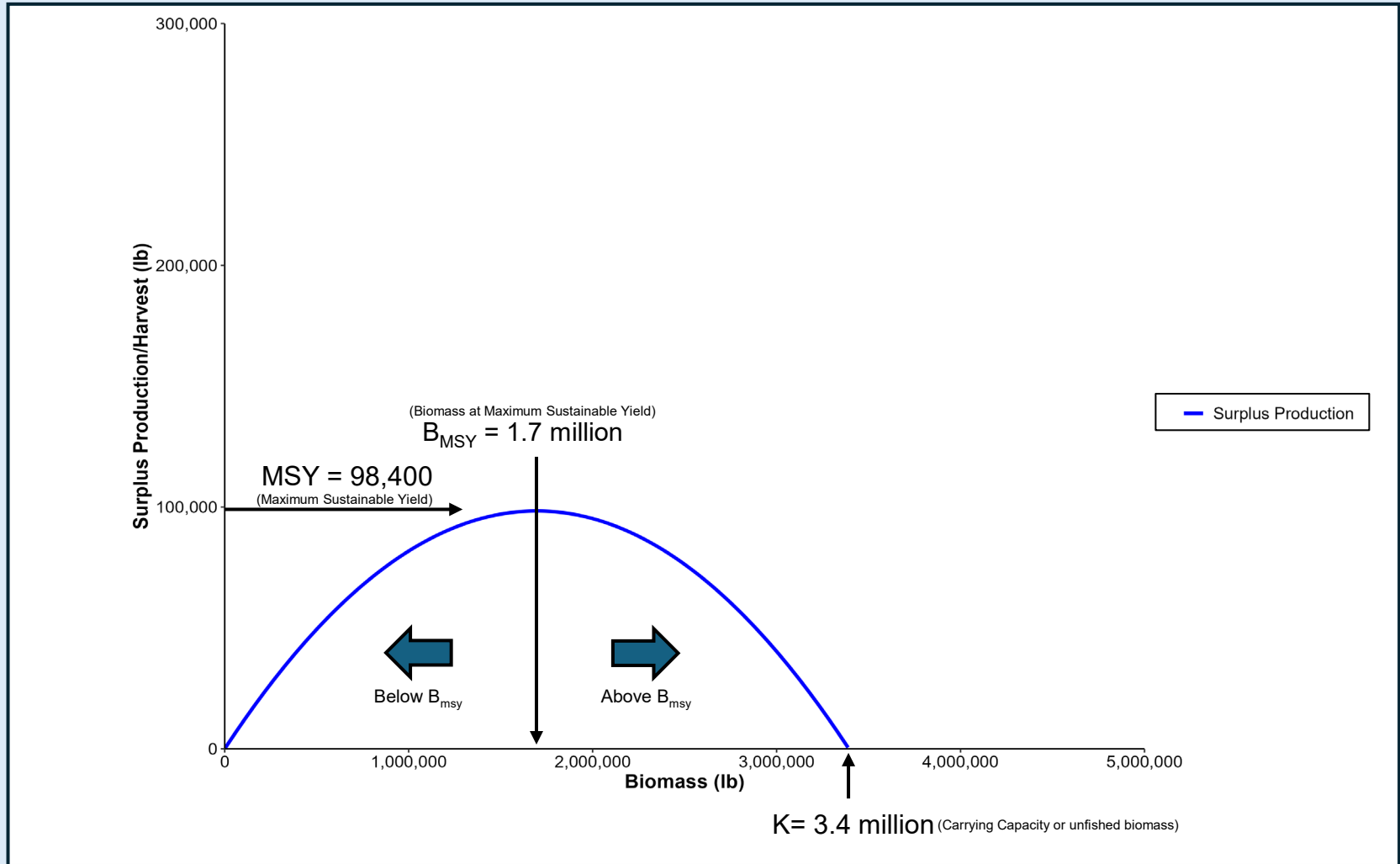


# PWS Spot Shrimp Population Surplus Production



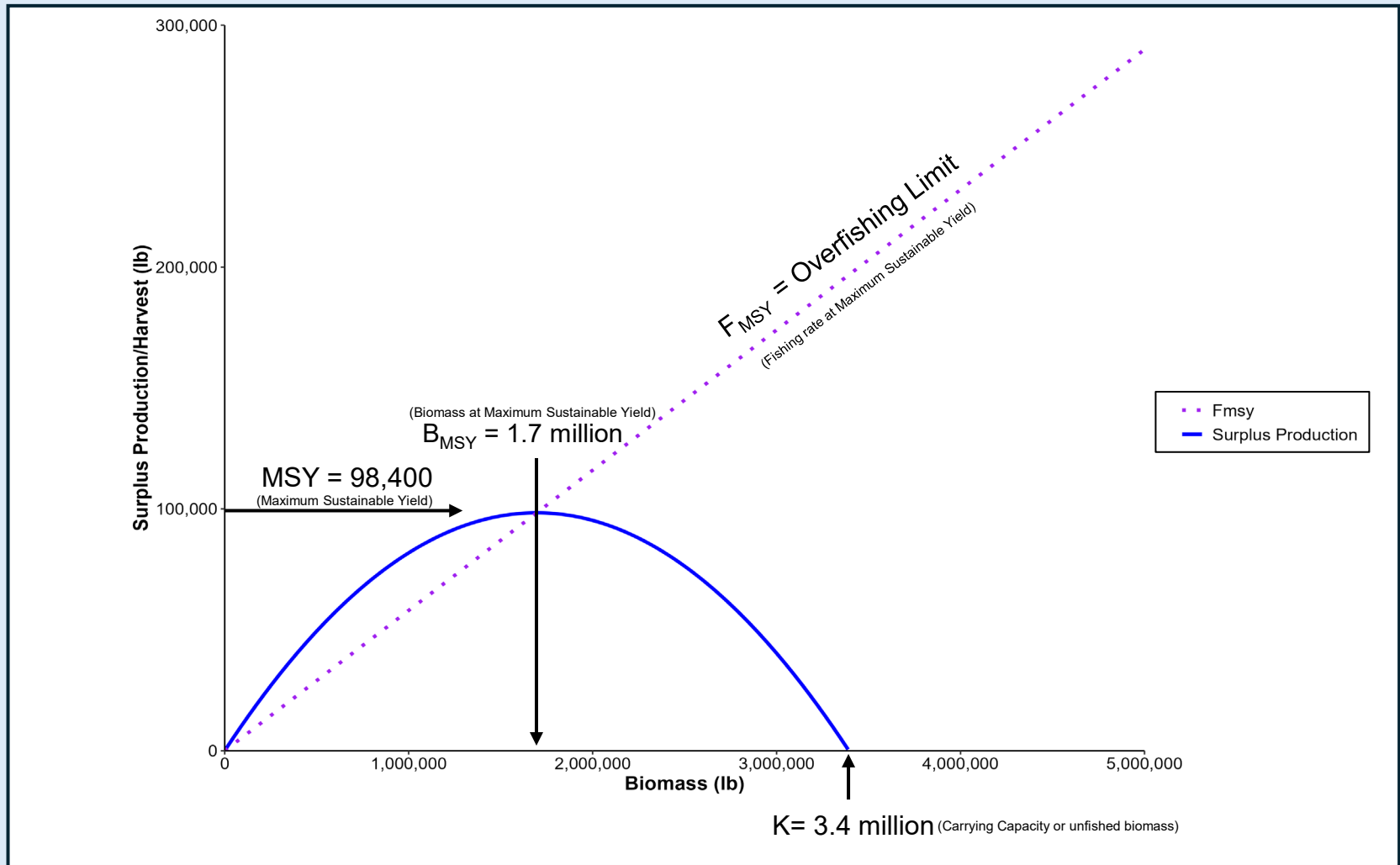
# PWS Spot Shrimp Population

## Surplus Production



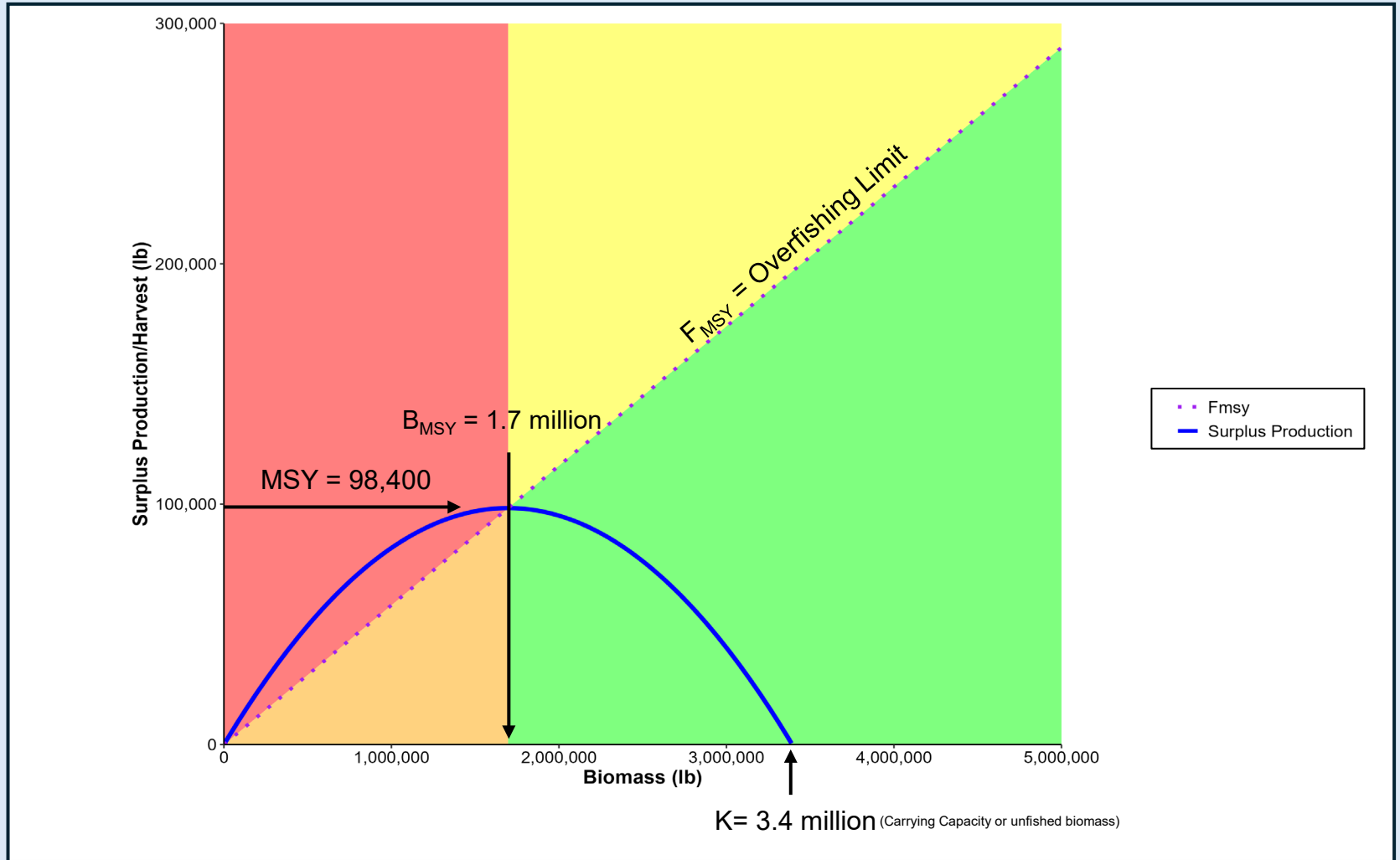
# PWS Spot Shrimp Population

## Surplus Production and $F_{MSY}$



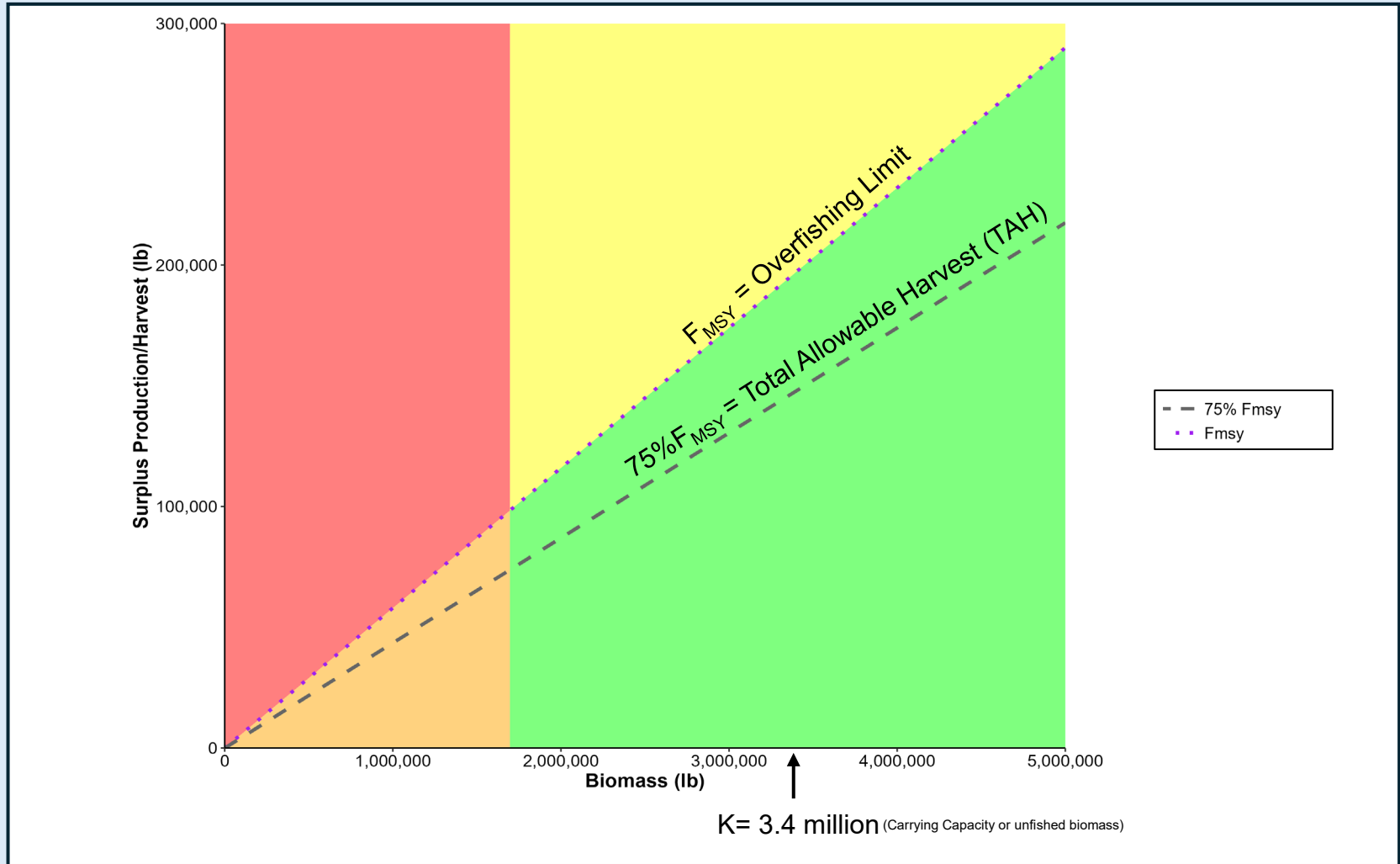
# PWS Spot Shrimp Population

## Surplus Production and $F_{MSY}$



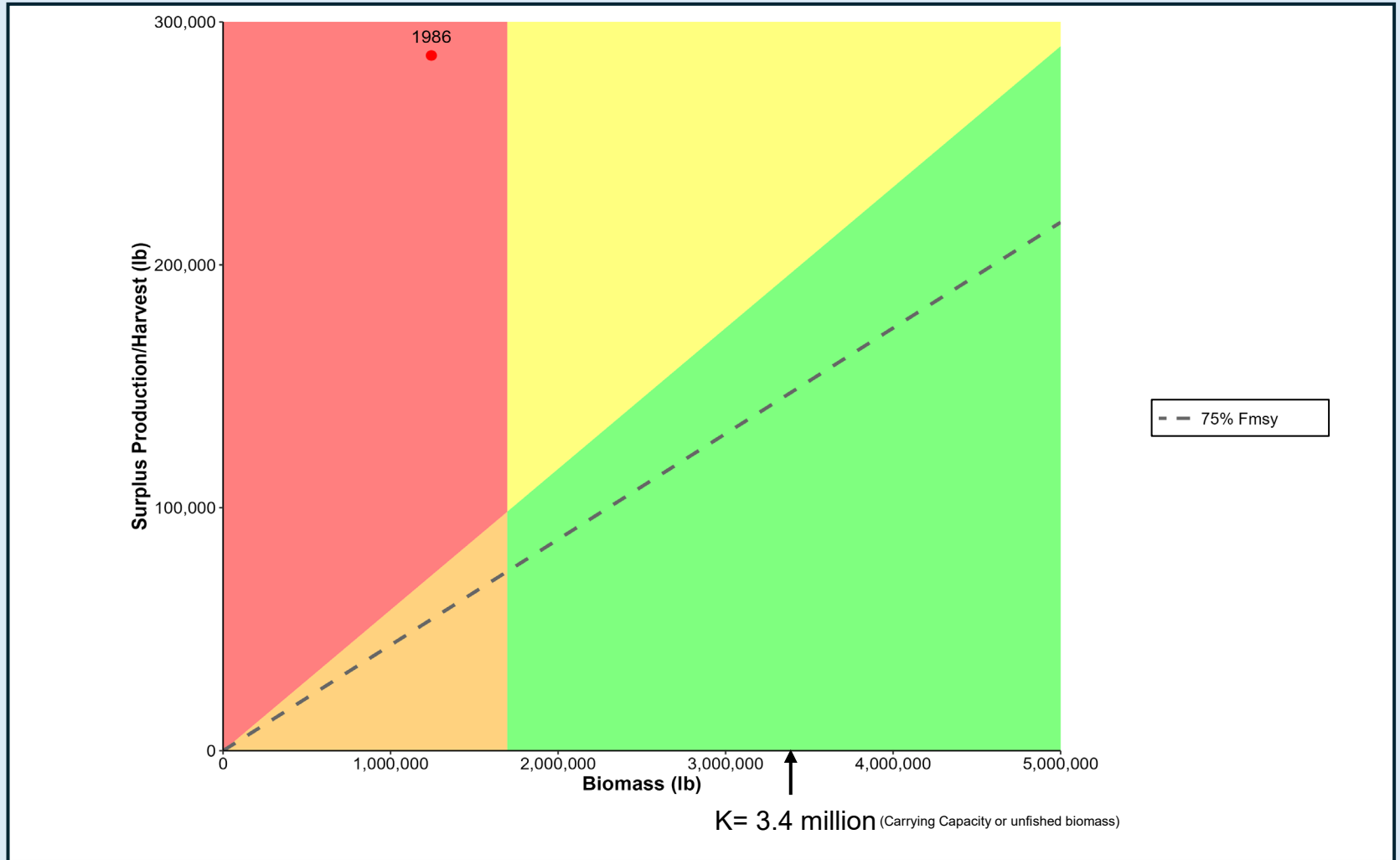
# PWS Spot Shrimp Population

## Surplus Production and 75%F<sub>MSY</sub>



# PWS Spot Shrimp Population

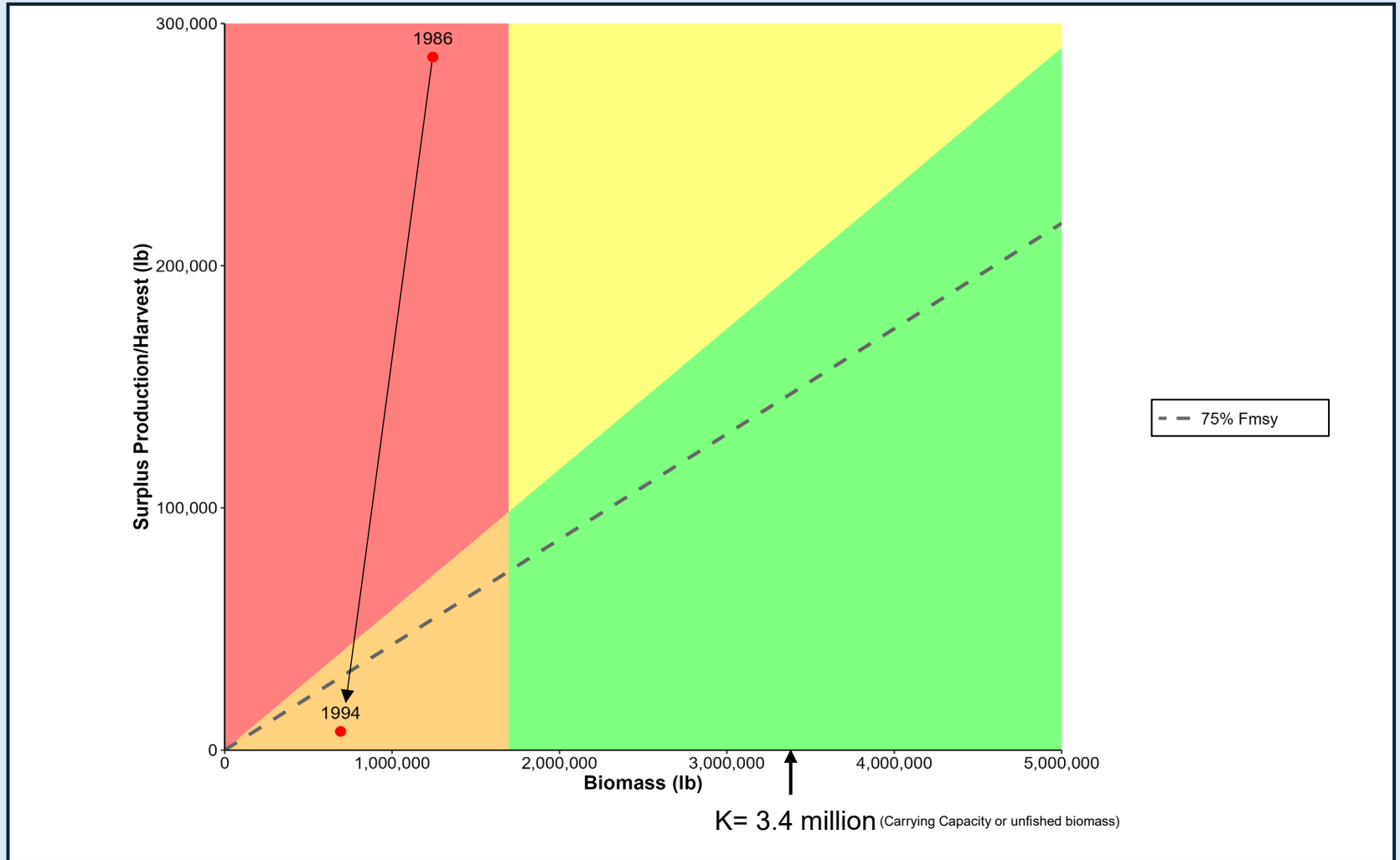
## Surplus Production and Stock Status





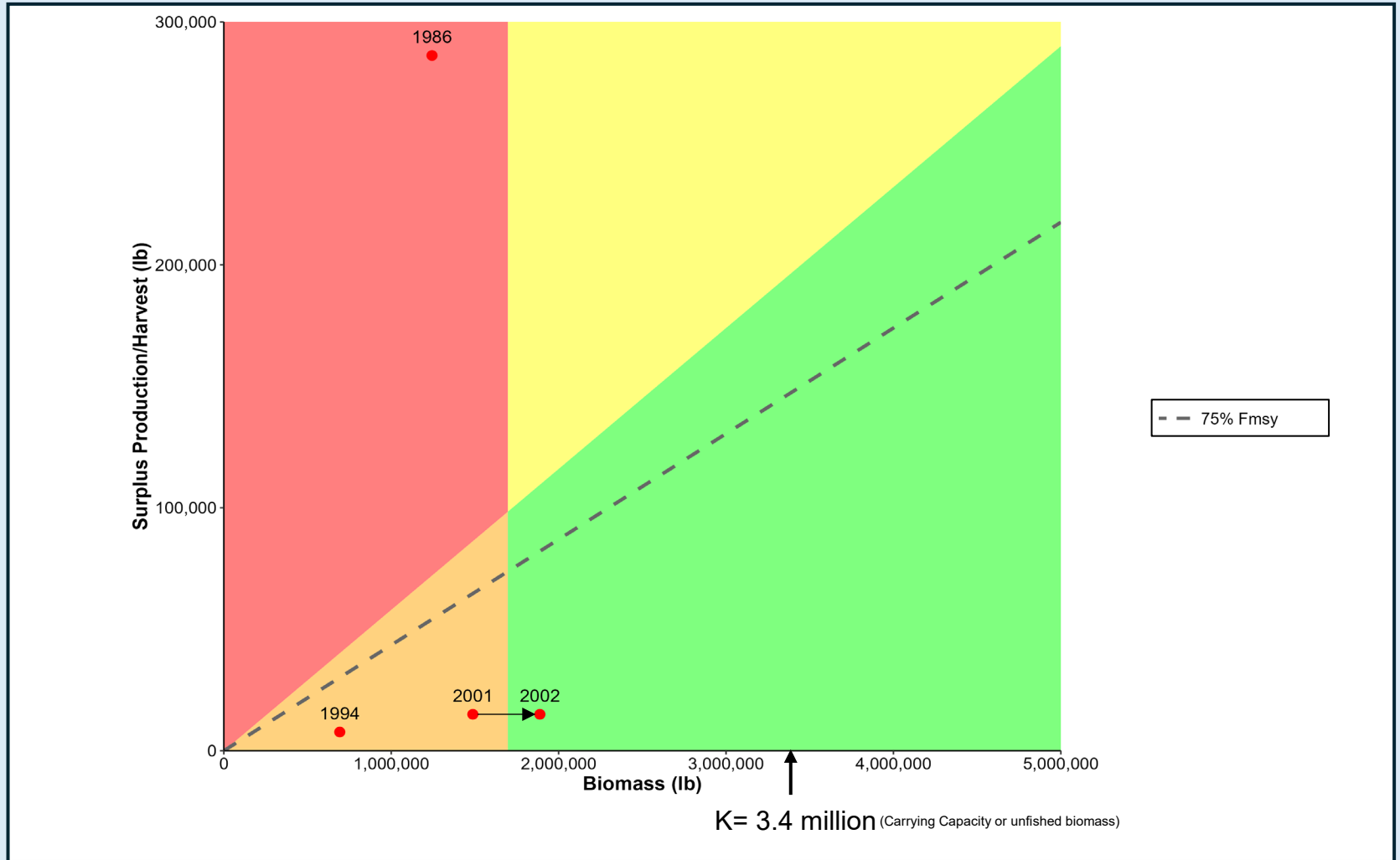
# PWS Spot Shrimp Population

## Surplus Production and Stock Status



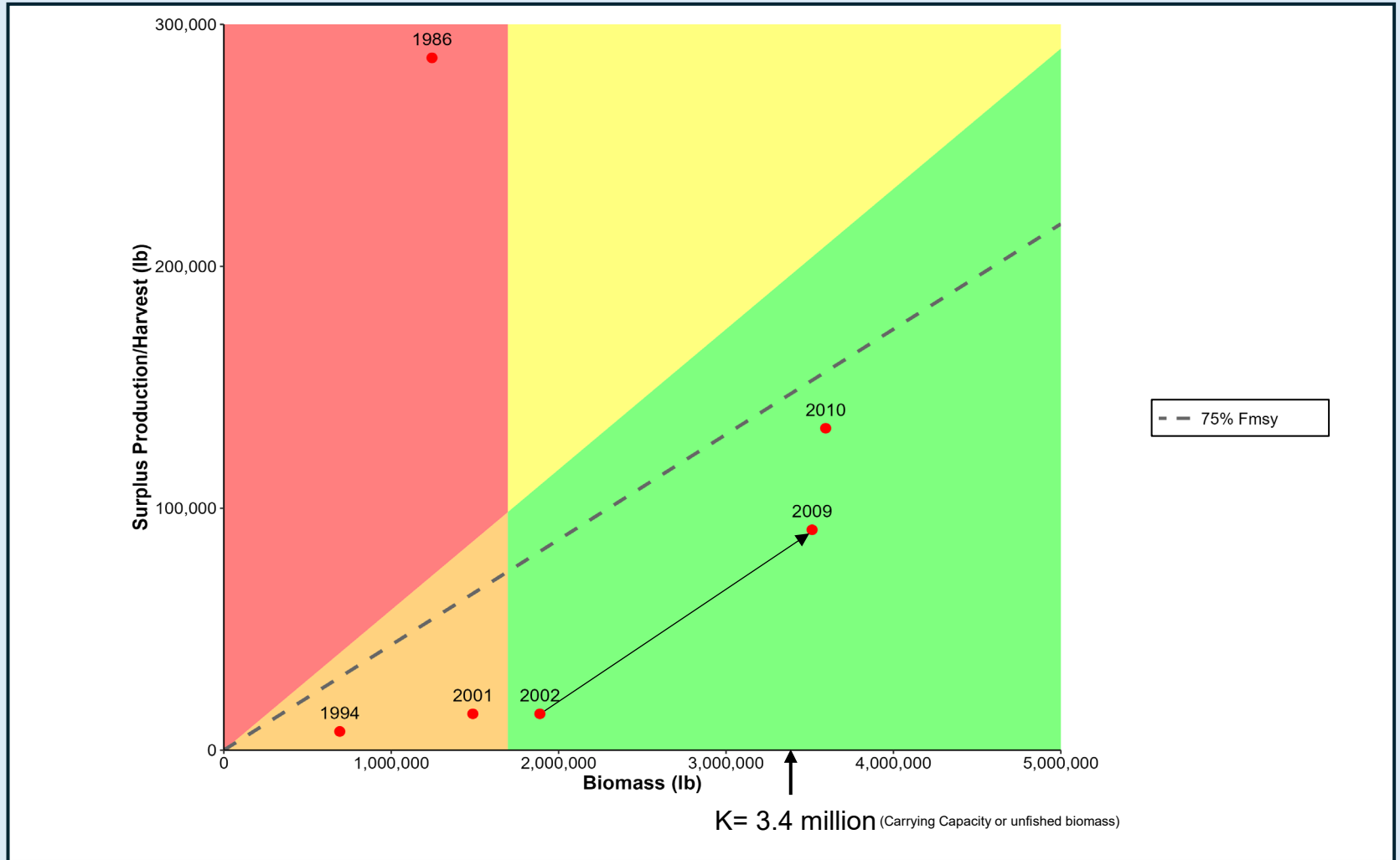
# PWS Spot Shrimp Population

## Surplus Production and Stock Status



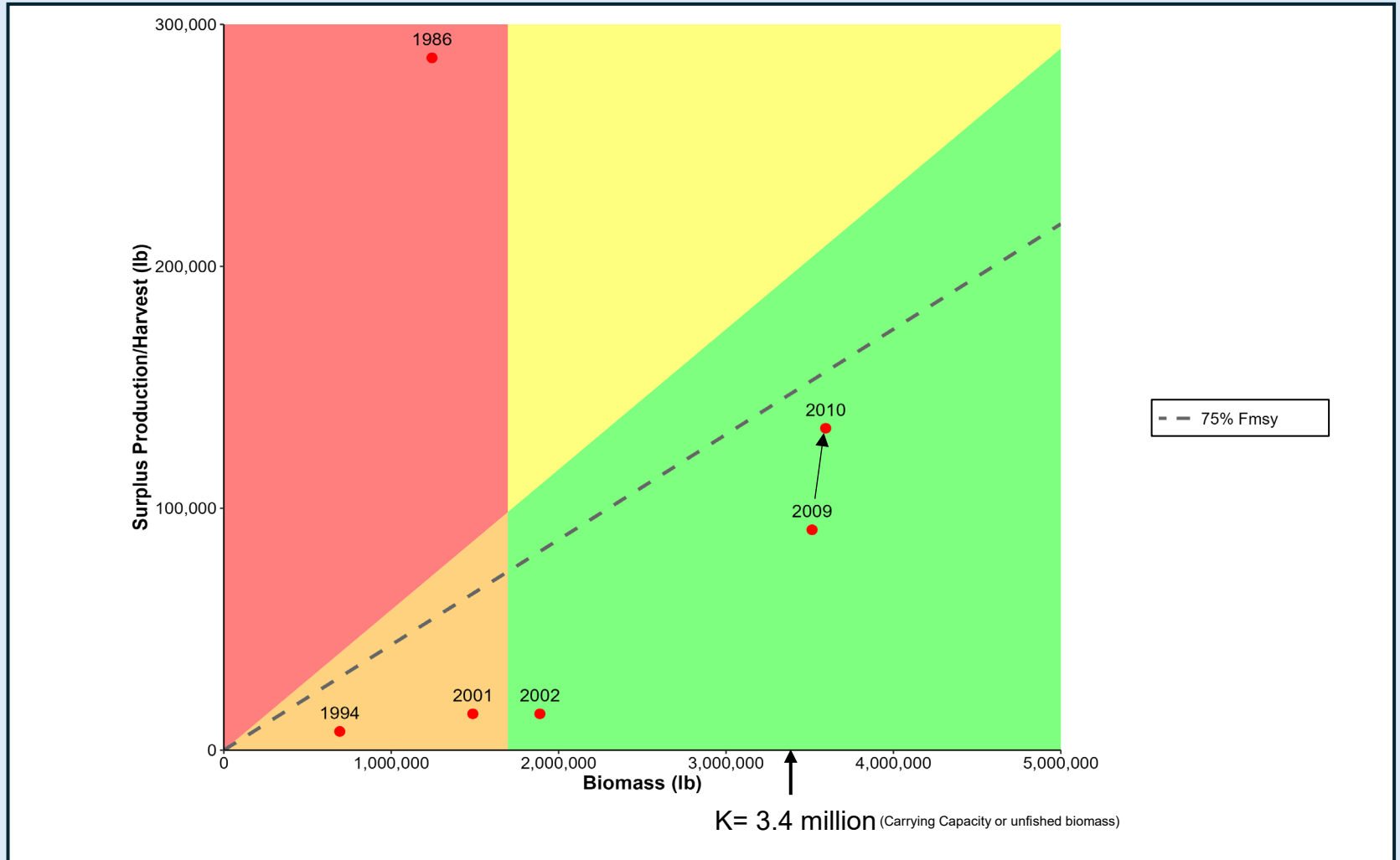
# PWS Spot Shrimp Population

## Surplus Production and Stock Status



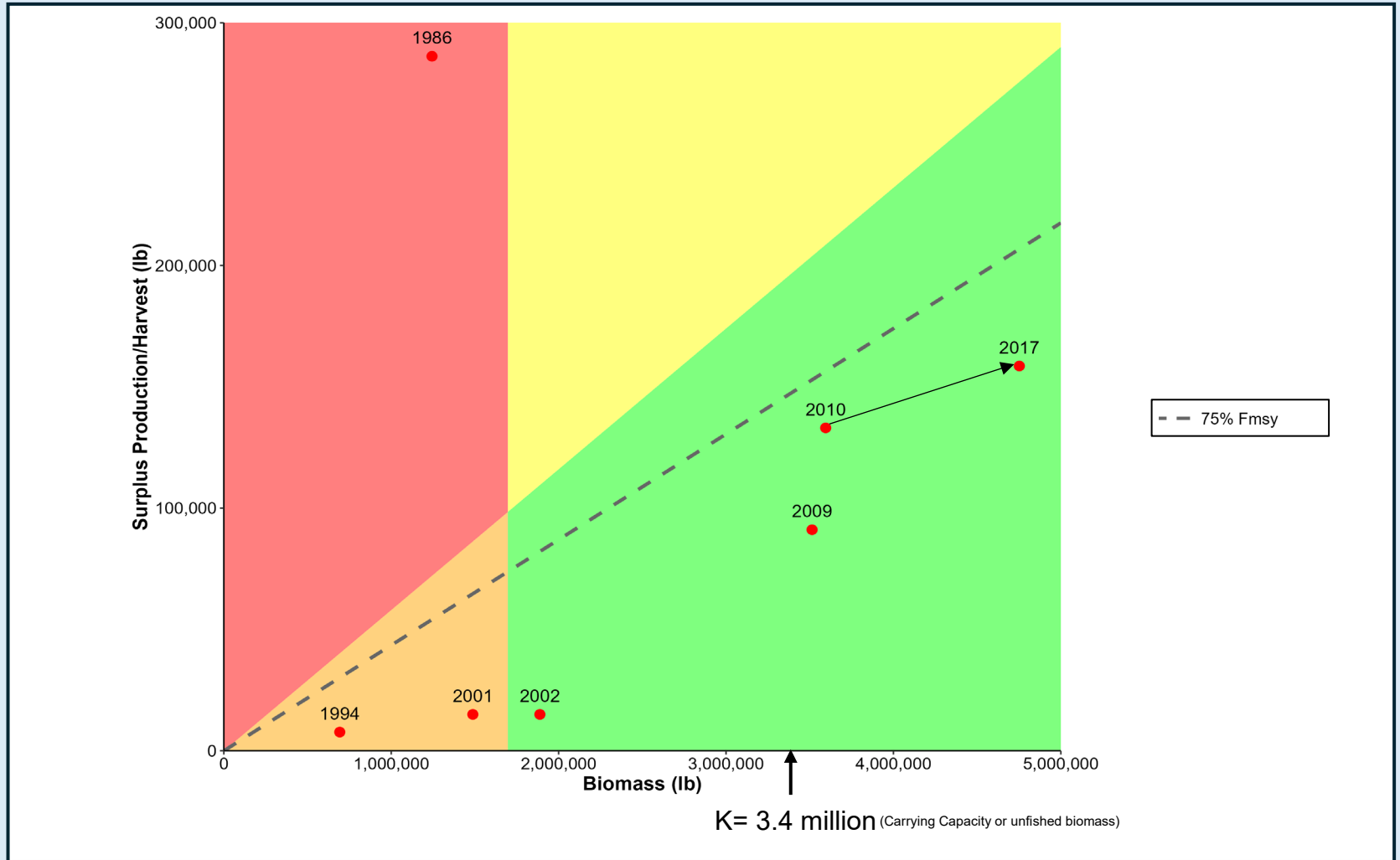
# PWS Spot Shrimp Population

## Surplus Production and Stock Status



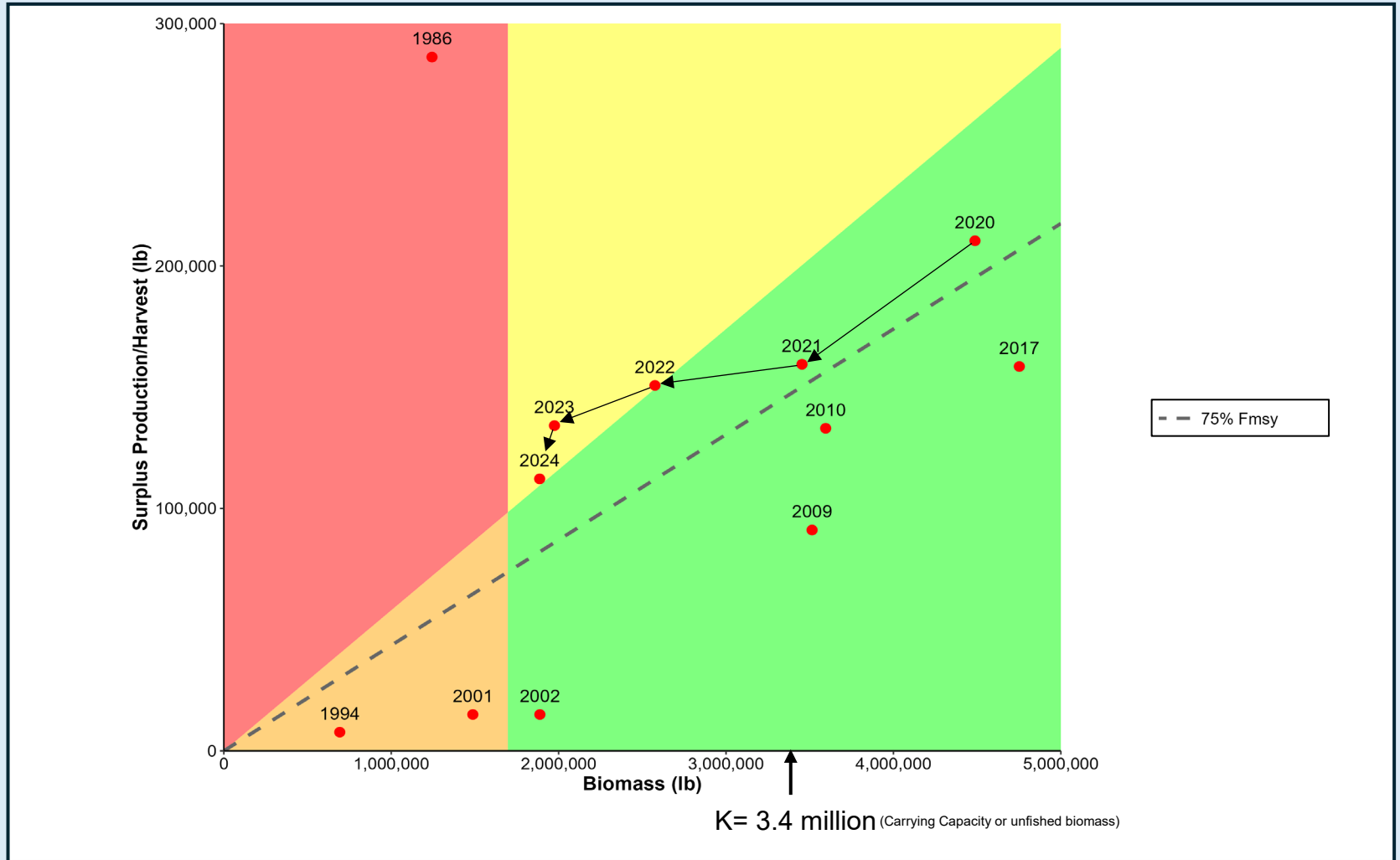
# PWS Spot Shrimp Population

## Surplus Production and Stock Status



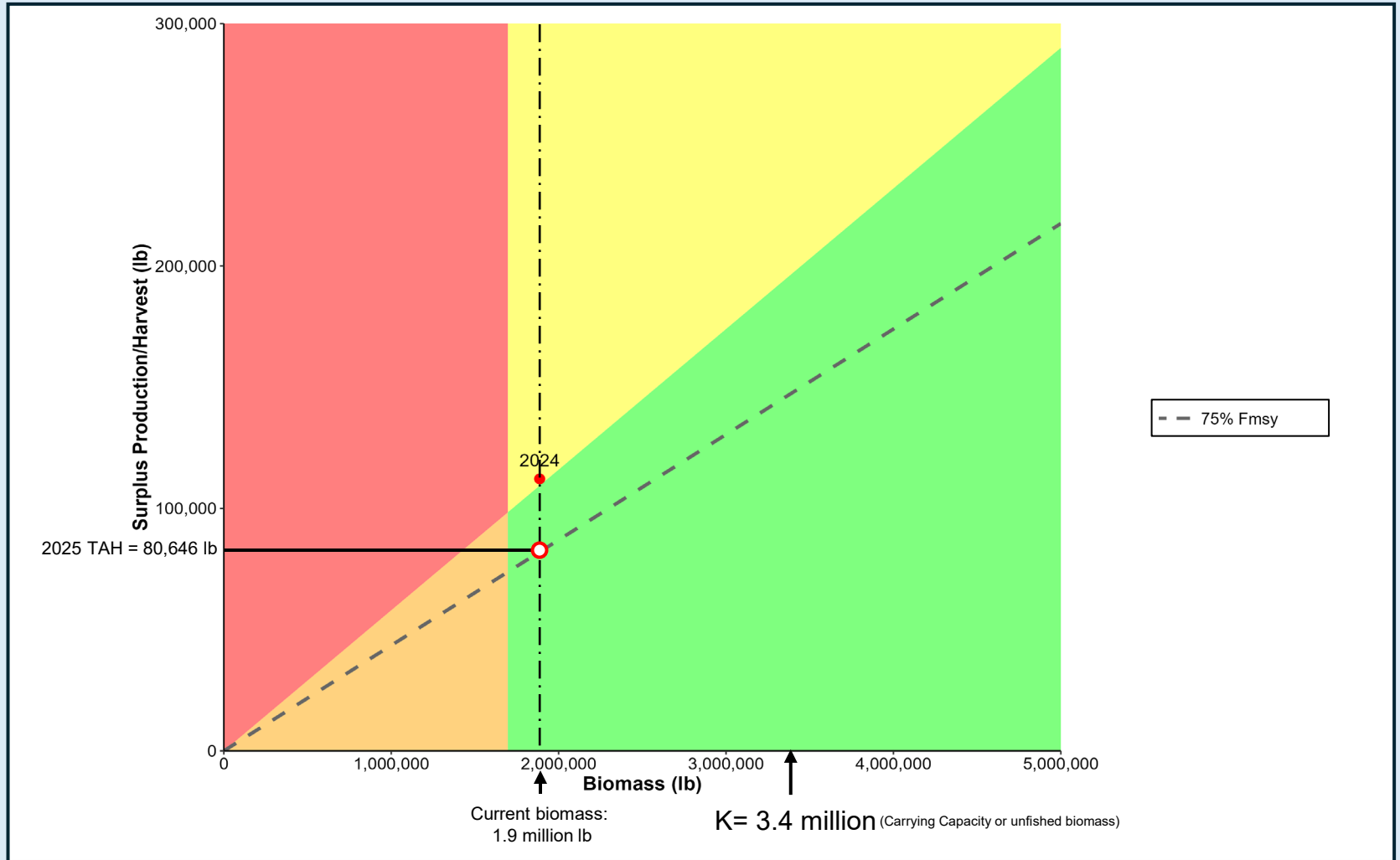
# PWS Spot Shrimp Population

## Surplus Production and Stock Status



# PWS Spot Shrimp Population

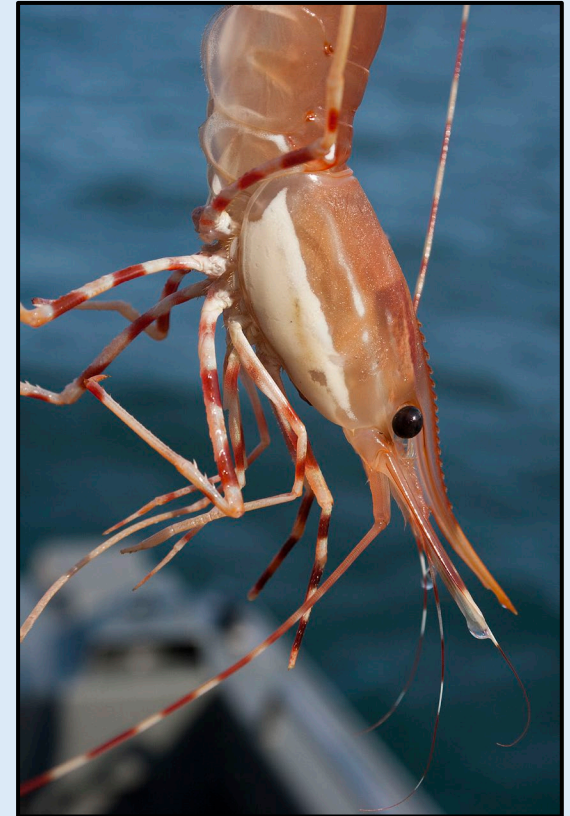
## Surplus Production and Current Stock Status



# PWS Shrimp Pot Fisheries

## 2025 Management Actions Under Current Regulations

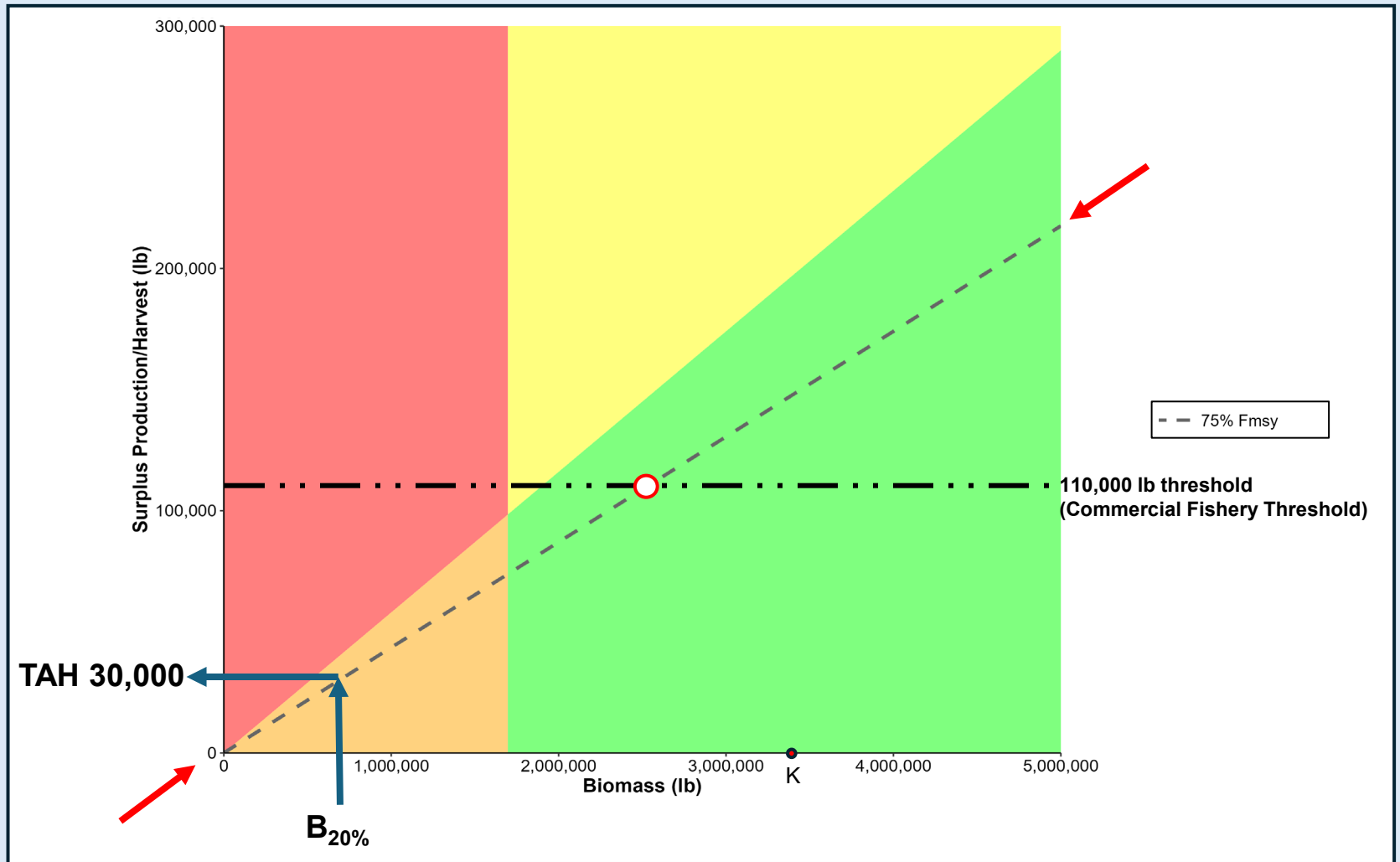
- TAH: 80,646 lb
- Noncommercial Fishery
  - GHL: 48,388 lb
    - Pot reduction: 2 pots/vessel
    - Season: May 15 – July 31
- Commercial Fishery
  - TAH below 110,000 lb
    - Closed





# PWS Spot Shrimp Population

## Surplus Production and Proposals



# Thank you



Schuster, M., D. E. Arthur, B. Blain-Roth, A. Cole, T. Cubbage, C. Russ, X. Zhang, A. Pollak, and J. Loboy. 2025. Prince William Sound shrimp pot fisheries through 2023 to inform the Alaska Board of Fisheries. Alaska Department of Fish and Game, Special Publication No. XX-XX, Anchorage.

