

Prince William Sound (PWS) Shrimp Pot Fisheries



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Area Management Biologist

Anchorage, PWS, and NGC Sport Fisheries

Outline: PWS Shrimp Pot Fisheries



Area Description

Biology and Life history

PWS Management

Regulations

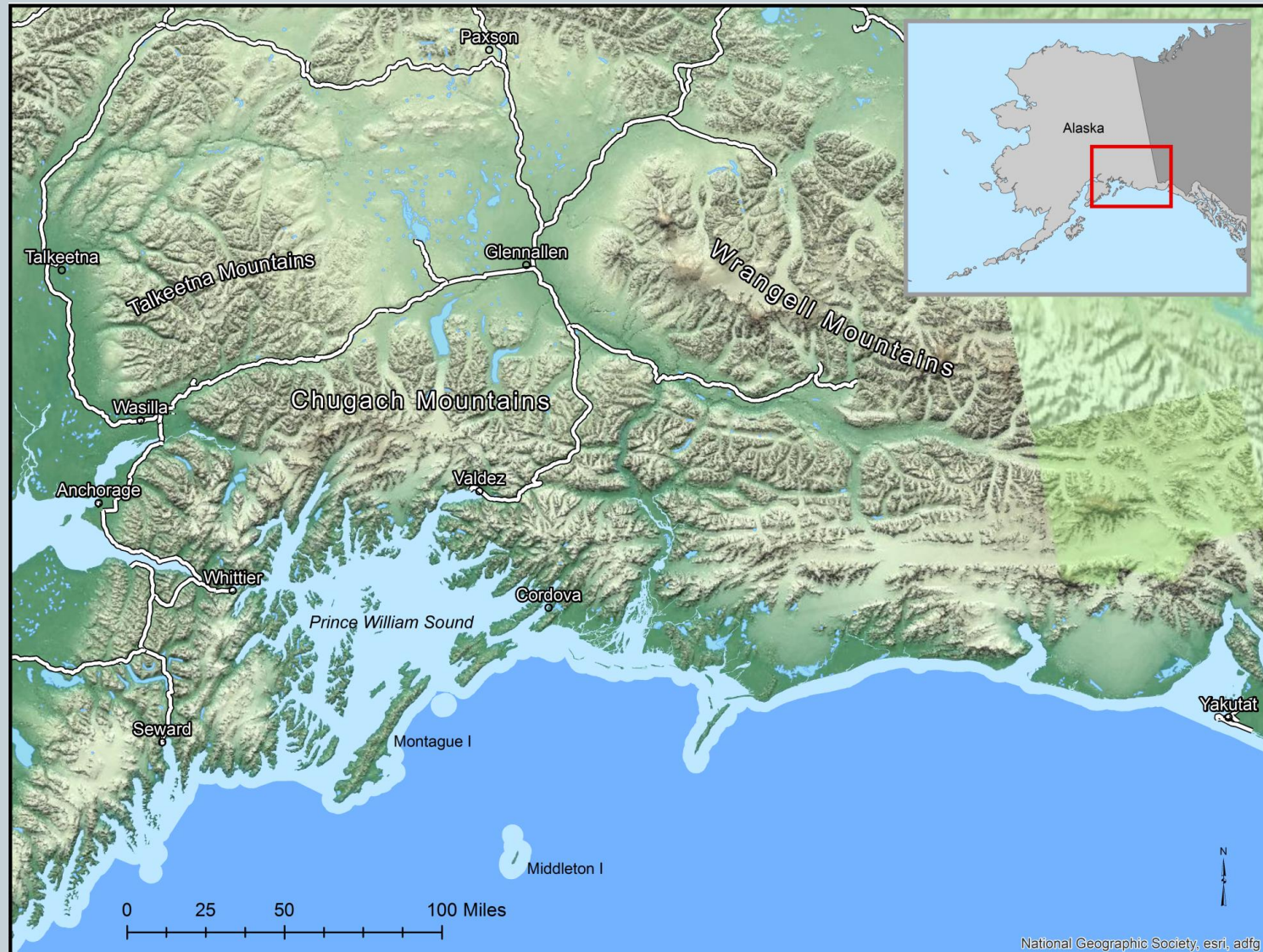
2016 Season summary

2017 update

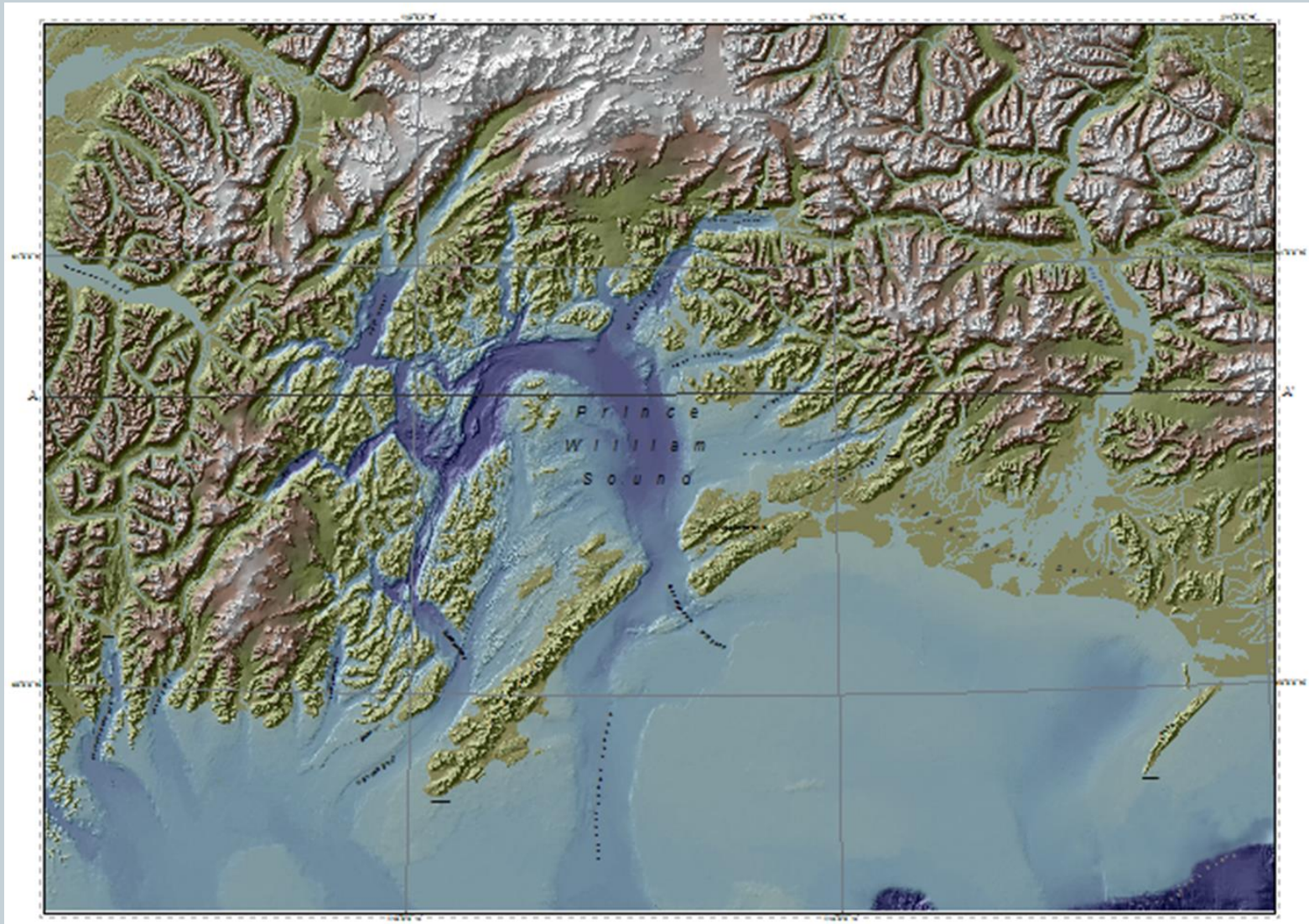
Tricks to increase your odds

Reminders

PWS Spot Shrimp (Area)



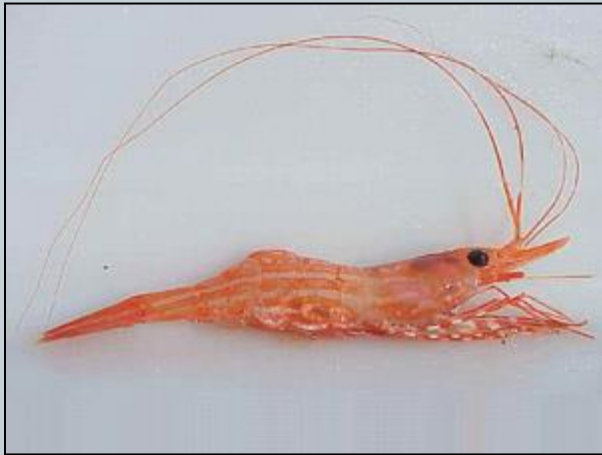
PWS Spot Shrimp (Area)



PWS Shrimp (Biology)

Three most commonly caught species of Pandalid Shrimp in the sound

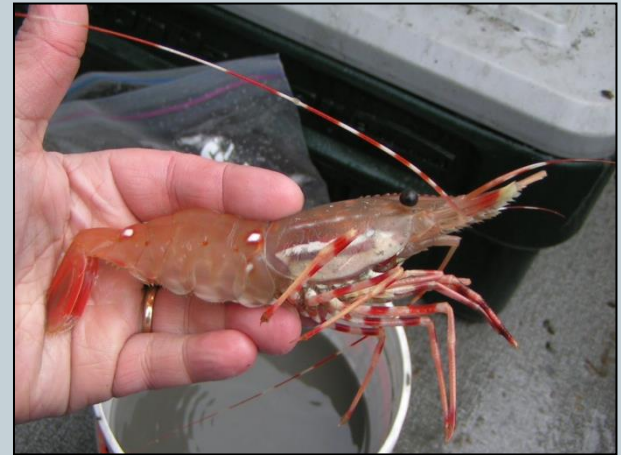
Sidestriped



Coonstripe



Spot

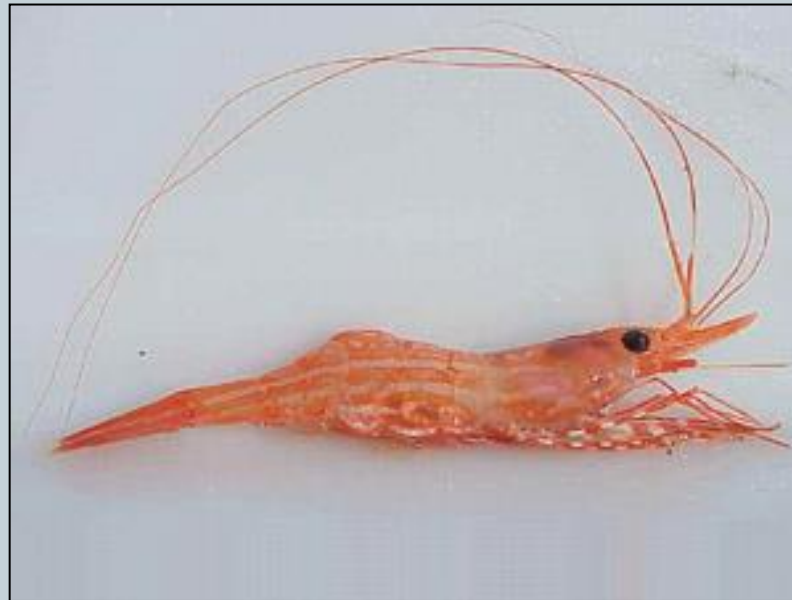


- 1) They are reported the same on the harvest report
- 2) **THE ALL TASTE GOOD!**

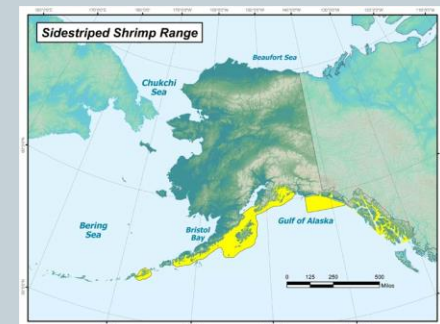
PWS Shrimp (Biology)

3 commonly caught species of pandalid shrimp:

1) Sidestriped (*Pandalopsis dispar*)



- 1) Slender, pinkish-orange in color with white stripes running lengthwise on the body
- 2) Can reach 8 inches in length
- 3) Extremely long antennae (1.5 times body length)



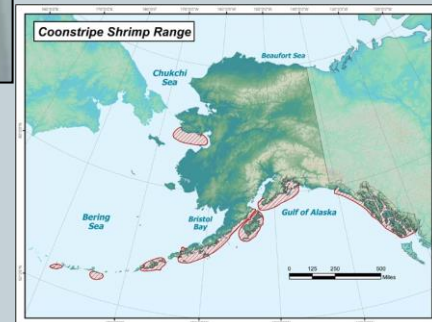
PWS Shrimp (Biology)

3 commonly caught species of pandalid shrimp:

2) Coonstripe (*Pandalus hypsinotis*)



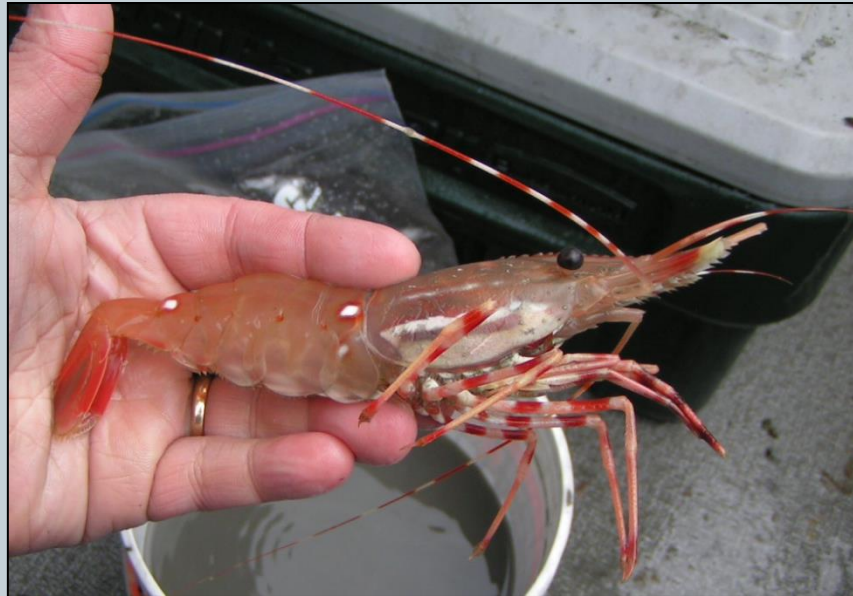
- 1) Distinct darker striped marking on their abdomen
- 2) Typically range 4 – 6 inches and but can be up to 7 ½ inches
- 3) Distinct robust and arched Carapace



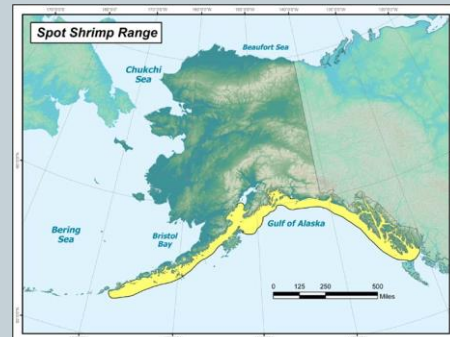
PWS Shrimp (Biology)

3 commonly caught species of pandalid shrimp:

3) Spot (*Pandalus platyceros*)



- 1) Largest and most common caught
- 2) Commonly exceeding 9 inches in Length
- 3) Distinct white spots behind the head



PWS Pandalid Shrimp (Lifecycle)

- Life span of seven to eleven years
- Adults are relatively sedentary (small range)
 - Susceptible to localized depletion
- Protandrous hermaphrodites
 - Begin life as males
 - Become female later in life at larger size (~35 mm carapace length)



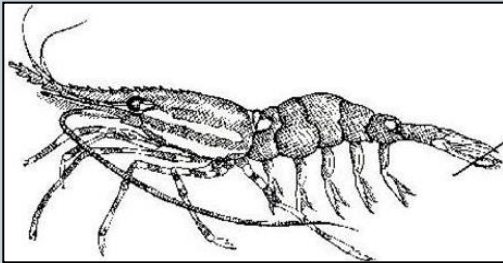
PWS Pandalid Shrimp (Lifecycle)

Spawn in Fall



Eggs hatch in Spring

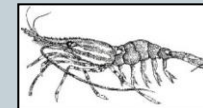
Age 3-10: all individuals are females



Larval Stage: free-swimming, planktonic

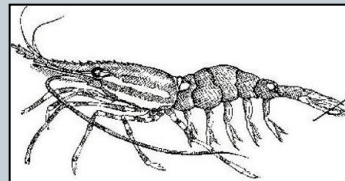


Juveniles: settle to bottom in mid-summer

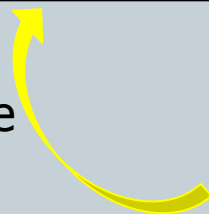
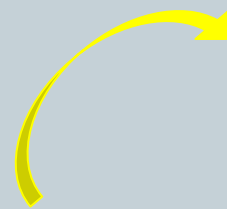


Sex change from male to female

Age 1-2: all individuals are males



Protandrous Hermaphrodites



PWS Shrimp (Biology)

What do they eat?

Opportunistic scavengers: Use antennae to actively search for food: invertebrates, algae, detritus....More active at night

What eats them?

Halibut, Rockfish, cod, salmon, us, etc.

Where can adults be found?

rock piles, crevices, coral, coral, on sponges, debris-covered bottoms. (20 – 250 fathoms) greatest concentration ~60 fathoms

PWS Shrimp (Management)

- Research (Survey and collect information)
- Develop models to determine sustainable harvest levels
- Inform public and allow user to harvest within sustainable levels and current regulatory guidelines

PWS Shrimp (Shrimp Survey)

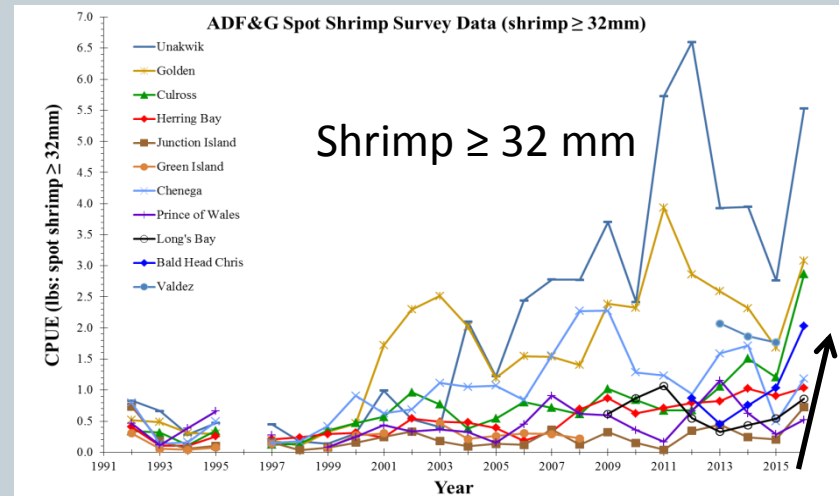
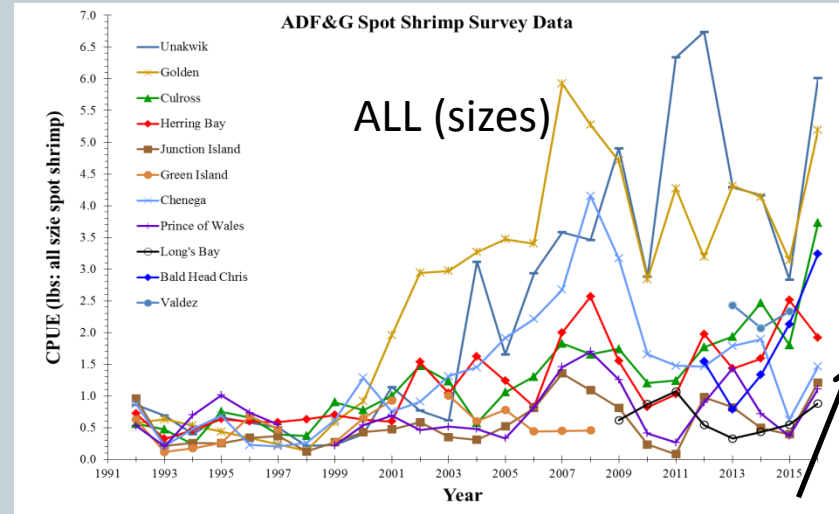
ADF&G Spot Shrimp Survey Site Locations



- *More information online*

PWS Shrimp (Shrimp Results)

ADF&G Spot Shrimp Survey Site Locations



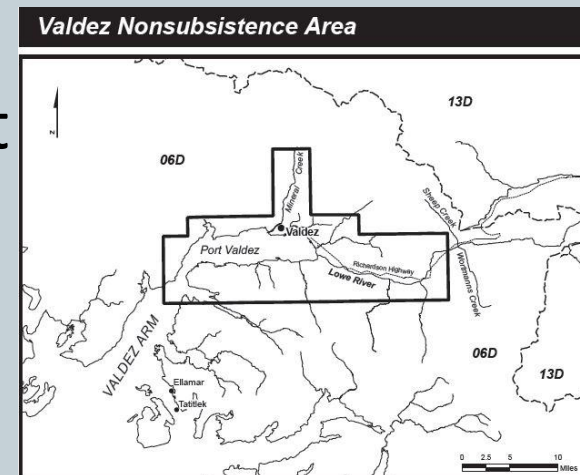
Charts are available online.

PWS Shrimp (Management) Guideline Harvest Level (GHL) Development

- Surplus Production Model
 - Relative survey abundance
 - Survey CPUE
 - Total catch weight
 - Previous year's harvest from commercial and noncommercial fisheries
- ***Model provides total allowable harvest (TAH) and GHLs for commercial (40%) and noncommercial fisheries (60%)***
- **2017 Fishery TAH: 167, 579 lbs**
 - Non commercial fishery (GHL)= 100,000 lb**
 - Commercial fishery = 67,000 lb,**

PWS Shrimp (Non commercial Management)

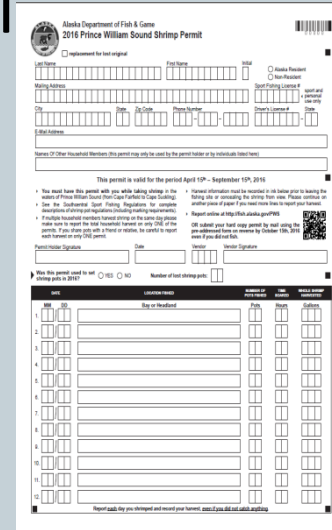
- 1) Noncommercial = subsistence and sport
- 2) Sport license is required for sport but not for subsistence
- 3) All saltwaters are open to shrimp fishing with the exception of subsistence use in the Valdez Non subsistence area
- 4) There is no threshold that must be met in order for this fishery to take place
- 5) No daily or season bag limit of shrimp



PWS Shrimp

(Non commercial Management)

1. Same permit for all non commercial users (subsistence and sport)
2. *Permits are available online!*
3. Permit required at time of harvest
4. Must be filled out prior to leaving fishing site
5. Shrimp reported as gallons of whole shrimp
6. Required to report by Oct. 15. Reporting can be done online.



Alaska Department of Fish & Game
2016 Prince William Sound Shrimp Permit

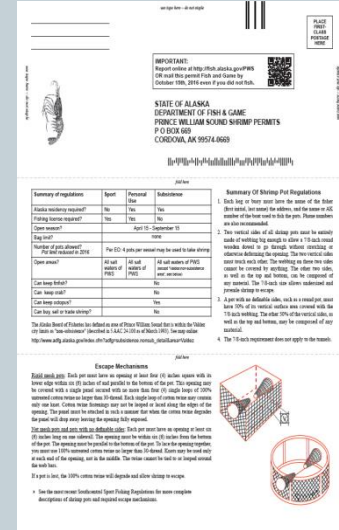
Life Name: _____ First Name: _____ Initial: _____
Address: _____
City: _____ State: _____ Zip: _____ Phone Number: _____
E-Mail Address: _____

This permit is valid for the period April 15th - September 15th, 2016.

Number of persons allowed to fish: _____
Number of traps: _____

Permit Holder Signature: _____ Date: _____
Writer Signature: _____

Trap	Location	Trap Type	Trap Size	Trap Depth	Trap Status
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					



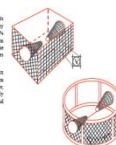
Summary of regulations

Regulation	Subsistence	Sport
Shrimp traps required?	No	No
Trap depth required?	No	No
Trap size?	18-24"	18-24"
Trap type?	FC	FC
Open area?	All	All
Can trap be used?	No	No
Can trap be used in transit?	No	No

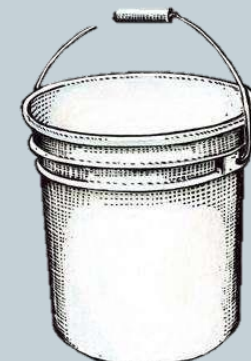
Summary of Shrimp Trap Regulations

1. Each trap or trap set must be the size of the other. The other must be the same size as the other. The other must be the same size as the other.
2. The vertical size of all shrimp traps must be exactly equal to the vertical size of the other. The other must be exactly equal to the vertical size of the other.
3. A permit holder who is a resident of Alaska must have 10% of the vertical size of the other. The other must be 10% of the vertical size of the other.
4. The 10% rule does not apply to the other.

Escape Mechanisms



Each trap must have an escape mechanism. The escape mechanism must be made of material that is at least 1/4 inch thick. The escape mechanism must be made of material that is at least 1/4 inch thick. The escape mechanism must be made of material that is at least 1/4 inch thick.

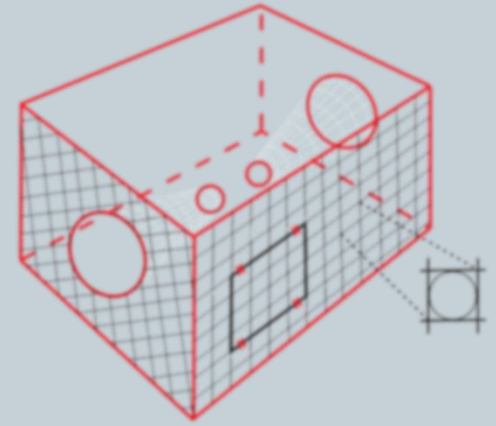
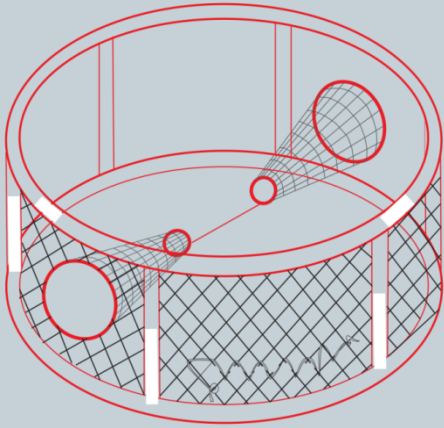


Report in Gallons of Whole shrimp

PWS Shrimp (2016 update)



PWS Shrimp (2016)



- Management goal: To stay within the established noncommercial GHL of **70,500 lb.**
 - Emergency order (EO) was issued to reduced the maximum number of pots from 5 to 4 per person per vessel.

PWS Shrimp (2016 update)

Most PWS permits issued

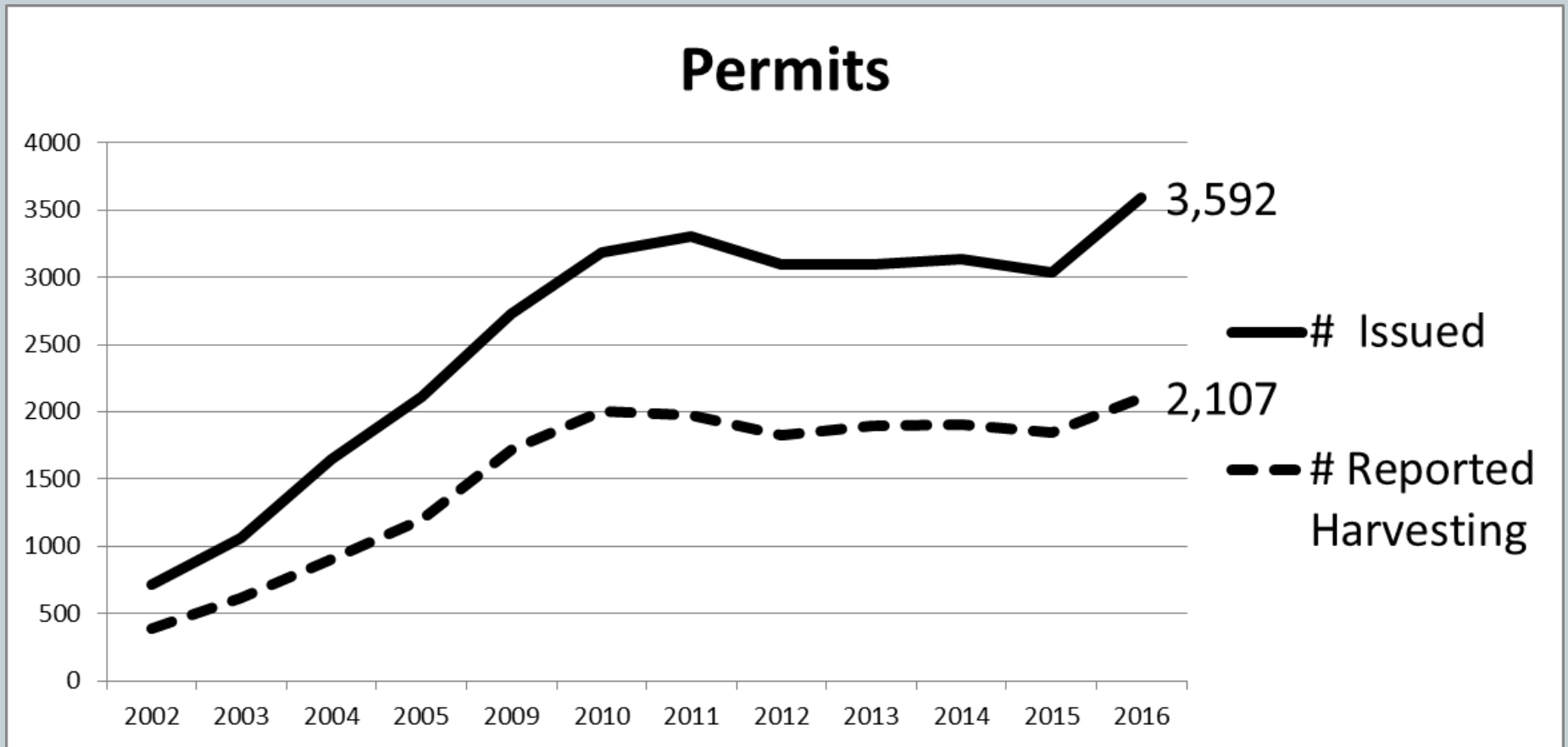
Low (pre-2009) effort levels

Emergency Order was issued (Reducing pot limit from 5 to 4)	2016	Prior 5-yr Avg (2011 - 2015)
Permits Issued	3,592	3,092
% Response	91%	87%
% reported harvesting Shrimp	59%	60%
Effort (Pot days)*	45,012	50,989
Harvest (Gallon of whole shrimp)*	26,423	23,317
Harvest (lbs)*	102,785	90,705
* expanded to account for non-reported		

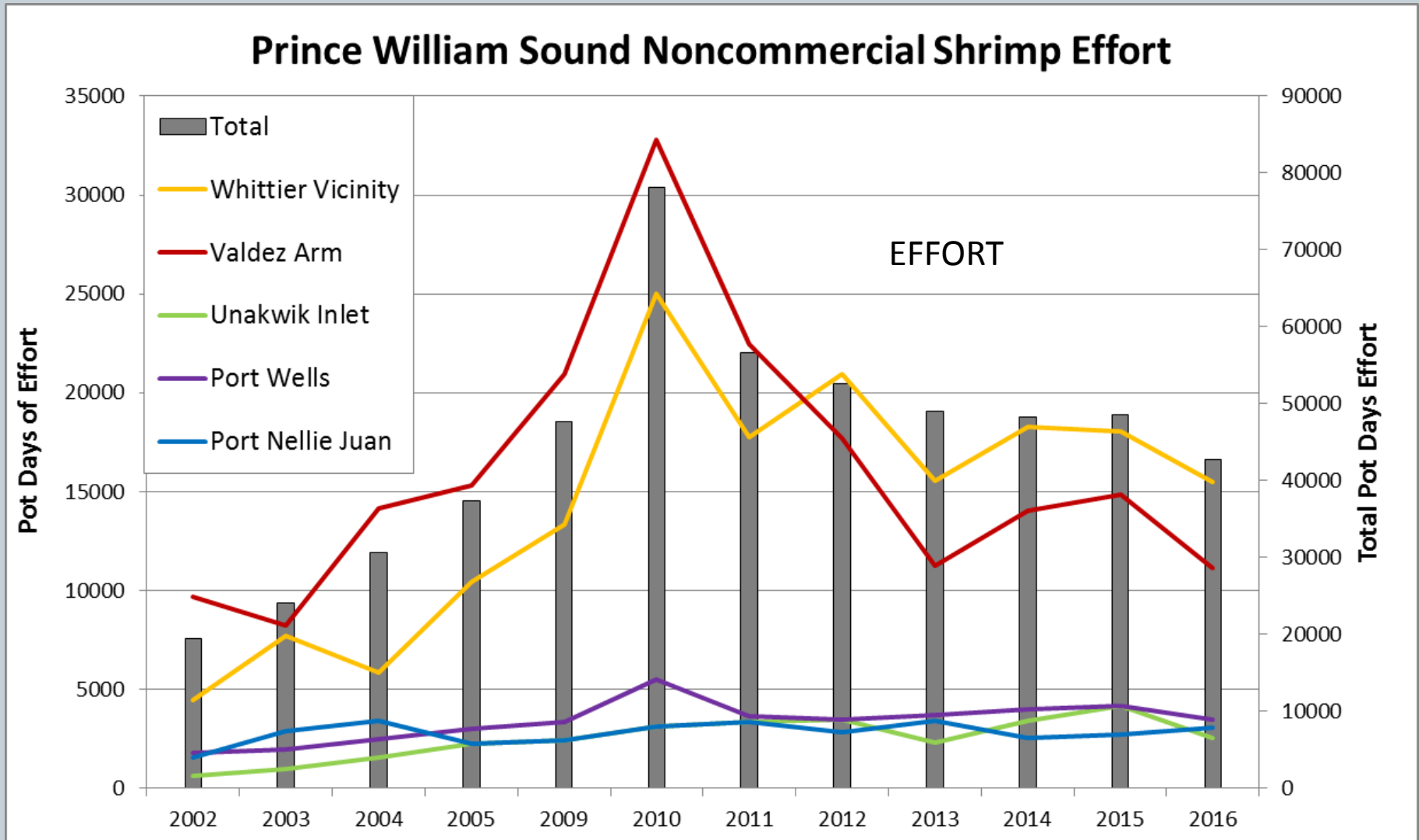
1 gallon of shrimp = approx. 3.89 lbs

Highest harvest on record

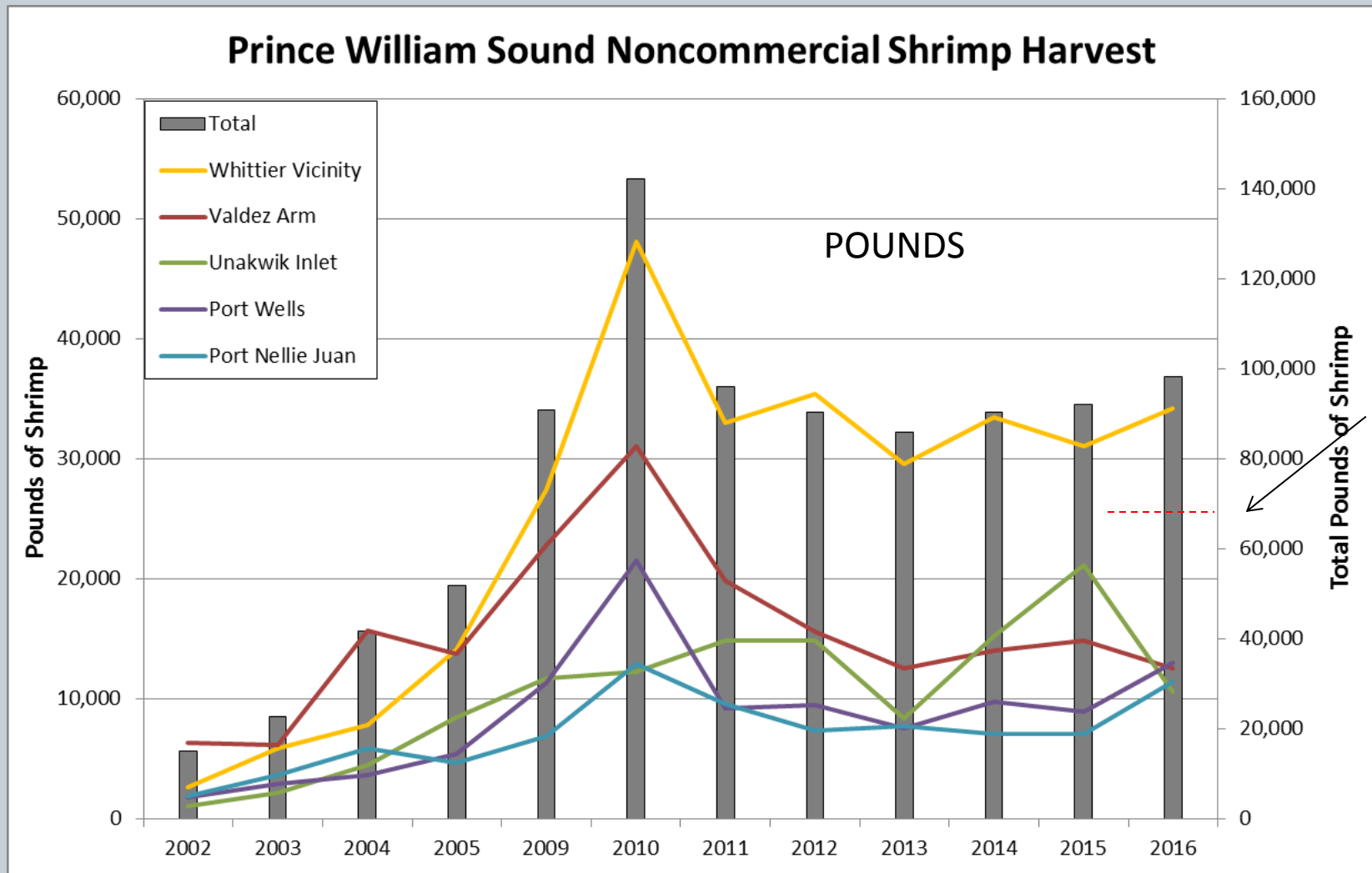
PWS Shrimp (2016 update) Permits



PWS Shrimp non commercial (2016 update) Effort



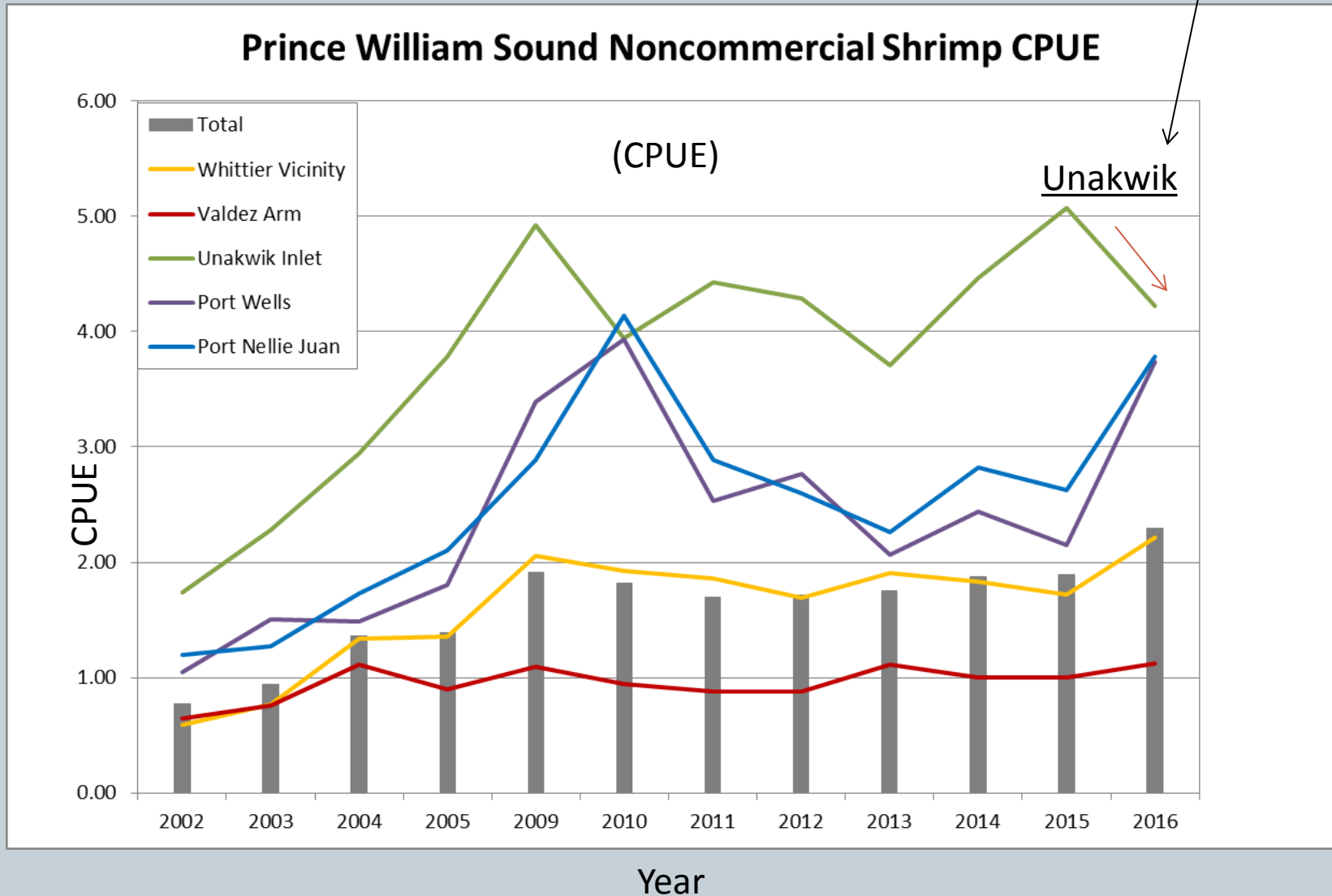
PWS Shrimp non commercial (2016 update) Harvest



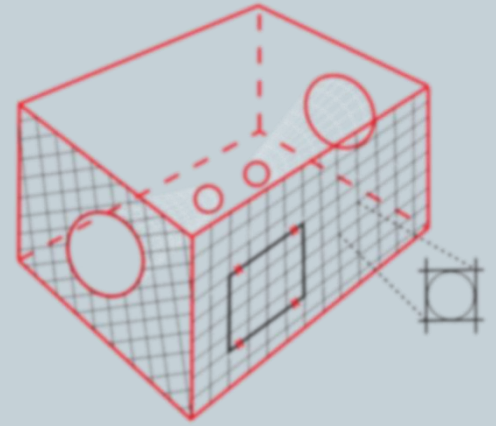
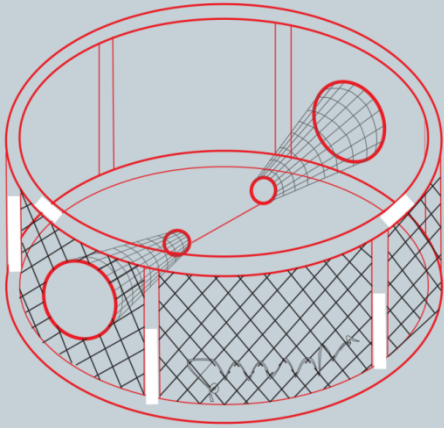
2016
GHL
70,500

PWS Shrimp non commercial (2016 update) CPUE

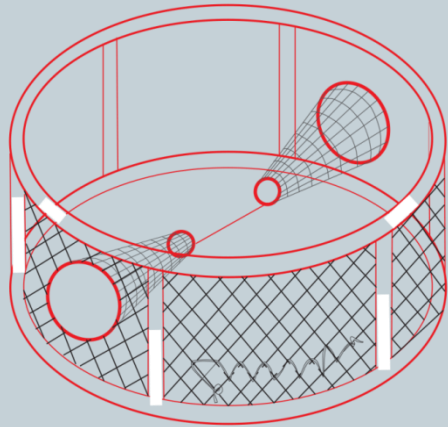
Commercial
Concentrated
in area 1 in
2016



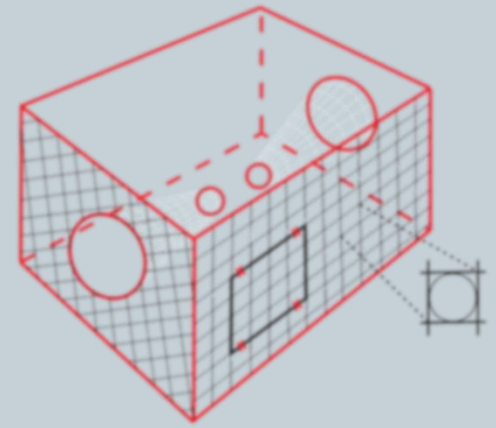
PWS Shrimp (2017)



- Commercial shrimp survey results were positive.
- Management goal: To stay within the established noncommercial GHL of **100,000 lb.**
 - Emergency order (EO) was issued to reduced the maximum number of pots from 5 to 4 per person per vessel.

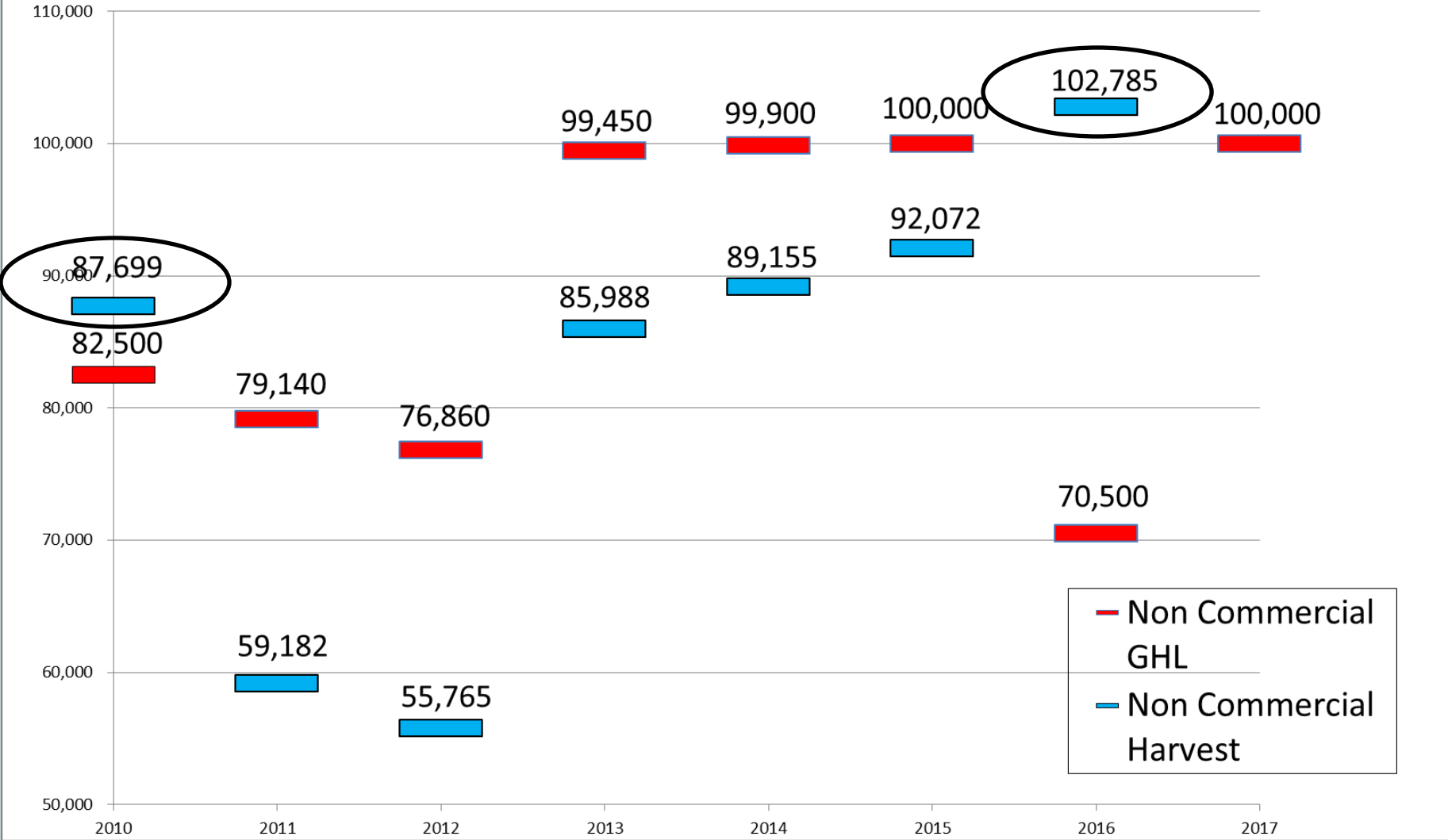


PWS Shrimp (2017)



- Oct 2016 Commercial survey indicated shrimp population healthy
- 2017 Participation (??)
 - Have no reason to anticipate an increase in participation.
- 2017 Effort (??)
 - Per E.O. reduced from 5 pots to 4 pots per person per vessel to remain similar effort levels of 2016.
- 2017 Harvest (??)
 - If participation, effort, and shrimp population is similar to 2016 season the harvest levels should be similar to 2016 season.

Non Commercial GHL's and Harvest Levels



PWS Shrimp (Tricks)

- Get the most use out of your 4 pots
 - Have two strings of two pots
- Soak pots overnight when possible
 - Shrimp are more active at night
- Be adaptive
 - Try new areas to avoid localized depletion
 - Use variety of baits
 - Seasonal movement



PWS Shrimp (Reminders)

- Get your fishing license and permit online
- Reporting is required and is important for accurate management. (Report online)
- Read and understand the regulations and Emergency Orders (Current Shrimp EO = 4 pots per vessel)
- Enforcement will be out.....Please correctly label your pot line
 - Must have name, home address, DOT Boat number or boat name (see reg booklet for more details)
 - Recommend putting your phone number on your buoy to aid enforcement officials

Have Fun and Be Safe!!

A close-up photograph of a person's hand holding a crayfish. The person is wearing a maroon long-sleeved shirt. The crayfish is orange and has its long antennae and legs extended. The background is a body of water with ripples. A white speech bubble with a brown border is overlaid on the image, containing text.

**Thank you for your attention and
time.**

Any questions?

The End

