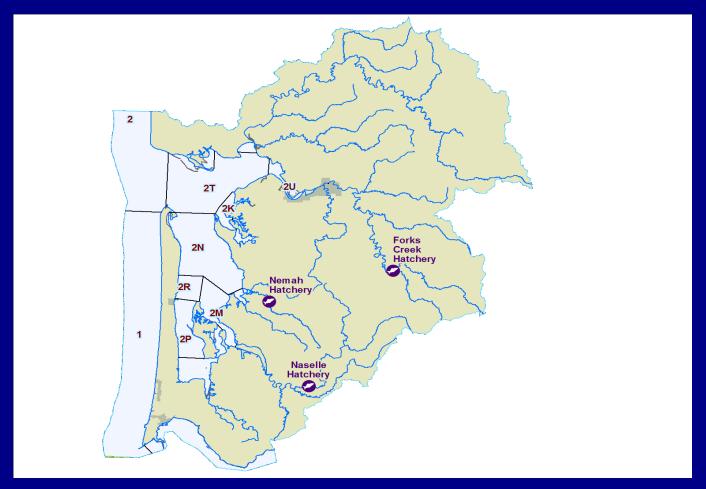
Willapa Bay Salmon Management Policy 2017 Season Review



Annette Hoffmann & Chad Herring–Region 6 Fish Program Washington Fish and Wildlife Commission Meeting
December 9, 2017

Presentation Outline

- Review of Key Policy Elements
 - Enhance conservation focus
 - Reduce gear conflict
- Review of 2017 Planning
- Fishery Review
 - Recreational
 - Commercial
- Stock Assessment
- 2018 Implementation

Review of Key Policy Elements

Implement Phase I: Chinook Rebuilding

 20% harvest rate limit on Naselle and Willapa River stocks

Pursue Alternative Commercial Gears

- Additional mark selective fishery opportunities
- 6% of commercial impacts

Prioritize Species Utilization by Sector

- Chinook recreational priority
- Coho and Chum commercial priority

Review of Key Policy Elements

Chinook Fishery Management

- No commercial fisheries in areas 2T and 2U prior to September 16.
- No commercial fisheries in areas 2M, 2N, 2P and 2R until after Labor Day.

Review of 2017 Planning

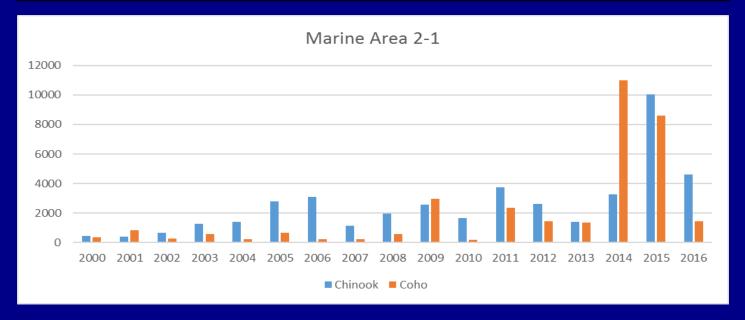
- Constraining stocks
 - Chinook
 - Rebuilding
 - 20% harvest rate on Naselle and Willapa stocks
 - Chum
 - 10% harvest rate
 - No commercial fisheries between October 15-31
- Alternative gear proposals
 - Floating pontoon fish trap

Recreational Fishery Review

- Marine Area 2-1
 - Marine Area 2 rules
 - August 1st January 31st
 - 3 adult daily limit, release wild Chinook
 - 2-pole endorsement
- Freshwater
 - August 1st January 31st
 - 4 adult daily limit, release wild Chinook
 - 2-pole endorsement
 - November 1st only 2 wild Coho

Recreational Marine Fishery Review

| Years | Total Catch | | | | |
|----------------|-------------|-------|--|--|--|
| | Chinook | Coho | | | |
| 2011-2014 avg. | 2,760 | 4,039 | | | |
| 2015 | 10,047 | 8,611 | | | |
| 2016 | 4,626 | 1,428 | | | |



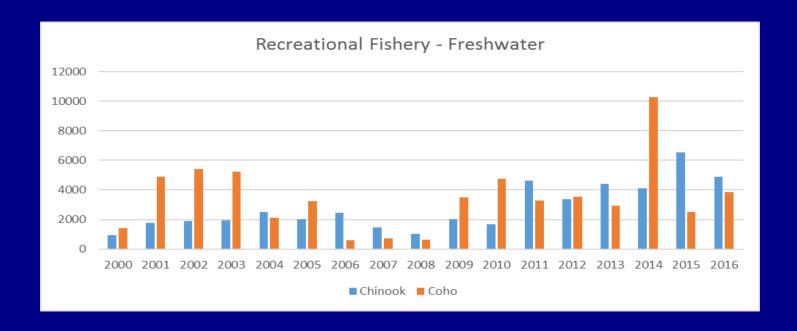
Recreational Marine Fishery Review

Recreational Monitoring

| | T 4.1 | | Chinook | | | | Coho | | |
|-------|---------------------------|------------------|----------------------|---------------------|-----|--------------------|----------------------|---------------------|--|
| Year | Year Number of Interviews | Total Anglers | Hatchery Retained | Natural Retained | | Encounter Ratio | Hatchery Retained | Natural Retained | |
| 2015 | 351 | 848 | 385 | 1 | 151 | 0.3922 | 149 | 92 | |
| 2016 | 1487 | 3516 | 695 | 8 | 254 | 0.3655 | 163 | 54 | |
| 2017 | 919 | 2127 | 499 | 4 | 166 | 0.3327 | 60 | 37 | |
| Total | 2757 | 6491 | 1579 | 13 | 571 | 0.3616 | 372 | 183 | |

Recreational Freshwater Fishery Review

| Years | Total Catch | | | | |
|----------------|-------------|-------|--|--|--|
| | Chinook | Coho | | | |
| 2011-2014 avg. | 4,116 | 5,017 | | | |
| 2015 | 6,544 | 2,494 | | | |
| 2016 | 4,887 | 3,845 | | | |

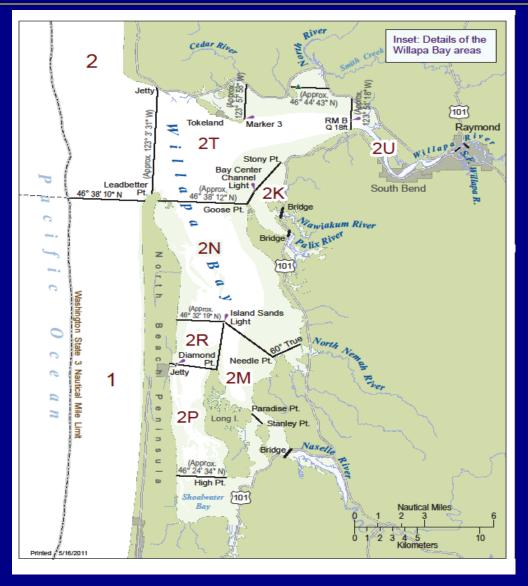


Recreational Fishery Review

Recreational Harvest Rates – Wild Chinook

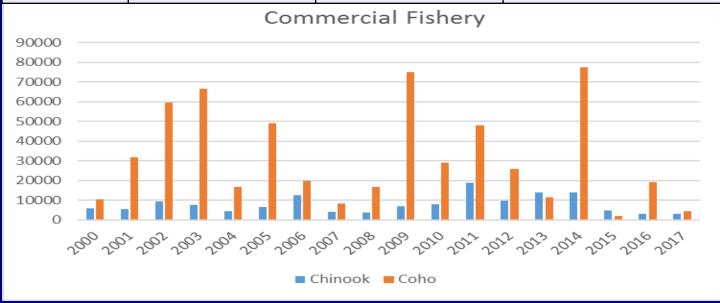
| | Predicted Pre-Season Harvest Rates | | | | Actual Post-Season Harvest Rates | | | | | | | |
|---------|------------------------------------|------------------|------------------|----------------|----------------------------------|------------------|----------------|------------------|------------------|----------------|------------------|------------------|
| | Marine Area 2-1 | | | Freshwater | | Marine Area 2-1 | | | Freshwater | | | |
| Year | Willapa Bay | Willapa River | Naselle River | Willapa Bay | Willapa River | Naselle River | Willapa Bay | Willapa River | Naselle River | Willapa Bay | Willapa River | Naselle River |
| 2015 | 0.021 | 0.04 | 0.011 | 0.019 | 0.015 | 0.012 | 0.059 | 0.100 | 0.044 | 0.043 | 0.048 | 0.022 |
| 2016 | 0.028 | 0.056 | 0.007 | 0.02 | 0.021 | 0.013 | 0.075 | 0.141 | 0.036 | 0.016 | 0.009 | 0.021 |
| 2017 | 0.041 | 0.076 | 0.011 | 0.038 | 0.045 | 0.023 | | | | | | |
| Average | 0.030 | 0.057 | 0.010 | 0.026 | 0.027 | 0.016 | 0.067 | 0.120 | 0.040 | 0.029 | 0.029 | 0.021 |

- Average total actual harvest rate by sub-basin
 - Willapa Bay 9.6%, Willapa River 14.9%, Naselle River 6.1%

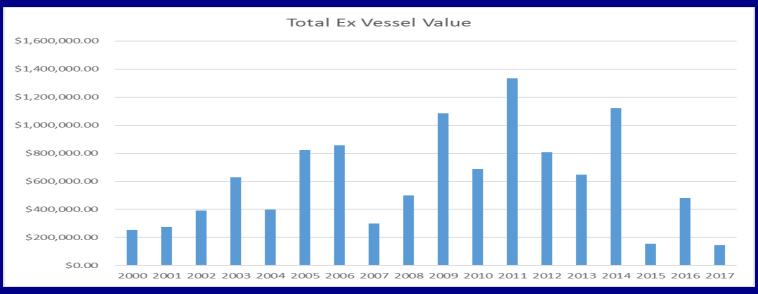


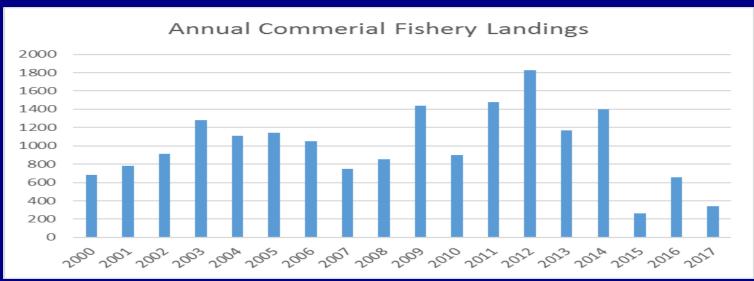
- South Bay Areas 2N, 2R, and 2M
 - September 5th October 13th
 - 22 12-hr openers
 - 7 tangle net openers
 - November
 - 22 24-hr openers
- North Bay Areas 2T and 2U
 - September 18th October 13th
 - 2U 19 12-hr openers, all tangle net
 - 2T 10 12-hr openers, 3 tangle net
 - November
 - 22 24-hr openers

| Voorg | Landed Catch | | | | | | |
|-----------|--------------|--------|------------------|--|--|--|--|
| Years | Chinook | Coho | Ex-Vessel Value* | | | | |
| 2011-2014 | 13,990 | 40,698 | \$978,437 | | | | |
| avg. | 13,770 | 10,070 | Ψ270,737 | | | | |
| 2015 | 4,737 | 1,922 | \$155,579 | | | | |
| 2016 | 3,144 | 19,304 | \$480,513 | | | | |
| 2017 | 2,946 | 4,575 | \$146,964 | | | | |



* GDP adjusted to 3rd Quarter 2017





Commercial Fishery Monitoring – Wild Chinook

| Total Impacts | | | | | | | | | | |
|---------------|----------------|------------------|---------------|----------------|------------------|---------------|--|--|--|--|
| | | Predicted | | Actual | | | | | | |
| Year | Willapa Bay | Willapa River | Naselle River | Willapa Bay | Willapa River | Naselle River | | | | |
| 2015 | 581 | 208 | 303 | 515 | 122 | 314 | | | | |
| 2016 | 493 | 169 | 281 | 298 | 97 | 173 | | | | |
| 2017 | 468 | 155 | 242 | 290 | 169 | 105 | | | | |

| Harvest Rate | | | | | | | | | | |
|--------------|----------------|------------------|---------------|----------------|------------------|---------------|--|--|--|--|
| | | Predicted | | Actual | | | | | | |
| Year | Willapa Bay | Willapa River | Naselle River | Willapa Bay | Willapa River | Naselle River | | | | |
| 2015 | 15.2 | 14.5 | 16.5 | 11.9 | 7.6 | 15.6 | | | | |
| 2016 | 15.1 | 11.8 | 17.3 | 12.3 | 9.2 | 18.8 | | | | |
| 2017 | 11.3 | 7.8 | 14.4 | | | | | | | |

Alternative Gear

| | Policy O | bjective | Pre-Se | ason | Actual | | |
|------|------------------|------------------|------------------|------------------|------------------|------------------|--|
| Year | Willapa River | Naselle River | Willapa River | Naselle River | Willapa River | Naselle River | |
| 2015 | 1.0% | 1.0% | 6.5% | 1.1% | 2.5% | 0.4% | |
| 2016 | 2.0% | 2.0% | 6.8% | 11.0% | 2.7% | 2.7% | |
| 2017 | 6.0% | 6.0% | 6.0% | 11.9% | | | |

- Tangle net use
- Terminal areas
- Condition upon release

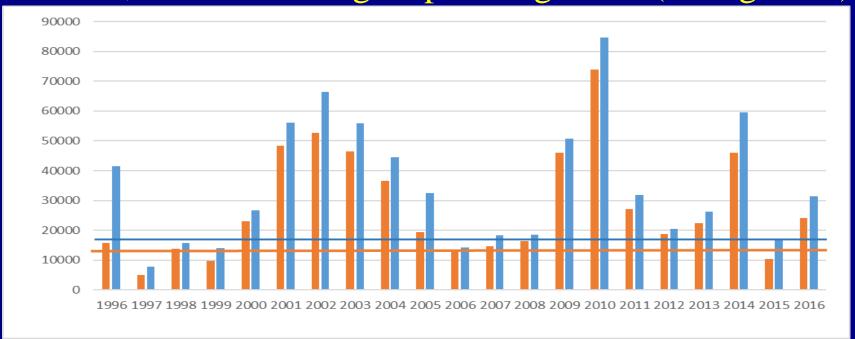
- Alternative Gear Proposals
 - Floating pontoon fish trap
 - Emerging Commercial Fishery
 - CR-101 filed April 19,2017
 - 3 stakeholder meetings
 - Public comment
 - Unlimited entry, time and place, ability to participate given timeframe, and faulty process
 - Withdrawn on June 14, 2017
 - Experimental Commercial Fishery
 - CR-101 filed June 14, 2017
 - 3 stakeholder meetings
 - Public comment similar to previous meetings

Stock Assessment - Chinook

| Basin | North River/Smith Creek | | Willapa River | | Naselle River | | Willapa Bay Basin | | |
|----------------|-------------------------------|------|---------------|------|---------------|--------------|-------------------|-------------|--|
| Pop. Des. | Prin | nary | Prim | nary | Contri | Contributing | | BASIN TOTAL | |
| Goal | 99 | 91 | 118 | 81 | 15 | 47 | 435 | 53 | |
| Year | NOS | pHOS | NOS | pHOS | NOS | pHOS | NOS | pHOS | |
| 2010 | 315 | 0% | 1873 | 69% | 1971 | 82% | 4418 | 76% | |
| 2011 | 298 | 0% | 1473 | 70% | 1415 | 87% | 3331 | 81% | |
| 2012 | 168 | 0% | 1191 | 66% | 581 | 92% | 2057 | 81% | |
| 2013 | 113 | 0% | 481 | 77% | 767 | 82% | 1669 | 80% | |
| 2014 | 99 | 47% | 784 | 74% | 975 | 81% | 1936 | 81% | |
| 2015 | 173 | 0% | 1064 | 70% | 483 | 68% | 2043 | 73% | |
| 2016 | 194 | 0% | 575 | 81% | 597 | 75% | 1581 | 74% | |
| 2017 | 190 | 0% | 1668 | 66% | 1191 | 24% | 3392 | 61% | |
| 2010-2016 Avg. | 194 | 7% | 1063 | 72% | 970 | 81% | 2434 | 78% | |

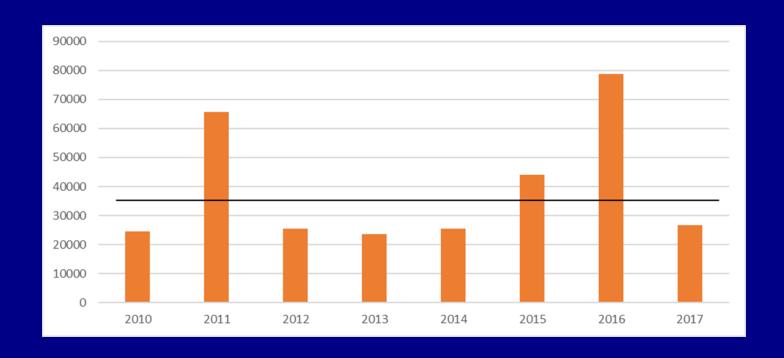
Stock assessment - Coho

- PFMC Objective
 - 17,200 naturally spawning Coho (Blue line)
- WDFW Objective
 - 13,400 natural origin spawning Coho (Orange line)



Stock assessment - Chum

- Spawner Escapement Objective
 - -35,400



2018 Policy Implementation

Constraining stocks

- Willapa River Fall Chinook 20%
- Naselle River Fall Chinook 20%
- − Willapa Bay Chum − 10%
- Continue to explore alternative gear
 - Floating pontoon fish trap
- Allocation of available impacts

Questions?