

2019 GRAYS HARBOR FISHERY SUMMARY

Spring Chinook

- No scheduled recreational fishery, did not meet escapement goal.

Fall Chinook

- Chehalis natural-origin Chinook have not achieved the escapement goal 3 of the past 5 years; WDFW-managed fisheries will not exceed 5% of the forecasted adult return to Grays Harbor.
- Humptulips natural-origin Chinook achieved escapement goal 3 of the past 5 years.
 - Harvest opportunities

Coho

- **Chehalis Coho**
 - Achieved escapement goal 3 of the past 5 years.
 - Harvest opportunities
- **Humptulips Coho.**
 - Humptulips natural-origin Coho have not achieved the escapement goal 3 of the past 5 years; WDFW-managed fisheries will not exceed 5% of the adult return to Grays Harbor.

Grays Harbor Chum

- Achieve escapement goal 3 of the past 5 years.
 - Harvest opportunities

Sturgeon

- Closed due to conservation concerns, managed by Region 5.

PAST PERFORMANCE (Shaded values exceed goal)

| Natural Spawning Escapement (Preliminary and Subject to Revision) | | | | | |
|--|------------------------------|--------------------------------|----------------------|------------------------|--------------------------|
| Year | Chehalis Fall Chinook | Humptulips Fall Chinook | Chehalis Coho | Humptulips Coho | Grays Harbor Chum |
| 2012 | 9,778 | 4,254 | 63,523 | 2,097 | 25,452 |
| 2013 | 10,158 | 2,345 | 52,133 | 3,599 | 21,284 |
| Goal | <i>12,364</i> | <i>2,236</i> | <i>28,506</i> | <i>6,894</i> | <i>21,000</i> |
| 2014 | 8,590 | 3,303 | 92,000 | 11,172 | 14,711 |
| 2015 | 13,227 | 4,078 | 19,389 | 1,500 | 33,705 |
| 2016 | 7,117 | 4,131 | 31,730 | 4,066 | 62,811 |
| 2017 | 9,594 | 7,551 | 22,691 | 2,832 | 18,627 |
| 2018 | 17,000 | 4,000 | N/A | N/A | 28,413 |
| Goal | <i>9,753</i> | <i>3,573</i> | <i>28,506</i> | <i>6,894</i> | <i>21,000</i> |
| Exceeded 3 of 5 | NO | YES | YES | NO | YES |

Distribution of Grays Harbor Catch

Chehalis River

| Chinook Actual Catch | | | | | |
|----------------------|-------|---------------|-----------------|------------|------------|
| Year | Catch | | | | |
| | QIN | NT Commercial | Sport | | Freshwater |
| | | | Marine area 2-2 | Freshwater | |
| 2012 | 19.9% | 1.0% | 13.9% | 2.9% | 2.9% |
| 2013 | 17.4% | 0.1% | 6.6% | 5.1% | 5.1% |
| 2014 | 31.0% | 0.1% | 0.3% | 2.0% | 2.0% |
| 2015 | 32.9% | 0.2% | 0.2% | 2.0% | 2.0% |
| 2016 | 12.7% | 0.1% | 0.6% | 3.9% | 3.9% |
| 2017 | 13.6% | 0.1% | 0.7% | 0.3% | 0.3% |

Humtulpis River

| Chinook Actual Catch | | | | | |
|----------------------|-------|---------------|-----------------|------------|------------|
| Year | Catch | | | | |
| | QIN | NT Commercial | Sport | | Freshwater |
| | | | Marine area 2-2 | Freshwater | |
| 2012 | 23.2% | 13.2% | 2.7% | 18.6% | 18.6% |
| 2013 | 34.0% | 0.4% | 1.1% | 33.1% | 33.1% |
| 2014 | 30.7% | 0.0% | 1.5% | 12.0% | 12.0% |
| 2015 | 16.2% | 0.0% | 1.2% | 25.7% | 25.7% |
| 2016 | 24.5% | 0.2% | 3.2% | 27.7% | 27.7% |
| 2017 | 14.7% | 0.1% | 3.5% | 16.3% | 16.3% |

Coho Actual Catch

| Coho Actual Catch | | | | | |
|-------------------|-------|------|-----------------|------------|------------|
| Year | Catch | | | | |
| | QIN | CTCR | Sport | | Freshwater |
| | | | Marine area 2-2 | Freshwater | |
| 2012 | 20.8% | 1.9% | 7.6% | 4.6% | 7.0% |
| 2013 | 16.2% | 2.2% | 5.0% | 1.2% | 14.8% |
| 2014 | 24.2% | 3.1% | 2.3% | 2.9% | 7.9% |
| 2015 | 23.0% | 1.3% | 3.2% | 4.2% | 11.4% |
| 2016 | 2.3% | 1.6% | 0.4% | 0.7% | 2.9% |
| 2017 | 11.6% | 1.6% | 2.0% | 2.7% | 10.6% |

Coho Actual Catch

| Coho Actual Catch | | | | | |
|-------------------|-------|---------------|-----------------|------------|------------|
| Year | Catch | | | | |
| | QIN | NT Commercial | Sport | | Freshwater |
| | | | Marine area 2-2 | Freshwater | |
| 2012 | 18.3% | 1.9% | 1.2% | 14.9% | 14.9% |
| 2013 | 17.4% | 0.8% | 0.3% | 4.9% | 4.9% |
| 2014 | 29.4% | 0.0% | 1.2% | 12.5% | 12.5% |
| 2015 | 27.0% | 0.2% | 0.2% | 15.3% | 15.3% |
| 2016 | 6.6% | 0.2% | 0.8% | 11.8% | 11.8% |
| 2017 | 30.4% | 0.2% | 0.8% | 11.8% | 11.8% |

Grays Harbor Chum

| Grays Harbor Chum | | | | | |
|-------------------|-----------|---------------|-----------------|------------|------------|
| Year | Catch | | | | |
| | QIN catch | NT Commercial | Sport | | Freshwater |
| | | | Marine area 2-2 | Freshwater | |
| 2012 | 28.7% | 2.6% | 0.0% | 0.0% | 0.0% |
| 2013 | 28.8% | 13.5% | 0.0% | 3.5% | 3.5% |
| 2014 | 35.7% | 9.1% | 0.1% | 1.6% | 1.6% |
| 2015 | 17.7% | 9.7% | 0.0% | 0.6% | 0.6% |
| 2016 | 6.1% | 1.7% | 0.0% | 0.4% | 0.4% |
| 2017 | 19.6% | 12.5% | 0.0% | 1.7% | 1.7% |

QIN - Quinault Indian Nation
 NT - Non-Treaty
 CTCR - Confederated Tribes of the Chehalis Reservation

2018 Preliminary Chinook Performance

| Spring Chinook | | | |
|-----------------------|------------------|-------------------|--------------------|
| Metric | Objective | Pre-Season | Preliminary |
| Run-Size | | 1,748 | 528 |
| Spawners | 1,400 | 1,594 | 495 |

| Chehalis Natural Fall | | | |
|--------------------------------|------------------|-------------------|--------------------|
| Metric | Objective | Pre-Season | Preliminary |
| Run-Size Natural Origin | | 10,807 | 18,513 |
| Natural Spawners | 9,753 | 9,112 | 17,000 |
| NT Commercial HR | 0.8% | 0.21% | 0.16% |
| WDFW-Managed Fisheries | 5% | 3.1% | 2.65% |
| Humptulips Natural Fall | | | |
| Run-Size | | 5,592 | 5,415 |
| Natural Spawners | 3,573 | 4,214 | 4,000 |
| NT Commercial HR | 5.4% | 2.45% | 0.12% |

Co-management data evaluation still in progress, preliminary data subject to change.

2019 GH Planning Model 2018 fisheries with 2019 forecasts.xlsx
CHEHALIS RIVER

| | | Chinook | | | Coho | | | Chum | |
|-------------------------------|--|---------|----------|--------|--------|----------|---------|----------|------|
| | | Wild | Hatchery | Total | Wild | Hatchery | Total | GH Total | Chum |
| 2019 Pre-season Forecasted RS | | 17,781 | 2,390 | 20,171 | 61,317 | 48,621 | 109,938 | 71,959 | |
| Escapement Goal | | 9,753 | 578 | 10,331 | 28,506 | 1,500 | 30,006 | 21,000 | |
| Harvestable | | 8,028 | 1,812 | 9,840 | 32,811 | 47,121 | 79,932 | 50,959 | |
| Non-Treaty Share | | 4,014 | 906 | 4,920 | 16,406 | 23,561 | 39,966 | 25,480 | |

CHEHALIS RIVER

ANTICIPATED HARVEST IMPACTS

| Stat Wk - DATE | AREA | # DAYS | day length | NDR | | MSF | Chinook | | | Coho | | | Chum | | | |
|----------------|-------|--------|------------|-------------------------|------|------|---------|------------------------|-------|--------|------|----------|--------|--------|------|--------|
| | | | | Chin | Coho | | Wild | Wild 2A/2D on Hatchery | Total | MSF | Wild | Hatchery | Total | MSI | Chum | |
| 34 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 35 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 36 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 37 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 38 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 39 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 40 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 41 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 42 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 43 | ch eh | 1 | 1.00 | 0.03 | 0.02 | 0.56 | 80 | 25 | 18 | 99 | 1.00 | 399 | 316 | 714 | 1 | 1,286 |
| 44 | ch eh | 2 | 1.00 | 0.03 | 0.02 | 0.56 | 16 | 9 | 6 | 22 | 1.00 | 472 | 374 | 846 | 1 | 3,309 |
| 45 | ch eh | 0 | 0.75 | 0.03 | 0.02 | 0.56 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 0 | 0 |
| 46 | ch eh | 2 | 0.75 | 0.03 | 0.02 | 1.00 | 5 | 5 | 1 | 6 | 1.00 | 157 | 125 | 282 | 1 | 330 |
| 47 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 0 | 0 |
| 48 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 0 | 0 |
| | | 5 | | Total NT Net Catch | | | 101 | 39 | 25 | 126 | | 1,028 | 815 | 1,842 | | 4,925 |
| 12-hour days | | | | GH Marine Area 2.2 | | | 127 | 0.0022 | 30 | 157 | | 325 | 311 | 636 | | 68 |
| 24-hour days | | | | Westport Boat Basin | | | 0 | | 0 | 0 | | 0 | 43 | 43 | | 0 |
| 24-hour days | | | | FW River Sport | | | 303 | 142 | 77 | 522 | | 1,706 | 3,446 | 5,153 | | 1,400 |
| | | | | | | | 430 | | 106 | 679 | | 2,031 | 3,800 | 5,832 | | 1,468 |
| | | | | Chinook Tribe | | | 674 | | 0 | 674 | | 710 | 2,120 | 2,829 | | 0 |
| | | | | | | | 1,205 | 39 | 131 | 1,478 | | 3,768 | 6,735 | 10,504 | | 6,393 |
| | | | | Expected Escapement | | | 15,306 | | 2,012 | 17,175 | | 53,628 | 38,023 | 91,650 | | 46,318 |
| | | | | Escapement Goal | | | 9,753 | | 578 | 10,331 | | 28,506 | 1,500 | 30,006 | | 21,000 |
| | | | | Total Remaining Harvest | | | 5,553 | | 1,434 | 6,844 | | 25,122 | 36,523 | 61,644 | | 25,318 |
| | | | | Share Remaining | | | 2,809 | | 775 | 3,442 | | 12,637 | 16,825 | 29,462 | | 17,821 |
| | | | | Terminal Harvest Rate | | | 0.068 | 0.029870 | 0.055 | 0.073 | | 0.061 | 0.139 | 0.070 | | 0.106 |
| | | | | NT Chehalis River HR | | | | | | | | 3,066 | | | | 0.089 |

2019 GH Planning Model 2018 fisheries with 2019 forecasts.xlsx

| HUMPTULIPS RIVER | | | | | |
|-------------------------------|---------|----------|--------|----------|--------|
| | Chinook | | Coho | | Chum |
| | Wild | Hatchery | Wild | Hatchery | Total |
| 2019 Pre-season Forecasted RS | 6,207 | 2,467 | 5,133 | 11,186 | 16,319 |
| Escapement Goal | 3,573 | 369 | 6,894 | 400 | 7,294 |
| Harvestable | 2,834 | 2,098 | -1,761 | 10,786 | 9,025 |
| Non-Treaty Share | 1,317 | 1,049 | -881 | 5,393 | 4,513 |
| | | | | | 25,480 |

HUMPTULIPS RIVER
ANTICIPATED HARVEST IMPACTS

| DATE | AREA | # DAYS | length | NDR | | | Chinook | | | Coho | | | Humptulips Chum | | | | | | |
|---|------|--------|--------|------|------|------|--------------|----------------|--------------|---------------|--------------|---------------|-----------------|--------------|-----|------|----------|-------|---|
| | | | | Chin | Coho | MSF | Wild | Wild Hump onl | Hatchery | Total | MSF | Wild | Hatchery | Total | MSF | Wild | Hatchery | Total | |
| 34 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 0 | 1 | 0 |
| 35 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 0 | 1 | 0 |
| 36 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 0 | 1 | 0 |
| 37 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 0 | 1 | 0 |
| 38 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 0 | 1 | 0 |
| 39 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 0 | 1 | 0 |
| 40 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 0 | 1 | 0 |
| 41 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 0 | 1 | 0 |
| 42 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 0 | 1 | 0 |
| 43 | hump | 2 | 0.75 | 0.03 | 0.02 | 1.00 | 113 | 111 | 67 | 180 | 180 | 50 | 109 | 159 | 1 | 781 | 1 | 781 | 0 |
| 44 | hump | 1 | 1.00 | 0.03 | 0.02 | 1.00 | 14 | 13 | 5 | 19 | 19 | 9 | 20 | 29 | 1 | 324 | 1 | 324 | 0 |
| 45 | hump | 0 | 0.75 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 0 | 1 | 0 |
| 46 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 1.00 | 2 | 4 | 6 | 1 | 6 | 0 |
| 47 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 0 | 1 | 0 |
| 48 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 0 | 1 | 0 |
| 2 11-hour and 1 8-hour | | | | | | | 126 | 124 | 72 | 199 | 61 | 133 | 194 | 1,085 | | | | | |
| 24-hour days | | | | | | | 66 | 1,9966% | 82 | 147 | 15 | 180 | 194 | 181 | | | | | |
| | | | | | | | 519 | 837 | 1,356 | 128 | 1,488 | 1,616 | 181 | | | | | | |
| Total NT Sport Catch | | | | | | | 584 | 919 | 1,503 | 143 | 1,568 | 1,810 | 181 | | | | | | |
| Total NT Humptulip River Terminal Impact | | | | | | | 711 | 991 | 1,702 | 204 | 1,801 | 2,005 | 1,266 | | | | | | |
| Expected Escapement | | | | | | | 4,701 | 1,090 | 5,790 | 4,307 | 7,897 | 12,204 | 46,318 | | | | | | |
| Escapement Goal | | | | | | | 3,573 | 369 | 3,942 | 6,894 | 400 | 7,294 | 21,000 | | | | | | |
| Total Remaining Harvestable | | | | | | | 1,128 | 721 | 1,848 | -2,587 | 7,497 | 4,910 | 25,318 | | | | | | |
| Share Remaining | | | | | | | 606 | 58 | 664 | -1,084 | 3,592 | 2,508 | 17,821 | | | | | | |
| Terminal Harvest Rate | | | | | | | 0.114 | 0.402 | 0.196 | 4.0% | 0.161 | 0.123 | 0.106 | | | | | | |

| Chehalis 2A and 2D | | | |
|---------------------------|------------------------|--------|--------|
| WDFW managed | | goal | model |
| Chinook | share | 4,014 | 531 |
| | goal | 9,753 | 15,306 |
| | commercial rate < or = | 0.8% | 0.22% |
| | WDFW total < or = | 5.0% | 2.99% |
| | MA2.2 | 27% | 23% |
| | FW | 73% | 70% |
| Coho | share | 16,406 | 3,059 |
| | goal | 28,506 | 53,628 |
| | WDFW total < or = | 5.0% | 6.1% |
| | MA2.2 | 27% | 12% |
| | FW | 73% | 88% |

| Humtulpis 2C | | | |
|---------------------|-------------------|-------|-------|
| WDFW managed | | goal | model |
| Chinook | rate < or = | 5.4% | 2.0% |
| | share | 1,317 | 711 |
| | goal | 3,573 | 4,701 |
| | MA 2.2 | 37% | 10% |
| | FW | 63% | 89% |
| Coho | goal | 6,894 | 4,307 |
| | WDFW total < or = | 5.0% | 3.97% |
| | Total < or = | 10% | 16.1% |
| | MA 2.2 | 18% | 0.11 |
| | FW | 82% | 89% |

| Grays Harbor Total | | | |
|---------------------------|-------------------|--------|-----------|
| Chinook | goal | 13,326 | 20,007 |
| | share (incl. CTR) | 5,331 | 1,916 |
| Coho | goal | 35,400 | 57,935 |
| | share (incl. CTR) | 15,525 | 3,972 |
| | | | 4.9% |
| Chum | goal | 21,000 | 46,318 |
| | share (incl. CTR) | 25,480 | 7,659 |
| MA 2.2 | = to or <2% | 4.10% | |
| FW | >98% | 96% | \$ 66,952 |

2019 GH Planning Model 2018 fisheries with 2019 forecasts.xlsm

CHEHALIS RIVER BASIN

| | Chinook | | Coho | | Chum | |
|---|---------------|---------------|---------------|---------------|---------------|---------------|
| | Natural | Hatchery | Natural | Hatchery | Natural | Hatchery |
| 2019 Pre-season Forecasted RS | 17,781 | 2,390 | 61,317 | 48,621 | 66,792 | 5,167 |
| Escapement Goals | 9,753 | 578 | 28,506 | 1,500 | 21,000 | 21,000 |
| Total Available Harvestable | 8,028 | 1,812 | 32,811 | 47,121 | 50,959 | 25,480 |
| Non-treaty Share | 4,014 | 906 | 16,406 | 23,561 | 18,764 | 18,764 |
| Chehalis River Management Objectives | | | | | | |
| Proportion of Rec Marine Area 2.2 | <27% | | <27% | | <2% | total |
| Commercial Impact Rate in 2A-D Only | <0.8% | | | | | |
| Total WDFW-managed fishery | =<5% | | =<5% | | | |
| Harvest Impacts | | | | | | |
| WDFW-managed fishery Harvest Rate | 531 | 131 | 662 | 4,615 | 7,674 | 6,393 |
| Marine Area 2.2 Harvest | 127 | 30 | 157 | 325 | 679 | 68 |
| Freshwater Harvest | 303 | 77 | 380 | 1,706 | 5,153 | 1,400 |
| Commercial Harvest (Area 2A, 2D) | 101 | 25 | 126 | 1,028 | 1,842 | 4,925 |
| Chehalis Tribal Harvest | 674 | 0 | 674 | 710 | 2,829 | 0 |
| QIN Treaty Harvest | 1,270 | 247 | 1,517 | 3,863 | 7,784 | 12,371 |
| Total Chehalis Basin Harvest | 2,475 | 378 | 2,853 | 10,598 | 18,288 | 18,764 |
| Expected Escapement | 15,306 | 2,012 | 17,318 | 53,628 | 91,650 | N/A |
| Harvest Rates | | | | | | |
| WDFW-managed fishery Harvest Rate | 3.0% | 5.49% | 3.28% | 4.99% | 6.98% | 8.88% |
| Total Recreational harvest rate | 2.42% | 4.45% | 2.66% | 3.31% | 5.30% | 2.04% |
| Proportion of Rec Marine Area 2.2 | 29.5% | 28.01% | 29.23% | 16.0% | 11.65% | 4.61% |
| Proportion of Rec Freshwater | 70.46% | 71.99% | 70.77% | 84.00% | 88.35% | 95.39% |
| Commercial Impact Rate in 2A-D only | 0.22% | | | | | |
| Commercial harvest rate | 0.57% | 1.03% | 0.62% | 1.68% | 1.68% | 6.84% |
| Chehalis Tribal harvest rate | 3.79% | 0.00% | 3.34% | 1.16% | 4.36% | 0.00% |
| QIN Treaty Harvest Rate | 7.14% | 10.34% | 7.52% | 6.39% | 7.08% | 17.19% |
| Total Chehalis Basin Harvest Rate | 13.92% | 15.83% | 14.15% | 12.54% | 16.63% | 26.08% |

2019 GH Planning Model 2018 fisheries with 2019 forecasts.xlsm

| HUMPTULIPS RIVER BASIN | | | | | | |
|---|---------|----------|--------|----------|----------|--------|
| | Chinook | | | Coho | | |
| | Natural | Hatchery | Total | Natural | Hatchery | Total |
| 2019 Pre-season Forecasted RS | 6,207 | 2,467 | 8,674 | 5,133 | 11,186 | 16,319 |
| Escapement Goal | 3,573 | 369 | 3,942 | 6,894 | 400 | 7,294 |
| Total Available Harvestable | 2,634 | 2,098 | 4,732 | -1,761 | 10,786 | 9,025 |
| Non-treaty Share | 1,317 | 1,049 | 2,366 | -881 | 5,393 | 4,513 |
| Humptulips River Management Objectives | | | | | | |
| Marine Area 2.2 impact rate | 37% | | | 18 - 34% | | |
| Commercial impact rate in 2C Only | < 5.4% | | | < 5% | | |
| Total Impacts | | | | | | |
| Harvest Impacts | | | | | | |
| Non-treaty Harvest | 711 | 991 | 1,702 | 204 | 1,801 | 2,005 |
| Marine Area 2.2 Harvest | 66 | 82 | 147 | 15 | 180 | 194 |
| Freshwater Harvest | 519 | 837 | 1,356 | 128 | 1,488 | 1,616 |
| Commercial Harvest | 126 | 72 | 199 | 61 | 133 | 194 |
| QIN Treaty Harvest | 796 | 386 | 1,182 | 622 | 1,489 | 2,110 |
| Total Humptulips Basin Harvest | 1,506 | 1,377 | 2,884 | 826 | 3,289 | 4,115 |
| Expected Escapement | | | | | | |
| | 4,701 | 1,090 | 5,790 | 4,307 | 7,897 | 12,204 |
| Harvest Rates | | | | | | |
| WDFW-managed fishery Harvest Rate | 11.45% | 40.17% | 19.62% | 3.97% | 16.10% | 12.28% |
| Total Recreational harvest rate | 9.41% | 37.25% | 17.33% | 2.78% | 14.91% | 11.09% |
| Proportion of Rec Marine Area 2.2 | 11.2% | 8.89% | 9.81% | 10.3% | 10.78% | 10.74% |
| Proportion of Rec Freshwater | 88.76% | 91.11% | 90.19% | 89.71% | 89.22% | 89.26% |
| Commercial harvest rate in 2C Only | | | | | | |
| Commercial harvest rate | 2.00% | 2.93% | 2.29% | 1.19% | 1.19% | 1.19% |
| QIN Treaty Harvest Rate | 12.82% | 15.66% | 13.63% | 12.11% | 13.31% | 12.93% |
| Total Harvest Rate | 24.27% | 55.83% | 33.25% | 16.08% | 29.40% | 25.21% |
| Chum | | | | | | |
| | | | | Natural | Hatchery | Total |
| | | | | 66,792 | 5,167 | 71,959 |
| | | | | | | 21,000 |
| | | | | | | 50,959 |
| | | | | | | 25,480 |

2019 GH Planning Model 2018 fisheries with 2019 forecasts.xlsm

GRAYS HARBOR TOTAL

| | Chinook | | Coho | | Chum | |
|-------------------------------|---------|----------|---------|----------|---------|----------|
| | Natural | Hatchery | Natural | Hatchery | Natural | Hatchery |
| 2019 Pre-season Forecasted RS | 23,988 | 4,857 | 66,450 | 59,807 | 66,792 | 5,167 |
| Escapement Goal | 13,326 | 947 | 35,400 | 1,900 | 21,000 | 21,000 |
| Total Available Harvestable | 10,662 | 3,910 | 31,050 | 57,907 | 50,959 | 50,959 |
| Non-treaty Share | 5,331 | 1,955 | 15,525 | 28,954 | 25,480 | 25,480 |
| Total | | | 126,257 | | | |
| | | | 37,300 | | | |

Management Objectives

| | |
|-----------------------------|------------|
| Marine Area 2.2 impact rate | |
| Commercial impact rate | 33 |
| Total Impacts | < 2% total |

Harvest Impacts

| | | | | | | | |
|-----------------------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|
| WDFW Managed Harvest | 1,242 | 1,122 | 2,364 | 3,263 | 6,416 | 9,679 | 7,659 |
| Marine Area 2.2 Harvest | 193 | 112 | 304 | 340 | 534 | 874 | 68 |
| Freshwater Harvest | 822 | 914 | 1,736 | 1,835 | 4,934 | 6,769 | 1,581 |
| Commercial Harvest | 227 | 97 | 324 | 1,089 | 948 | 2,036 | 6,010 |
| <i>Chehalis Tribe</i> | 674 | 0 | 674 | 710 | 2,120 | 2,829 | 0 |
| Total NT - Harvest | 1,916 | 1,122 | 3,038 | 3,972 | 8,536 | 12,508 | 7,659 |
| QIN Treaty Harvest | 2,066 | 633 | 2,699 | 4,543 | 5,352 | 9,894 | 17,982 |
| Total GH Harvest | 3,981 | 1,756 | 5,737 | 8,515 | 13,887 | 22,402 | 25,641 |

Expected Escapement

| | | | | | | | |
|--|--------|-------|--------|--------|--------|---------|--------|
| | 20,007 | 3,101 | 23,108 | 57,935 | 45,920 | 103,855 | 46,318 |
|--|--------|-------|--------|--------|--------|---------|--------|

Harvest Rates

| | | | | | | | |
|-----------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Non-treaty Harvest Rate | 5.18% | 23.10% | 8.20% | 4.91% | 10.73% | 7.67% | 10.64% |
| Proportion of Rec Marine Area 2.2 | | | | | | | 4.10% |
| Marine Area 2.2 harvest rate | 0.80% | 2.30% | 1.05% | 0.51% | 0.89% | 0.69% | 0.09% |
| Freshwater harvest rate | 3.43% | 18.81% | 6.02% | 2.76% | 8.25% | 5.36% | 2.20% |
| Commercial harvest rate | 0.95% | 1.99% | 1.12% | 1.64% | 1.58% | 1.61% | 8.35% |
| QIN Treaty Harvest Rate | 8.61% | 13.04% | 9.36% | 6.84% | 8.95% | 7.84% | 24.99% |
| Total GH Harvest Rate | 16.60% | 36.15% | 19.89% | 12.81% | 23.22% | 17.74% | 35.63% |

2019 GH Planning Model A Historical Sport 2018 comm.dism

CHEHALIS RIVER

| | | Chinook | | Coho | | Chum | |
|--------------------------------------|--|---------------|--------------|---------------|----------------|---------------|---------------|
| | | Wild | Hatchery | Wild | Hatchery | Wild | Hatchery |
| 2019 Pre-season Forecasted RS | | 17,781 | 2,390 | 48,821 | 109,938 | 71,959 | 71,959 |
| Escapement Goal | | 9,753 | 578 | 1,500 | 30,006 | 21,000 | 21,000 |
| Harvestable | | 8,028 | 1,812 | 47,121 | 79,932 | 50,959 | 50,959 |
| Non-Treaty Share | | 4,014 | 906 | 23,561 | 39,966 | 25,480 | 25,480 |

CHEHALIS RIVER

ANTICIPATED HARVEST IMPACTS

| Stat Wk - DATE | AREA | # DAYS | day length | NDR | | MSF | | Chinook | | Coho | | Chum | | | | | | |
|----------------|-------|--------|------------|---------------------------|------|------|------------------------|-----------------|--------------|---------------|----------|---------------|---------------|---------------|----------|---------------|-----|---|
| | | | | Chin Coho | MSF | Wild | Vlid 2A/2D on Hatchery | Total | MSF | Wild | Hatchery | Total | MSF | Wild | Hatchery | Total | MSI | |
| 34 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 35 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 36 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 37 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 38 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 39 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 40 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 41 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 42 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 43 | ch eh | 1 | 1.00 | 0.03 | 0.02 | 0.56 | 80 | 25 | 18 | 99 | 1.00 | 399 | 316 | 714 | 1 | 1,286 | 0 | 0 |
| 44 | ch eh | 2 | 1.00 | 0.03 | 0.02 | 0.56 | 16 | 9 | 6 | 22 | 1.00 | 472 | 374 | 846 | 1 | 3,309 | 0 | 0 |
| 45 | ch eh | 0 | 0.75 | 0.03 | 0.02 | 0.56 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 46 | ch eh | 2 | 0.75 | 0.03 | 0.02 | 1.00 | 5 | 5 | 1 | 6 | 1.00 | 157 | 125 | 282 | 1 | 330 | 0 | 0 |
| 47 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 48 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| | | 5 | | Total NT Net Catch | | | 101 | 39 | 25 | 126 | | 1,028 | 815 | 1,842 | | 4,925 | | |
| 12-hour days | | | | GH Marine Area 2.2 | | | 287 | 0.0022 | 85 | 372 | | 1,670 | 1,441 | 3,111 | | 68 | | |
| 24-hour days | | | | Westport Boat Basin | | | 0 | 0 | 0 | 0 | | 0 | 43 | 43 | | 0 | | |
| 24-hour days | | | | FW River Sport | | | 378 | 142 | 89 | 610 | | 5,209 | 5,207 | 10,416 | | 1,461 | | |
| | | | | | | | 665 | 175 | 982 | | | 6,879 | 6,691 | 13,570 | | 1,529 | | |
| | | | | Chehalis Tribe | | | 674 | 0 | 674 | | | 710 | 2,120 | 2,829 | | 0 | | |
| | | | | | | | 1,440 | 39 | 199 | 1,782 | | 8,616 | 9,625 | 18,241 | | 6,454 | | |
| | | | | Expected Escapement | | | 15,071 | | 1,944 | 16,872 | | 48,780 | 35,133 | 83,913 | | 46,257 | | |
| | | | | Escapement Goal | | | 9,753 | | 578 | 10,331 | | 28,506 | 1,500 | 30,006 | | 21,000 | | |
| | | | | Total Remaining Harvest | | | 5,318 | | 1,366 | 6,541 | | 20,274 | 33,633 | 53,907 | | 25,257 | | |
| | | | | Share Remaining | | | 2,574 | | 707 | 3,138 | | 7,789 | 13,935 | 21,725 | | 17,760 | | |
| | | | | Terminal Harvest Rate | | | 0.081 | 0.043088 | 0.083 | 0.088 | | 0.141 | 0.198 | 0.140 | | 0.107 | | |
| | | | | NT Chehalis River HR | | | | | | | | 3,086 | | | | 0.090 | | |

2019 GH Planning Model A Historical Sport 2018 comm.xlsx

| HUMPTULIPS RIVER | | | |
|------------------|---------|--------|--------|
| | Chinook | Coho | Chum |
| Wild | 5,133 | 11,186 | 71,959 |
| Hatchery | 6,894 | 400 | 21,000 |
| Total | 12,027 | 11,586 | 92,959 |
| Escapement Goal | 3,573 | 400 | 21,000 |
| Harvestable | 2,654 | 10,786 | 50,959 |
| Non-Treaty Share | 1,317 | 5,393 | 25,480 |

2019 Pre-season Forecasted RS 6,207 2,467 8,674

Escapement Goal 3,573 369 3,942

Harvestable 2,654 2,098 4,752

Non-Treaty Share 1,317 1,049 2,366

HUMPTULIPS RIVER

ANTICIPATED HARVEST IMPACTS

| DATE | AREA | # DAYS | length | NDR | | | | Total | MSF | Wild | Hatchery | Total | MSF | Wild | Hatchery | Total |
|---|------|--------|--------|------|------|------|-------|---------|-------|-------|----------|-------|--------|-------|----------|--------|
| | | | | Chin | Coho | MSF | Wild | | | | | | | | | |
| 34 19-Aug-18 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 0 |
| 35 26-Aug-18 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 0 |
| 36 2-Sep-18 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 0 |
| 37 9-Sep-18 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 0 |
| 38 16-Sep-18 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 0 |
| 39 23-Sep-18 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 0 |
| 40 30-Sep-18 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 0 |
| 41 7-Oct-18 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 0 |
| 42 14-Oct-18 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 0 |
| 43 21-Oct-18 | hump | 2 | 0.75 | 0.03 | 0.02 | 1.00 | 113 | 111 | 67 | 180 | 1.00 | 1.00 | 50 | 109 | 159 | 1 |
| 44 28-Oct-18 | hump | 1 | 1.00 | 0.03 | 0.02 | 1.00 | 14 | 13 | 5 | 19 | 1.00 | 1.00 | 9 | 20 | 29 | 1 |
| 45 4-Nov-18 | hump | 0 | 0.75 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 0 |
| 46 11-Nov-18 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 1.00 | 2 | 4 | 6 | 1 |
| 47 18-Nov-18 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 0 |
| 48 48-53 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 0 |
| 2 11-hour and 1 8-hour | | | | | | | 1 | | | | | | 61 | 133 | 184 | 1,085 |
| 24-hour days | | | | | | | | | | | | | 35 | 399 | 434 | |
| Total NT Net Catch | | | | | | | 126 | 124 | 72 | 199 | 181 | 325 | 128 | 1,488 | 1,616 | 181 |
| GH Marine Area 2.2 | | | | | | | 144 | 1,9966% | 181 | 325 | 181 | 325 | 128 | 1,488 | 1,616 | 181 |
| FW River Sport | | | | | | | 616 | | 949 | 1,564 | 1,564 | 1,564 | 163 | 1,887 | 2,050 | 181 |
| Total NT Sport Catch | | | | | | | 760 | | 1,130 | 1,889 | 1,889 | 1,889 | 224 | 2,020 | 2,244 | 1,266 |
| Total NT Humpulip River Terminal Impact | | | | | | | 886 | | 1,202 | 2,088 | 2,088 | 2,088 | 4,287 | 7,678 | 11,965 | 48,257 |
| Expected Escapement | | | | | | | 4,525 | | 879 | 5,404 | 5,404 | 5,404 | 6,894 | 400 | 7,294 | 21,000 |
| Escapement Goal | | | | | | | 3,573 | | 369 | 3,942 | 3,942 | 3,942 | -2,607 | 7,278 | 4,671 | 26,257 |
| Total Remaining Harvestable | | | | | | | 952 | | 510 | 1,462 | 1,462 | 1,462 | -1,105 | 3,373 | 2,268 | 17,760 |
| Share Remaining | | | | | | | 431 | | -153 | 278 | 278 | 278 | 4.4% | 0.181 | 0.138 | 0.107 |
| Terminal Harvest Rate | | | | | | | 0.143 | | 0.487 | 0.241 | 0.241 | 0.241 | | | | |

| Chehalis 2A and 2D | | | |
|---------------------------|------------------------|--------|--------|
| WDFW managed | | goal | model |
| Chinook | share | 4,014 | 766 |
| | goal | 9,753 | 15,071 |
| | commercial rate < or = | 0.8% | 0.22% |
| | WDFW total < or = | 5.0% | 4.31% |
| | MA2.2 | 27% | 38% |
| | FW | 73% | 57% |
| Coho | share | 16,406 | 7,907 |
| | goal | 28,506 | 48,780 |
| | WDFW total < or = | 5.0% | 14.1% |
| | MA2.2 | 27% | 23% |
| | FW | 73% | 77% |

| Humptulips 2C | | | |
|----------------------|-------------------|-------|-------|
| WDFW managed | | goal | model |
| Chinook | rate < or = | 5.4% | 2.0% |
| | share | 1,317 | 886 |
| | goal | 3,573 | 4,525 |
| | MA 2.2 | 37% | 17% |
| | FW | 63% | 81% |
| Coho | goal | 6,894 | 4,287 |
| | WDFW total < or = | 5.0% | 4.37% |
| | Total < or = | 10% | 16.5% |
| | MA 2.2 | 18% | 21.2% |
| | FW | 82% | 79% |

| Grays Harbor Total | | | |
|---------------------------|-------------------|--------|-----------|
| Chinook | goal | 13,326 | 19,596 |
| | share (incl. CTR) | 5,331 | 2,326 |
| Coho | goal | 35,400 | 53,067 |
| | share (incl. CTR) | 15,525 | 8,840 |
| | | | 12.2% |
| Chum | goal | 21,000 | 46,257 |
| | share (incl. CTR) | 25,480 | 7,720 |
| MA 2.2 | = to or <2% | 3.95% | |
| FW | >98% | 96% | \$ 66,952 |

2019 GH Planning Model A historical Sport 2018 comm.xlsm

CHEHALIS RIVER BASIN

| | Chinook | | | Coho | | | Chum | | |
|---|---------|----------|--------|---------|----------|---------|---------|----------|------------|
| | Natural | Hatchery | Total | Natural | Hatchery | Total | Natural | Hatchery | Total |
| 2019 Pre-season Forecasted RS | 17,781 | 2,390 | 20,171 | 61,317 | 48,621 | 109,938 | 66,792 | 5,167 | 71,959 |
| Escapement Goals | 9,753 | 578 | 10,331 | 28,506 | 1,500 | 30,006 | | | 21,000 |
| Total Available Harvestable | 8,028 | 1,812 | 9,840 | 32,811 | 47,121 | 79,932 | | | 50,959 |
| Non-treaty Share | 4,014 | 906 | 4,920 | 16,406 | 23,561 | 39,966 | | | 25,480 |
| Chehalis River Management Objectives | | | | | | | | | |
| Proportion of Rec Marine Area 2.2 | <27% | | | <27% | | | | | < 2% total |
| Commercial Impact Rate in 2A-D Only | < 0.8% | | | | | | | | |
| Total WDFW-managed fishery | =<5% | | | =<5% | | | | | |
| Harvest Impacts | | | | | | | | | |
| WDFW-managed fishery Harvest Rate | 766 | 199 | 965 | 7,907 | 7,505 | 15,412 | | | 6,454 |
| Marine Area 2.2 Harvest | 287 | 85 | 372 | 1,670 | 1,484 | 3,154 | | | 68 |
| Freshwater Harvest | 378 | 89 | 467 | 5,209 | 5,207 | 10,416 | | | 1,461 |
| Commercial Harvest (Area 2A, 2D) | 101 | 25 | 126 | 1,028 | 815 | 1,842 | | | 4,925 |
| Chehalis Tribal Harvest | 674 | 0 | 674 | 710 | 2,120 | 2,829 | | | 0 |
| QIN Treaty Harvest | 1,270 | 247 | 1,517 | 3,921 | 3,863 | 7,784 | | | 12,371 |
| Total Chehalis Basin Harvest | 2,710 | 446 | 3,157 | 12,537 | 13,488 | 26,025 | | | 18,825 |
| Expected Escapement | 15,071 | 1,944 | 17,014 | 48,780 | 35,133 | 83,913 | | | N/A |
| Harvest Rates | | | | | | | | | |
| WDFW-managed fishery Harvest Rate | 4.3% | 8.34% | 4.79% | 12.89% | 15.44% | 14.02% | | | 8.97% |
| Total Recreational harvest rate | 3.74% | 7.31% | 4.16% | 11.22% | 13.76% | 12.34% | | | 2.12% |
| Proportion of Rec Marine Area 2.2 | 43.2% | 48.82% | 44.34% | 24.3% | 22.18% | 23.24% | | | 4.42% |
| Proportion of Rec Freshwater | 56.84% | 51.18% | 55.66% | 75.72% | 77.82% | 76.76% | | | 95.58% |
| Commercial Impact Rate in 2A-D only | 0.22% | | | | | | | | |
| Commercial harvest rate | 0.57% | 1.03% | 0.62% | 1.68% | 1.68% | 1.68% | | | 6.84% |
| Chehalis Tribal harvest rate | 3.79% | 0.00% | 3.34% | 1.16% | 4.36% | 2.57% | | | 0.00% |
| QIN Treaty Harvest Rate | 7.14% | 10.34% | 7.52% | 6.39% | 7.95% | 7.08% | | | 17.19% |
| Total Chehalis Basin Harvest Rate | 15.24% | 18.68% | 15.65% | 20.45% | 27.74% | 23.67% | | | 26.16% |

2019 GH Planning Model A historical Sport 2018 comm.xlsm

| HUMPTULIPS RIVER BASIN | | | | | | | | | |
|--|---------|----------|--------|----------|----------|--------|---------|----------|-----------|
| | Chinook | | | Coho | | | Chum | | |
| | Natural | Hatchery | Total | Natural | Hatchery | Total | Natural | Hatchery | Total |
| 2019 Pre-season Forecasted RS | 6,207 | 2,467 | 8,674 | 5,133 | 11,186 | 16,319 | 66,792 | 5,167 | 71,959 |
| Escapement Goal | 3,573 | 369 | 3,942 | 6,894 | 400 | 7,294 | | | 21,000 |
| Total Available Harvestable | 2,634 | 2,098 | 4,732 | -1,761 | 10,786 | 9,025 | | | 50,959 |
| Non-treaty Share | 1,317 | 1,049 | 2,366 | -881 | 5,393 | 4,513 | | | 25,480 |
| Humtpullips River Management Objectives | | | | | | | | | |
| Marine Area 2.2 impact rate | 37% | | | 18 - 34% | | | | | |
| Commercial impact rate in 2C Only | < 5.4% | | | < 5% | | | | | |
| Total Impacts | | | | | | | | | |
| Harvest Impacts | | | | | | | | | |
| Non-treaty Harvest | 886 | 1,202 | 2,088 | 224 | 2,020 | 2,244 | | | 1,266 |
| Marine Area 2.2 Harvest | 144 | 181 | 325 | 35 | 399 | 434 | | | 0 |
| Freshwater Harvest | 616 | 949 | 1,564 | 128 | 1,488 | 1,616 | | | 181 |
| Commercial Harvest | 126 | 72 | 199 | 61 | 133 | 194 | | | 1,085 |
| QIN Treaty Harvest | 796 | 386 | 1,182 | 622 | 1,489 | 2,110 | | | 5,611 |
| Total Humtpullips Basin Harvest | 1,682 | 1,588 | 3,270 | 846 | 3,508 | 4,354 | | | 6,877 |
| Expected Escapement | | | | | | | | | |
| | 4,525 | 879 | 5,404 | 4,287 | 7,678 | 11,965 | | | N/A |
| Harvest Rates | | | | | | | | | |
| WDFW-managed fishery Harvest Rate | 14.27% | 48.71% | 24.07% | 4.37% | 18.06% | 13.75% | | | 1.76% |
| Total Recreational harvest rate | 12.24% | 45.79% | 21.78% | 3.18% | 16.87% | 12.56% | | | 0.25% |
| Proportion of Rec Marine Area 2.2 | 18.9% | 16.02% | 17.20% | 21.4% | 21.14% | 21.16% | | | See above |
| Proportion of Rec Freshwater | 81.05% | 83.98% | 82.80% | 78.57% | 78.86% | 78.84% | | | 100.00% |
| Commercial harvest rate in 2C Only | | | | | | | | | |
| Commercial harvest rate | 2.00% | 2.93% | 2.29% | 1.19% | 1.19% | 1.19% | | | 1.51% |
| QIN Treaty Harvest Rate | 12.82% | 15.66% | 13.63% | 12.11% | 13.31% | 12.93% | | | 7.80% |
| Total Harvest Rate | 27.09% | 64.37% | 37.69% | 16.48% | 31.36% | 26.68% | | | 9.56% |

2019 GH Planning Model A historical Sport 2018 comm.xlsm

| GRAYS HARBOR TOTAL | | | | | | | | | |
|-----------------------------------|--------------|---------------|---------------|---------------|---------------|---------------|---------|----------|---------------|
| | Chinook | | | Coho | | | Chum | | |
| | Natural | Hatchery | Total | Natural | Hatchery | Total | Natural | Hatchery | Total |
| 2019 Pre-season Forecasted RS | 23,988 | 4,857 | 28,845 | 66,450 | 59,807 | 126,257 | 66,792 | 5,167 | 71,959 |
| Escapement Goal | 13,326 | 947 | 14,273 | 35,400 | 1,900 | 37,300 | | | 21,000 |
| Total Available Harvestable | 10,662 | 3,910 | 14,572 | 31,050 | 57,907 | 88,957 | | | 50,959 |
| Non-treaty Share | 5,331 | 1,955 | 7,286 | 15,525 | 28,954 | 44,479 | | | 25,480 |
| Management Objectives | | | | | | | | | |
| Marine Area 2.2 impact rate | | | | | | | | | |
| Commercial impact rate | 33 | | | | | | | | |
| Total Impacts | < 2% total | | | | | | | | |
| Harvest Impacts | | | | | | | | | |
| WDFW Managed Harvest | 1,652 | 1,401 | 3,053 | 8,131 | 9,525 | 17,656 | | | 7,720 |
| Marine Area 2.2 Harvest | 431 | 266 | 697 | 1,705 | 1,883 | 3,587 | | | 68 |
| Freshwater Harvest | 994 | 1,038 | 2,032 | 5,337 | 6,695 | 12,032 | | | 1,642 |
| Commercial Harvest | 227 | 97 | 324 | 1,089 | 948 | 2,036 | | | 6,010 |
| <i>Chehalis Tribe</i> | 674 | 0 | 674 | 710 | 2,120 | 2,829 | | | 0 |
| Total NT - Harvest | 2,326 | 1,401 | 3,727 | 8,840 | 11,645 | 20,485 | | | 7,720 |
| QIN Treaty Harvest | 2,066 | 633 | 2,699 | 4,543 | 5,352 | 9,894 | | | 17,982 |
| Total GH Harvest | 4,392 | 2,035 | 6,426 | 13,383 | 16,997 | 30,380 | | | 25,702 |
| Expected Escapement | | | | | | | | | |
| | 19,596 | 2,822 | 22,419 | 53,067 | 42,810 | 95,877 | | | 46,257 |
| Harvest Rates | | | | | | | | | |
| Non-treaty Harvest Rate | 6.89% | 28.85% | 10.58% | 12.24% | 15.93% | 13.98% | | | 10.73% |
| Proportion of Rec Marine Area 2.2 | | | | | | | | | |
| Marine Area 2.2 harvest rate | 1.80% | 5.48% | 2.42% | 2.57% | 3.15% | 2.84% | | | 0.09% |
| Freshwater harvest rate | 4.14% | 21.37% | 7.04% | 8.03% | 11.19% | 9.53% | | | 2.28% |
| Commercial harvest rate | 0.95% | 1.99% | 1.12% | 1.64% | 1.58% | 1.61% | | | 8.35% |
| QIN Treaty Harvest Rate | 8.61% | 13.04% | 9.36% | 6.84% | 8.95% | 7.84% | | | 24.99% |
| Total GH Harvest Rate | 18.31% | 41.89% | 22.28% | 20.14% | 28.42% | 24.06% | | | 35.72% |

FISH AND WILDLIFE COMMISSION POLICY DECISION

POLICY TITLE: Grays Harbor Basin
Salmon Management

POLICY NUMBER: C-3621

Repeals or
Supersedes: NA

Effective Date: March 1, 2014
Termination Date: December 31, 2023

See Also: Policies C-3608, C-3619

Approved February 8, 2014

by: *Miranda Wecker*, Chair
Washington Fish and Wildlife Commission

Purpose

The objective of this policy is to advance the conservation and restoration of wild salmon. Where consistent with this conservation objective, the policy also seeks to maintain or enhance the economic well-being and stability of the fishing industry in the state, provide the public with outdoor recreational experiences and a fair distribution of fishing opportunities throughout the Grays Harbor Basin, and improve the technical rigor of fishery management. Enhanced transparency and information sharing are needed to restore and maintain public trust and support for management of Grays Harbor salmon fisheries.

Definition and Intent

This policy sets a general management direction and provides guidance for Washington Department of Fish and Wildlife (Department) management of all Pacific salmon returning to the Grays Harbor Basin. The Grays Harbor Basin is defined as Grays Harbor and its freshwater tributaries.

General Policy Statement

This policy provides a cohesive set of principles and guidance to promote the conservation of wild salmon and steelhead and improve the Department's management of salmon in the Grays Harbor Basin. The Fish and Wildlife Commission (Commission) recognizes that management decisions must be informed by fishery monitoring (biological and economic), and that innovation and adaptive management will be necessary to achieve the stated purpose of this policy. By improving communication, information sharing, and transparency, the Department shall promote improved public support for management of Grays Harbor salmon fisheries.

State commercial and recreational fisheries will need to increasingly focus on the harvest of abundant hatchery fish. Mark-selective fisheries are a tool that permits the harvest of abundant hatchery fish while reducing impacts on wild stocks needing protection. As a general policy, the Department shall implement mark-selective salmon fisheries, unless the wild populations substantially affected by the fishery are meeting

- 6) When establishing fishery seasons, the Department shall consider the anticipated impact of both Quinault Indian Nation and nontreaty fisheries in the Grays Harbor Basin.
- 7) In a manner consistent with conservation objectives, fishing opportunities will be fairly distributed across fishing areas and reflect the diverse interests of WDFW-managed fishers.
- 8) Recreational and WDFW-managed commercial fisheries shall be structured (e.g., schedule, location, gear) to minimize gear and other fishery conflicts. WDFW-managed commercial gillnet fisheries in a fishing area or aggregate area (i.e., Area 2A/2B/2D; or Area 2C) shall be scheduled, if possible, so that in any given calendar week there are a minimum of three consecutive days when no treaty or state-managed commercial fisheries occur. If the treaty fishery occurs 4 or more days in a calendar week, no WDFW-managed commercial fishery shall occur in the remaining days of the week.
- 9) Monitoring, sampling, and enforcement programs will adequately account for species and population impacts (landed catch and incidental fishing mortality) of all recreational and WDFW-managed commercial fisheries and ensure compliance with state regulations.
- 10) If it becomes apparent that a scheduled fishery will exceed its preseason catch expectation, and the overage will put at risk the attainment of conservation objectives, the Department shall implement inseason management actions that are projected to enhance the effectiveness of fishery management relative to the attainment of the conservation objectives and impact sharing in the preseason fishery plan.
- 11) Salmon management will be well documented, transparent, well-communicated, and accountable. The Department shall strive to make ongoing improvements in the transparency of fishery management and for effective public involvement. These shall include: a) clearly describing management objectives in a document available to the public prior to the initiation of the preseason planning process; b) enhancing opportunities for public engagement during the preseason fishery planning process; c) communicating inseason information and management actions to advisors and the public; d) seeking Quinault Indian Nation support for the inclusion of observers in co-management meetings; and e) striving to improve communication with the public regarding co-management issues that are under discussion.
- 12) The Department shall seek to improve fishery management and technical tools through improved fishery monitoring, the development of new tools, and rigorous assessment of fishery models and parameters.

- a) achieve spawner goals;
 - b) provide meaningful recreational fishing opportunities; and
 - c) limit commercial fishery impacts to the incidental harvest of fall Chinook during fisheries directed at other species.
- 3) The following guidelines describe the anticipated sharing of fishery impacts in the Grays Harbor Basin between WDFW-managed commercial, marine recreational, and freshwater recreational fisheries. Variation from these guidelines may occur if it will result in fisheries that more closely achieve the stated purpose of this policy.

- a) WDFW-managed commercial fisheries in the Grays Harbor Basin shall have the following impact limits:

Areas 2A, 2B, 2D: the impact rate of the state-managed commercial fishery shall be 0.8% on natural-origin Chehalis fall Chinook when the impact of the recreational fishery is equal to or greater than 4.2%. The impact rate of the WDFW-managed commercial fishery may be less than 0.8% when conservation concerns for natural-origin Chehalis fall Chinook result in a less than 4.2% impact rate in the recreational fishery.

When the terminal run of natural-origin Chehalis fall Chinook reaches an abundance of 18,793, the impact rate of the WDFW-managed commercial fishery shall linearly increase from 0.8% to a maximum of 5.8% at a terminal run of 25,000 natural-origin Chehalis fall Chinook.

Area 2C: the impact rate of the state-managed commercial fishery shall be 1.2% on natural-origin Humptulips fall Chinook when the impact of the recreational fishery is equal to or greater than 3.8%. The impact rate of the WDFW-managed commercial fishery may be less than 1.2% when conservation concerns for Humptulips natural-origin fall Chinook result in a less than 3.8% impact rate in the recreational fishery.

When the terminal run of natural-origin Humptulips fall Chinook reaches an abundance of 3,779, the impact rate of the WDFW-managed commercial fishery shall linearly increase from 1.2% to a maximum of 5.4% at a run of 4,070 natural-origin Humptulips fall Chinook.

- b) Chehalis Fall Chinook. Fisheries shall be developed with the intent of achieving the following sharing of impacts within the recreational fishing sector:

Chum Salmon

Subject to the adaptive management provisions of this policy, the Department will manage chum salmon fisheries consistent with the Guiding Principles and the following objectives:

- 1) Fisheries will be managed with the intent of achieving escapement goals for wild and hatchery chum salmon. In no case, shall WDFW-managed fisheries result in an impact of more than 5% of the return when the natural-origin adult return exceeds the spawner objective by less than 10%.
- 2) No fisheries directed at chum salmon shall occur unless the adult coho salmon return exceeds spawner objectives, or if coho salmon impacts remain after coho and Chinook salmon fisheries.
- 3) The following guidelines describe the anticipated sharing of fishery impacts between marine recreational and freshwater recreational fisheries. Variation from these guidelines may occur if it will result in fisheries that more closely achieve the stated purpose of this policy.
 - a) Fisheries shall be developed with the intent of achieving the following sharing of impacts within the recreational fishing sector:

| Run Size | % to Freshwater | % to Area 2-2 |
|----------|-----------------|---------------|
| Small | >98% | ≤2% |
| Large | >98% | ≤2% |

Adaptive Management

The Commission recognizes that adaptive management will be essential to achieve the purpose of this policy. Department staff may implement actions to manage adaptively to achieve the objectives of this policy and will coordinate with the Commission, as needed, in order to implement corrective actions. Components of the adaptive management will be shared with the public through the agency web site and will include the following elements:

- 1) **Annual Fishery Management Review.** The Department shall annually evaluate fishery management tools and parameters and identify improvements as necessary to accurately predict fishery performance and escapement.

As a component of the annual fishery management review, the Department shall assess if spawner goals were achieved for Chehalis spring Chinook, Chehalis fall Chinook, Humptulips fall Chinook, Chehalis coho, Humptulips coho, and Grays Harbor chum salmon. If the number of natural-origin spawners was less than the goal in 3 out of the last 5 years (beginning in 2009), the Department shall implement the following measures:

Page left intentionally blank

March 12, 2019

Addendum To:

Materials presented at the Grays Harbor Salmon
Advisory Group meeting held on March 5, 2019

1. Fall Chinook Forecast
2. Planning models

FORECASTS Updated Fall Chinook Forecast 3.12.19

| | Natural Origin | Hatchery |
|---------------------------|-----------------------|-----------------|
| CHINOOK | | |
| Spring | 581 | None |
| Fall Chehalis | 13,568 | 2,226 |
| Fall Humptulips | 4,427 | 5,435 |
| COHO (Ocean Age 3) | | |
| Chehalis | 63,136 | 48,342 |
| Humptulips | 5,525 | 12,035 |
| Grays Harbor Chum | 66,792 | 5,167 |

2019 GH Planning Model 2018 fisheries with 2019 forecast updated 3.12.19

CHEHALIS RIVER

| | | Chinook | | Coho | | Chum | |
|-------------------------------|--------|----------|--------|--------|----------|---------|----------|
| | Wild | Hatchery | Total | Wild | Hatchery | Total | GH Total |
| 2019 Pre-season Forecasted RS | 13,568 | 2,226 | 15,794 | 61,317 | 48,621 | 109,938 | 71,959 |
| Escapement Goal | 9,753 | 578 | 10,331 | 28,506 | 1,500 | 30,006 | 21,000 |
| Harvestable | 3,815 | 1,648 | 5,463 | 32,811 | 47,121 | 79,932 | 50,959 |
| Non-Treaty Share | 1,908 | 824 | 2,732 | 16,406 | 23,561 | 39,966 | 25,480 |

CHEHALIS RIVER

ANTICIPATED HARVEST IMPACTS

| Stat Wk - DATE | AREA | # DAYS | day length | NDR | | MSF | Chinook | | MSF | Coho | | Chehalis | | |
|----------------|------|--------|------------|------|------|------|---------|------------------------|------|--------|----------|----------|----------|--------|
| | | | | Chin | Coho | | Wild | vild 2A/2D on Hatchery | | Total | Hatchery | Wild | Hatchery | Total |
| 34 19-Aug-18 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 1.00 | 0 | 0 | 0 | 1 | 0 |
| 35 26-Aug-18 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 1.00 | 0 | 0 | 0 | 1 | 0 |
| 36 2-Sep-18 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 1.00 | 0 | 0 | 0 | 1 | 0 |
| 37 9-Sep-18 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 1.00 | 0 | 0 | 0 | 1 | 0 |
| 38 16-Sep-18 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 1.00 | 0 | 0 | 0 | 1 | 0 |
| 39 23-Sep-18 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 1.00 | 0 | 0 | 0 | 1 | 0 |
| 40 30-Sep-18 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 1.00 | 0 | 0 | 0 | 1 | 0 |
| 41 7-Oct-18 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 1.00 | 0 | 0 | 0 | 1 | 0 |
| 42 14-Oct-18 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 1.00 | 0 | 0 | 0 | 1 | 0 |
| 43 21-Oct-18 | chch | 1 | 1.00 | 0.03 | 0.02 | 0.56 | 61 | 19 | 1.00 | 399 | 316 | 714 | 1 | 1,286 |
| 44 28-Oct-18 | chch | 2 | 1.00 | 0.03 | 0.02 | 0.56 | 12 | 7 | 1.00 | 472 | 374 | 846 | 1 | 3,309 |
| 45 4-Nov-18 | chch | 0 | 0.75 | 0.03 | 0.02 | 0.56 | 0 | 0 | 1.00 | 0 | 0 | 0 | 1 | 0 |
| 46 11-Nov-18 | chch | 2 | 0.75 | 0.03 | 0.02 | 1.00 | 4 | 4 | 1.00 | 157 | 125 | 282 | 1 | 330 |
| 47 18-Nov-18 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 1.00 | 0 | 0 | 0 | 1 | 0 |
| 48 25-Nov-18 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 1.00 | 0 | 0 | 0 | 1 | 0 |
| 12-hour days | | 5 | | | | | 77 | 30 | | 1,028 | 815 | 1,842 | | 4,925 |
| 24-hour days | | | | | | | 95 | 0.0022 | | 325 | 311 | 636 | | 68 |
| 24-hour days | | | | | | | 0 | | | 0 | 43 | 43 | | 0 |
| | | | | | | | 231 | 109 | | 1,706 | 3,446 | 5,153 | | 1,400 |
| | | | | | | | 327 | 118 | | 2,031 | 3,800 | 5,832 | | 1,468 |
| | | | | | | | 320 | 0 | | 710 | 2,120 | 2,829 | | 0 |
| | | | | | | | 724 | 30 | | 3,768 | 6,735 | 10,504 | | 6,393 |
| | | | | | | | 11,574 | 1,837 | | 53,628 | 38,023 | 91,650 | | 46,318 |
| | | | | | | | 9,753 | 578 | | 28,506 | 1,500 | 30,006 | | 21,000 |
| | | | | | | | 1,821 | 1,259 | | 25,122 | 36,523 | 61,644 | | 25,318 |
| | | | | | | | 1,184 | 683 | | 12,637 | 16,825 | 29,462 | | 17,821 |
| | | | | | | | 0.053 | 0.029749 | | 0.061 | 0.139 | 0.070 | | 0.106 |
| | | | | | | | | | | 3,066 | | | | 0.089 |

2019 GH Planning Model 2018 fisheries with 2019 forecast updated 3.12.19

HUMPTULIPS RIVER

| | | Chinook | | | Coho | | | Chum |
|-------------------------------|--|---------|----------|-------|--------|----------|--------|--------|
| | | Wild | Hatchery | Total | Wild | Hatchery | Total | Chum |
| 2019 Pre-season Forecasted RS | | 4,427 | 5,435 | 9,862 | 5,133 | 11,186 | 16,319 | 71,959 |
| Escapement Goal | | 3,573 | 369 | 3,942 | 6,894 | 400 | 7,294 | 21,000 |
| Harvestable | | 854 | 5,066 | 5,920 | -1,761 | 10,786 | 9,025 | 50,959 |
| Non-Treaty Share | | 427 | 2,533 | 2,960 | -881 | 5,393 | 4,513 | 25,480 |

HUMPTULIPS RIVER

ANTICIPATED HARVEST IMPACTS

| | | Chinook | | | | Coho | | | | Hump-tails | |
|------------------------|-----------|---------|---------------|----------|-------|------|--------|----------|--------|------------|--------|
| | | Wild | Wild Hump onl | Hatchery | Total | MSF | Wild | Hatchery | Total | Chum | Chum |
| 34 | 19-Aug-18 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 1 | 0 |
| 35 | 26-Aug-18 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 1 | 0 |
| 36 | 2-Sep-18 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 1 | 0 |
| 37 | 9-Sep-18 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 1 | 0 |
| 38 | 16-Sep-18 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 1 | 0 |
| 39 | 23-Sep-18 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 1 | 0 |
| 40 | 30-Sep-18 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 1 | 0 |
| 41 | 7-Oct-18 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 1 | 0 |
| 42 | 14-Oct-18 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 1 | 0 |
| 43 | 21-Oct-18 | 2 | 79 | 148 | 228 | 1.00 | 50 | 109 | 159 | 1 | 761 |
| 44 | 28-Oct-18 | 1 | 9 | 11 | 21 | 1.00 | 9 | 20 | 29 | 1 | 324 |
| 45 | 4-Nov-18 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 1 | 0 |
| 46 | 11-Nov-18 | 0 | 0 | 0 | 0 | 1.00 | 2 | 4 | 6 | 1 | 0 |
| 47 | 18-Nov-18 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 1 | 0 |
| 48 | 48-53 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 1 | 0 |
| 2 11-hour and 1 8-hour | | 1 | 88 | 159 | 249 | | 61 | 133 | 194 | | 1,085 |
| 24-hour days | | | | | | | 15 | 180 | 194 | | |
| | | | 1.9966% | 129 | 178 | | 128 | 1,488 | 1,616 | | 181 |
| | | | | 1,844 | 2,214 | | 143 | 1,668 | 1,810 | | 181 |
| | | | | 1,973 | 2,392 | | 204 | 1,801 | 2,005 | | 1,266 |
| | | | | 2,132 | 2,641 | | 4,307 | 7,897 | 12,204 | | 46,318 |
| | | | | 2,917 | 6,039 | | 6,894 | 400 | 7,294 | | 21,000 |
| | | | | 369 | 3,942 | | -2,587 | 7,497 | 4,910 | | 25,318 |
| | | | | 2,548 | 2,097 | | -1,084 | 3,592 | 2,508 | | 17,821 |
| | | | | 401 | 319 | | 4.0% | 0.161 | 0.123 | | 0.106 |
| | | | | 0.392 | 0.268 | | | | | | |
| | | | | | | | | | | | |

Total NT Hump-tail River Terminal Impact

Expected Escapement 3,122

Escapement Goal 3,573

Total Remaining Harvestable -451

Share Remaining -82

Terminal Harvest Rate 0.115

0.115

0.268

0.161

0.123

0.106

| Chehalis 2A and 2D | | | |
|---------------------------|------------------------|--------|---------------|
| WDFW managed | | goal | model |
| Chinook | share | 1,908 | 404 |
| | goal | 9,753 | 11,574 |
| | commercial rate < or = | 0.8% | 0.22% |
| | WDFW total < or = | 5.0% | 2.97% |
| | MA2.2 | 27% | 26% |
| | FW | 73% | 71% |
| Coho | share | 16,406 | 3,059 |
| | goal | 28,506 | 53,628 |
| | WDFW total < or = | 5.0% | 6.1% |
| | MA2.2 | 27% | 12% |
| | FW | 73% | 88% |

| Humtulsips 2C | | | |
|----------------------|-------------------|-------|--------------|
| WDFW managed | | goal | model |
| Chinook | rate < or = | 5.4% | 2.0% |
| | share | 427 | 509 |
| | goal | 3,573 | 3,122 |
| | MA 2.2 | 37% | 7% |
| | FW | 63% | 88% |
| Coho | goal | 6,894 | 4,307 |
| | WDFW total < or = | 5.0% | 3.97% |
| | Total < or = | 10% | 16.1% |
| | MA 2.2 | 18% | 0.11 |
| | FW | 82% | 89% |

| Grays Harbor Total | | | |
|---------------------------|-------------------|--------|------------------|
| Chinook | goal | 13,326 | 14,696 |
| | share (incl. CTR) | 2,335 | 1,233 |
| Coho | goal | 35,400 | 57,935 |
| | share (incl. CTR) | 15,525 | 3,972 |
| | | | 4.9% |
| Chum | goal | 21,000 | 46,318 |
| | share (incl. CTR) | 25,480 | 7,659 |
| MA 2.2 | = to or <2% | 4.10% | |
| FW | >98% | 96% | \$ 68,949 |

2019 GH Planning Model 2018 fisheries with 2019 forecast updated 3.12.19

CHEHALIS RIVER BASIN

| | Chinook | | | Coho | | | Chum | | |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------|----------|---------------|
| | Natural | Hatchery | Total | Natural | Hatchery | Total | Natural | Hatchery | Total |
| 2019 Pre-season Forecasted RS | 13,568 | 2,226 | 15,794 | 61,317 | 48,621 | 109,938 | 66,792 | 5,167 | 71,959 |
| Escapement Goals | 9,753 | 578 | 10,331 | 28,506 | 1,500 | 30,006 | | | 21,000 |
| Total Available Harvestable | 3,815 | 1,648 | 5,463 | 32,811 | 47,121 | 79,932 | | | 50,959 |
| Non-treaty Share | 1,908 | 824 | 2,732 | 16,406 | 23,561 | 39,966 | | | 25,480 |
| Chehalis River Management Objectives | | | | | | | | | |
| Proportion of Rec Marine Area 2.2 | <27% | | | <27% | | | | | < 2% total |
| Commercial Impact Rate in 2A-D Only | < 0.8% | | | | | | | | |
| Total WDFW-managed fishery | =<5% | | | =<5% | | | | | |
| Harvest Impacts | | | | | | | | | |
| WDFW-managed fishery Harvest Rate | 404 | 141 | 545 | 3,059 | 4,615 | 7,674 | | | 6,393 |
| Marine Area 2.2 Harvest | 95 | 47 | 142 | 325 | 354 | 679 | | | 68 |
| Freshwater Harvest | 231 | 71 | 303 | 1,706 | 3,446 | 5,153 | | | 1,400 |
| Commercial Harvest (Area 2A, 2D) | 77 | 23 | 100 | 1,028 | 815 | 1,842 | | | 4,925 |
| Chehalis Tribal Harvest | 320 | 0 | 320 | 710 | 2,120 | 2,829 | | | 0 |
| QIN Treaty Harvest | 1,270 | 247 | 1,517 | 3,921 | 3,863 | 7,784 | | | 12,371 |
| Total Chehalis Basin Harvest | 1,994 | 389 | 2,382 | 7,689 | 10,598 | 18,288 | | | 18,764 |
| Expected Escapement | 11,574 | 1,837 | 13,412 | 53,628 | 38,023 | 91,650 | | | N/A |
| Harvest Rates | | | | | | | | | |
| WDFW-managed fishery Harvest Rate | 3.0% | 6.35% | 3.45% | 4.99% | 9.49% | 6.98% | | | 8.88% |
| Total Recreational harvest rate | 2.41% | 5.32% | 2.82% | 3.31% | 7.82% | 5.30% | | | 2.04% |
| Proportion of Rec Marine Area 2.2 | 29.2% | 39.72% | 31.99% | 16.0% | 9.32% | 11.65% | | | 4.61% |
| Proportion of Rec Freshwater | 70.82% | 60.28% | 68.01% | 84.00% | 90.68% | 88.35% | | | 95.39% |
| Commercial Impact Rate in 2A-D only | 0.22% | | | | | | | | |
| Commercial harvest rate | 0.57% | 1.03% | 0.63% | 1.68% | 1.68% | 1.68% | | | 6.84% |
| Chehalis Tribal harvest rate | 2.36% | 0.00% | 2.03% | 1.16% | 4.36% | 2.57% | | | 0.00% |
| QIN Treaty Harvest Rate | 9.36% | 11.10% | 9.61% | 6.39% | 7.95% | 7.08% | | | 17.19% |
| Total Chehalis Basin Harvest Rate | 14.70% | 17.45% | 15.08% | 12.54% | 21.80% | 16.63% | | | 26.08% |

2019 GH Planning Model 2018 fisheries with 2019 forecast updated 3.12.19

| HUMPTULIPS RIVER BASIN | | | | | | | | | |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------|----------|--------------|
| | Chinook | | | Coho | | | Chum | | |
| | Natural | Hatchery | Total | Natural | Hatchery | Total | Natural | Hatchery | Total |
| 2019 Pre-season Forecasted RS | 4,427 | 5,435 | 9,862 | 5,133 | 11,186 | 16,319 | 66,792 | 5,167 | 71,959 |
| Escapement Goal | 3,573 | 369 | 3,942 | 6,894 | 400 | 7,294 | | | 21,000 |
| Total Available Harvestable | 854 | 5,066 | 5,920 | -1,761 | 10,786 | 9,025 | | | 50,959 |
| Non-treaty Share | 427 | 2,533 | 2,960 | -881 | 5,393 | 4,513 | | | 25,480 |
| Humptulips River Management Objectives | | | | | | | | | |
| Marine Area 2.2 impact rate | 37% | | | 18 - 34% | | | | | |
| Commercial impact rate in 2C Only | < 5.4% | | | < 5% | | | | | |
| Total Impacts | | | | | | | | | |
| Harvest Impacts | | | | | | | | | |
| Non-treaty Harvest | 509 | 2,132 | 2,641 | 204 | 1,801 | 2,005 | | | 1,266 |
| Marine Area 2.2 Harvest | 49 | 129 | 178 | 15 | 180 | 194 | | | 0 |
| Freshwater Harvest | 370 | 1,844 | 2,214 | 128 | 1,488 | 1,616 | | | 181 |
| Commercial Harvest | 90 | 159 | 249 | 61 | 133 | 194 | | | 1,085 |
| QIN Treaty Harvest | 796 | 386 | 1,182 | 622 | 1,489 | 2,110 | | | 5,611 |
| Total Humptulips Basin Harvest | 1,305 | 2,518 | 3,823 | 826 | 3,289 | 4,115 | | | 6,877 |
| Expected Escapement | | | | | | | | | |
| | 3,122 | 2,917 | 6,039 | 4,307 | 7,897 | 12,204 | | | N/A |
| Harvest Rates | | | | | | | | | |
| WDFW-managed fishery Harvest Rate | 11.50% | 39.23% | 26.78% | 3.97% | 16.10% | 12.28% | | | 1.76% |
| Total Recreational harvest rate | 9.47% | 36.30% | 24.26% | 2.78% | 14.91% | 11.09% | | | 0.25% |
| Proportion of Rec Marine Area 2.2 | 11.8% | 6.53% | 7.45% | 10.3% | 10.78% | 10.74% | | | See above |
| Proportion of Rec Freshwater | 88.25% | 93.47% | 92.55% | 89.71% | 89.22% | 89.26% | | | 100.00% |
| Commercial harvest rate in 2C Only | | | | | | | | | |
| Commercial harvest rate | 2.00% | 2.93% | 2.53% | 1.19% | 1.19% | 1.19% | | | 1.51% |
| QIN Treaty Harvest Rate | 17.97% | 7.11% | 11.99% | 12.11% | 13.31% | 12.93% | | | 7.80% |
| Total Harvest Rate | 29.48% | 46.34% | 38.77% | 16.08% | 29.40% | 25.21% | | | 9.56% |

2019 GH Planning Model 2018 fisheries with 2019 forecast updated 3.12.19

| GRAYS HARBOR TOTAL | | | | | | | | | | |
|-----------------------------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|-----------|--------|------------|
| | Chinook | | | Coho | | | Chum | | | |
| | Natural | Hatchery | Total | Natural | Hatchery | Total | Natural | Hatchery | Total | |
| 2019 Pre-season Forecasted RS | 17,995 | 7,661 | 25,656 | 66,450 | 59,807 | 126,257 | 66,792 | 5,167 | 71,959 | |
| Escapement Goal | 13,326 | 947 | 14,273 | 35,400 | 1,900 | 37,300 | | | 21,000 | |
| Total Available Harvestable | 4,669 | 6,714 | 11,383 | 31,050 | 57,907 | 88,957 | | | 50,959 | |
| Non-treaty Share | 2,335 | 3,357 | 5,692 | 15,525 | 28,954 | 44,479 | | | 25,480 | |
| Management Objectives | | | | | | | | | | |
| Marine Area 2.2 impact rate | | | | | | | | | | < 2% total |
| Commercial impact rate | | | | | | | | | | 33 |
| Total Impacts | | | | | | | | | | |
| Harvest Impacts | | | | | | | | | | |
| WDFW Managed Harvest | 913 | 2,274 | 3,186 | 3,263 | 6,416 | 9,679 | 7,659 | 68 | | |
| Marine Area 2.2 Harvest | 145 | 176 | 321 | 340 | 534 | 874 | | | | |
| Freshwater Harvest | 601 | 1,916 | 2,517 | 1,835 | 4,934 | 6,769 | | | 1,581 | |
| Commercial Harvest | 167 | 182 | 349 | 1,089 | 948 | 2,036 | | | 6,010 | |
| <i>Chehalis</i> Tribe | 320 | 0 | 320 | 710 | 2,120 | 2,829 | | | 0 | |
| Total NT - Harvest | 1,233 | 2,274 | 3,507 | 3,972 | 8,536 | 12,508 | | | 7,659 | |
| QIN Treaty Harvest | 2,066 | 633 | 2,699 | 4,543 | 5,352 | 9,894 | 17,982 | | | |
| Total GH Harvest | 3,299 | 2,907 | 6,206 | 8,515 | 13,887 | 22,402 | 25,641 | | | |
| Expected Escapement | | | | | | | | | | |
| | 14,696 | 4,754 | 19,450 | 57,935 | 45,920 | 103,855 | 46,318 | | | |
| Harvest Rates | | | | | | | | | | |
| Non-treaty Harvest Rate | 5.07% | 29.68% | 12.42% | 4.91% | 10.73% | 7.67% | 10.64% | | | |
| Proportion of Rec Marine Area 2.2 | | | | | | | 4.10% | | | |
| Marine Area 2.2 harvest rate | 0.80% | 2.30% | 1.25% | 0.51% | 0.89% | 0.69% | 0.09% | | | |
| Freshwater harvest rate | 3.34% | 25.00% | 9.81% | 2.76% | 8.25% | 5.36% | 2.20% | | | |
| Commercial harvest rate | 0.93% | 2.38% | 1.36% | 1.64% | 1.58% | 1.61% | 8.35% | | | |
| QIN Treaty Harvest Rate | 11.48% | 8.27% | 10.52% | 6.84% | 8.95% | 7.84% | 24.99% | | | |
| Total GH Harvest Rate | 18.33% | 37.94% | 24.19% | 12.81% | 23.22% | 17.74% | 35.63% | | | |

2019 GH Fall Planning Model A historical Sport 2018 comm w/Fall Chinook update 3.12.19
CHEHALIS RIVER

| | | Chinook | | Coho | | Chum | | |
|-------------------------------|--|---------|----------|--------|----------|--------|----------|---------|
| | | Wild | Hatchery | Wild | Hatchery | Wild | Hatchery | |
| 2019 Pre-season Forecasted RS | | 13,568 | 2,226 | 15,794 | 109,938 | 61,317 | 48,621 | 109,938 |
| Escapement Goal | | 9,753 | 578 | 10,331 | 30,006 | 28,506 | 1,500 | 30,006 |
| Harvestable | | 3,815 | 1,648 | 5,463 | 79,932 | 32,811 | 47,121 | 79,932 |
| Non-Treaty Share | | 1,908 | 824 | 2,732 | 39,966 | 16,406 | 23,561 | 39,966 |

CHEHALIS RIVER

ANTICIPATED HARVEST IMPACTS

| Stat Wk - DATE | AREA | # DAYS | day length | NDR | | MSF | Chinook | | | MSF | Coho | | MSI | Chehalis | | |
|--------------------------------|---------------------|--------|------------|------|------|------|---------|------------------------|----------|--------|--------|--------|--------|----------|-------|------|
| | | | | Chin | Coho | | Wild | vild 2A/2D on Hatchery | Hatchery | | Total | Wild | | Hatchery | Total | Chum |
| 34 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 1.00 | 0 | 0 | 1 | 0 | 0 | |
| 35 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 1.00 | 0 | 0 | 1 | 0 | 0 | |
| 36 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 1.00 | 0 | 0 | 1 | 0 | 0 | |
| 37 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 1.00 | 0 | 0 | 1 | 0 | 0 | |
| 38 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 1.00 | 0 | 0 | 1 | 0 | 0 | |
| 39 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 1.00 | 0 | 0 | 1 | 0 | 0 | |
| 40 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 1.00 | 0 | 0 | 1 | 0 | 0 | |
| 41 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 1.00 | 0 | 0 | 1 | 0 | 0 | |
| 42 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 1.00 | 0 | 0 | 1 | 0 | 0 | |
| 43 | ch eh | 1 | 1.00 | 0.03 | 0.02 | 0.56 | 61 | 19 | 17 | 1.00 | 399 | 316 | 714 | 1 | 1,286 | |
| 44 | ch eh | 2 | 1.00 | 0.03 | 0.02 | 0.56 | 12 | 7 | 6 | 1.00 | 472 | 374 | 846 | 1 | 3,309 | |
| 45 | ch eh | 0 | 0.75 | 0.03 | 0.02 | 0.56 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 1 | 0 | |
| 46 | ch eh | 2 | 0.75 | 0.03 | 0.02 | 1.00 | 4 | 4 | 1 | 1.00 | 157 | 125 | 282 | 1 | 330 | |
| 47 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 1.00 | 0 | 0 | 1 | 0 | 0 | |
| 48 | all | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 1.00 | 0 | 0 | 1 | 0 | 0 | |
| Total NT Net Catch | | | | | | | 77 | 30 | 23 | 100 | 1,028 | 815 | 1,842 | 4,925 | | |
| 12-hour days | GH Marine Area 2.2 | | | | | | 215 | 0.0022 | 135 | 350 | 1,670 | 1,441 | 3,111 | 68 | | |
| 24-hour days | Westport Boat Basin | | | | | | 0 | | 0 | 0 | 0 | 43 | 43 | 0 | | |
| 24-hour days | FW River Sport | | | | | | 289 | 109 | 83 | 480 | 5,209 | 5,207 | 10,416 | 1,461 | | |
| Total | | | | | | | 504 | 218 | 830 | 830 | 6,879 | 6,691 | 13,570 | 1,529 | | |
| Chehalis Tribe | | | | | | | 320 | | 0 | 320 | 710 | 2,120 | 2,829 | 0 | | |
| Total | | | | | | | 901 | 30 | 241 | 1,250 | 8,616 | 9,625 | 18,241 | 6,454 | | |
| Expected Escapement | | | | | | | 11,397 | | 1,738 | 13,026 | 48,780 | 35,133 | 83,913 | 46,257 | | |
| Escapement Goal | | | | | | | 9,753 | | 578 | 10,331 | 28,506 | 1,500 | 30,006 | 21,000 | | |
| Total Remaining Harvest | | | | | | | 1,644 | | 1,160 | 2,695 | 20,274 | 33,633 | 53,907 | 25,257 | | |
| Share Remaining | | | | | | | 1,006 | | 583 | 1,481 | 7,789 | 13,935 | 21,725 | 17,760 | | |
| Terminal Harvest Rate | | | | | | | 0.066 | 0.042815 | 0.108 | 0.079 | 0.141 | 0.198 | 0.140 | 0.107 | | |
| NT Chehalis River HR | | | | | | | | | | | 3,066 | | | 0.090 | | |

HUMPTULIPS RIVER

| | | Chinook | | Coho | | Chum |
|--------------------------------------|--|---------|----------|--------|----------|--------|
| | | Wild | Hatchery | Wild | Hatchery | Total |
| 2019 Pre-season Forecasted RS | | 4,427 | 5,435 | 5,133 | 11,186 | 16,319 |
| Escapement Goal | | 3,573 | 369 | 6,894 | 400 | 7,294 |
| Harvestable | | 854 | 5,066 | -1,761 | 10,786 | 9,025 |
| Non-Treaty Share | | 427 | 2,533 | -881 | 5,393 | 4,513 |
| | | | | | | 25,480 |

ANTICIPATED HARVEST IMPACTS

| DATE | AREA | # DAYS | length | NDR | | | Chinook | | | Coho | | | Hump-tails | | | | | |
|---|------|----------|--------|------|------|-----------------------------|------------|---------------|--------------|--------------|------|------------|--------------|--------------|------|--------------|---|-----|
| | | | | Chin | Coho | MSF | Wild | Wild Hump onl | Hatchery | Total | MSF | Wild | Hatchery | Total | Chum | | | |
| 34 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 35 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 36 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 37 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 38 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 39 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 40 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 41 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 42 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 43 | hump | 2 | 0.75 | 0.03 | 0.02 | 1.00 | 80 | 79 | 148 | 228 | 1.00 | 50 | 109 | 159 | 1 | 761 | 1 | 761 |
| 44 | hump | 1 | 1.00 | 0.03 | 0.02 | 1.00 | 10 | 9 | 11 | 21 | 1.00 | 9 | 20 | 29 | 1 | 324 | 1 | 324 |
| 45 | hump | 0 | 0.75 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 46 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 1.00 | 2 | 4 | 6 | 0 | 0 | 0 | 0 |
| 47 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 48 | hump | 0 | 1.00 | 0.03 | 0.02 | 1.00 | 0 | 0 | 0 | 0 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 11-hour and 1 8-hour | | 1 | | | | Total NT Net Catch | 90 | 88 | 159 | 249 | | 61 | 133 | 194 | | 1,085 | | |
| 24-hour days | | | | | | GH Marine Area 2.2 | 108 | 1.9966% | 285 | 393 | | 35 | 399 | 434 | | | | |
| | | | | | | FW River Sport | 370 | | 1,844 | 2,214 | | 128 | 1,488 | 1,616 | | | | |
| | | | | | | Total NT Sport Catch | 478 | | 2,130 | 2,608 | | 163 | 1,887 | 2,050 | | | | |
| Total NT Hump-tail River Terminal Impact | | | | | | | 568 | | 2,289 | 2,857 | | 224 | 2,020 | 2,244 | | 1,266 | | |
| Expected Escapement | | | | | | | 3,063 | | 2,760 | 5,823 | | 4,287 | 7,678 | 11,965 | | 46,257 | | |
| Escapement Goal | | | | | | | 3,573 | | 369 | 3,942 | | 6,894 | 400 | 7,294 | | 21,000 | | |
| Total Remaining Harvestable | | | | | | | -510 | | 2,391 | 1,881 | | -2,607 | 7,278 | 4,671 | | 25,257 | | |
| Share Remaining | | | | | | | -141 | | 244 | 103 | | -1,105 | 3,373 | 2,268 | | 17,760 | | |
| Terminal Harvest Rate | | | | | | | 0.128 | | 0.421 | 0.290 | | 4.4% | 0.181 | 0.138 | | 0.107 | | |

| Chehalis 2A and 2D | | | |
|---------------------------|-------------|--------|---------------|
| WDFW managed | | goal | model |
| Chinook | share | 1,908 | 581 |
| | goal | 9,753 | 11,397 |
| commercial rate | < or = 0.8% | | 0.22% |
| WDFW total | < or = 5.0% | | 4.28% |
| MA2.2 | 27% | | 42% |
| FW | 73% | | 57% |
| Coho | share | 16,406 | 7,907 |
| | goal | 28,506 | 48,780 |
| WDFW total | < or = 5.0% | | 14.1% |
| MA2.2 | 27% | | 23% |
| FW | 73% | | 77% |

| Humptulips 2C | | | |
|----------------------|-------------------|-------|--------------|
| WDFW managed | | goal | model |
| Chinook | rate < or = | 5.4% | 2.0% |
| | share | 427 | 568 |
| | goal | 3,573 | 3,063 |
| MA 2.2 | 37% | | 15% |
| FW | 63% | | 77% |
| Coho | goal | 6,894 | 4,287 |
| | WDFW total < or = | 5.0% | 4.37% |
| Total | < or = 10% | | 16.5% |
| MA 2.2 | 18% | | 21.2% |
| FW | 82% | | 79% |

| Grays Harbor Total | | | |
|---------------------------|-------------------|--------|------------------|
| Chinook | goal | 13,326 | 14,460 |
| | share (incl. CTR) | 2,335 | 1,469 |
| Coho | goal | 35,400 | 53,067 |
| | share (incl. CTR) | 15,525 | 8,840 |
| | | | 12.2% |
| Chum | goal | 21,000 | 46,257 |
| | share (incl. CTR) | 25,480 | 7,720 |
| MA 2.2 | = to or <2% | 3.95% | |
| FW | >98% | 96% | \$ 68,949 |

2019 GH Fall Planning Model A historical Sport 2018 comm w/Fall Chinook update 3.12.19

| CHEHALIS RIVER BASIN | | | | | | | | | | | |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------|----------|---------------|--|--|
| | Chinook | | | Coho | | | Chum | | | | |
| | Natural | Hatchery | Total | Natural | Hatchery | Total | Natural | Hatchery | Total | | |
| 2019 Pre-season Forecasted RS | 13,568 | 2,226 | 15,794 | 61,317 | 48,621 | 109,938 | 66,792 | 5,167 | 71,959 | | |
| Escapement Goals | 9,753 | 578 | 10,331 | 28,506 | 1,500 | 30,006 | | | 21,000 | | |
| Total Available Harvestable | 3,815 | 1,648 | 5,463 | 32,811 | 47,121 | 79,932 | | | 50,959 | | |
| Non-treaty Share | 1,908 | 824 | 2,732 | 16,406 | 23,561 | 39,966 | | | 25,480 | | |
| Chehalis River Management Objectives | | | | | | | | | | | |
| Proportion of Rec Marine Area 2.2 | <27% | | | <27% | | | | | < 2% total | | |
| Commercial Impact Rate in 2A-D Only | < 0.8% | | | | | | | | | | |
| Total WDFW-managed fishery | =<5% | | | =<5% | | | | | | | |
| Harvest Impacts | | | | | | | | | | | |
| WDFW-managed fishery Harvest Rate | 581 | 241 | 822 | 7,907 | 7,505 | 15,412 | | | 6,454 | | |
| Marine Area 2.2 Harvest | 215 | 135 | 350 | 1,670 | 1,484 | 3,154 | | | 68 | | |
| Freshwater Harvest | 289 | 83 | 372 | 5,209 | 5,207 | 10,416 | | | 1,461 | | |
| Commercial Harvest (Area 2A, 2D) | 77 | 23 | 100 | 1,028 | 815 | 1,842 | | | 4,925 | | |
| Chehalis Tribal Harvest | 320 | 0 | 320 | 710 | 2,120 | 2,829 | | | 0 | | |
| QIN Treaty Harvest | 1,270 | 247 | 1,517 | 3,921 | 3,863 | 7,784 | | | 12,371 | | |
| Total Chehalis Basin Harvest | 2,171 | 488 | 2,659 | 12,537 | 13,488 | 26,025 | | | 18,825 | | |
| Expected Escapement | 11,397 | 1,738 | 13,135 | 48,780 | 35,133 | 83,913 | | | N/A | | |
| Harvest Rates | | | | | | | | | | | |
| WDFW-managed fishery Harvest Rate | 4.3% | 10.81% | 5.20% | 12.89% | 15.44% | 14.02% | | | 8.97% | | |
| Total Recreational harvest rate | 3.71% | 9.78% | 4.57% | 11.22% | 13.76% | 12.34% | | | 2.12% | | |
| Proportion of Rec Marine Area 2.2 | 42.7% | 61.77% | 48.48% | 24.3% | 22.18% | 23.24% | | | 4.42% | | |
| Proportion of Rec Freshwater | 57.25% | 38.23% | 51.52% | 75.72% | 77.82% | 76.76% | | | 95.58% | | |
| Commercial Impact Rate in 2A-D only | 0.22% | | | | | | | | | | |
| Commercial harvest rate | 0.57% | 1.03% | 0.63% | 1.68% | 1.68% | 1.68% | | | 6.84% | | |
| Chehalis Tribal harvest rate | 2.36% | 0.00% | 2.03% | 1.16% | 4.36% | 2.57% | | | 0.00% | | |
| QIN Treaty Harvest Rate | 9.36% | 11.10% | 9.61% | 6.39% | 7.95% | 7.08% | | | 17.19% | | |
| Total Chehalis Basin Harvest Rate | 16.00% | 21.92% | 16.84% | 20.45% | 27.74% | 23.67% | | | 26.16% | | |

2019 GH Fall Planning Model A historical Sport 2018 comm w/Fall Chinook update 3.12.19

| HUMPTULIPS RIVER BASIN | | | | | | | | | |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------|----------|--------------|
| | Chinook | | | Coho | | | Chum | | |
| | Natural | Hatchery | Total | Natural | Hatchery | Total | Natural | Hatchery | Total |
| 2019 Pre-season Forecasted RS | 4,427 | 5,435 | 9,862 | 5,133 | 11,186 | 16,319 | 66,792 | 5,167 | 71,959 |
| Escapement Goal | 3,573 | 369 | 3,942 | 6,894 | 400 | 7,294 | | | 21,000 |
| Total Available Harvestable | 854 | 5,066 | 5,920 | -1,761 | 10,786 | 9,025 | | | 50,959 |
| Non-treaty Share | 427 | 2,533 | 2,960 | -881 | 5,393 | 4,513 | | | 25,480 |
| Humptulips River Management Objectives | | | | | | | | | |
| Marine Area 2.2 impact rate | 37% | | | 18 - 34% | | | | | |
| Commercial impact rate in 2C Only | < 5.4% | | | < 5% | | | | | |
| Total Impacts | | | | | | | | | |
| Harvest Impacts | | | | | | | | | |
| Non-treaty Harvest | 568 | 2,289 | 2,857 | 224 | 2,020 | 2,244 | | | 1,266 |
| Marine Area 2.2 Harvest | 108 | 285 | 393 | 35 | 399 | 434 | | | 0 |
| Freshwater Harvest | 370 | 1,844 | 2,214 | 128 | 1,488 | 1,616 | | | 181 |
| Commercial Harvest | 90 | 159 | 249 | 61 | 133 | 194 | | | 1,085 |
| QIN Treaty Harvest | 796 | 386 | 1,182 | 622 | 1,489 | 2,110 | | | 5,611 |
| Total Humptulips Basin Harvest | 1,364 | 2,675 | 4,039 | 846 | 3,508 | 4,354 | | | 6,877 |
| Expected Escapement | | | | | | | | | |
| | 3,063 | 2,760 | 5,823 | 4,287 | 7,678 | 11,965 | | | N/A |
| Harvest Rates | | | | | | | | | |
| WDFW-managed fishery Harvest Rate | 12.83% | 42.11% | 28.97% | 4.37% | 18.06% | 13.75% | | | 1.76% |
| Total Recreational harvest rate | 10.80% | 39.19% | 26.44% | 3.18% | 16.87% | 12.56% | | | 0.25% |
| Proportion of Rec Marine Area 2.2 | 22.6% | 13.41% | 15.09% | 21.4% | 21.14% | 21.16% | | | See above |
| Proportion of Rec Freshwater | 77.41% | 86.59% | 84.91% | 78.57% | 78.86% | 78.84% | | | 100.00% |
| Commercial harvest rate in 2C Only | | | | | | | | | |
| Commercial harvest rate | 2.00% | 2.93% | 2.53% | 1.19% | 1.19% | 1.19% | | | 1.51% |
| QIN Treaty Harvest Rate | 17.97% | 7.11% | 11.99% | 12.11% | 13.31% | 12.93% | | | 7.80% |
| Total Harvest Rate | 30.80% | 49.22% | 40.95% | 16.48% | 31.36% | 26.68% | | | 9.56% |

2019 GH Fall Planning Model A historical Sport 2018 comm w/Fall Chinook update 3.12.19

| GRAYS HARBOR TOTAL | | | | | | | | | |
|-----------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------|----------|---------------|
| | Chinook | | | Coho | | | Chum | | |
| | Natural | Hatchery | Total | Natural | Hatchery | Total | Natural | Hatchery | Total |
| 2019 Pre-season Forecasted RS | 17,995 | 7,661 | 25,656 | 66,450 | 59,807 | 126,257 | 66,792 | 5,167 | 71,959 |
| Escapement Goal | 13,326 | 947 | 14,273 | 35,400 | 1,900 | 37,300 | | | 21,000 |
| Total Available Harvestable | 4,669 | 6,714 | 11,383 | 31,050 | 57,907 | 88,957 | | | 50,959 |
| Non-treaty Share | 2,335 | 3,357 | 5,692 | 15,525 | 28,954 | 44,479 | | | 25,480 |
| Management Objectives | | | | | | | | | |
| Marine Area 2.2 impact rate | < 2% total | | | | | | | | |
| Commercial impact rate | | | | | | | | | |
| Total Impacts | 33 | | | | | | | | |
| Harvest Impacts | | | | | | | | | |
| WDFW Managed Harvest | 1,149 | 2,529 | 3,678 | 8,131 | 9,525 | 17,656 | | | 7,720 |
| Marine Area 2.2 Harvest | 323 | 420 | 743 | 1,705 | 1,883 | 3,587 | | | 68 |
| Freshwater Harvest | 658 | 1,927 | 2,586 | 5,337 | 6,695 | 12,032 | | | 1,642 |
| Commercial Harvest | 167 | 182 | 349 | 1,089 | 948 | 2,036 | | | 6,010 |
| <i>Chehalis Tribe</i> | 320 | 0 | 320 | 710 | 2,120 | 2,829 | | | 0 |
| Total NT - Harvest | 1,469 | 2,529 | 3,999 | 8,840 | 11,645 | 20,485 | | | 7,720 |
| QIN Treaty Harvest | 2,066 | 633 | 2,699 | 4,543 | 5,352 | 9,894 | | | 17,982 |
| Total GH Harvest | 3,535 | 3,163 | 6,698 | 13,383 | 16,997 | 30,380 | | | 25,702 |
| Expected Escapement | | | | | | | | | |
| | 14,460 | 4,498 | 18,958 | 53,067 | 42,810 | 95,877 | | | 46,257 |
| Harvest Rates | | | | | | | | | |
| Non-treaty Harvest Rate | 6.38% | 33.02% | 14.34% | 12.24% | 15.93% | 13.98% | | | 10.73% |
| Proportion of Rec Marine Area 2.2 | | | | | | | | | 3.95% |
| Marine Area 2.2 harvest rate | 1.80% | 5.48% | 2.90% | 2.57% | 3.15% | 2.84% | | | 0.09% |
| Freshwater harvest rate | 3.66% | 25.16% | 10.08% | 8.03% | 11.19% | 9.53% | | | 2.28% |
| Commercial harvest rate | 0.93% | 2.38% | 1.36% | 1.64% | 1.58% | 1.61% | | | 8.35% |
| QIN Treaty Harvest Rate | 11.48% | 8.27% | 10.52% | 6.84% | 8.95% | 7.84% | | | 24.99% |
| Total GH Harvest Rate | 19.64% | 41.29% | 26.11% | 20.14% | 28.42% | 24.06% | | | 35.72% |