PS Rec Advisor Meeting

August 17, 2021



Meeting Agenda

- Recreational Fishing Updates
 - MA-10 Updates
 - MA-11 Updates
 - Other MA updates
 - Tulalip Bubble & Elliot Bay
- MA-7 Discussion
 - MA-7 vs. other fisheries
 - Preseason modeling FRAM
 - Where we landed
- Additional Questions / Concerns



MA-5, MA-6, MA-9

 As per the agreed upon seasons, 8/16 – 9/30: Non-Retention for Chinook

 Coho and Pink fisheries to continue as planned



| Marine Area | Retained / Legal Chinook Harvest | | Sublegal End | counters | Unmarked Encounters | |
|----------------|-------------------------------------|--------|----------------------------|----------|----------------------------|-------|
| 9 | Harvest Estimate | 5,069 | Estimate | 6,063 | Estimate | 3,582 |
| | Harvest Quota | 4,700 | Encounter Limit | 7,317 | Encounter Limit | 2,110 |
| | Percent of Harvest Quota | 108% * | Percent of Encounter Quota | 83% | Percent of Encounter Quota | 170% |

 Harvest through the switch to NR came to 108% of quota.

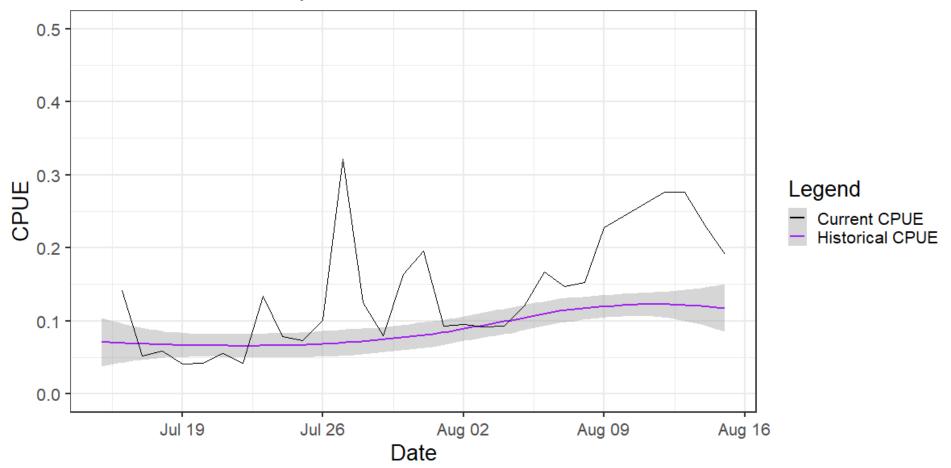


| Marine Area | Retained / Legal Chinook Harvest | | Sublegal Encounters | | Unmarked Encounters | |
|----------------|-------------------------------------|--------------|----------------------------|-------|----------------------------|-------|
| 10 | Harvest Estimate | 1,371 | Estimate | 2,796 | Estimate | 1,665 |
| | Harvest Quota | 3,718 | Encounter Limit | 6,592 | Encounter Limit | 2,586 |
| | Percent of Harvest Quota | 37 %* | Percent of Encounter Limit | 42%* | Percent of Encounter Limit | 64% |

- CPUE increased since last week
- Expected due to MA-9 moving to NR
- We will closely monitor MA-10 in the coming weeks

^{*} Denotes management control(s)

Area 10 CPUE Comparison



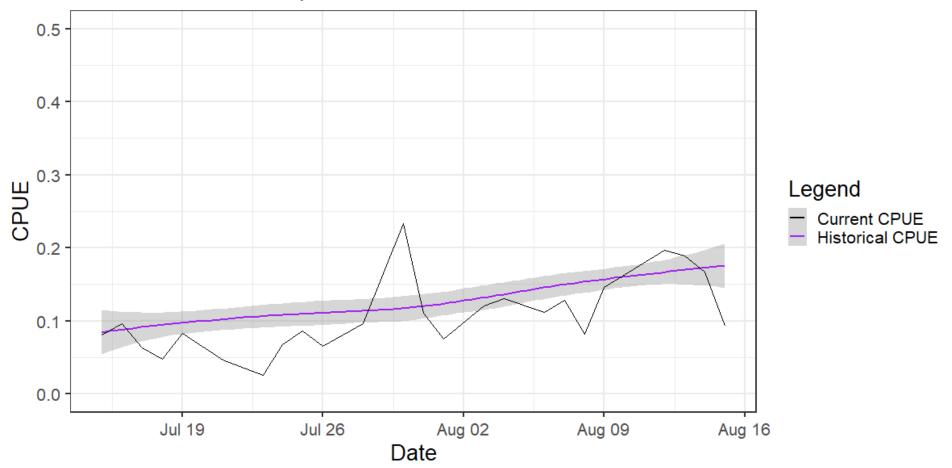


| Marine Area | Retained / Legal Chinook Harvest | | Sublegal Encounters | | Unmarked Encounters | |
|----------------|----------------------------------|-------|----------------------------------|-------|----------------------------|-------|
| 11 | Harvest Estimate | 2,007 | Estimate | 2,448 | Estimate | 1,543 |
| | Harvest Quota | 3,084 | Encounter Limit | 4,233 | Encounter Limit | 1,586 |
| | Percent of Harvest Quota | 65%* | Percent of Encounter Quota | 58%* | Percent of Encounter Quota | 97% |

- CPUE has been relatively steady since the opening weekend.
- At the current catch rate, the projection is that we will reach quota by August 25th
- There are impacts modeled in case of early closure

* Denotes management control(s)

Area 11 CPUE Comparison





Tulalip Bubble

- Met with comanagers on 8/12
- Determined that broodstock numbers were sufficient to allow for re-opening of Tulalip Bubble
- We will continue to monitor broodstock.

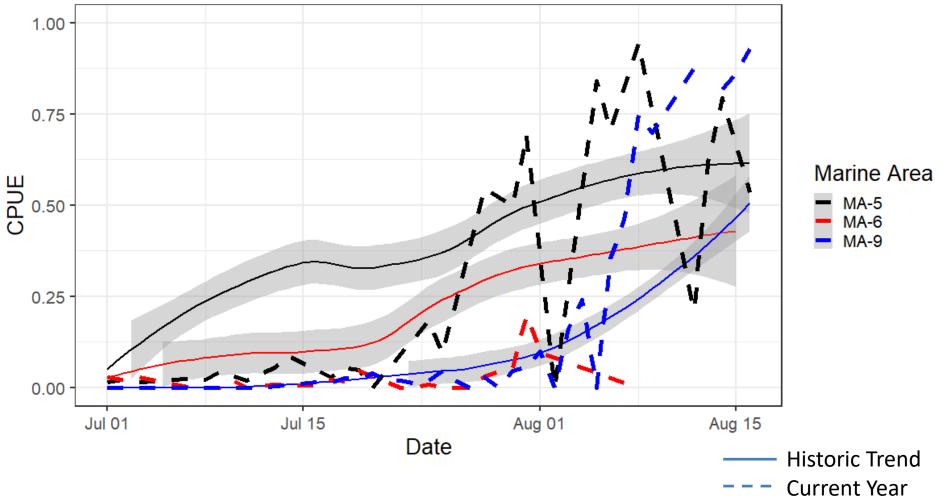
Elliot Bay

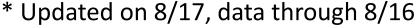
- In-season updates
 (ISU) indicated higher
 than expected
 returns to the Green
 River
- Allowed for additional weekend of opportunity in Elliot Bay



Pink Salmon CPUE MA -5,-6, and -9

Pink Salmon CPUE Comparison





MA-7 vs MA-6 & -9

- Stock compositions indicate there is a higher concentration of Stillaguamish fish in MA-7 vs. 6 & 9
- This allows for a higher number of overall Chinook impacts in MA-6 & -9
- Why are 6/9 still open?
 - 6 & 9 reached quota but did not almost double it (100% & 108% vs 185%)
 - There are more total impacts modeled for 6 & 9, due to fewer Stilly fish
 - There were additional impacts built in for MA-9 if it closed early, to continue the Coho season



Other Area 7 Fisheries

- Bellingham Bay modeled separately
 - No Stilly impacts in B'ham Bay
 - Targeting hatchery Chinook from Samish
- Commercial fishery modeled differently
 - No Stilly impacts in the commercial fishery
 - Targeting Fraser Pinks

MA-7 - FRAM

| MA-7 Jul - Sep | Total Encounters | | | Total Mortality | | | Total Landed | | |
|-------------------|------------------|-------|--------------------|-----------------|-----|-------|--------------|----|-------|
| | Mark | UM | Total | Mark | UM | Total | Mark | UM | Total |
| Legal | 1,569 | 1,658 | 3,227 | 1,464 | 264 | 1,728 | 1,365 | 17 | 1,382 |
| Sublegal | 1,091 | 808 | 1,899 | 218 | 162 | 380 | 0 | 0 | 0 |
| Total | 2,661 | 2,466 | <mark>5,126</mark> | 1,683 | 425 | 2,108 | 1,365 | 17 | 1,382 |

- 2,390 CNR encounters built into FRAM pre-season models for September NR
- Total Chinook Encounters for MA-7: 7,234



MA-7 – Catch & Encounters

| Metric | Chinook Harvest |
|-----------------------------|------------------|
| Harvest Estimate | 2,550 |
| Harvest Quota | 1,382 |
| Percent of Harvest Quota | * 185% |

- Used 4,591 of the 7,234
 Total Encounters
- Leaves 2,643 Chinook
 Encounters through 9/30

| Category | Legal Marked | Legal Unmarked | Sublegal Marked | Sublegal Unmarked | Total |
|------------|-----------------|-------------------|--------------------|----------------------|--------------------|
| Estimated | 2,932 | 676 | 385 | 598 | <mark>4,591</mark> |
| FRAM | 1,569 | 1,658 | 1,091 | 808 | 5,126 |
| Difference | -1,363 | 982 | 706 | 210 | 535 |
| % | 187% | 41% | 35% | 74% | <mark>90%</mark> |



Potential September Scenarios

| Previous Coho Catch | Chinook Encounter | Coho Kept | Ratio Chin / Coho | Total Coho Catch | Potential Chinook Encounters |
|---------------------|----------------------|-----------|----------------------|---------------------|------------------------------|
| 2018 | 110 | 434 | 0.25 | 3,605 | 325 - 902 |
| 2019 | 96 | 492 | 0.20 | 5,600 | 147 – 1,400 |
| 2020 | 132 | 1,480 | 0.09 | NA | |
| Average | | | 0.18 | 4603 | 325 – 1400 |

- Average Chinook Enc: Kept Coho ratio is 0.18
 - For every 100 kept Coho, ~18 Chinook encountered

Average Sept Coho catch ~4600



Caveats

- Even though we technically have impacts left, there is no guarantee
 - We will be presenting a potential fishery to comanagers for discussion

Sept Coho fishery is data-limited – encounter rate is

likely underestimated

 We don't know the full range of impacts on stocks of concern considering our overage in July

 The Coho run is currently below historic averages

