



Columbia River Summer Chinook Briefing

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Topics

- Background and Abundance
- Historical Fisheries
- Escapement
- Policies/Agreements
- 2018 Expectations
- Summary



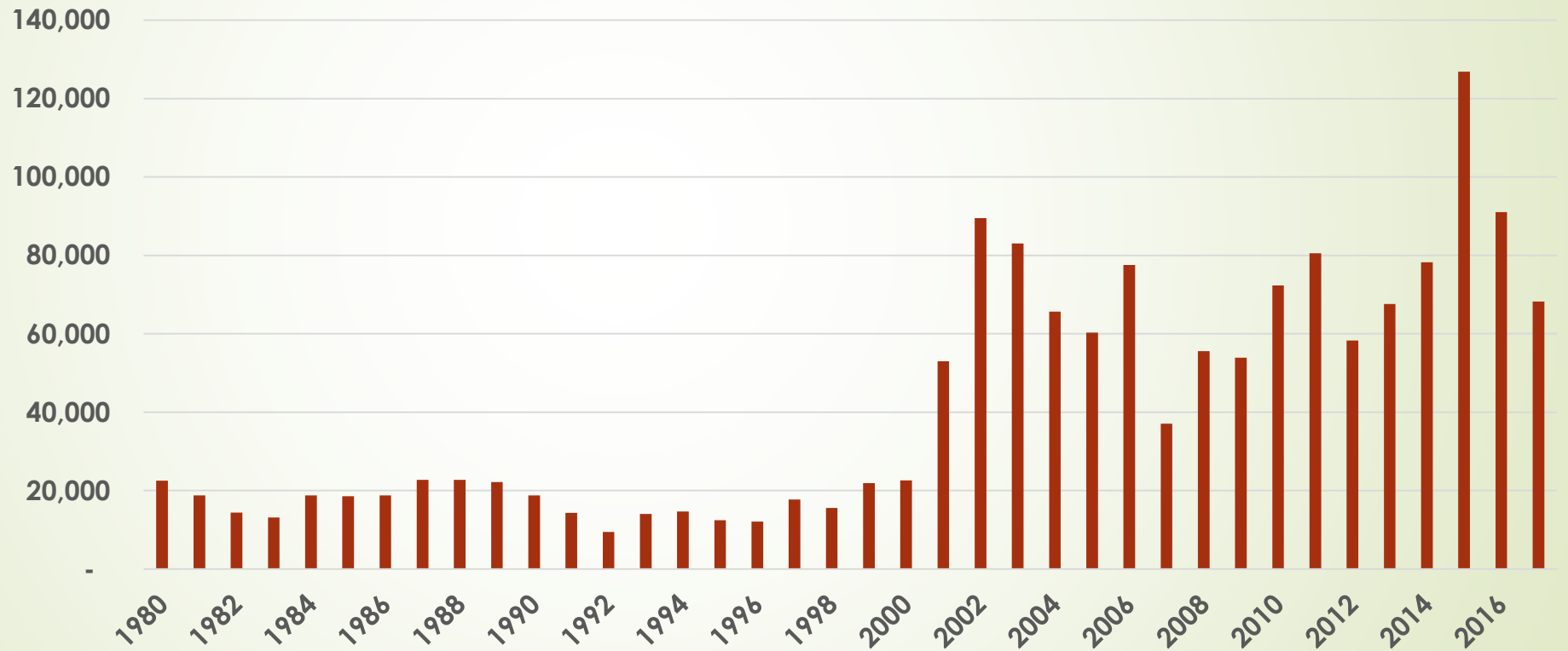
Methow River – September 2013

Background and Abundance

- ▶ Summer Chinook enter the Columbia River in June and July on their migration to the upper Columbia River Basin – above Priest Rapids Dam (PRD).
- ▶ Cross Bonneville Dam from June 16 through July.
- ▶ Not listed under the Endangered Species Act (ESA).
- ▶ Historically, the bulk of the spawning occurred in the upper Columbia River above Grand Coulee Dam and access to that area was blocked by the construction of the dam, which was completed in 1941.
- ▶ During 2002-2017, average return was 72,900 fish



Upper Columbia Summer Chinook Entering the Columbia River



Historical Fisheries

- ▶ Commercial seasons for summer Chinook closed in 1965 and sport seasons closed in 1974 and did not reopen until 2000, with a limited sport fishery above PRD.
- ▶ The states opened the summer Chinook sport fishery below Bonneville Dam on June 28, 2002 for the first time since 1973 with mark-selective (MSF) regulations to protect other ESA-listed stocks.
- ▶ Sport and commercial fisheries have occurred since 2005 and have included MSF and non-MSF regulations.



Example of Recent Fishery – 2016 sport

➤ Below Bonneville

- June 16 - July 31, MSF, 2 adults
- 3,100 adults kept & 4,200 released
- 87% of allocated mortalities

Bonneville mark rate

41%

➤ Bonneville-PRD

- June 16 - July 31/August 15, MSF, 2 adults
- 640 adults kept & 900 released
- 88% of allocated mortalities

➤ Above PRD (including tributaries)

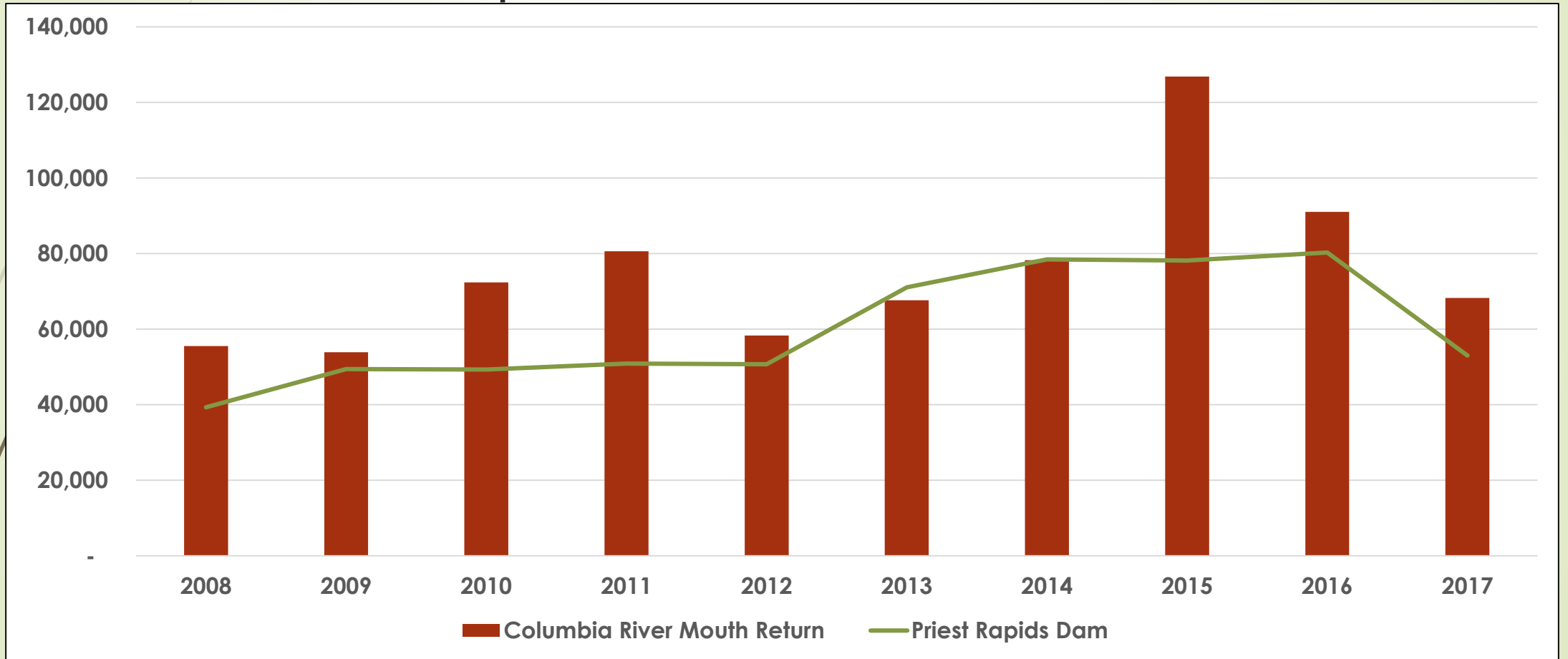
- Mainstem: July 1 - August 31, MSF, 2 adults
- 3,600 adults kept & 4,000 released
- 70% of allocated mortalities

Escapement

- Natural production of summer Chinook occurs in the Wenatchee, Entiat, Chelan, Methow, Okanogan and Columbia rivers.
- From 2008-2017 natural origin escapement has been:
 - Wenatchee, Entiat, Chelan – 7,600 (Goal 13,500)
 - Methow – 1,600 (Goal 1,500)
 - Okanogan – 6,100 (Goal 2,000)
- The management goal in *U.S. v Oregon* is 20,000 hatchery and natural origin fish past Priest Rapids Dam.

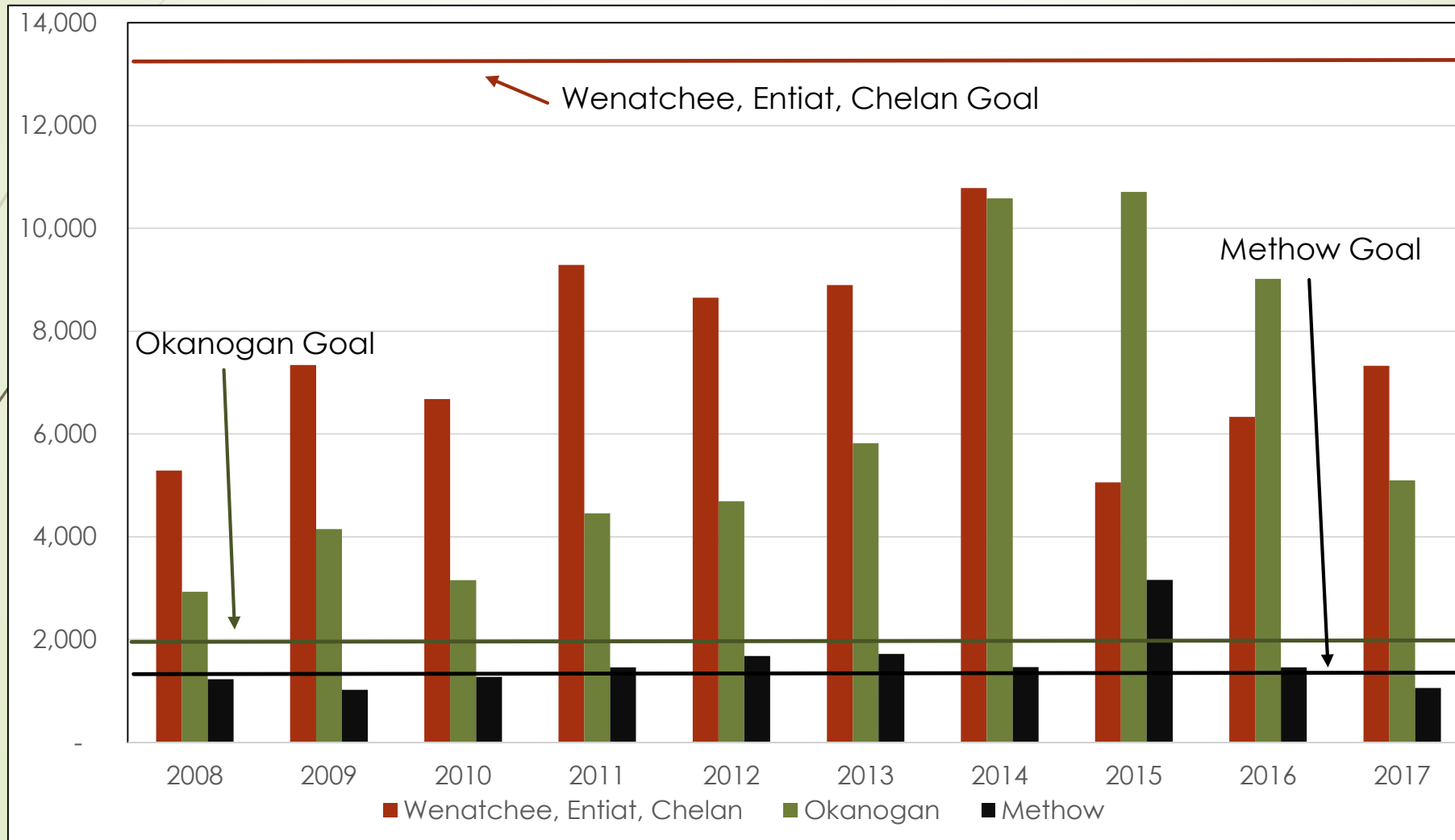


Columbia River Mouth Returns and Priest Rapids Dam Counts



Current Goal is 20,000 fish over Priest Rapids Dam

Natural Origin Escapement to Selected Tributaries



Policies and Agreements

- ▶ Columbia River Basin Salmon Management Policy C-3620
 - ▶ Meet natural production targets (Wenatchee, Methow, Okanogan) and for hatchery escapement goals
 - ▶ Non-treaty sharing above and below PRD, including Colville
 - ▶ Non-treaty below PRD (recreation-commercial allocations)

- ▶ Colville Tribal Agreement
 - ▶ Co-manage natural populations and habitat projects
 - ▶ Coordinate hatchery production
 - ▶ Coordinate harvest planning process (pre-season, in-season, post season)
 - ▶ Harvest allocations
 - ▶ Co-manage enforcement activities

2018 Non-Tribal Expectations

	Total	Hatchery	Wild*	Percent Hatchery
Forecast	67,300	40,380	26,920	60%
Harvest Below PRD	3,541			
Below Bonn Sport	2,361	2,174	187	65% June/55% July
Bonn to PRD Sport	425	255	26	60%
Commercial allocation	708	389	319	55% July
Harvest Above PRD	7,387			
Sport	6,180	3,811	515	41%

*The number of wild fish shown in the harvest category are wild mortalities. For recreational fisheries, wild fish mortalities are calculated by multiplying the wild fish released by 15%.

Seine Gear Compared to Gillnet Gear

- ▶ Steelhead mortality rate
 - ▶ Purse Seine (fall) – 2%, Beach Seine (fall) – 5%
 - ▶ Gillnet (summer) – 59%, Gillnet (fall) – 38%-45%
- ▶ 2014-15 ODFW Purse Seine study
 - ▶ Zones 2-4 (Aug-Sept)
 - ▶ 201 sets
 - ▶ 9,720 Chinook encounters (38% mark rate)
 - ▶ 503 steelhead encounters
- ▶ Steelhead encounters per Chinook landed are approximately 3 times higher in purse seine gear compared to gillnet gear in the summer fishery.

Potential Commercial Fishery in 2018

- ▶ Commercial large mesh gill net fishery is non-selective on summer Chinook, but species selective.
- ▶ Expectations for handle of sockeye, steelhead and sturgeon is estimated to be less than 50 of each and is dependent on effort, fishery dates and run sizes.
- ▶ Effort is estimated to be 30-50 fishers per day.
- ▶ Ex-vessel value is estimated to be \$6-\$7 per pound and average weight is estimated to be 16 pounds.
- ▶ Total ex-vessel value from the fishery would be \$68,000 – \$79,000 for summer Chinook. Additional estimates would need to be made to include sockeye and sturgeon harvest.

Summary

- ▶ Natural spawning numbers and pHOS levels are mixed, although often near targets.
- ▶ Mark selective fishing is essential to achieving natural spawning escapement goals and pHOS levels, while providing fishing opportunity.
- ▶ Need for ongoing adaptive management of fisheries to continue progress towards meeting objectives.
- ▶ Commission policy provides for adaptive management of commercial fisheries emphasizing selectivity (species or mark selective). Species selective using large mesh nets is feasible. Mark selective using net gear (seines, etc.) is currently not feasible.

Questions?

