NE of McNary Columbia River Salmon & Steelhead

- Welcome/Introductions
- Purpose of Meeting
- 2017 Returns & 2018 Forecasts
- Management Objectives & Fishery Options

Northeast of McNary Meetings - March 27-29, 2018 Washington Department of Fish and Wildlife

• Part of a 3-Year Project to simplify regulations

- ✓ 2017 Gamefish
- 2018 Salmon
- 2019 Marine Fish and Shellfish
- Introduction at NOF Forecast meetings
 - Basic Tenets
 - Broad Proposals
 - Brainstorming with Public

 Based on brainstorming, refine broad proposals and develop waterbody specific proposals

- Share specific proposals at future meetings.
- Likely:
 - March 15 Puget Sound
 - March 19 Columbia River
 - March 20 NOF #1
 - March 27 29 Columbia/Snake
- Concepts are unrefined at this time
- Will develop quickly as NOF progresses
- Public will need to continue to track

Constraints

• Tribal co-manager agreement

 Columbia River requires discussion with Oregon and needs to accommodate their process.
 ODFW is targeting January 1, 2019

• Basic Tenets

- Consider implications at a population level versus individual fish level
- Stop adding complexity
- Reduce the number of stream reaches
- Standardize opening and closing dates
- Standardize the daily limit (recognizing conservation needs)
- Decouple salmon and steelhead limits
- Eliminate layered gear restrictions

• Broad Proposals

- Daily limit
 - 6 fish, no more than 2 adults
 - 6 fish, no more than 2 adults. Bonus fish where needed.
 - Combine jacks and adults with a limit of 2, 3, or 4 per day
 - 2 adults, no limit on jacks
- Gear Restrictions
 - One gear restriction for all salmon fisheries?
- Boat Limit/Party Fishing
 - Allow everywhere?
- 2-Pole
 - Allow everywhere except quota fisheries and most marine areas?
- Fish Handling Rules
 - Eliminate?

2018 PFMC/NOF Schedule

East of McNary - Mid/Upper Columbia River, 6-8 pm

- March 27 Clarkston @ Walla Walla Community College
- March 28 Wenatchee @ Douglass PUD
- March 29 Kennewick @ Kennewick Irrigation District

Columbia River & Ocean

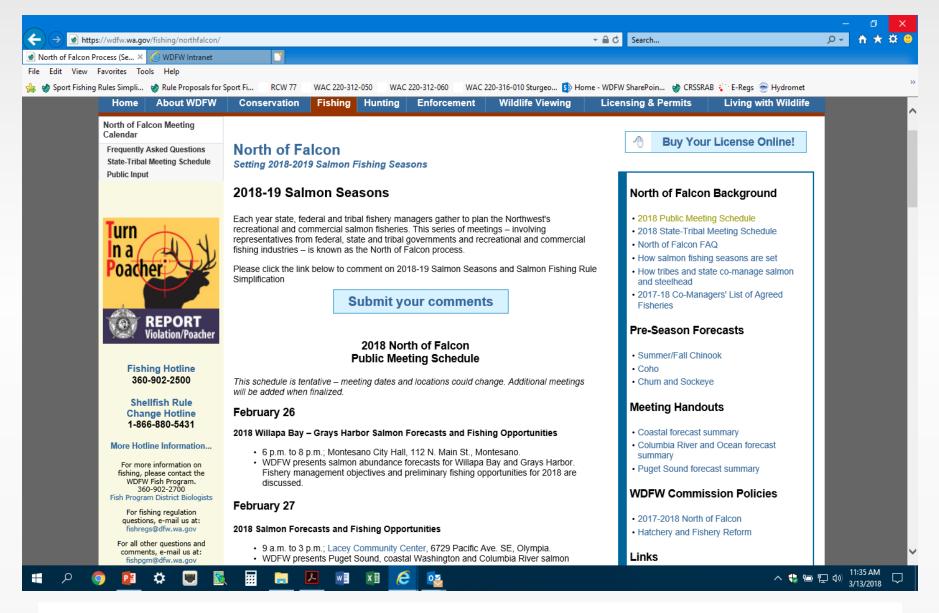
- April 2, 10 am 3 pm
- Ridgefield WDFW

Puget Sound

- April 3, 9:30 am 5 pm
- Lynnwood Embassy Suites

Pacific Fishery Management Council

- Final salmon seasons set
- April 6-11
- Sheraton Portland Airport Hotel
- 8235 NE Airport Way, Portland, OR



http://wdfw.wa.gov/fishing/northfalcon/

Columbia River Salmon and Steelhead

2017 Returns and 2018 Forecasts

Northeast of McNary Meetings – March 27 – 29, 2018 Washington Department of Fish and Wildlife

Environment Conditions Affecting Returns

- In the ocean, sea surface temperatures (SSTs) have cooled following "The Blob" and El Niño
- Cold wet winters in 2017 and 2018 are good for freshwater salmon production
- Expect biological effects of warm ocean conditions to continue for several years. Big concern for 2018 coho and 2019 chinook returns because of low 2017 juvenile abundances.

Salmon Indicators: **Bad** -> Fair -> Good

								Year													
Basin-	Ecosystem Indicators	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
scale	PDO (Sum Dec-March)	17	6	3	12	7	19	11	15	13	9	5	1	14	4	2	8	10	20	18	16
physical	PDO (Sum May-Sept)	10	4	6	5	11	16	15	17	12	13	2	9	7	3	1	8	18	20	19	14
indices	ONI (Average Jan-June)	19	1	1	6	13	15	14	16	8	11	3	10	17	4	5	7	9	18	20	12
marces																					
	46050 SST (°C; May-Sept)	16	9	3	4	1	8	20	15	5	17	2	10	7	11	12	13	14	19	18	6
Regional	Upper 20 m T (°C; Nov-Mar)	19	11	8	10	6	14	15	12	13	5	1	9	16	4	3	7	2	20	18	17
physical	Upper 20 m T (°C; May-Sept)	16	12	14	4	1	3	20	18	7	8	2	5	13	10	6	17	19	9	15	11
indices	Deep temperature (°C; May-Sept)	20	6	8	4	1	10	12	16	11	5	2	7	14	9	3	15	19	18	13	17
mulces	Deep salinity (May-Sept)	19	3	9	4	5	16	17	10	7	1	2	14	18	13	12	11	20	15	8	6
	r					•													-		
	Copepod richness anom. (no. species; May-Sept)	18	2	1	7	6	13	12	17	15	10	8	9	16	4	5	3	11	19	20	14
	N. copepod biomass anom. (mg C m ⁻³ ; May-Sept)	18	13	9	10	3	15	12	19	14	11	6	8	7	1	2	4	5	16	20	17
Deviewel	S. copepod biomass anom. (mg C m ⁻³ ; May-Sept)	20	2	5	4	3	13	14	19	12	10	1	7	15	9	8	6	11	17	18	16
Regional	Biological transition (day of year)	17	8	5	7	9	14	13	18	12	2	1	3	15	6	10	4	11	20	20	16
biological	Ichthyoplankton biomass (log (mg C 1000 m ⁻³); Jan-Mar)	20	11	3	7	9	18	17	13	16	15	2	12	4	14	10	8	19	5	6	1
indices	Ichthyoplankton community index (PCO axis 1 scores; Jan-Mar)			١٨				200		Ord		2	14	1	20	4.0	Ond		17	20	19
	Chinook salmon juvenile catches (no. km ⁻¹ ; June)	1998 = Worst						$2005 = 3^{rd}$ 2016 =								13	17	20			
	Coho salmon juvenile catches (no. km ⁻¹ ; June)	Score					Worst Score				e	3	9	, vvor			t Score		8	13	20
	L																				
	Mean of ranks	17.1	7.0	5.8	6.9	5.8	12.4	15.1	16.2	10.9	8.9	2.7	8.3	12.2	8.2	6.5	7.6	12.3	15.9	16.4	13.9
	Rank of the mean rank	20	6	2	5	2	14	16	18	11	10	1	9	12	8	4	7	13	17	19	15
	•	_						•													-

www.nwfsc.noaa.gov

Table SF-01. Ocean ecosystem indicate Colored squares indicate positic conditions for salmon entering the far right, colored dots indice ocean conditions in 2017 (coho	ve (gre the oc ate the	een), ne ean eao foreca	eutral () ch year ist of ac	yellow), . In the lult retu	, or negat two colu rns base	tive (red) umns to d on				
	Juvenile Migration Year									
	2014	2015	2016	2017	coho 2018	Chinook 2018				
Large-scale ocean and atmospheric in	dicato	rs								
PDO (May - Sept)				-	•	•				
<u>ONI (Jan - Jun)</u>					•	•				
Local and regional physical indicators										
Sea surface temperature					٠	•				
Deep water temperature					•	•				
Deep water salinity			-		•	•				
Local biological indicators										
Copepod biodiversity				-	•	•				
Northern copepod anomalies					•	•				
Biological spring transition					٠	•				
Winter ichthyoplankton biomass					•	•				
Winter ichthyoplankton community					•	•				
Juvenile Chinook salmon catch - June					•	•				
Juvenile coho salmon catch – June			-		•	•				
Key good conditions for salmon intermediate conditions for salmon poor conditions for salmon	almon		inter	nediate	expected returns e expected	expected				

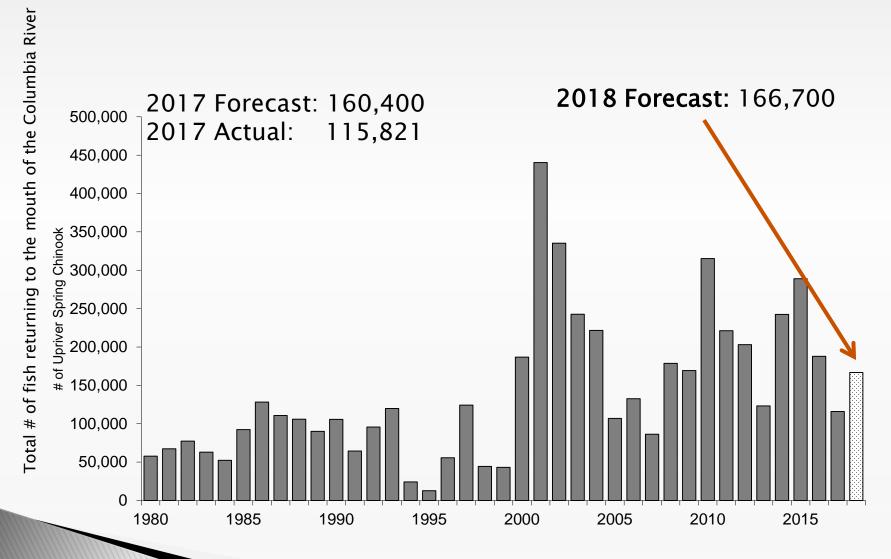
Predation

- Northern Pikeminnow/bird management
- Pinnipeds Marine Mammal Protection Act
 - 50,000-75,000 California sea lions in Pacific NW and 1,000-4,000 in Columbia system
 - OR/WA documented 'habituated offenders' under Section 120 (191 removed to-date)
 - States request from NOAA a more streamlined process and funding to take action when warranted.

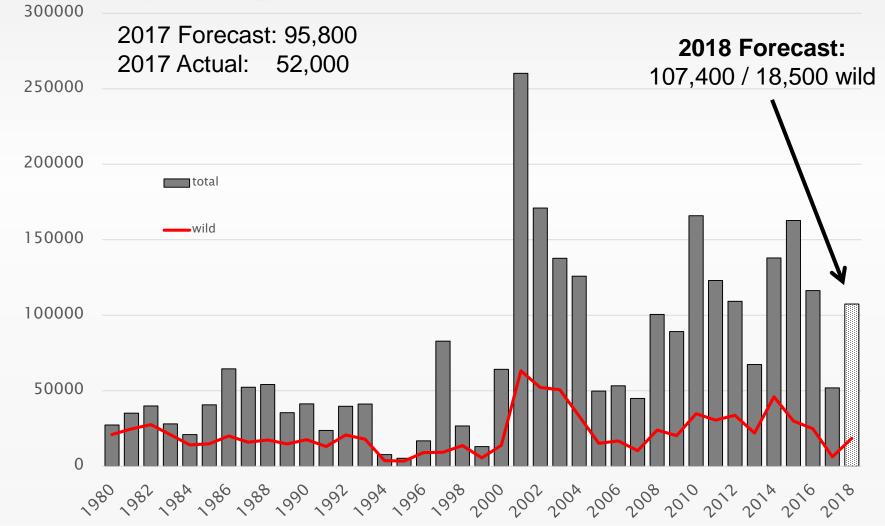
Stocks Originating upstream of Bonneville Dam



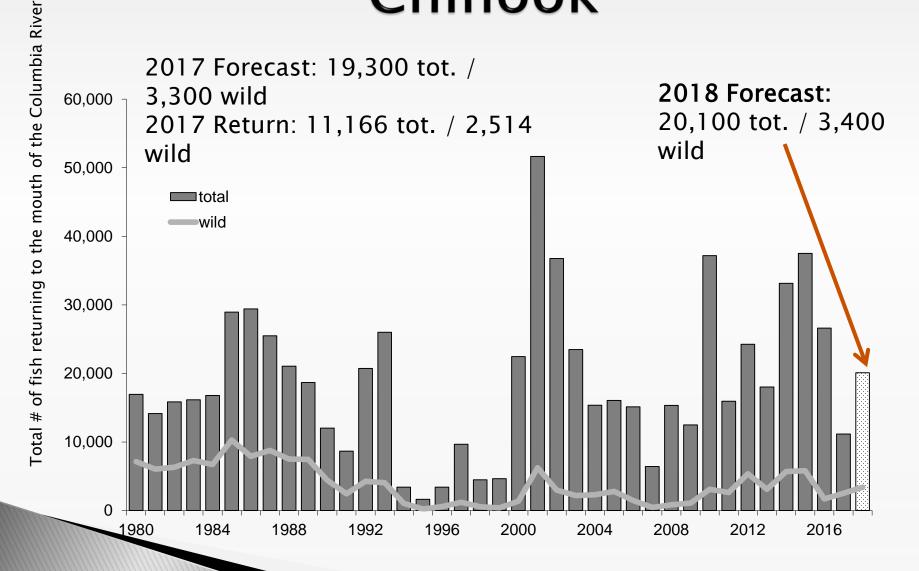
Upriver Spring Chinook



Snake River Spring/Summer Chinook



Upper Columbia Spring Chinook

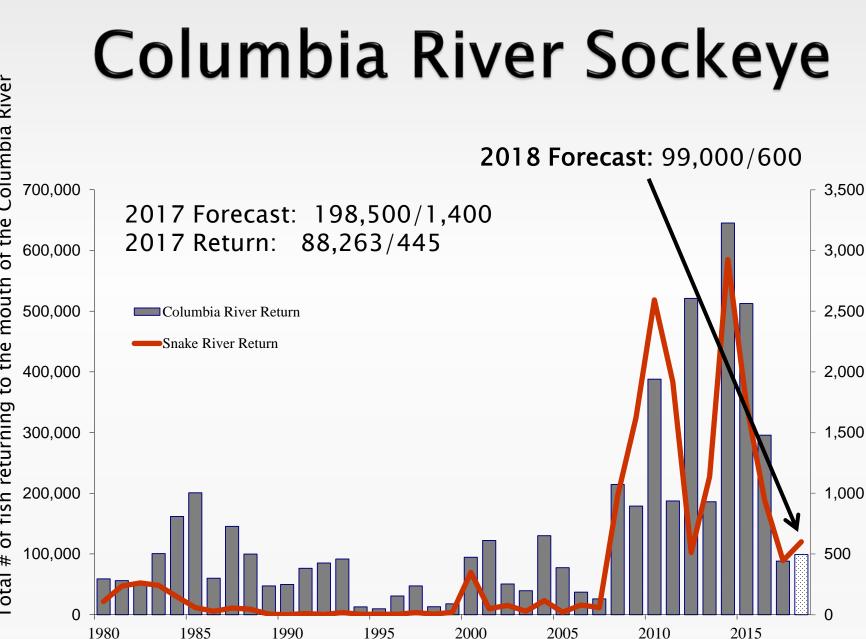


17



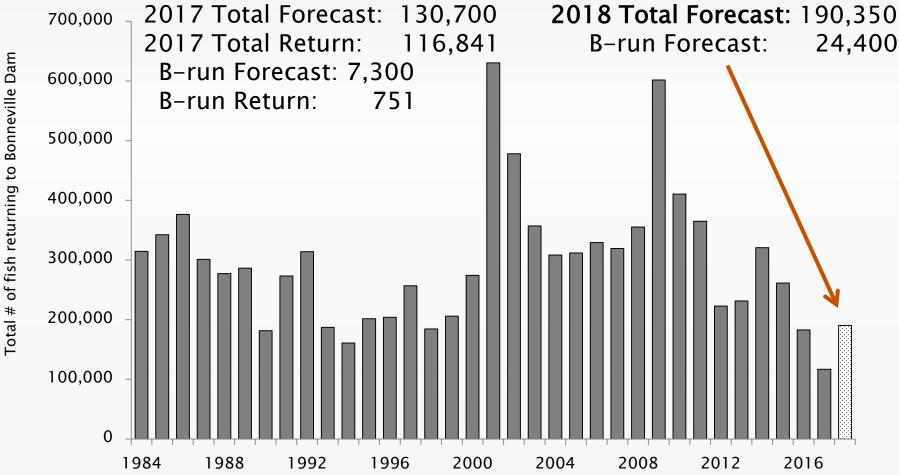
Upper Columbia Summer Chinook





Total # of fish returning to the mouth of the Columbia River

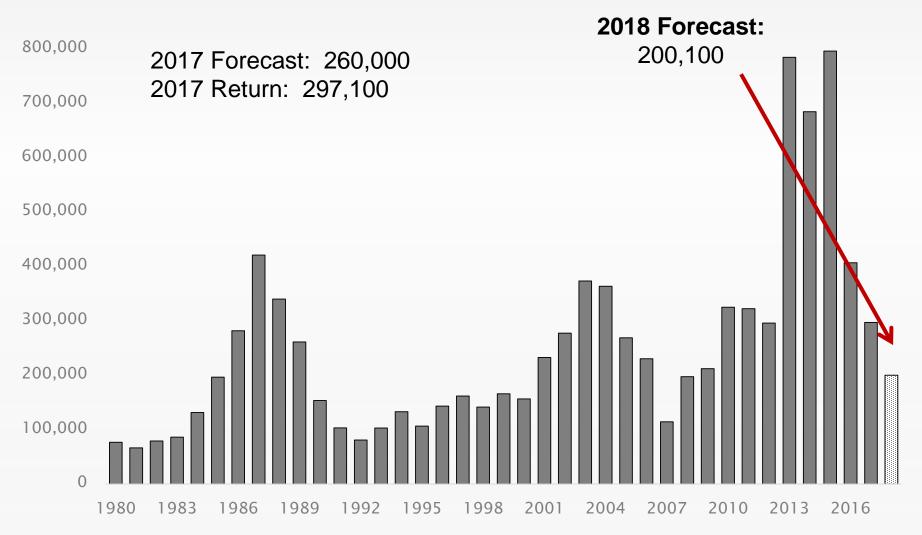
Upriver Summer Steelhead



20

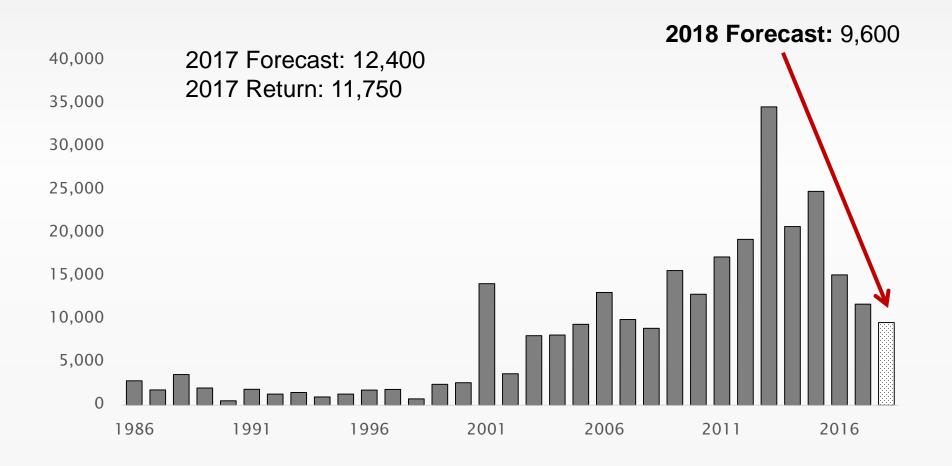
Upriver Bright (URB) Fall Chinook

900,000



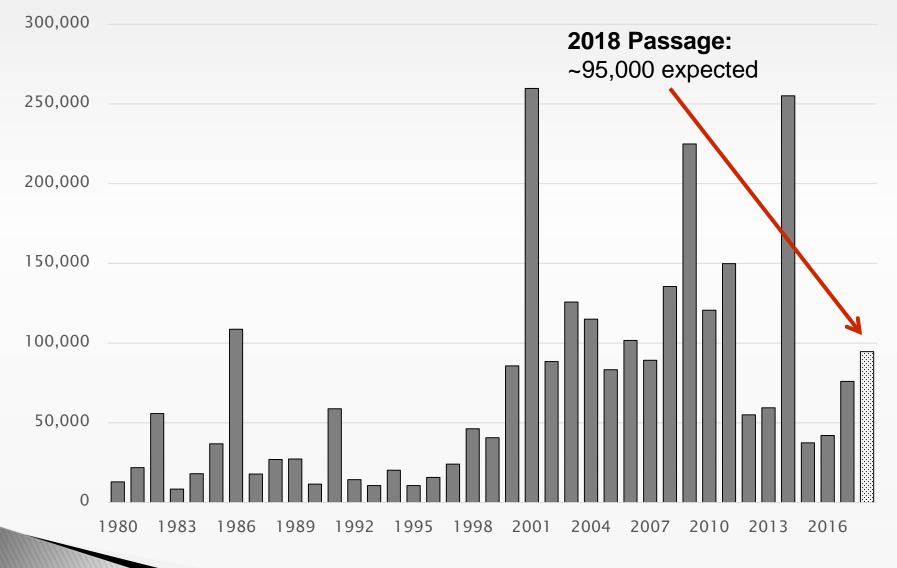


Snake River Wild Fall Chinook





Coho Passage at Bonneville Dam



Fishery Management







2018 Sockeye Forecast & Fisheries

Forecast: 99,000

- Tentative Proposal: close sockeye recreational retention from mouth to CJD (and tributaries)
 - Early in the NOF process.
 - In LCR, change requires consensus amongst Co-managers (Washington and Oregon)
- Conservation: return as many sockeye to the spawning grounds as possible
 - Lake Wenatchee not forecasted to meet escapement needs



2018 Upriver Spring Chinook Management Guidelines

- *U.S. v Oregon* (2018–2027) guidelines
 - Preseason: 2.0% ESA impact limit
 - 30% buffer in place until run size update
 - Catch Balance more constraining then impacts

Commission Policy

- Sport and Comm. buffers in place prior to run update
- Comm./sport impact-sharing at 20/80
- 25% of the sport allocation reserved for above BON

2018 Spring Chinook Fisheries

Below Bonneville sport

- Season: Jan 1 Apr 7, 1 chinook bag beginning March 1
- Catch allocation: 7,157 upriver (8,400 all stocks) prior to a run update
- Bonneville to WA/OR border above McNary sport
 - Season: March 16- May 7, 1 chinook bag limit
 - Catch allocation: 954 upriver prior to a run update
- Yakima River, Snake River (920 upriver), & Icicle River
 - Addressed later in presentation

All catch data rounded and includes release mortalities

Snake River Fishery Structure

- Open in late April (late compared to downriver)
 - fisheries timed concurrent with increased Dam passage
- Fisheries really heat up in early May
 Chinook abundance is reaching peak
- Limited areas open
 - this allows intensive monitoring, extends duration of fisheries & distributes opportunity (~18 miles if all four areas are open)

2017 Snake River Fishery

- Preseason forecast of 160,400
- Preseason impacts of 863 (harvest plus release mortalities)
- Three sections open 2d/wk beginning Apr 28
- Run was downgraded on May 15 to 83,000 and the fishery was closed
- Anglers harvested 65 adults and released 8 wild adults in 5,807 hours of effort

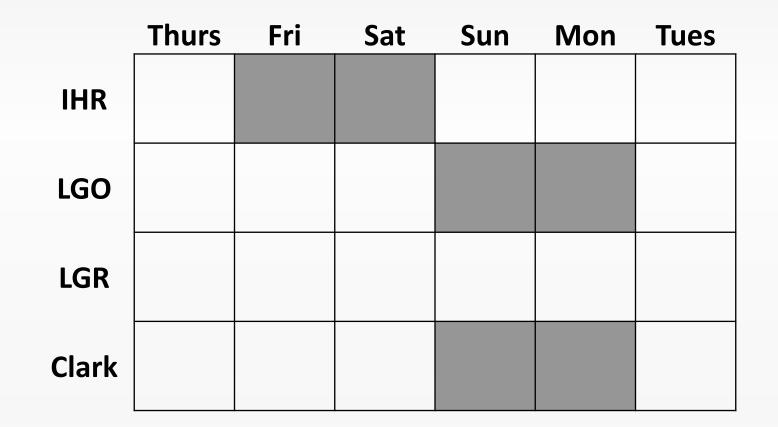
2017 Snake River Fishery

2017 Snake	River Spring	Chinook Ex	panded Ef	fort and Cat	ch Estimat	es			UPDATE	D 5-16-17					
Angler Effort				rt									1		
		Peak # observed	Peak # observed	Total	Saln	non Kept			Salı	mon Relea	Ave Catch Rate (hrs/fish kept)				
Dates open	Section	Shore Anglers	boat anglers	Angler hrs	H Adults	H lacks	Total	W Adults	W Jacks	H Adults	H Jacks	Total	Shore	Boat	"Wall"
Apr 28-29	IHR 1	24			0	0	0	0				0		0.0	vvan
May 5-6	(Fri-Sat)	40		610.2	2	0	2	5				5		0.0	
May 12-13		53	55	1,857.5	29	4	33	2	0	0	0	2	92.7	33.4	
Sum				2,851.8	31	4	35	7	0	0	0	7	-		
Apr 30-May 1	LGO 2	28	2	555.4	2	0	2	0	0	0	0	0	228.6	0.0	0.0
May 7-8	(Sun-Mon)	47	9	1,044.2	14	0	14	1	0	0	0	1	. 72.2	0.0	0.0
May 14-15		61	10	1,325.4	18	0	18	0	0	0	0	0	67.3	0.0	0.0
Sum				2,925.0	34	0	34	1	0	0	0	1	-		
Apr 30-May 1	Clarkst 3	3	0	0.0	0	0	0	0	0	0	0	0	0.0	0.0	
May 7-8	(Sun-Mon)	2	5	30.0	0	0	0	0	0	0	0	0	0.0	0.0	
May 14-15		0	2	0.0	0	0	0	0	0	0	0	0	0.0	0.0	
Sum				30.0	0	0	0	0	0	0	0	0)		
													1		
Snake R. Totals			5,806.8	65.0	4.0	69.0	8.0	0.0	0.0	0.0	8.0				

2018 Snake River Fishery – expectations

- Season structured the same as 2017
- Preseason Impact Estimate = 920 (883 harvest and 37 release mortalities)
- Expected opening April 20
- Open 3 areas (IHR, LGO, Clark)
- Goal: Provide 2-4 fishing events
- Bag limit of **1 adult**/ day & **2 days/week**
- WDFW will monitor harvest & may close any area early to help distribute harvest or manage available impacts

2018 Snake River Fishery – expectations



Grande Ronde River Fisheries

- 2018 Fishery
 - Low returns are forecasted for 2018 and there are currently no plans for a Grande Ronde spring Chinook fishery.



2018 Yakima Spring Chinook

- Total adult forecast (to Yakima River mouth) = 6,340 adults (74% of 8,530 10-yr rolling avg.)
- > Hatchery forecast = 2,000 (2017 forecast = 2,760; actual return = 2,230)
- > 2017 Harvest: 449 adults + 301 jacks = 750
- Lower river section from Hwy. 240 Bridge to SR 241Bridge (Mabton-Sunnyside Rd. – new area expansion) expected to open Friday, April 27 and run to mid-June.
- > Upper river section from I-82 at Union Gap to Roza Dam will likely open in early to mid-May and run to June 30.

- Daily limit 2 hatchery chinook. Gear restrictions: up to two, single-point barbless hooks.
- No fishing from boats equipped with internal combustion engines upstream of I-82 bridge at Selah Gap
- > Two-poles allowed with endorsement
- Fishing conditions will likely be poor at times because of above normal snowpack runoff

Icicle River Spring Chinook

- 2017 Regulations:
 - Icicle: Closed initially via emergency regulation due forecasted returns not high enough to meet hatchery broodstock needs. Later re-opened via emergency regulation for appx. 5 weeks to harvest 300 fish.
 - Results: 197 angler trips, 800 hours fished, 41 fish caught, 41 ad-clipped harvested, & 2 ad-intact released

2018 Regulations:

Icicle: Currently in pamphlet (May 15–July 31) **Note:** Forecasted abundance is same as 2017 (very low). *High likelihood the Icicle River fishery may close or open late*.

- Harvest Guidelines are three-tiered
 - *U.S. v Oregon* MA: Share 50/50 treaty/non-Indian
 - Upper Col MA : Share above/below Priest Rapids Dam based on run size
 - Commission policy: Share below Priest Rapids Dam 80/20 sport/comm in 2017

Forecast: 67,300 fish

- 11,200 fish available for in-river non-Indian sport and commercial fisheries, Colville and Wanapum tribal fisheries
 - 7,600 (68%) upstream of PRD & 3,600 (28%) downstream of PRD

Below Bonneville Dam: To be determined

Bonneville Dam-Hwy 395: Mark selective, June 16– July 31, daily limit 6 (no more than 2 adult hatchery chinook, release sockeye)

Hwy 395 to Priest Rapids Dam: See below in Tri-cities summer season

Priest Rapids Dam to Rock Island Dam: Mark selective, July 1-August 31, daily limit 6 (no more than 2 hatchery adult chinook, release wild adult chinook, sockeye, and coho)

Rock Island Dam to Wells Dam: Mark selective, July 1– October 15, daily limit 6 (no more than 2 hatchery adult chinook, release wild adult chinook, sockeye, and coho)

Wells Dam to Brewster Bridge: Mark selective, July 16 – August 31, daily limit 6 (no more than 2 hatchery adult chinook, release wild adult chinook, sockeye, and coho)

Brewster Bridge to Chief Joseph Dam: Mark selective, July 1–October 15, daily limit 6 (no more than 2 hatchery adult chinook, release wild adult chinook, sockeye, and coho)

Wenatchee River: Mark selective, August 1– September 30, daily limit 6 (no more than 2 hatchery adult chinook, release wild adult chinook, sockeye, and coho)

*Entiat River: Non-mark selective, July 16-September 30, daily limit 6 (release sockeye and coho)

Okanogan River

- Mouth to Hwy 97 Bridge: Mark selective, July 1–October 15, daily limit 6 (no more than 2 hatchery adult chinook, release wild adult chinook, sockeye, and coho)
- Hwy 97 Bridge to Mallot Bridge: Mark selective, July 1– September 15, daily limit 6 (no more than 2 hatchery adult chinook, release wild adult chinook, sockeye, and coho)
- Upstream of Mallot Bridge: Mark selective, July 1– September 15, daily limit 6 (no more than 2 hatchery adult chinook, release wild adult chinook, sockeye, and coho)

Similkameen River: Mark selective, July 1–September 15, daily limit 6 (no more than 2 hatchery adult chinook, release wild adult chinook, sockeye, and coho)

Fishery Options: Brewster Pool "Bubble Fishery"

Brewster Bridge to CJD

- > Not considering mainstem areas below BB (mixed stock)
- Wild adult chinook retention (likely 1 fish as part of daily adult limit)
- Targeting wild adult chinook in excess of spawning escapement needs
- > Evaluate in-season

- Coordination with tribal co-managers
- If opened, by emergency regulation
- Low confidence of an opener
- >2018 forecast is similar to 2017 return
- Ultimately a low number of excess wild adult chinook in 2017
- Potentially lower number ins 2018 (lingering effects of "Blob")



Proposed Hanford Reach "Summer Salmon" Regulations

Hwy. 395 Bridge to I-182 Bridge (CRC 534)

June 16 - Aug. 15. Daily limit 4. Up to one (1) may be an adult hatchery CHINOOK. Release wild adult chinook and sockeye.

I-182 Bridge to Priest Rapids Dam (CRC 535/536)

June 16 - Aug. 15. Daily limit 6. Up to two (2) may be adult hatchery CHINOOK. Release wild adult chinook and sockeye.

2018 Fall Chinook Fisheries

Below Bonneville – reductions from past years

- Fisheries constrained by Upriver Brights
- > Z6 sport Bonneville to Highway 395
 - Fishery constrained by Upriver Brights
- Priest Rapids Dam to Rock Island Dam Non– mark selective, September 1–October 15, daily limit 6 (no more than 2 adult chinook, release sockeye and coho)
- Above Rock Island Evaluate in-season (unlikely given forecast)



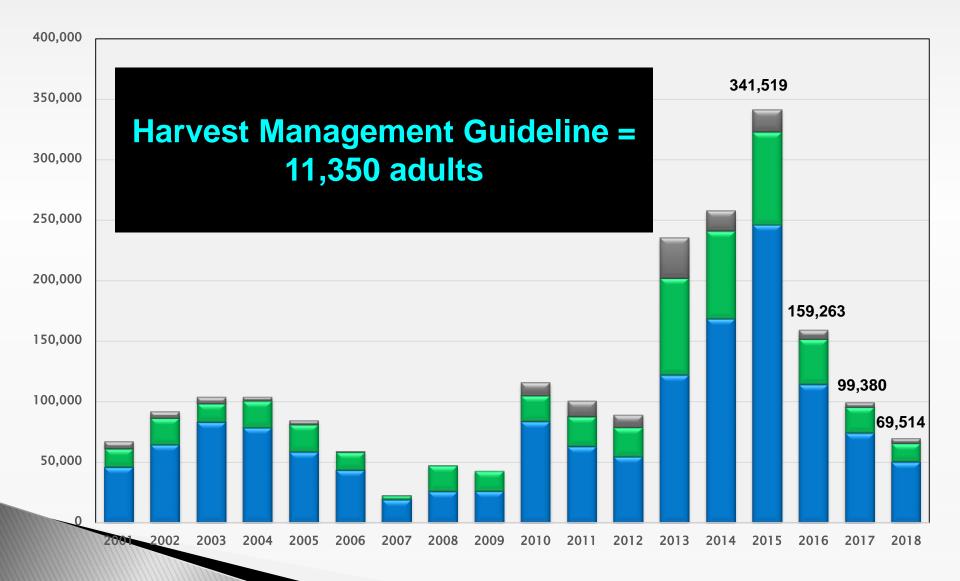
2018 Snake River Fall Chinook Fisheries

- Opened all of Snake River beginning in 2011
- Will use CRC for harvest estimates
- Plan to open all areas again in 2018 (Mid August or first of September to October 31)
- Opened by emergency rule, expecting similar limits and restriction as in 2017
- Continuing work on a joint state Fall Chinook FMEP

2018 Hanford Reach Fall Fishery

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2018 Hanford Reach Fall Forecast





2018 Hanford Reach Fall Chinook Regulations

Highway 395 bridge to Old Hanford townsite wooden powerline towers (534, 535)

Aug. 16 – Oct. 31. Daily limit 6. Up to 2 may be adults.

Use of two poles permitted with permit.



2018 Hanford Reach Fall Chinook Regulations (cont.)

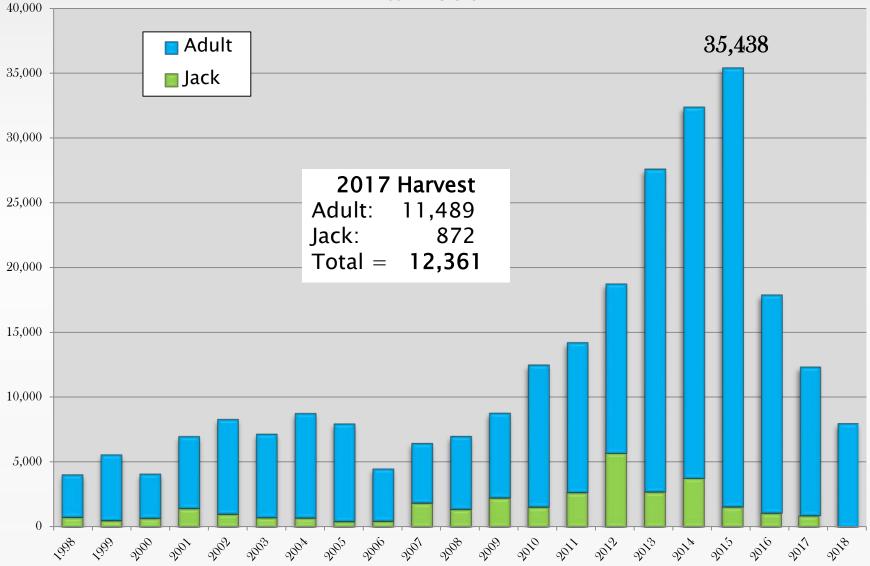
Old Hanford townsite wooden powerline towers to Priest Rapids Dam (536)

Aug. 16 – Oct. 15. Daily limit 6. Up to 2 may be adults.

Use of two poles permitted with permit.

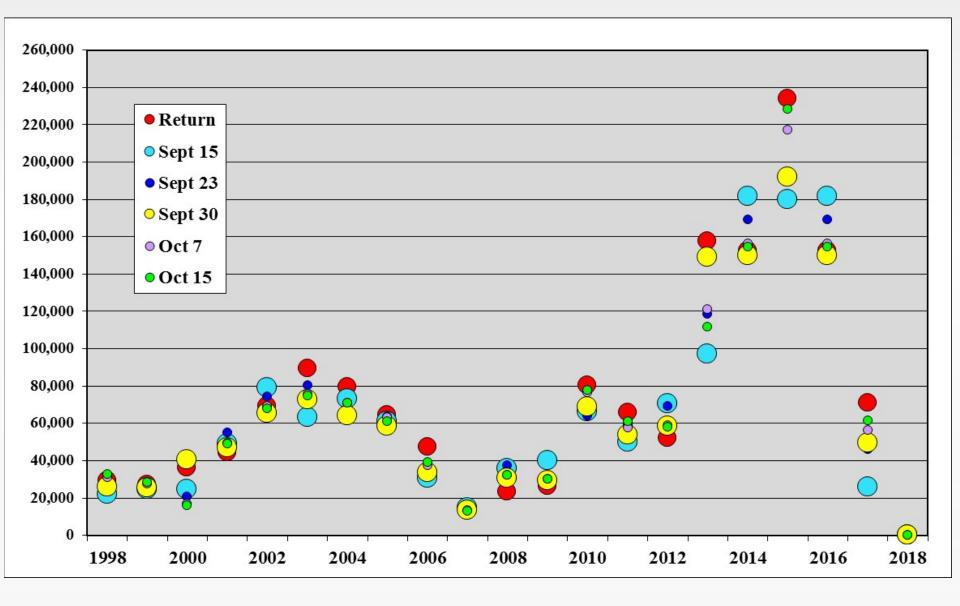
Hanford Reach Fall Chinook Sport Fishery

Harvest





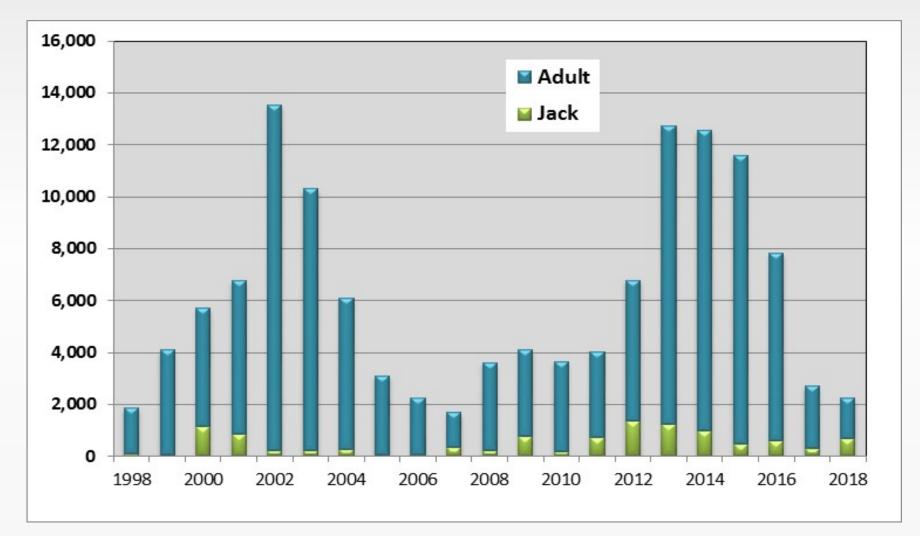
Hanford Reach Fall Chinook Harvest Management Plan



Escapement Goal = 31,110

Yakima River Fall Chinook Forecast

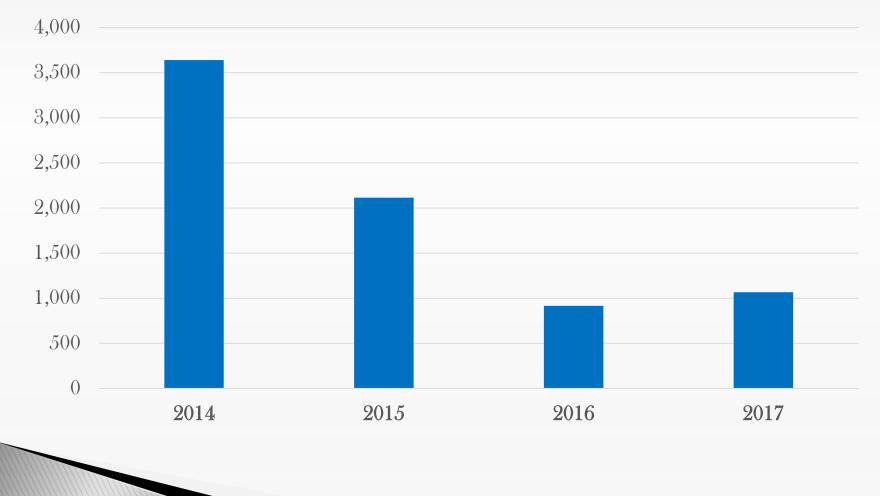
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Age	Age 2	Age 3	Age 4	Age 5	Age 6	Total	Adults
2018 Forecast	680	1,009	402	141	8	2,240	1,560



Ringold Springs Hatchery Summer Steelhead Returns





2018–19 Ringold Springs Hatchery Summer Steelhead Regulations

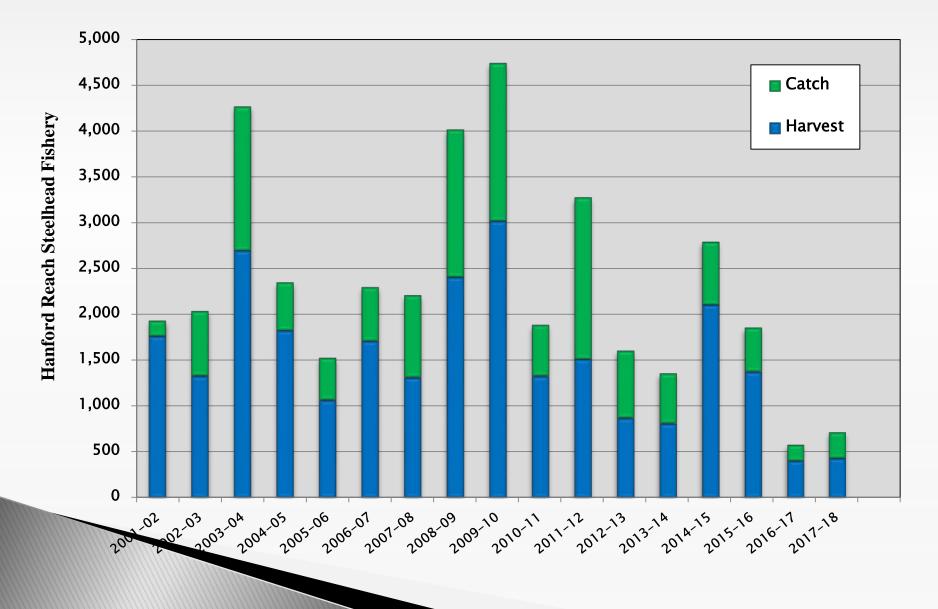
October 1 – 31 Daily limit 2 hatchery steelhead with both adipose fin clipped <u>and</u> ventral fin clipped.

Nov. 1 – Mar 31 Daily limit 2 hatchery steelhead.

April 1 - 15, 2019 Ringold area bank fishery?



Ringold Springs Hatchery Summer Steelhead Catch & Harvest



Questions?