

# FISH PASSAGE CENTER

 $847~\mathrm{NE}~19^{\mathrm{th}}$  Avenue, #250, Portland, OR 97232

Phone: (503) 833-3900 Fax: (503) 232-1259

www.fpc.org/ e-mail us at fpcstaff@fpc.org

## **MEMORANDUM**

TO: FPAC

FROM: FPC Staff

DATE: November 13, 2015 (revised 11/19/15)

RE: Action Notes from November 10, 2015, FPAC conference call

On November 10, 2015, FPAC met via conference call for its weekly meeting. Present for the meeting were: Paul Wagner (FPAC Co-Chair, NOAA), Tom Lorz (FPAC Co-Chair, CRITFC), Charlie Morrill (WDFW), Russ Kiefer (IDFG), Tom Iverson (Yakama Tribe), Bob Rose (Yakama Tribe), Rick Martinson (SMP), Joe Skalicky (USFWS), Erin Cooper (FPC), Tommy Garrison (FPC), Dave Benner (FPC), Michele DeHart (FPC) and Margaret Filardo (FPC).

#### **Agenda Items**

#### Approval of Past FPAC Notes

• Notes from November 3, 2015, were approved.

#### Water Supply/Flood Control

- The Fish Passage Center provided a summary of the current reservoir operations and water supply forecasts, snowpack estimates, and ESP runoff volumes. See the attached document.
- A discussion took place regarding whether there would be a deep draft of Libby this December given the weather concerns. Concern was expressed regarding the ability to provide spring flow and meet the June 30 full elevation as specified in the Biological Opinion. Paul Wagner (NOAA) pointed out that the COE considered the operation of Libby to the BiOp requirements difficult due to the way runoff came into the project, and COE was targeting a lower elevation in their operations as "full." FPAC members expressed concern that Libby elevations have an impact on meeting BiOp requirements for spring and summer flows.

 Paul Wagner (NOAA) pointed out that these changes have been discussed at TMT. FPAC members felt that these discussions should not be used to change the BiOp as they have not adequately addressed the differences between necessary flood control and power generation.

#### Chum

• Paul Wagner (NOAA) reported that there were adult chum observed last Friday. Now that chum operations have started, conditions should improve for spawning adults.

## Adult Fish Passage Status

• For adult counts on November 10, 2015, please see the attached document. For updated counts, use the FPC website.

#### TMT Year End Review

• The draft version of the TMT year-end review agenda is now available. Proposed changes should be sent to the COE.

## BON B2 Adult PIT-Tag Detector

- A sinkhole has been identified near the Cascade Island adult fish ladder, which may limit access to the PIT-tag detection building.
- It is possible there may be some damage to the Cascade Island ladder, but at this point it is unknown.
- Charlie Morrill (WDFW) and Dave Benner (FPC) will be in contact with the COE to find out the extent of the damage.

### Sturgeon Mortality

• FPAC members expressed concern that the COE is not implementing suggestions from fisheries managers to minimize sturgeon mortality. Margaret Filardo (FPC) encouraged FPOM members to submit a document to the COE that outlines these concerns. Charlie Morrill (WDFW) will distribute his comments to FPAC.

### Bonneville Tailwater Data

- Joe Skalicky (USFWS) informed FPAC that not all BPA data on Bonneville tailwater temperature are available to managers. Tom Iverson (Yakama Tribe) pointed out that BPA data collection is funded with federal money, and therefore should be made available.
- Dave Benner (FPC) will provide a summary of information on water temperature below BON for chum operations.
- Michele DeHart (FPC) said if the data can be provided, the FPC Web site can be used to disseminate it. Joe Skalicky (USFWS) will contact BPA to see if data can be made available.

#### Sockeye Thermal Limitations

• The FPC will investigate Paul Wagner's questions regarding the COE's reporting in the 2003 *Water Quality Plan* of the effects of the hydrosystem on water temperatures.

• The FPC will be expanding their sockeye analysis of 2015 thermal limitations to include summer Chinook, fall Chinook and steelhead.

## **Coordination**

- There will be an FPOM meeting in Walla Walla on Thursday, November 12, from 9:00 AM to Noon.
- The FPOM subcommittee meeting for determining minimum condition monitoring sampling has been moved to December.
- Following FPOM, there will be an SWRG meeting in Walla Walla on November 12, 2015, to review proposals on adult passage.
- The next FPAC face-to-face meeting will be on November 17 at 9:00 AM.
- The FPAC conference call on December 1, 2015, will be at 1:00 PM.
- TMT year-end review will be December 2.

## FPAC Agenda for Tuesday, November 10, 2015 Meeting time: 9:00 AM

- 1. Approval of notes from November 3 meeting
- 2. Water supply and reservoir status
- 3. Weather update and climate forecast
- 4. Fish passage status nighttime flow criteria
- 5. Chum operations
- 6. Year-end review items
- 7. Bonneville B2 adult PIT detector
- 8. Sockeye report questions or comments
- 9. Coordination for other scheduled meetings
- 10. Other



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#### **MEMORANDUM**

TO: FPAC

FROM: David Benner

DATE: November 9, 2015

RE: Reservoir Operations/Water Supply

Grand Coulee Reservoir is at 1,287.6 feet (11-8-15) and has refilled 0.1 feet over the last week. Outflows at Grand Coulee have ranged between 68.8 and 87.0 Kcfs over the last week.

The Libby Reservoir is currently at elevation 2,440.8 feet (11-8-15) and has held steady over the previous week. Daily average outflows at Libby Dam have been 4.0 Kcfs over the last week.

Hungry Horse is currently at an elevation of 3,528.1 feet (11-8-15) and drafted 1.1 feet over the last week. Outflows at Hungry Horse have been 2.4–3.3 Kcfs over the last week.

Dworshak is currently at an elevation of 1,516.2 feet (11-8-15) and held steady over the last week. Outflows have been 1.6 Kcfs over the last week.

The Brownlee Reservoir was at an elevation of 2,061.2 feet on November 8, 2015, and has refilled 2.0 feet over the last week. Hells Canyon outflows have ranged between 8.4 and 8.7 Kcfs over the last four days.

	November 8, 20 ES	
Location	% Average (1981–2010)	Runoff Volume (Kaf)
The Dalles (Apr–Aug)	95	83,252
Grand Coulee (Apr–Aug)	97	55,111
Libby Res. Inflow, MT (Apr–Aug)	101	5,916
Hungry Horse Res. Inflow, MT (Apr–Aug)	94	1,818
Lower Granite Res. Inflow (Apr–July)	94	18,558
Brownlee Res. Inflow (Apr–July)	79	4,346
Dworshak Res. Inflow (Apr–July)	105	2,547

Bonneville Dam Tailwater Date Range: 0600 11/7 through midnight 11/8

Date	Minimum Bon TW	Maximum Bon TW	Average Bon TW
11/7/2015	11.5	12.1	11.8
11/8/2015	11.7	11.9	11.8

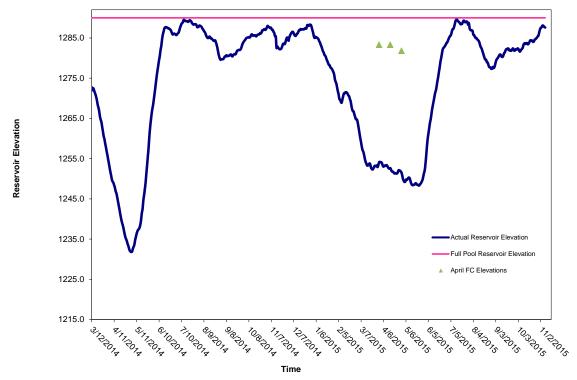


Figure 1. Grand Coulee

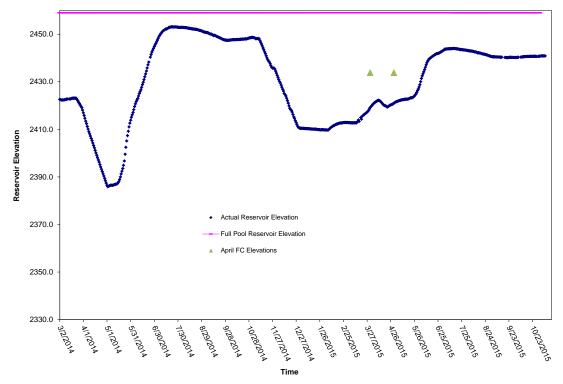


Figure 2. Libby

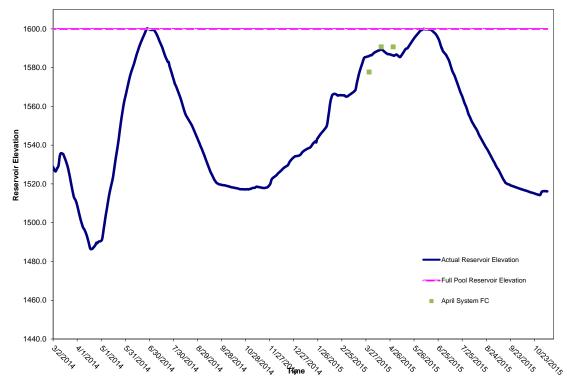


Figure 3. Dworshak

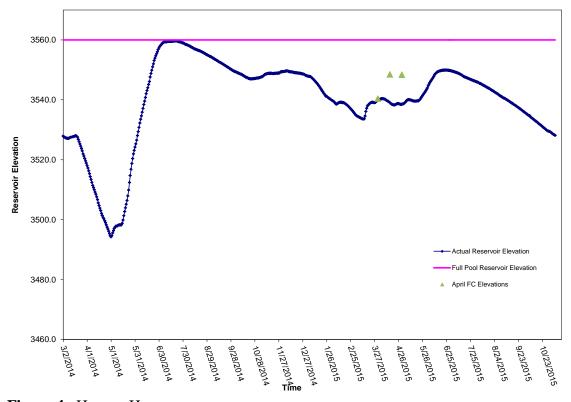


Figure 4. Hungry Horse

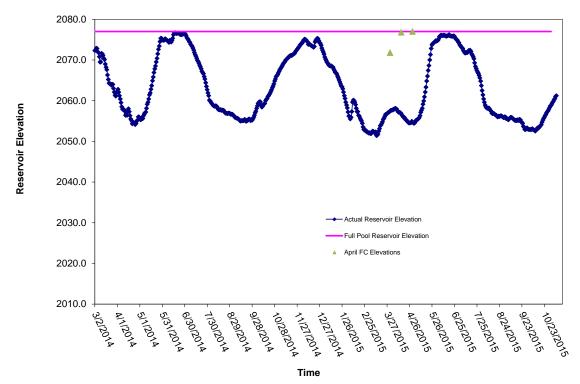


Figure 5. Brownlee

#### 2015 ADULT SALMON COUNTS

Daily Totals for Last 7 days and Year to Date Totals (based on reporting dates since 2000)

[FPC Home][Adult Salmon Home]



FPC RSS Feed for Adult Salmon Dam Counts

#### MORE HOT LINKS:

GO TO: <u>Annual Totals</u> or 10 Yr. Avg. vs 2015 and 2014 <u>Graph</u> or <u>Table</u> or <u>Water Flow & Spill</u> or <u>Current Water Temperature (January through December)</u>

Current vs. Historical Water Temperature (April through Aug) Offline until April

FISHING REPORTS: Oregon or Washington or Idaho

Printer Friendly Reports: Lower Columbia BON-WFA, Snake IHR-LGR or Mid-Upper Columbia PRD-WEL

#### WILLAMETTE FALLS 2)

DATE	CHINOOK ADULT	CHINOOK JACK	SPRING CHINOOK ADULT	SPRING CHINOOK JACK	SUMMER CHINOOK ADULT	SUMMER CHINOOK JACK	FALL CHINOOK ADULT	FALL CHINOOK JACK	COHO ADULT	COHO JACK	STEELHEAD	WILD 5) STEELHEAD	SHAD	SOCKEYE	LAMPREY	сним	PINK	SOURCE
11/03/15	0	0	0	0	n/a	n/a	0	0	28	7	7	n/a	n/a	n/a	n/a	n/a	n/a	WFA
11/04/15	0	0	0	0	n/a	n/a	0	0	4	0	0	n/a	n/a	n/a	n/a	n/a	n/a	WFA
11/05/15	1	0	0	0	n/a	n/a	1	0	10	1	2	n/a	n/a	n/a	n/a	n/a	n/a	WFA
11/06/15	0	0	0	0	n/a	n/a	0	0	15	2	3	n/a	n/a	n/a	n/a	n/a	n/a	WFA
11/07/15	0	0	0	0	n/a	n/a	0	0	7	0	2	n/a	n/a	n/a	n/a	n/a	n/a	WFA
11/08/15	0	0	0	0	n/a	n/a	0	0	7	1	1	n/a	n/a	n/a	n/a	n/a	n/a	WFA
11/09/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
YTD	53978	3064	51046	3064	n/a	n/a	2932	1022	2377	909	8196	n/a	n/a	n/a	n/a	n/a	n/a	

#### **BONNEVILLE DAM**

DATE	CHINOOK ADULT	CHINOOK JACK	SPRING CHINOOK ADULT	SPRING CHINOOK JACK	SUMMER CHINOOK ADULT	SUMMER CHINOOK JACK	FALL CHINOOK ADULT	FALL CHINOOK JACK	COHO ADULT	COHO	STEELHEAD	WILD 5) STEELHEAD	SHAD 6)	SOCKEYE	LAMPREY	СНИМ	PINK	SOURCE
11/03/15	334	32	0	0	0	0	334	32	173	12	224	108	n/a	0	16	7	0	USACE
11/04/15	223	25	0	0	0	0	223	25	147	10	185	86	n/a	0	9	4	0	USACE
11/05/15	302	23	0	0	0	0	302	23	157	7	238	118	n/a	0	6	2	0	USACE
11/06/15	647	36	0	0	0	0	647	36	167	9	258	109	n/a	0	2	5	0	USACE
11/07/15	193	10	0	0	0	0	193	10	118	4	189	69	n/a	0	5	6	0	USACE
11/08/15	185	25	0	0	0	0	185	25	92	3	162	89	n/a	0	2	4	0	USACE
11/09/15	317	28	0	0	0	0	317	28	151	6	140	54	n/a	0	0	8	0	USACE
VTD	1335/30	113308	220480	113308	161735	17730	953215	82354	35567	1815	266250	96858	1815001	510707	38630	80	55	

## THE DALLES DAM <sup>2) \*\*)</sup>

DATE	CHINOOK ADULT	CHINOOK JACK	SPRING CHINOOK ADULT	SPRING CHINOOK JACK	SUMMER CHINOOK ADULT	SUMMER CHINOOK JACK	FALL CHINOOK ADULT	FALL CHINOOK JACK	COHO ADULT	COHO	STEELHEAD	WILD 5) STEELHEAD	SHAD	SOCKEYE	LAMPREY	СНИМ	PINK	SOURCE
11/03/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
11/04/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
11/05/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
11/06/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
11/07/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
YTD	953152	115226	194116	115226	123915	15458	635121	87461	23777	3182	217018	76073	n/a	429797	12400	0	137	

#### JOHN DAY DAM 2)

DATE	CHINOOK ADULT	CHINOOK JACK	SPRING CHINOOK ADULT	SPRING CHINOOK JACK	SUMMER CHINOOK ADULT	SUMMER CHINOOK JACK	FALL CHINOOK ADULT	FALL CHINOOK JACK	COHO ADULT	COHO	STEELHEAD	WILD 5) STEELHEAD	SHAD	SOCKEYE	LAMPREY	СНИМ	PINK	SOURCE
11/03/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
11/04/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
11/05/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
11/06/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
11/07/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
11/08/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
11/09/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
YTD	808762	82816	166015	82816	108768	10988	533979	60314	18762	3066	179506	64512	n/a	366364	8370	0	10	

### MCNARY DAM \*\*)

DATE	CHINOOK ADULT	CHINOOK JACK	SPRING CHINOOK ADULT	SPRING CHINOOK JACK	SUMMER CHINOOK ADULT	SUMMER CHINOOK JACK	FALL CHINOOK ADULT	FALL CHINOOK JACK	COHO ADULT	COHO JACK	STEELHEAD	WILD 5) STEELHEAD	SHAD	SOCKEYE	LAMPREY	сним	PINK	SOURCE
11/03/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11/04/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11/05/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11/06/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11/07/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11/08/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11/09/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
YTD	751407	71109	156151	71109	96287	8723	498969	53619	16523	3378	177137	59834	999552	279744	1748	0	11	

ICE HARBOR DAM

DATE	CHINOOK ADULT	CHINOOK JACK	SPRING CHINOOK ADULT	SPRING CHINOOK JACK	SUMMER CHINOOK ADULT	SUMMER CHINOOK JACK	FALL CHINOOK ADULT	FALL CHINOOK JACK	COHO ADULT	COHO JACK	STEELHEAD	WILD 5) STEELHEAD	SHAD	SOCKEYE	LAMPREY	сним	PINK	SOURCE
11/03/15			ADULI	JACK -	ADULI	JACK	ADULI	JACK									لــــاا	
11/03/15						_	_		_				_			_		
11/05/15	-	-	-	-	-	-	-	-	-	_		-	-		-	_	_	
11/06/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11/07/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
YTD	200848	18560	116462	18560	21408	2807	62978	10008	1307	185	128521	35078	220757	1052	764	0	0	
							LOW	ER MONU	IMENTA	L DAM	2)							
	0111110011	0111110011	SPRING	SPRING	SUMMER	SUMMER	FALL	FALL				1411 5 5						
DATE	CHINOOK ADULT	CHINOOK JACK	CHINOOK ADULT	CHINOOK JACK	CHINOOK ADULT	CHINOOK	CHINOOK ADULT	CHINOOK JACK	COHO ADULT	COHO JACK	STEELHEAD	WILD 5) STEELHEAD	SHAD	SOCKEYE	LAMPREY	CHUM	PINK	SOURCE
11/03/15		-	_	-	_	-	_			_	-	_	-	-	-	-		
11/04/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
11/05/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
11/06/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
11/07/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
11/08/15 11/09/15	-	-	-	-		-	-		-			-	-					
YTD	183669	29376	111511	29376	17764	4835	54394	15844	1014	339	131476	37048	n/a	888	264	0	0	
								ITTLE GO	OSE D	AM 2)								
DATE	CHINOOK ADULT	CHINOOK JACK	SPRING CHINOOK	SPRING CHINOOK	SUMMER CHINOOK	SUMMER CHINOOK	FALL CHINOOK	FALL	COHO ADULT	COHO JACK	STEELHEAD	WILD 5) STEELHEAD	SHAD	SOCKEYE	LAMPREY	СНИМ	PINK	SOURCE
11/03/15		_	ADULT	JACK	ADULT	JACK	ADULT	JACK			_				_			
11/03/15	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_		
11/05/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
11/06/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
11/07/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
YTD	179092	23579	105124	23579	15494	4464	58474	10562	1671	315	126271	33436	n/a	587	58	0	0	
							LC	WER GR	ANITE [	OAM <sup>3)</sup>								
DATE	CHINOOK	CHINOOK	SPRING CHINOOK	SPRING CHINOOK	SUMMER CHINOOK	SUMMER CHINOOK	FALL CHINOOK	FALL CHINOOK	соно	соно	STEELHEAD	WILD 5)	SHAD	SOCKEYE	LAMPREY	сним	PINK	SOURCE
DATE	ADULT	JACK	ADULT	JACK	ADULT	JACK	ADULT	JACK	ADULT	JACK	STEELILAD	STEELHEÁD	6)	SOURLIE	LAWIFICE	CHOM	FINK	SOURCE
11/03/15	60	34	0	0	0	0	60	34	13	3	450	153	n/a	0	0	0	0	USACE
11/04/15	33	25	0	0	0	0	33	25 26	14	0	363 365	98	n/a	0	0	0	0	USACE
11/05/15 11/06/15	46 23	26 26	0	0	0	0	46 23	26	21 11	0	280	110 80	n/a n/a	0	0	0	0	USACE
11/07/15	39	27	0	0	0	0	39	27	18	4	433	126	n/a	0	0	0	0	USACE
11/08/15	34	15	0	0	0	0	34	15	15	0	382	113	n/a	0	0	0	0	USACE
11/09/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
YTD	178836	24035	104873	24035	14958	4222	59005	11434	1300	208	134136	37174	84833	440	50	0	0	
							PR	RIEST RA	PIDS DA	M <sup>1) 4)</sup>								
DATE	снімоок	снімоок	SPRING	SPRING	SUMMER	SUMMER	FALL	FALL	соно	соно		WILD 5)	01145					
	ADULT	JACK	CHINOOK	CHINOOK	II CHINOOK	CHINOOK	CHINOOK	CHINOOK	COHO					II SOCKEYE	LAMPREY	СНИМ	PINK	SOURCE
11/03/15			CHINOOK ADULT	CHINOOK	CHINOOK ADULT	CHINOOK JACK	CHINOOK ADULT	CHINOOK JACK	ADULT	JACK	STEELHEAD	STEELHEÁD	SHAD	SOCKEYE	LAMPREY	сним	PINK	SOURCE
	508	22	CHINOOK ADULT	CHINOOK JACK		JACK 0	ADULT 508	JACK 22	ADULT 11	<b>JACK</b> 2	4	<b>STEELHEAD</b> n/a	0	0	0	0	0	GCPUD
11/04/15	357	22 15	CHINOOK ADULT 0	CHINOOK JACK 0	0 0	0 0	508 357	22 15	11 19	2 2	4	n/a n/a	0	0	0	0	0	GCPUD GCPUD
11/05/15	357 355	22 15 44	CHINOOK ADULT 0 0	CHINOOK JACK 0 0	0 0 0	0 0 0	508 357 355	JACK 22 15 44	11 19 14	<b>JACK</b> 2	4 11 0	n/a n/a n/a	0 0 0	0 0 0	0 0 1	0 0 0	0	GCPUD GCPUD GCPUD
	357	22 15	CHINOOK ADULT 0	CHINOOK JACK 0	0 0	0 0	508 357	22 15	11 19	2 2 3	4	n/a n/a	0	0	0	0	0	GCPUD GCPUD
11/05/15 11/06/15	357 355 477	22 15 44 15	CHINOOK ADULT 0 0 0	0 0 0	0 0 0 0	0 0 0 0	508 357 355 477	22 15 44 15	11 19 14 12	2 2 3 0	4 11 0 7	n/a n/a n/a n/a n/a	0 0 0 0	0 0 0 0	0 0 1 2	0 0 0 0	0 0 0	GCPUD GCPUD GCPUD GCPUD
11/05/15 11/06/15 11/07/15 11/08/15 11/09/15	357 355 477 98 77	22 15 44 15 5 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	357 355 477 98 77	22 15 44 15 5 0	11 19 14 12 4 8	2 2 3 0 0 2	4 11 0 7 6 7	n/a n/a n/a n/a n/a n/a n/a	0 0 0 0 0	0 0 0 0 0 0	0 0 1 2 4 0	0 0 0 0 0	0 0 0 0 0	GCPUD GCPUD GCPUD GCPUD GCPUD
11/05/15 11/06/15 11/07/15 11/08/15	357 355 477 98	22 15 44 15 5	0 0 0 0 0 0	0 0 0 0	0 0 0 0 0	0 0 0 0 0	508 357 355 477 98	22 15 44 15 5 0 - 5812	11 19 14 12 4 8 - 4397	2 2 3 0 0 2 - 623	4 11 0 7 6	n/a n/a n/a n/a n/a n/a	0 0 0 0	0 0 0 0	0 0 1 2 4	0 0 0 0	0 0 0 0	GCPUD GCPUD GCPUD GCPUD GCPUD
11/05/15 11/06/15 11/07/15 11/08/15 11/09/15	357 355 477 98 77	22 15 44 15 5 0	0 0 0 0 0 0 0 0 0 27716	0 0 0 0 0 0 0 0 10932	0 0 0 0 0 0 0 0 0 78139	JACK 0 0 0 0 0 0 - 3550	508 357 355 477 98 77 - 88967	22 15 44 15 5 0 - 5812	11 19 14 12 4 8	2 2 3 0 0 2 - 623	4 11 0 7 6 7	n/a n/a n/a n/a n/a n/a n/a	0 0 0 0 0	0 0 0 0 0 0	0 0 1 2 4 0	0 0 0 0 0	0 0 0 0 0	GCPUD GCPUD GCPUD GCPUD GCPUD
11/05/15 11/06/15 11/07/15 11/08/15 11/09/15	357 355 477 98 77	22 15 44 15 5 0 - 10932	0 0 0 0 0 0 0 27716	CHINOOK JACK  0 0 0 0 1 10932	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	JACK  0 0 0 0 0 - 3550	357 355 477 98 77 - 88967	22 15 44 15 5 0 - 5812  WANAI	11 19 14 12 4 8 - 4397 PUM DA	2 2 3 0 0 2 - <b>623</b> M	4 11 0 7 6 7	n/a n/a n/a n/a n/a n/a n/a	0 0 0 0 0	0 0 0 0 0 0	0 0 1 2 4 0	0 0 0 0 0	0 0 0 0 0	GCPUD GCPUD GCPUD GCPUD GCPUD
11/05/15 11/06/15 11/07/15 11/08/15 11/09/15 YTD	357 355 477 98 77 - 194822 CHINOOK ADULT	22 15 44 15 5 0 - 10932 CHINOOK JACK	CHINOOK ADULT  0 0 0 0 0 0 0 27716	CHINOOK  O  O  O  O  O  O  O  The state of t	ADULT  0 0 0 0 0 0 78139  SUMMER CHINOOK ADULT	JACK	508 357 355 477 98 77 88967	22 15 44 15 5 0 - 5812  WANA	11 19 14 12 4 8 - 4397 PUM DA COHO ADULT	2 2 3 0 0 2 - 623 M	4 11 0 7 6 7 - 14286	n/a	0 0 0 0 0 0 - 17043	0 0 0 0 0 3 301272	0 0 1 2 4 0 - 6748	0 0 0 0 0 - 0	0 0 0 0 0 0 - <b>0</b>	GCPUD GCPUD GCPUD GCPUD GCPUD GCPUD
11/05/15 11/06/15 11/07/15 11/08/15 11/09/15 YTD	357 355 477 98 77 - 194822	22 15 44 15 5 0 - 10932	0 0 0 0 0 0 0 27716	CHINOOK JACK  0 0 0 0 1 10932	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	JACK  0 0 0 0 0 - 3550	357 355 477 98 77 - 88967	22 15 44 15 5 0 - 5812  WANAI	11 19 14 12 4 8 - 4397 PUM DA	2 2 3 0 0 2 - <b>623</b> M	4 11 0 7 6 7 - 14286	n/a	0 0 0 0 0 0 0	0 0 0 0 0 0 0 - 301272	0 0 1 2 4 0 -	0 0 0 0 0 0	0 0 0 0 0 0	GCPUD GCPUD GCPUD GCPUD GCPUD GCPUD
11/05/15 11/06/15 11/07/15 11/08/15 11/09/15 YTD DATE	357 355 477 98 77 - 194822 CHINOOK ADULT	22 15 44 15 5 0 - 10932 CHINOOK JACK	CHINOOK	CHINOOK  0 0 0 0 0 1 10932  SPRING CHINOOK JACK 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3550  SUMMER CHINOOK  O  O  O  O  O  O  O  O  O  O  O  O	508 357 355 477 98 77 88967	222 15 44 15 5 0 0 - 5812 WANAI FALL CHINCOK JACK 12	11 19 14 12 4 8 - 4397 PUM DA	2 2 3 0 0 2 - 623 M COHO JACK	4 11 0 7 6 7 - 14286 STEELHEAD	n/a	0 0 0 0 0 0 - 17043	0 0 0 0 0 0 301272 sockeye	0 0 1 2 4 0 - 6748	0 0 0 0 0 - 0	0 0 0 0 0 0 - 0	GCPUD GCPUD GCPUD GCPUD GCPUD GCPUD
11/05/15 11/06/15 11/07/15 11/08/15 11/09/15 YTD DATE 11/03/15 11/04/15	357 355 477 98 77 - 194822 CHINOOK ADULT 298 150	22 15 44 15 5 0 - 10932 CHINOOK JACK	CHINOOK	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3550  SUMMER CHINOOK JACK	508 357 355 477 98 77 - 88967  FALL CHINOOK ADULT 298 150	22 15 44 15 5 0 0 - 5812 WANAI FALL CHINGK JACK 12 8	11 19 14 12 4 8 - 4397 PUM DA COHO ADULT 8 12	2 2 3 0 0 2 - 623 M COHO JACK	4 11 0 7 6 7 - 14286 STEELHEAD	N/a stantalination n/a n/a n/a n/a n/a n/a	0 0 0 0 0 0 17043	0 0 0 0 0 0 - 301272 SOCKEYE	0 0 1 2 4 0 - 6748	0 0 0 0 0 0 - <b>0</b>	0 0 0 0 0 0 - 0	GCPUD
11/05/15 11/06/15 11/07/15 11/09/15 11/09/15 YTD DATE 11/03/15 11/04/15 11/05/15 11/06/15	357 355 477 98 77 - 194822 CHINOOK ADULT 298 150 219 71 130	22 155 44 15 5 0 - 10932 CHINOOK JACK 12 8 22 5	CHINOOK ADULT	CHINOOK	ADULT	3550  SUMMER CHINOOK JACK  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	508 357 355 477 98 77 - 88967  FALL CHINCOK ADULT 298 150 219 71 130	22 15 44 15 0 - 5812 WANAI FALL CHINOOK JACK 12 8 22 5 17	11 19 14 12 4 8 - 4397 PUM DA ADULT 8 12 7 3 6	2 2 3 0 0 2 - 623 M  COHO JACK  4 7 1 3 1	4 11 0 7 6 6 7 - 14286 STEELHEAD 15 10 8 6 4	N/a  n/a  n/a  n/a  n/a  n/a  n/a  n/a	0 0 0 0 0 0 17043 SHAD	0 0 0 0 0 0 - 301272 sockeye	0 0 1 2 4 0 - 6748 LAMPREY 0 0 0 5 6	0 0 0 0 0 0 0 <b>CHUM</b>	0 0 0 0 0 0 - 0	GCPUD
11/05/15 11/06/15 11/07/15 11/09/15 11/09/15 YTD DATE 11/03/15 11/04/15 11/06/15 11/06/15 11/08/15	357 355 477 98 77 - 194822 CHINOOK ADULT 298 150 219 71	22 155 44 15 5 0 - 10932 CHINOOK JACK 12 8 22 5 17 6	CHINOOK ADULT	CHINOOK	0 0 0 0 0 0 78139  SUMMER CHINOOK ADULT 0 0 0 0	3550  SUMMER CHINOOK JACK  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	508 357 355 477 98 77 - 88967  FALL CHINCOK ADULT 298 150 219 71	22 15 44 15 0 0 - 5812 WANAI FALL CHINOOK JACK 12 8 22 5	11 19 14 12 4 8 - 4397 PUM DA ADULT 8 12 7 3	2 2 3 0 0 2 - 623 M  COHO JACK  4 7 1 3	4 11 0 7 6 7 - 14286 STEELHEAD  15 10 8 6	N/a  n/a  n/a  n/a  n/a  n/a  n/a  n/a	0 0 0 0 0 0 17043	0 0 0 0 0 0 - 301272 SOCKEYE	0 0 1 2 4 0 - <b>6748</b> LAMPREY 0 0 0 5 6	0 0 0 0 0 0 0 <b>CHUM</b>	0 0 0 0 0 0 - 0	GCPUD
11/05/15 11/06/15 11/07/15 11/08/15 11/09/15 YTD  DATE  11/03/15 11/04/15 11/06/15 11/08/15 11/08/15 11/08/15 11/08/15	357 355 477 98 77 - 194822 CHINOOK ADULT 298 150 219 71 130 74	22 15 44 15 5 0 - 10932 CHINOOK JACK 12 8 22 5 17 6	CHINOOK ADULT	CHINOOK	ADULT	3550  SUMMER CHINOOK JACK  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	508 357 355 477 98 77 88967  FALL CHINOOK ADULT 298 150 219 71 130 74	22 15 44 15 5 0 - 5812 WANAI  FALL CHINOOK JACK 12 8 22 5 17 6 -	11 19 14 12 4 8 8 - 4397 PUM DA COHO ADULT 8 12 7 3 6 3 3 -	2 2 3 0 0 0 2 - 623 M  COHO JACK  4 7 1 3 1 0	4 11 0 7 6 7 7 - 14286 STEELHEAD 15 10 8 6 4 9	N/a   N/a	0 0 0 0 0 17043 SHAD	0 0 0 0 0 301272 301272	0 0 1 2 4 0 - 6748 LAMPREY 0 0 5 6 0 0	0 0 0 0 0 0 0 <b>CHUM</b>	0 0 0 0 0 0 - 0	GCPUD
11/05/15 11/06/15 11/07/15 11/09/15 11/09/15 YTD DATE 11/03/15 11/04/15 11/06/15 11/06/15 11/08/15	357 355 477 98 77 - 194822 CHINOOK ADULT 298 150 219 71 130	22 155 44 15 5 0 - 10932 CHINOOK JACK 12 8 22 5 17 6	CHINOOK ADULT	CHINOOK	ADULT	3550  SUMMER CHINOOK JACK  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	508 357 355 477 98 77 88967  FALL CHINOOK ADULT 298 150 219 71 130 74 - 55046	22 15 44 15 0 - 5812 WANAI FALL CHINOOK JACK 12 8 22 5 17 6 - 3669	11 19 14 12 4 8 - 4397 PUM DA ADULT 8 12 7 3 6 3 3 - 3037	2 2 3 0 0 0 2 - 623 M  COHO JACK  4 7 1 3 1 0 - 276	4 11 0 7 6 6 7 - 14286 STEELHEAD 15 10 8 6 4 9 - 14090	N/a  n/a  n/a  n/a  n/a  n/a  n/a  n/a	0 0 0 0 0 0 17043 SHAD	0 0 0 0 0 0 - 301272 sockeye	0 0 1 2 4 0 - 6748 LAMPREY 0 0 0 5 6	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 - 0	GCPUD
11/05/15 11/06/15 11/07/15 11/08/15 11/09/15 YTD  DATE  11/03/15 11/04/15 11/06/15 11/08/15 11/08/15 11/08/15 11/08/15	357 355 477 98 77 - 194822 CHINOOK ADULT 298 150 219 71 130 74 - 157664	22 15 44 15 5 0 - 10932 CHINOOK JACK 12 8 22 5 17 6 6926	CHINOOK ADULT	CHINOK	ADULT  0 0 0 0 0 78139  SUMMER CHINOOK ADULT  0 0 0 0 76636	3550 SUMMER CHINOOK JACK  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	508 357 355 477 98 77 88967  FALL CHINOOK ADULT 298 150 219 71 1300 74 - 55046 RC	22 15 44 15 5 0 - 5812 WANAI  CHINOOK JACK 12 8 22 5 17 6 - 3669	11 19 14 12 4 8 - 4397 PUM DA ADULT 8 12 7 3 6 3 - 3037 ND DAN	2 2 3 0 0 0 2 - 623 M  COHO JACK  4 7 1 3 3 1 0 - 276 2) 4) 7)	4 11 0 7 6 6 7 - 14286 STEELHEAD 15 10 8 6 4 9 - 14090	### STEELHEAD	0 0 0 0 0 17043 SHAD	0 0 0 0 0 301272 301272	0 0 1 2 4 0 - 6748 LAMPREY 0 0 5 6 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 - 0	GCPUD
11/05/15 11/06/15 11/07/15 11/08/15 11/09/15 YTD  DATE  11/03/15 11/04/15 11/06/15 11/08/15 11/08/15 11/08/15 11/08/15	357 355 477 98 77 - 194822 CHINOOK ADULT 298 150 219 71 130 74	22 15 44 15 5 0 - 10932 CHINOOK JACK 12 8 22 5 17 6	CHINOOK ADULT	CHINOOK	SUMMER CHINOOK SUMMER CHINOOK	JACK	508 357 355 477 98 7- 88967  FALL CHINOOK ADULT 298 150 219 71 130 74 - 55046  RC FALL CHINOOK	22 15 44 15 5 0 - 5812 WANAI CHINOOK 3669 CK ISLAI CHINOOK CHI	11 19 14 12 4 8 - 4397 PUM DA ADULT 8 12 7 3 6 3 3 - 3037	2 2 3 0 0 0 2 - 623 M  COHO JACK  4 7 1 3 1 0 - 276	4 11 0 7 6 6 7 - 14286 STEELHEAD 15 10 8 6 4 9 - 14090	N/a   N/a	0 0 0 0 0 17043 SHAD	0 0 0 0 0 301272 301272	0 0 1 2 4 0 - 6748 LAMPREY 0 0 5 6 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 - 0	GCPUD
11/05/15 11/06/15 11/07/15 11/08/15 11/09/15 YTD  DATE 11/03/15 11/04/15 11/05/15 11/06/15 11/08/15 11/09/15 YTD	357 355 477 98 77 - 194822  CHINOOK ADULT  298 150 219 71 130 74 - 157664  CHINOOK	22 155 44 15 5 0 - 10932  CHINOOK  12 8 22 5 17 6 - 6926	CHINOOK ADULT	CHINOK	ADULT	3550  SUMMER CHINOOK JACK  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	508 357 355 477 988 77 - 88967  FALL CHINOOK ADULT 298 150 219 71 130 74 - 55046 RC	22 15 44 15 5 0 - 5812 WANAI  FALL CHINOOK JACK  12 8 22 5 17 6 - 3669 CK ISLAI	11 19 14 12 4 8 - 4397 PUM DA  COHO ADULT 3 6 3 - 3037 ND DAN  COHO COHO	2 2 3 0 0 0 2 - 623 M COHO JACK 4 7 1 3 1 0 - 276 2) 4) 7]	4 11 0 7 6 7 - 14286 STEELHEAD  15 10 8 6 4 9 -	STEELHEAD	0 0 0 0 17043 SHAD 0 0 0 0 0	0 0 0 0 0 301272 SOCKEYE 0 0 0 0 0	0 0 1 2 4 0 - 6748 LAMPREY 0 0 5 6 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	GCPUD
11/05/15 11/06/15 11/07/15 11/08/15 11/09/15 YTD  DATE 11/03/15 11/04/15 11/05/15 11/07/15 11/08/15 YTD  DATE	357 355 477 98 77 - 194822  CHINOOK ADULT  298 150 219 71 130 74 - 157664  CHINOOK ADULT	22 15 44 15 5 0 - 10932 CHINOOK JACK 12 8 22 5 17 6 6 926	CHINOOK ADULT	CHINOOK  O O O O O O O O O O O O O O O O O	ADULT	JACK	508 357 355 477 98 77 - 88967  FALL CHINOOK ADULT 298 150 219 71 130 74 - 55046 RC FALL CHINOOK ADULT	22 15 44 15 5 0 - 5812 WANAI FALL CHINOOK JACK 12 8 22 5 17 6 - 3669 CK ISLAI FALL CHINOOK JACK	11 19 14 12 4 8 - 4397 PUM DA COHO ADULT 8 12 7 3 6 6 3 3 - 3037 ND DAN COHO ADULT	2 2 3 0 0 2 2 623 M COHO JACK 4 7 1 3 1 0 - 276 2) 4) 7]	4 11 0 7 6 7 - 14286 STEELHEAD  15 10 8 6 4 9 - 14090	STEELHEAD	0 0 0 0 0 17043 SHAD 0 0 0 0 0 795	0 0 0 0 0 0 - 301272 SOCKEYE 0 0 0 0 0 0 - 296339	0 0 1 2 4 0 - 6748 LAMPREY 0 0 5 6 0 0 - 5 328	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	GCPUD
11/05/15 11/06/15 11/07/15 11/08/15 11/09/15 YTD  DATE 11/03/15 11/04/15 11/05/15 11/09/15 YTD  DATE 11/03/15 11/04/15 11/09/15 11/09/15 11/09/15 11/09/15 11/09/15 11/09/15 11/09/15 11/09/15	357 355 477 98 77 - 194822  CHINOOK ADULT  298 150 219 71 130 74 - 157664  CHINOOK ADULT  599 543 413	22 155 44 155 0 - 10932  CHINOOK JACK  12 8 22 5 17 6 - 6926  CHINOOK JACK  13 18 5	CHINOOK ADULT	CHINOOK	SUMMER CHINOOK ADULT	JACK	## ADULT    508	22 15 44 15 0 - 5812 WANAI  FALL CHINOOK JACK  12 8 22 5 17 6 - 3669 CK ISLAI  FALL CHINOOK JACK  13 18 18	11 19 14 12 4 8 - 4397 PUM DA  COHO ADULT  8 12 7 3 6 3 - 3037 ND DAN  COHO ADULT  13 6 7	2 2 3 0 0 2 - 623 M  COHO JACK  4 7 1 3 1 0 - 276   2) 4) 7)  COHO JACK  0 0 1	4 11 0 7 6 7 14286  STEELHEAD  15 10 8 6 4 9 - 14090  STEELHEAD  4 16 7	STEELHEAD	0 0 0 0 0 17043  SHAD  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 301272 SOCKEYE 0 0 0 296339	0 0 1 2 4 4 0 - 6748 LAMPREY 0 0 - 5 328 LAMPREY	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	GCPUD
11/05/15 11/06/15 11/07/15 11/08/15 11/09/15 YTD  DATE 11/03/15 11/04/15 11/05/15 11/09/15 YTD  DATE 11/03/15 11/04/15 11/09/15 11/09/15 11/09/15 11/09/15 11/09/15 11/09/15 11/09/15 11/09/15 11/09/15 11/09/15	357 355 477 98 77 - 194822  CHINOOK ADULT  298 150 219 71 130 74 - 157664  CHINOOK ADULT  599 543 413 338	22 15 44 15 5 0 - 10932  CHINOOK JACK  12 8 22 5 17 6 - 6926  CHINOOK JACK  13 18 5 5	CHINOOK ADULT	CHINOOK	SUMMER CHINOOK ADULT	JACK	508 357 355 477 98 98 77 - 88967  FALL CHINOOK ADULT 298 150 219 71 130 74 - 55046  RC FALL CHINOOK ADULT 5599 543 413 338	22 15 44 15 0 - 5812 WANAI  FALL CHINOOK JACK  12 8 22 5 17 6 - 3669 CK ISLAI  FALL CHINOOK JACK  13 18 5 5	11 19 14 12 4 8 - 4397 PUM DA  COHO ADULT  8 12 7 3 6 3 - 3037 ND DAN  COHO ADULT  13 6 7 4	2 2 3 0 0 0 2 - 623 M  COHO JACK  4 7 7 1 3 1 0 - 276 2) 4) 7]  COHO JACK  0 0 1 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 0 0	4 11 0 7 6 7 7 14286  STEELHEAD  15 10 8 6 4 9 - 14090  STEELHEAD  4 16 7 14	STEELHEAD	0 0 0 0 17043  SHAD  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 301272 SOCKEYE 0 0 0 296339 SOCKEYE	0 0 1 1 2 4 4 0 - 6748  LAMPREY  0 0 5 6 0 0 - 5328  LAMPREY  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CHUM  CHUM  CHUM  CHUM  CHUM  CHUM  CHUM  CHUM	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	GCPUD
11/05/15 11/06/15 11/07/15 11/08/15 11/09/15 YTD  DATE 11/03/15 11/04/15 11/06/15 11/09/15 YTD  DATE 11/03/15 11/04/15 11/09/15 11/04/15 11/05/15 11/06/15 11/06/15 11/06/15 11/06/15 11/06/15 11/06/15 11/06/15 11/06/15	357 355 477 98 77 194822  CHINOOK ADULT  298 150 219 71 130 74 - 157664  CHINOOK ADULT  599 543 413 338 419	22 15 44 15 5 0 - 10932  CHINOOK JACK  12 8 22 5 17 6 - 6926  CHINOOK JACK  13 18 5 5 5	CHINOOK ADULT	CHINOK	SUMMER CHINOOK ADULT	JACK	508 357 355 477 88967  FALL CHINOOK ADULT  298 150 219 71 130 74 - 55046  RC  FALL CHINOOK ADULT  599 543 413 338 419	22 15 44 15 0 - 5812 WANAI  FALL CHINOOK JACK  12 8 22 5 17 6 - 3669 CK ISLAI  FALL CHINOOK JACK  13 18 5 5 5	11 19 14 12 4 8 8 - 4397 PUM DA  COHO ADULT  8 12 7 3 6 3 - 3037 ND DAN  COHO ADULT 13 6 7 4 2	2 2 3 0 0 0 2 - 623 M  COHO JACK  4 7 1 3 1 0 - 276 12) 4) 7]  COHO JACK  0 0 1 0 0 0 0	4 11 0 7 6 7 7 - 14286  STEELHEAD  STEELHEAD  15 10 8 6 4 9 - 14090  STEELHEAD  4 16 7 14 11	STEELHEAD	0 0 0 0 0 17043  SHAD  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 301272 SOCKEYE 0 0 0 0 296339 SOCKEYE	0 0 1 2 4 0 - 6748 LAMPREY 0 0 5 6 0 0 - 5 328 LAMPREY	CHUM  CHUM	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	GCPUD
11/05/15 11/06/15 11/06/15 11/07/15 11/08/15 11/09/15 YTD  DATE 11/03/15 11/06/15 11/07/15 11/08/15 11/09/15 YTD  DATE 11/03/15 11/06/15 11/06/15 11/06/15 11/06/15 11/06/15 11/06/15 11/08/15	357 355 477 98 77 - 194822  CHINOOK ADULT  298 150 219 71 130 74 - 157664  CHINOOK ADULT  599 543 413 338	22 15 44 15 5 0 - 10932  CHINOOK JACK  12 8 22 5 17 6 - 6926  CHINOOK JACK  13 18 5 5	CHINOOK ADULT	CHINOOK	SUMMER CHINOOK ADULT	JACK	508 357 355 477 98 98 77 - 88967  FALL CHINOOK ADULT 298 150 219 71 130 74 - 55046  RC FALL CHINOOK ADULT 5599 543 413 338	22 15 44 15 0 - 5812 WANAI  FALL CHINOOK JACK  12 8 22 5 17 6 - 3669 CK ISLAI  FALL CHINOOK JACK  13 18 5 5	11 19 14 12 4 8 - 4397 PUM DA  COHO ADULT  8 12 7 3 6 3 - 3037 ND DAN  COHO ADULT  13 6 7 4	2 2 3 0 0 0 2 - 623 M  COHO JACK  4 7 7 1 3 1 0 - 276 2) 4) 7]  COHO JACK  0 0 1 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 0 0	4 11 0 7 6 7 7 14286  STEELHEAD  15 10 8 6 4 9 - 14090  STEELHEAD  4 16 7 14	STEELHEAD	0 0 0 0 17043  SHAD  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 301272 SOCKEYE 0 0 0 296339 SOCKEYE	0 0 1 1 2 4 4 0 - 6748  LAMPREY  0 0 5 6 0 0 - 5328  LAMPREY  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CHUM  CHUM  CHUM  CHUM  CHUM  CHUM  CHUM  CHUM	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	GCPUD
11/05/15 11/06/15 11/07/15 11/08/15 11/09/15 YTD  DATE 11/03/15 11/04/15 11/06/15 11/09/15 YTD  DATE 11/03/15 11/04/15 11/09/15 11/04/15 11/05/15 11/06/15 11/06/15 11/06/15 11/06/15 11/06/15 11/06/15 11/06/15 11/06/15	357 355 477 98 77 194822  CHINOOK ADULT  298 150 219 71 130 74 - 157664  CHINOOK ADULT  599 543 413 338 419	22 15 44 15 5 0 - 10932  CHINOOK JACK  12 8 22 5 17 6 - 6926  CHINOOK JACK  13 18 5 5 9	CHINOOK ADULT	CHINOK	SUMMER CHINOOK ADULT	JACK	508 357 355 477 88967  FALL CHINOOK ADULT  298 150 219 71 130 74 - 55046  RC  FALL CHINOOK ADULT  55046  RC  FALL CHINOOK ADULT  338 419 313	22 15 44 15 0 - 5812 WANAI  FALL CHINOOK JACK  12 8 22 5 17 6 - 3669 CK ISLAI  FALL CHINOOK JACK  13 18 5 5 5	11 19 14 12 4 8 8 - 4397 PUM DA  COHO ADULT  8 12 7 3 6 3 - 3037 ND DAN  COHO ADULT 13 6 7 4 2	2 2 3 0 0 0 2 - 623 M  COHO JACK  4 7 1 3 1 0 - 276 12) 4) 7]  COHO JACK  0 0 1 0 0 0 0	4 11 0 7 6 7 7 - 14286  STEELHEAD  STEELHEAD  15 10 8 6 4 9 - 14090  STEELHEAD  4 16 7 14 11	STEELHEAD	0 0 0 0 0 17043  SHAD  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 301272 SOCKEYE 0 0 0 0 296339 SOCKEYE	0 0 1 2 4 0 - 6748 LAMPREY 0 0 5 6 0 0 - 5 328 LAMPREY	CHUM  CHUM	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	GCPUD

#### ROCKY REACH DAM 2) 4)

DATE	CHINOOK ADULT	CHINOOK JACK	SPRING CHINOOK ADULT	SPRING CHINOOK JACK	SUMMER CHINOOK ADULT	SUMMER CHINOOK JACK	FALL CHINOOK ADULT	FALL CHINOOK JACK	COHO ADULT	COHO JACK	STEELHEAD	WILD 5) STEELHEAD	SHAD	SOCKEYE	LAMPREY	СНИМ	PINK	SOURCE
11/03/15	497	12	0	0	0	0	497	12	4	0	18	8	n/a	0	0	0	0	CHPUD
11/04/15	576	14	0	0	0	0	576	14	6	0	14	4	n/a	0	0	0	0	CHPUD
11/05/15	345	6	0	0	0	0	345	6	2	0	14	8	n/a	0	0	0	0	CHPUD
11/06/15	342	1	0	0	0	0	342	1	2	0	10	3	n/a	0	0	0	0	CHPUD
11/07/15	269	7	0	0	0	0	269	7	6	0	8	2	n/a	0	0	0	0	CHPUD
11/08/15	212	7	0	0	0	0	212	7	2	0	9	5	n/a	2	1	0	0	CHPUD
11/09/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
YTD	125984	4670	15244	4670	76246	1937	34494	2124	2003	124	10820	4343	n/a	216387	2134	0	0	

#### WELLS DAM 2) 4)

DATE	CHINOOK ADULT	CHINOOK JACK	SPRING CHINOOK ADULT	SPRING CHINOOK JACK	SUMMER CHINOOK ADULT	SUMMER CHINOOK JACK	FALL CHINOOK ADULT	FALL CHINOOK JACK	COHO ADULT	COHO JACK	STEELHEAD	WILD 5) STEELHEAD	SHAD	SOCKEYE	LAMPREY	сним	PINK	SOURCE
11/03/15	341	12	0	0	0	0	341	12	7	0	27	9	n/a	0	0	0	0	DART
11/04/15	201	8	0	0	0	0	201	8	3	0	19	5	n/a	0	0	0	0	DART
11/05/15	200	8	0	0	0	0	200	8	7	0	16	5	n/a	0	0	0	0	DART
11/06/15	115	3	0	0	0	0	115	3	9	0	16	6	n/a	0	0	0	0	DART
11/07/15	90	2	0	0	0	0	90	2	6	0	10	6	n/a	0	0	0	0	DART
11/08/15	81	4	0	0	0	0	81	4	2	0	8	2	n/a	0	0	0	0	DART
11/09/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
YTD	97422	5725	19971	5725	62129	3311	15322	894	1113	46	9058	3517	n/a	187055	0	0	0	

#### NOTES:

- At Willamette Falls Dam, it takes the staff most of the day to accurately review one day of fish passage on tape when the counts are high. The WFA staff make every attempt to keep the counts as up-to-date as possible. Note: at WFA Monday's are extremely busy, as the staff attempt to catch-up with the weekend counts.
- The Corp of Engineers has stopped shad counting at The Dalles, starting in 2011 on the advice of the Fish Passage Operations and Management (FPOM) committee, made up of NOAA, CRITFC, ODFW, WDFW, IDFW, BPA, and COE biologists.
- 1) Since the year 2006, Priest Rapids Dam and Wanapum Dam jack counts have included mini jacks.
- 2) Shad are not counted at Willamette Falls, The Dalles, John Day, Lower Monumental, Little Goose, Rock Island, Rocky Reach and Wells Dams
- 3) Steelhead counts appear higher at Lower Granite Dam because most years a group which migrated into the river system between October and December overwinters below LGR and continues its migration in early March. The fish ladder at Lower Granite will not be in operation until March 4, 2015. The first full day of counting in 2015 will be March 5, 2015
- 4) As the Army Corp of Engineers no longer collects adult counts from the PUDs, we now get data directly from Chelan, Douglas and Grant Co. PUDs and DART.
- The steelhead counts include unclipped (wild) steelhead. It is not appropriate to add the steelhead counts and wild steelhead counts together.
- 5) Wild steelhead are counted separately from hatchery steelhead at Corps dams on the Columbia and Snake Rivers. Wild steelhead are identified as fish with an intact adipose fin. However, a small number of hatchery fish may not have had their adipose fin removed. There are no wild steelhead counts at Priest Rapids or Willamette Falls. Willamette Falls counts for: Chinook, Steelhead, and Coho only.
- 6) Shad are typically not counted at any of the Corps dams after August 31 each year and shad are not counted at all Corps dams. An n/a in the shad columns at Bonneville Dam and Lower Granite Dam after August 31st means that the shad are not being counted.
- <sup>7)</sup>In 2014, Grant County PUD trapped and transported hundreds of Lamprey above Rock Island Dam. Therefore, the ladder counts of Lamprey at Rock Island under estimate the true numbers of lamprey past the project.
- When the source column on this report reads 'unknown', 'ceftp', or 'TMT', it is because the counts have been gathered via the phone or ftp and are considered preliminary data. When the Corp of Engineers finalizes the counts and posts them on their website the source reads USACE.
- This report includes ALL available adult counts. The information in this report is preliminary.
- In 2012, the U.S. Army Corps of Engineers and NOAA Fisheries are currently developing automated counting systems for Lamprey Passage Structures (LPS) installed at Bonneville Dam. In the interest of publishing accurate counts, LPS counts will not be publicly posted in-season until the automated systems are fully operational.
- The adult counts in this report are based on reporting dates for dams recently established (2000). They are presented in the table below. A report with adult salmon counts based on historical dates (prior to 2000) can be found <a href="here.">here.</a>
- The reporting dates table shows that several dams stop counting fish around November 15th each year. After a dam stops counting fish for the season, only the total number of fish are shown on this report.
- These data are updated periodically throughout the day. The FPC data retrieving robot searches the web for updated data every 30 minutes in the AM, and every hour in the PM.
- The last column " Source " shows where the data was imported from: NWACE is imported from the COE's Daily Fish Reports; USACE is from <u>US Army Corps of Engineers</u> fish count pages; CHPUD is from <u>Chelan PUD</u>; GCPUD is from <u>Grant PUD</u> and DGPUD is from <u>Douglas PUD</u> and DART is from the <u>University of Washington's Data Access in Real Time</u>, WFA is imported from <u>ODFW's Willamette Falls</u> website.
- Some of the sites are several days behind in reporting, but is reported by the COE as zero, so where zeros appear across all rows, the data should be considered as "not yet reported".
- Video counts can cause a delay in posting the data to the web, because the staff at the projects have to review the tapes.

#### 2014-15 Adult Salmon Dam Count Monitoring Dates

<u>Dam</u>	Video Monitoring Dates  Day	Night	Direct Monitoring Dates
Bonneville Dam	November 1 - February 28, 2015 March 1 - March 31, 2015	June 15 - September 30, 2015	April 1 to October 31, 2015
**The Dalles Dam		June 15 - September 30, 2015	April 1 to October 31, 2015
John Day Dam		June 15 - September 30, 2015	April 1 to October 31, 2015
McNary Dam		July 1 - September 30, 2015	April 1 to October 31, 2015
Ice Harbor Dam			April 1 to October 31, 2015
Lower Monumental Dam	November 1 - February 28, 2015		April 1 to October 31, 2015
Little Goose Dam			April 1 to October 31, 2015
Lower Granite Dam	November 1 - December 30, 2015 March 1 - March 31, 2015	June 15 - September 30, 2015	April 1 - October 31, 2015

Priest Rapids Dam April 15 - November 15, 2015 (24 hr)

Wanapum Dam April 15 - November 15, 2015 (24 hr)

Rock Island Dam April 14 - November 15, 2015 (24 hr)

Rocky Reach Dam April 14 - November 15, 2015 (24 hr)

Wells Dam May 1 - November 15, 2015 (24 hr)

Willamette Falls Count year round (24 hr)

#### 2014-2015 Columbia and Snake River Fishway Outages

Dam	Dates Fishways are Closed
Bonneville Dam	<ul> <li>Bradford Island Fishway: November 10, 2014 - November 24, 2014</li> <li>Cascades Island Fishway (with UMT): December 3, 2014 to February 28, 2015</li> <li>Washington Shore Fishway: December 8, 2014 to February 28, 2015</li> </ul>
The Dalles Dam	East Fish Fishway: December 3, 2014 - January 27, 2015 North Fish Fishway: February 3, 2015 - February 26, 2015
John Day Dam	North Fish Fishway: November29, 2014 - December 23, 2014 South Fish Fishway: January 4, 2015 - February 26, 2015
McNary Dam	<ul> <li>Washington Shore Fishway: January 5, 2015 – January 15, 2015</li> <li>Oregon Shore Fishway: January 17, 2015 - February 28, 2015</li> </ul>
Ice Harbor Dam	<ul> <li>North Shore Fishway: January 26, 2015 - February 24, 2015</li> <li>South Shore Fishway: January 5 - January 22, 2015</li> </ul>
Lower Monumental Dam	North Shore Fishway: January 5, 2015 - February 3, 2015 South Shore Fishway: February 4, 2015 - February 27, 2015
Little Goose Dam	<ul> <li>January 7, 2015 - February 20, 2015</li> </ul>
Lower Granite Dam	<ul> <li>January 7, 2015 - March 4, 2015</li> </ul>
Priest Rapids Dam	● Left Bank Fishway: December 30, 2014 - February 24, 2015 ● Right Bank Fishway: December 1, 2014 – December 22, 2014
Wanapum Dam	Right Bank Fishway: January 26, 2015 - February 6, 2015 Left Bank Fishway: December 12, 2014 – January 22, 2015
Rock Island Dam	Right Bank Fishway: December 1, 2014 - February 20, 2015 Left Bank Fishway: January12, 2015 - February 6, 2015 Middle Fishway: December 29, 2014 - January 9, 2015
Rocky Reach Dam	<ul> <li>January 6, 2015 - February 28, 2015</li> </ul>
Wells Dam	● West Ladder: TBD East Ladder: December 9, 2014 to February 5, 2015

Data source: Corp of Engineers, Dewatering Plans and Schedules. Available online at: <a href="http://www.nwd-wc.usace.army.mil/tmt/documents/FPOM/2010/Plans%20lists%20charts/">http://www.nwd-wc.usace.army.mil/tmt/documents/FPOM/2010/Plans%20lists%20charts/</a>

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