Fish Passage Center

Weekly Report #14 - 2

March 28, 2014

847 NE 19th Ave., Suite 250
Portland, OR 97232
phone: (503) 833-3900
fax: (503) 232-1259

Summary of Events

Water Supply

Precipitation throughout the Columbia Basin has varied between 135% and 254% of average at individual sub-basins over March. Precipitation above The Dalles has been 180% of average over March. Over the 2014 water year, precipitation has ranged between 75% and 99% of average.

Table 1. Summary of March precipitation and cumulative October through March 24, 2014, precipitation with respect to average (1971–2000), at select locations within the Columbia and Snake River Basins.

Location	Water Year 2014 March 1–24, 2014		Water Year 2014 October 1, 2013 to March 24, 2014	
	Observed (inches)	% Average	Observed (inches)	% Average
Columbia above Coulee	5.33	220	19.5	89
Snake River above Ice Harbor	2.80	155	10.5	78
Columbia above The Dalles	3.58	180	13.5	80
Kootenai	6.06	254	21.1	96
Clark Fork	3.62	190	13.0	86
Flathead	6.42	251	20.2	99
Pend Oreille River Basin above Waneta Dam	4.99	218	16.9	90
Salmon River Basin	3.63	162	12.4	75
Upper Snake Tributaries	3.64	164	13.6	87
Clearwater	5.77	183	23.9	95
Willamette River above Portland	7.56	135	35.8	75

Snowpack within the Columbia Basin has been variable. Average snowpack in the Columbia River for basins above the Snake River confluence is 116% of average. For Snake River Basins the average snowpack is 94% of average, and for lower Columbia Basins between McNary and Bonneville Dam average snowpack is 62% of average.

Table 2 displays the March 25th ESP runoff volume forecasts for multiple reservoirs along with the March COE forecasts at Libby and Dworshak. The March 25th ESP forecast at The Dalles between January and July is 107,196 Kaf (106% of average).

Table 2. March ESP Runoff Volume Forecasts for various reservoirs within the Columbia and Snake River Basins.

Location	March 25, 2014, 5-day QPF ESP	
	% Average (1981–2010)	Runoff Volume (Kaf)
The Dalles (Jan–July)	106	107196
Grand Coulee (Jan–July)	106	63114
Libby Res. Inflow, MT (Apr–Aug)	110	6482 5505*
Hungry Horse Res. Inflow, MT (Jan–July)	109	2284
Lower Granite Res. Inflow (Apr–July)	115	22783
Brownlee Res. Inflow (Apr–July)	74	4065
Dworshak Res. Inflow (Apr–July)	124	2994 2701*

* Denotes COE March Forecast

Grand Coulee Reservoir is at 1262.9 feet (3-26-14) and has drafted 5.5 feet over the last week. The April 10th FC is Elevation at Grand Coulee is 1258.0 feet (based on March Water Supply Forecast). Outflows at Grand Coulee have ranged between 121.5 and 144.8 Kcfs over the last week.

The Libby Reservoir is currently at elevation 2421.4 feet (3-26-14) and has drafted 0.7 feet over the previous week. The April 10th FC Elevation at Libby is 2440.9 feet (based on March Final WSF). However the COE anticipates a significant increase in the April Water Supply forecast relative to that estimated in March which will lower the Flood Control elevations at Libby. Daily average outflows at Libby Dam have been increased from 4.0 Kcfs early last week to 15 Kcfs over the last several days.

Hungry Horse is currently at an elevation of 3522.9 feet (3-26-14) and has drafted 4.6 feet over the previous week. The April 10th FC Elevation at Hungry Horse is 3530.4 feet (based on March WSF). Outflows at Hungry Horse have increased over the last week from 5.1 to 9.7 Kcfs in anticipation of increasing Water Supply and decreasing Flood Control elevations.

Dworshak is currently at an elevation of 1516.9 feet (3-26-14) and has drafted 12.2 feet over the previous week. The April 10th System FC Elevation at Dworshak is 1502.3 feet (based on March Final WSF). The April 10th Local/Shifted FC Elevation at Dworshak is 1532.1 feet (based on March Final WSF). The COE anticipates an increase in the April Water Supply Forecast at Dworshak (decrease in FC elevations) which has resulted in elevated outflows from Dworshak, ranging between 17.0 and 19.9 Kcfs over the last week.

The Brownlee Reservoir was at an elevation of 2064.0 feet on March 26th, 2014, drafting 1.2 feet over the last week. Inflows to Brownlee Dam have ranged between 11.8 and 15.0 Kcfs last week. The April 10th FC Elevation at Brownlee is 2057.7 feet (based on March WSF).

Spill

Dworshak Dam has been spilling approximately 9 Kcfs as the project drafts to its flood control elevation. Involuntary spill has occurred at some of the mainstem projects as excess to hydraulic capacity or generation needs at some time during this past week. The lowering of the reservoir above Wanapum Dam has resulted in a reduced hydraulic capacity at this project, as well as at Rock Island Dam, and increased spill at both of these projects.

Variations in total dissolved gas levels for the implementation of the voluntary fish spill programs begin in April, therefore, the 110% standard for total dissolved gas is in place. However, since the spill is considered involuntary, the exceedences of the 110% standards are not considered violations.

Smolt Monitoring

To date, only two Smolt Monitoring Program dam sites are sampling for 2014: Bonneville Dam and Lower Granite Dam. Bonneville Dam began sampling the first week of March and Lower Granite Dam began sampling on March 25th, with the first sample worked up on March 26th. Several other SMP dam sites are scheduled to begin sampling next week, including Rock Island, Lower Monumental, Little Goose, and John Day. McNary Dam is not scheduled to begin sampling for 2014 until about April 7th. All SMP trap sites (Lewiston, Grande Ronde, Salmon River, and Imnaha River) began sampling in early to mid-March.

Over the past week, subyearling Chinook, yearling Chinook, and sockeye have made up the majority of the salmonids sampled at Bonneville. The daily average passage indices for these three species for this week were 470 per day for subyearling Chinook, about 400 per day for yearling Chinook, and nearly 550 per day for sockeye. To date, over 99% of the subyearling Chinook sampled at BON have been fry. When compared to last week, passage of subyearling Chinook has decreased while passage of sockeye has increased substantially. In fact, the daily average passage index for sockeye last week was less than 100 per day. Bonneville continued to sample relatively low numbers of coho and steelhead juveniles this week. So far, no pacific lamprey ammocoetes have been sampled at BON. However, samples of pacific lamprey macropthalmia have remained high this week. The daily average collection for pacific lamprey macropthalmia for this week was over 420 per day.

Sampling at Lower Granite Dam began on March 25th, with the first sample worked up on March 26th. Of the two samples for this year, yearling Chinook have dominated the collections. The passage index for yearling Chinook on these 2 days has ranged from 1,530 to 3,170. The passage index for steelhead was 260 on both days of sampling while that for sockeye it has ranged from 370–470 per day. Given that Dworshak Dam has been spilling water for flood control since March 11th, it is highly likely that the sockeye collected a Lower Granite this week are kokanee from Dworshak reservoir. So far, collections of subyearling Chinook and coho at Lower Granite have been low

and all subyearling Chinook have been fry. Finally, no lamprey juveniles have been sampled at Lower Granite Dam this year.

The Grande Ronde Trap is operated by the Oregon Department of Fish and Wildlife and is located at river kilometer two in the Grande Ronde River. Over the past week, yearling Chinook have dominated the collections at the Grande Ronde River Trap, with an average daily collection of nearly 120 per day. In fact, yearling Chinook collections have steadily increased since March 14th, with a maximum collection of 252 in the March 27th sample. This increase in yearling Chinook collections is at least partially due to recent hatchery releases in the Grande Ronde River, upstream of the trap. Over the past four days, 34%–68% of yearling Chinook collected at the trap have been of known hatchery origin. The Grande Ronde Trap sampled only a few steelhead juveniles this week.

The Salmon River Trap is located at river kilometer 103 and operated by Idaho Department of Fish and Game. Yearling Chinook have again dominated the collections at the Salmon River Trap this week, with a daily average collection of nearly 1,300 per day. This is a substantial increase from last week's daily average collection of only about 440 per day. Increases in yearling Chinook collections over the past 10 days are largely due to recent hatchery releases above the trap. In fact, over the past 10 days, about 74%–98% of the daily yearling Chinook collections at the Salmon River Trap have been clipped. Only a few steelhead were sampled at the Salmon River Trap this week and no juvenile lamprey were sampled this week.

The Snake River Trap is located at river kilometer 225 and operated by Idaho Department of Fish and Game. To date, the Snake River Trap has collected mostly yearling Chinook, with a few steelhead and subyearling Chinook fry. Collections of yearling Chinook were low until March 22nd and 23rd when collections increased. Collections of yearling Chinook since March 23rd have gone back down to generally less than 10 fish per day. The higher collections on March 22nd and 23rd were due to an influx of hatchery fish, as approximately 90% of the yearling Chinook collected on these 2 days were clipped.

The Imnaha River Trap is located at river kilometer seven and is operated by the Nez Perce Tribe. Sampling at the Imnaha River Trap is year-round, however the FPC typically receives data only from early March through June. Due to the remote nature of the trap, the Nez Perce Tribe is able to send collection data to the FPC only periodically. Therefore, data for the Imnaha Trap may be several days behind. To date, we have received data through March 25th. Over the last week, collections at the Imnaha River trap have been dominated by yearling Chinook. The average daily collection for yearling Chinook over the period of March 19–25 was about 100 per day. This is a slight decrease from the average of the previous 4 days (March 15–18), which was about 145 per day. The only other species that has been collected so far this season is steelhead. The daily average collection for steelhead over the March 19–25 period was nearly 20 per day.

Hatchery Release

Snake River Zone: The Snake River Zone encompasses the Snake River and its tributaries from its confluence with the Columbia River to Hells Canyon Dam. To date, the Fish Passage Center has not received a complete preliminary hatchery release schedule from the Nez Perce Tribe for 2014 releases. Therefore, release estimates discussed for this zone are likely underestimates, as they do not include all releases conducted by the tribe. Release data from the Nez Perce Tribe will be entered into our database as soon as we receive them.

Approximately 1.3 million yearling spring Chinook juveniles were scheduled for release into this zone this week. Of these, nearly 91% were scheduled for release into the south fork of the Clearwater River. The remaining 9% were scheduled for a volitional release from the Grande Ronde Acclimation Ponds on the Grande Ronde River. In addition to yearling spring Chinook releases, over 1.5 million summer steelhead were scheduled for release to this zone this week. Of these, approximately 64% were scheduled to be released into tributaries of the Clearwater River while the remaining 36% were scheduled to be released into the Snake River, below Hells Canyon Dam. The steelhead that were scheduled to be released into the Clearwater

River this week were 100% unclipped, but were tagged with coded-wire tags.

There are several releases of yearling spring Chinook juveniles scheduled to take place over the next 2 weeks. In all, these releases are expected to total nearly 4.4 million spring Chinook juveniles. Of these, approximately 47% are scheduled for release from Dworshak National Fish Hatchery into the Clearwater River. The remaining releases of yearling spring Chinook over the next 2 weeks are scheduled to occur in the Salmon (44%), Tucannon (6%), and Grande Ronde (3%) rivers.

In addition, just over 2.1 million yearling summer Chinook are scheduled for release into this zone over the next 2 weeks. Of these, approximately 54% were reared at McCall Hatchery and are scheduled for release into the Salmon River while 46% were reared at Pahsimeroi Hatchery and are scheduled for release into the Pahsimeroi River. Finally, nearly 3.4 million summer steelhead are scheduled for release to this zone over the next 2 weeks. Of these, about 77% are scheduled for release into the Salmon (53%) and Pahsimeroi (24%) rivers. The remaining 23% are scheduled for release into the Wallowa (11%), Grande Ronde (6%), Clearwater (6%), and Snake (below Hells Canyon Dam) (<1%) rivers.

Mid-Columbia Zone: The Mid-Columbia Zone encompasses the area of the Columbia River and its tributaries from McNary Dam to Chief Joseph Dam. Volitional releases totaling approximately 806,000 spring Chinook juveniles from Cle Elem Hatchery acclimation sites continued this week. These volitional releases are expected to run through mid-May. No new releases of juvenile salmonids were scheduled for this zone this week.

There are several releases of juvenile salmonids scheduled for this zone over the next two weeks. Nearly 250,000 yearling spring Chinook are scheduled to be released into the Walla Walla River, beginning on or around April 1st. In addition, about 225 subyearling summer Chinook are scheduled to be released into the Methow River, as part of the WDFW Cooperative program. There are also several releases of yearling summer Chinook scheduled for this zone over the next 2 weeks. In all, approximately 617,000 yearling summer Chinook are scheduled for release to this zone over the next 2 weeks. Of these, about 93% are scheduled to be released from Chelan Falls Hatchery while the other 7% are scheduled to be released into Omak Creek, a tributary of the Okanogan River. Finally, about 290,000 summer steelhead are scheduled for release into this zone over the next 2 weeks. Of these, approximately 52% are scheduled to be released into the Mid-Columbia River from Ringold Springs Hatchery, 31% are scheduled to be released into the Touchet River, and 17% are scheduled to be released into the Methow River.

Lower Columbia Zone: The Lower Columbia Zone is defined as the Columbia River and its tributaries from Bonneville Dam to McNary Dam. The only release that was scheduled for this zone this week was a release of approximately 250,000 coho juveniles to the Umatilla River, which was scheduled to begin on or around March 24th. These coho juveniles were scheduled to be released from the Pendleton Acclimation Facility.

There are several releases of yearling spring Chinook that are scheduled to begin over the next 2 weeks. In all, these spring Chinook releases are expected to total nearly 940,000 juveniles. Of these, approximately 76% are scheduled to be released from Warm Springs National Fish Hatchery into the Deschutes River. The remaining 24% are scheduled for release into the Umatilla River (16%) and Hood River (8%). Finally, about 162,000 summer steelhead are scheduled for release into the Deschutes River, beginning on or around April 8th.

Adult Passage

Bonneville Dam uses video counts from January 1st through March 31st and direct counting after this period. Bonneville Dam counts adult salmon and steelhead year round. Lower Granite Dam uses video counts from March 1st through March 31st and direct counting after this period. Lower Granite Dam counts adult salmon and steelhead through December 30th each year. Willamette Falls also uses video counts and reports adult counts year round.

Adult counts at Bonneville Dam have been updated through 3/26/14. The 2014 adult spring Chinook count at Bonneville Dam is 174, which has 16 more fish than the 2013 count of 158. The 2013 Bonneville Dam adult spring Chinook count is about 1.5 times greater than the 10-year average count of 117. At Willamette Falls 12 adult spring Chinook have been counted so far this season.

The 2013 Bonneville Dam adult steelhead count of 2,260 is about 1.7 times greater than the 2013 count of 1,347 and 1.2 times greater than the 10-year average count of 1,817. This year's Lower Granite steelhead count of 4,310 is about 1.1 times greater than the 2013 count of 3,778 and 1.2 times greater than the 10-year average count of 3,495. At Willamette Falls, the 2014 count for steelhead was 2,892 as of March 27th. This year's steelhead count is about 82% of the 2013 count of 3,532 and about 68% of the 10-year average count of 4,235.

Between March 1st and March 28th, a total of 57 steelhead and 10 other salmonid species were observed over the separator at the Bonneville Juvenile Monitoring Facility (JMF). 2014 Kelt passage at the Bonneville JMF can be found at: http://www.fpc.org/adultsalmon/bonkeltcounts.htm.

Hatchery Releases Last Two Weeks

Hatchery Release Summary

From: 3/14/2014 to 03/27/14

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Idaho Dept. of Fish and Game	Clearwater Hatchery	CH1	SP	2014	265,000	03-17-14	03-17-14	Kooskia Hatchery	Clearwater River M F
Idaho Dept. of Fish and Game	Clearwater Hatchery	CH1	SP	2014	525,000	03-18-14	03-18-14	Powell Acclim Pond	Lochsa River
Idaho Dept. of Fish and Game	Clearwater Hatchery	CH1	SP	2014	1,186,000	03-25-14	04-01-14	Red River	S Fk Clearwater River
Idaho Dept. of Fish and Game	Clearwater Hatchery	CH1	SU	2014	487,000	03-24-14	03-24-14	Crooked River	S Fk Clearwater River
Idaho Dept. of Fish and Game	Niagara Springs	ST	SU	2014	547,700	03-24-14	03-30-14	Hells Canyon Dam	Snake River
Idaho Dept. of Fish and Game	Rapid River Hatchery	CH1	SP	2014	200,000	03-21-14	03-21-14	Pinehurst Bridge	Little Salmon River
Idaho Dept. of Fish and Game	Rapid River Hatchery	CH1	SP	2014	427,000	03-17-14	03-20-14	Hells Canyon Dam	Snake River
Idaho Dept. of Fish and Game	Rapid River Hatchery	CH1	SP	2014	2,500,000	03-17-14	04-25-14	Rapid River Hatchery	Little Salmon River
Idaho Dept. of Fish and Game Total					**6,137,700**				
Nez Perce Tribe	Clearwater Hatchery	CH1	SP	2014	405,000	03-19-14	03-21-14	Selway River	Clearwater River M F
Nez Perce Tribe	Kooskia NFH	CH1	SP	2014	630,000	03-15-14	03-31-14	Clear Creek	Clearwater River M F
Nez Perce Tribe Total					**1,035,000**				
U.S. Fish and Wildlife Service	Dworshak NFH	CH1	SU	2014	487,000	03-24-14	04-05-14	Powell Acclim Pond	Lochsa River
U.S. Fish and Wildlife Service Total					**487,000**				
Umatilla Tribe	Cascade Hatchery	CO	UN	2014	250,000	03-24-14	03-24-14	Pendelton Acclim Pond	Umatilla River
Umatilla Tribe	Lookingglass Hatchery	CH1	SP	2014	122,000	03-22-14	04-15-14	Grande Ronde Acclim Pond	Grande Ronde River
Umatilla Tribe	Lookingglass Hatchery	CH1	SP	2014	138,000	03-21-14	04-15-14	Catherine Cr Acclim Pond	Grande Ronde River
Umatilla Tribe Total					**510,000**				
Washington Dept. of Fish and Wildlife	Washougal Hatchery	CO	NO	2014	2,500,000	03-20-14	04-01-14	Klickitat River	Klickitat River
Washington Dept. of Fish and Wildlife Total					**2,500,000**				
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2014	258,316	03-15-14	05-15-14	Clark Flat Acclim Pond	Yakima River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2014	270,653	03-15-14	05-15-14	Jack Creek Acclim Pond	Yakima River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2014	277,151	03-15-14	05-15-14	Easton Pond	Yakima River
Yakama Tribe Total					**806,120**				
Grand Total					**11,475,820**				

Hatchery Releases Next Two Weeks

Hatchery Release Summary

From: 3/28/2014 to 4/10/2014

Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Colville Tribe	Chief Joseph Hatchery	CH1	SU	2014	44,000	04-01-14	04-15-14	Omak Creek	Okanogan River
Colville Tribe Total					**44,000**				
Idaho Dept. of Fish and Game	Clearwater Hatchery	CH1	SP	2014	1,186,000	03-25-14	04-01-14	Red River	S Fk Clearwater River
Idaho Dept. of Fish and Game	Clearwater Hatchery	ST	SU	2014	188,000	04-07-14	04-16-14	Meadow Creek - CLES	S Fk Clearwater River
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2014	93,268	04-08-14	04-08-14	Shoup Br (Salmon R)	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2014	93,662	04-09-14	04-09-14	Salmon River (ID)	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2014	94,165	04-07-14	04-07-14	Salmon River (ID)	Salmon River (ID)
Idaho Dept. of Fish and Game	Magic Valley Hatchery	ST	SU	2014	219,155	04-10-14	04-17-14	Little Salmon River	Salmon River (ID)
Idaho Dept. of Fish and Game	McCall Hatchery	CH1	SU	2014	234,000	03-29-14	04-03-14	Knox Bridge	Salmon River (ID)
Idaho Dept. of Fish and Game	McCall Hatchery	CH1	SU	2014	814,000	03-29-14	04-03-14	Knox Bridge	Salmon River (ID)
Idaho Dept. of Fish and Game	Niagara Springs	ST	SU	2014	2,300	03-30-14	03-30-14	Hells Canyon Dam	Snake River
Idaho Dept. of Fish and Game	Niagara Springs	ST	SU	2014	547,700	03-24-14	03-30-14	Hells Canyon Dam	Snake River
Idaho Dept. of Fish and Game	Niagara Springs	ST	SU	2014	800,000	03-31-14	04-10-14	Pahsimeroi River	Pahsimeroi River
Idaho Dept. of Fish and Game	Pahsimeroi Hatchery	CH1	SU	2014	143,242	04-01-14	04-14-14	Pahsimeroi Hatchery	Pahsimeroi River
Idaho Dept. of Fish and Game	Pahsimeroi Hatchery	CH1	SU	2014	834,059	04-01-14	04-14-14	Pahsimeroi Hatchery	Pahsimeroi River
Idaho Dept. of Fish and Game	Rapid River Hatchery	CH1	SP	2014	2,500,000	03-17-14	04-25-14	Rapid River Hatchery	Little Salmon River
Idaho Dept. of Fish and Game	Sawtooth Hatchery	CH1	SP	2014	180,000	04-04-14	04-04-14	Sawtooth Hatchery	Salmon River (ID)
Idaho Dept. of Fish and Game	Sawtooth Hatchery	CH1	SP	2014	193,000	04-01-14	04-02-14	Yankee Fk (Salmon R)	Salmon River (ID)
Idaho Dept. of Fish and Game	Sawtooth Hatchery	CH1	SP	2014	1,560,500	04-04-14	04-04-14	Sawtooth Hatchery	Salmon River (ID)
Idaho Dept. of Fish and Game Total					**9,683,051**				
Nez Perce Tribe	Kooskia NFH	CH1	SP	2014	630,000	03-15-14	03-31-14	Clear Creek	Clearwater River M F
Nez Perce Tribe	McCall Hatchery	CH1	SU	2014	95,000	04-01-14	04-02-14	Johnson Cr Idaho	South Fork Salmon River
Nez Perce Tribe Total					**725,000**				
Oregon Dept. of Fish and Wildlife	Irrigon Hatchery Complex	ST	SU	2014	360,000	04-10-14	04-10-14	Wallowa Acclim Pond	Wallowa River
Oregon Dept. of Fish and Wildlife	Round Butte Hatchery	ST	SU	2014	162,000	04-08-14	04-08-14	Deschutes River	Deschutes River
Oregon Dept. of Fish and Wildlife	Umatilla Hatchery	CH1	SP	2014	150,000	04-01-14	04-01-14	Umatilla River	Umatilla River
Oregon Dept. of Fish and Wildlife Total					**672,000**				
U.S. Fish and Wildlife Service	Dworshak NFH	CH1	SP	2014	2,042,652	03-31-14	04-24-14	Dworshak Hatchery	Clearwater River M F
U.S. Fish and Wildlife Service	Dworshak NFH	CH1	SU	2014	487,000	03-24-14	04-05-14	Powell Acclim Pond	Lochsa River
U.S. Fish and Wildlife Service	Hagerman NFH	ST	SU	2014	126,000	04-03-14	04-04-14	McNabb/Salmon River	Salmon River (ID)
U.S. Fish and Wildlife Service	Hagerman NFH	ST	SU	2014	1,166,550	04-02-14	04-25-14	Sawtooth Hatchery	Salmon River (ID)
U.S. Fish and Wildlife Service	Warm Springs NFH	CH1	SP	2014	711,328	03-31-14	04-03-14	Warm Springs Hatchery	Deschutes River
U.S. Fish and Wildlife Service Total					**4,533,530**				
Umatilla Tribe	Carson NFH	CH1	SP	2014	249,091	04-01-14	04-01-14	Walla Walla River	Walla Walla River
Umatilla Tribe	Lookingglass Hatchery	CH1	SP	2014	122,000	03-22-14	04-15-14	Grande Ronde Acclim Pond	Grande Ronde River
Umatilla Tribe	Lookingglass Hatchery	CH1	SP	2014	130,000	04-06-14	04-15-14	Grande Ronde Acclim Pond	Grande Ronde River
Umatilla Tribe	Lookingglass Hatchery	CH1	SP	2014	138,000	03-21-14	04-15-14	Catherine Cr Acclim Pond	Grande Ronde River
Umatilla Tribe Total					**639,091**				
Warm Springs Tribe	Round Butte Hatchery	CH1	SP	2014	75,000	04-09-14	04-09-14	W Fk Hood River	Hood River
Warm Springs Tribe Total					**75,000**				
Washington Dept. of Fish and Wildlife	Chelan Hatchery	CH1	SU	2014	141,000	04-10-14	04-10-14	Chelan Falls	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Chelan Hatchery	CH1	SU	2014	142,000	04-10-14	04-10-14	Chelan Falls	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Chelan Hatchery	CH1	SU	2014	143,000	04-10-14	04-10-14	Chelan Falls	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Chelan Hatchery	CH1	SU	2014	147,000	04-10-14	04-10-14	Chelan Falls	Mid-Columbia River
Washington Dept. of Fish and Wildlife	COOP	CH0	SU	2014	225	03-30-14	03-30-14	Methow River	Methow River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	ST	SU	2014	90,000	04-05-14	04-15-14	Dayton Acclim Pond	Touchet River
Washington Dept. of Fish and Wildlife	Lyons Ferry Hatchery	ST	SU	2014	210,000	04-08-14	04-30-14	Cottonwood Acclim Pond	Grande Ronde River
Washington Dept. of Fish and Wildlife	Methow Hatchery	ST	SU	2014	50,000	04-10-14	04-30-14	Twisp Acclim Pond	Methow River
Washington Dept. of Fish and Wildlife	Ringold Springs Hatchery	ST	SU	2014	150,000	04-10-14	04-20-14	Ringold Springs Hatchery	Mid-Columbia River
Washington Dept. of Fish and Wildlife	Tucannon Hatchery	CH1	SP	2014	256,000	04-01-14	04-25-14	Curl Lake Acclim Pond	Tucannon River
Washington Dept. of Fish and Wildlife	Washougal Hatchery	CO	NO	2014	2,500,000	03-20-14	04-01-14	Klickitat River	Klickitat River
Washington Dept. of Fish and Wildlife Total					**3,829,225**				
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2014	258,316	03-15-14	05-15-14	Clark Flat Acclim Pond	Yakima River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2014	270,653	03-15-14	05-15-14	Jack Creek Acclim Pond	Yakima River
Yakama Tribe	Cle Elem Hatchery	CH1	SP	2014	277,151	03-15-14	05-15-14	Easton Pond	Yakima River
Yakama Tribe Total					**806,120**				
Grand Total					**21,007,017**				

CH = Chinook, ST = Steelhead, CO = Coho, SO = Sockeye, CT = Cutthroat Trout, CM = Chum

Daily Average Flow and Spill (in Kcfs) at Mid-Columbia Projects

	Grand Coulee		Chief Joseph		Wells		Rocky Reach		Rock Island		Wanapum		Priest Rapids	
Date	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
03/14/2014	101.4	0.0	99.0	0.0	112.6	11.0	117.0	1.0	125.1	26.9	131.4	25.5	141.7	20.8
03/15/2014	132.3	2.0	131.2	11.8	124.0	0.4	112.8	0.4	121.7	33.3	117.8	14.6	123.9	5.2
03/16/2014	132.1	3.0	133.8	25.1	133.8	14.2	129.5	14.4	134.1	17.1	133.9	45.0	137.4	43.7
03/17/2014	132.1	2.3	130.2	25.1	135.3	20.1	129.9	13.5	137.0	21.3	142.5	44.7	152.0	28.7
03/18/2014	141.8	2.9	140.0	25.0	146.6	17.9	144.7	7.9	155.6	31.1	152.3	60.2	159.1	43.7
03/19/2014	144.0	4.2	143.4	25.0	149.1	18.9	148.1	13.1	156.5	22.2	153.7	55.9	166.8	52.3
03/20/2014	144.4	0.0	144.1	25.0	152.3	19.1	154.3	13.1	162.1	23.0	162.6	58.5	176.9	52.3
03/21/2014	136.2	0.0	141.6	8.9	146.6	5.3	144.9	0.0	152.3	20.4	151.0	48.0	161.6	31.7
03/22/2014	135.0	0.0	133.0	0.0	129.2	0.0	127.9	1.8	131.1	28.2	132.4	37.7	132.5	5.5
03/23/2014	144.8	0.0	139.7	0.0	132.2	4.1	122.1	3.0	130.2	27.7	140.3	40.1	147.8	21.8
03/24/2014	129.3	0.0	133.5	0.0	133.5	0.0	134.8	0.0	144.7	14.4	140.4	37.9	144.2	0.0
03/25/2014	121.5	0.0	130.3	0.0	130.6	0.0	129.3	0.0	135.4	13.9	136.6	37.5	141.6	0.0
03/26/2014	134.5	0.0	127.2	0.1	130.3	0.0	127.2	0.0	133.1	14.6	135.0	32.6	140.5	2.3
03/27/2014	135.0	0.0	132.1	10.4	125.6	0.0	125.6	0.0	131.3	16.0	135.2	32.2	138.1	16.4

Daily Average Flow and Spill (in Kcfs) at Snake Basin Projects

	Dworshak		Brownlee	Hells Canyon	Lower Granite		Little Goose		Lower Monumental		Ice Harbor	
Date	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
03/14/2014	14.0	3.6	22.2	23.9	85.9	0.0	77.1	0.0	85.8	0.0	89.6	12.4
03/15/2014	14.0	3.6	19.3	20.0	81.4	15.2	78.4	15.1	82.5	15.0	82.9	12.7
03/16/2014	17.1	6.6	18.0	25.9	77.9	20.2	74.5	17.0	74.2	18.1	75.0	15.9
03/17/2014	17.1	6.5	17.0	22.2	74.1	9.8	72.6	11.1	78.8	10.8	79.0	15.7
03/18/2014	17.1	6.5	16.1	20.7	74.7	4.1	72.5	8.8	70.7	11.1	76.3	15.7
03/19/2014	17.1	6.5	15.7	25.0	69.1	1.9	67.8	2.3	73.6	6.8	73.0	11.9
03/20/2014	17.0	6.4	15.0	21.1	72.3	0.0	64.8	0.0	71.6	0.0	74.0	3.1
03/21/2014	17.1	6.4	14.2	20.0	68.0	0.0	66.0	0.0	69.8	0.0	66.4	0.0
03/22/2014	19.9	9.2	13.5	14.4	57.9	0.0	55.0	0.0	58.5	0.0	60.1	0.0
03/23/2014	19.9	9.2	13.1	12.7	57.7	0.0	57.2	0.0	58.8	0.0	60.2	0.0
03/24/2014	19.9	9.2	12.4	16.1	55.8	0.0	49.4	0.0	55.0	0.0	51.7	0.0
03/25/2014	19.9	9.1	11.8	11.3	57.0	0.0	50.6	0.0	52.6	0.0	54.2	0.0
03/26/2014	19.8	9.0	11.9	12.8	56.5	0.0	54.2	0.0	55.7	0.0	56.1	0.0
03/27/2014	19.9	9.0	12.5	18.8	58.2	0.0	58.3	0.0	58.8	0.0	59.0	0.0

Daily Average Flow and Spill (in Kcfs) at Lower Columbia Projects

	McNary		John Day		The Dalles		Bonneville			
Date	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	PH1	PH2
03/14/2014	239.9	47.0	234.4	0.0	234.5	0.0	257.2	20.5	126.1	103.1
03/15/2014	245.4	55.2	238.0	7.5	239.9	19.0	267.5	47.2	111.5	101.4
03/16/2014	224.1	46.1	223.8	19.8	219.4	46.2	246.9	69.7	81.8	87.9
03/17/2014	234.1	47.8	240.5	13.7	235.0	31.8	263.3	38.2	105.7	108.9
03/18/2014	241.3	47.9	238.9	16.0	235.8	34.4	262.2	40.0	102.9	106.9
03/19/2014	252.9	69.6	242.7	8.0	240.2	18.7	267.5	49.2	100.7	105.2
03/20/2014	260.5	71.4	255.6	15.5	249.7	14.5	273.3	59.6	97.7	103.7
03/21/2014	253.2	59.2	246.7	5.0	241.7	0.0	247.5	27.0	99.3	108.9
03/22/2014	230.6	37.0	232.1	0.0	233.0	0.0	260.2	38.0	101.7	108.1
03/23/2014	210.2	16.9	218.0	0.0	215.3	0.0	242.4	19.1	100.8	110.2
03/24/2014	210.6	22.3	208.4	0.0	206.2	0.0	223.5	1.2	100.9	109.0
03/25/2014	196.3	9.6	197.3	0.0	196.2	0.0	215.6	1.2	94.9	107.0
03/26/2014	207.6	21.9	214.4	0.0	211.7	0.0	221.3	1.2	99.8	107.8
03/27/2014	205.2	34.9	203.9	0.0	204.2	0.0	224.4	1.2	99.4	111.4

Total Dissolved Gas Saturation (%) - Average of 12 Highest Hours, 24 h Average and 24 h High

Total Dissolved Gas Saturation Data at Upper Columbia River Sites

	Hungry H. Dnst				Boundary				Grand Coulee				Grand C. Tlwr				Chief Joseph			
	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#
Date	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
3/14	98.9	99.1	99.4	22	---	---	---	0	100.1	100.4	100.6	18	100.0	100.1	100.3	18	---	---	---	0
3/15	98.5	98.9	99.4	24	---	---	---	0	99.2	99.5	99.6	24	98.9	99.1	99.5	24	---	---	---	0
3/16	99.1	99.5	99.6	24	---	---	---	0	100.4	100.9	101.1	24	99.9	100.4	100.7	24	---	---	---	0
3/17	99.0	99.5	99.9	24	---	---	---	0	100.4	100.7	101.1	24	99.7	100.0	100.5	24	---	---	---	0
3/18	98.0	98.2	98.5	24	---	---	---	0	99.7	99.9	100.0	24	99.4	99.9	100.3	24	---	---	---	0
3/19	96.8	97.0	97.5	24	---	---	---	0	100.5	100.8	101.1	24	100.4	101.4	102.6	24	---	---	---	0
3/20	96.9	97.1	97.3	23	---	---	---	0	99.9	100.1	100.4	24	99.2	99.6	100.5	24	---	---	---	0
3/21	101.0	104.5	104.7	24	---	---	---	0	99.7	99.9	100.1	24	98.5	98.8	98.8	24	---	---	---	0
3/22	104.7	104.9	105.1	24	---	---	---	0	99.9	100.3	100.4	24	98.8	99.3	99.5	24	---	---	---	0
3/23	104.9	105.0	105.1	24	---	---	---	0	100.0	100.2	100.4	24	99.1	99.3	99.5	24	---	---	---	0
3/24	104.7	104.9	105.0	24	---	---	---	0	100.3	100.7	101.0	24	99.3	99.8	100.1	24	---	---	---	0
3/25	105.3	105.5	105.7	24	---	---	---	0	102.1	102.6	102.8	24	101.0	101.7	101.8	24	---	---	---	0
3/26	105.7	106.2	106.4	24	---	---	---	0	102.9	103.1	103.2	24	101.8	102.1	102.2	24	---	---	---	0
3/27	105.9	106.7	107.6	23	---	---	---	0	102.7	102.9	103.1	23	101.5	101.7	101.9	23	---	---	---	0

Total Dissolved Gas Saturation Data at Mid Columbia River Sites

	Chief J. Dnst				Wells				Wells Dwnstrm				Rocky Reach				Rocky R. Tlwr			
	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#
Date	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
3/14	---	---	---	0	101.0	101.2	101.6	14	103.1	103.6	107.7	14	101.9	102.2	102.6	17	102.6	102.9	104.3	17
3/15	---	---	---	0	100.0	100.4	100.7	24	100.2	100.7	101.1	24	102.4	103.6	105.4	24	103.0	104.2	105.8	24
3/16	---	---	---	0	101.4	102.2	103.1	21	104.9	105.6	107.6	21	103.8	104.4	105.5	24	109.9	111.4	112.9	24
3/17	---	---	---	0	102.3	102.8	103.0	23	107.2	107.9	108.2	23	102.7	103.0	103.4	24	110.7	111.8	113.0	24
3/18	---	---	---	0	101.5	101.6	101.9	21	105.5	106.4	107.2	21	103.8	104.8	105.5	24	109.9	110.6	111.5	24
3/19	---	---	---	0	102.6	102.8	103.4	17	105.9	107.2	108.8	17	106.3	106.8	107.2	24	111.1	112.7	113.8	24
3/20	---	---	---	0	101.1	101.3	101.7	21	104.7	106.3	109.3	21	105.0	105.4	106.1	24	112.1	113.8	115.3	24
3/21	---	---	---	0	101.4	101.6	101.9	20	103.1	103.6	104.0	20	105.4	105.7	105.8	24	106.7	106.9	107.2	24
3/22	---	---	---	0	100.7	101.0	101.5	21	100.9	101.5	102.3	21	104.9	105.1	105.3	24	106.6	108.0	112.5	24
3/23	---	---	---	0	99.8	100.0	100.5	20	101.1	102.0	104.0	20	102.7	103.1	104.0	24	105.5	106.5	108.7	24
3/24	---	---	---	0	100.0	100.3	100.5	21	100.4	100.8	101.2	21	102.1	102.5	103.1	24	103.0	103.8	104.4	24
3/25	102.8	102.8	103.7	8	101.7	102.2	102.6	21	101.9	102.5	102.9	21	103.6	103.7	103.8	24	104.6	104.8	105.1	24
3/26	102.1	102.5	102.7	24	102.5	102.8	103.2	22	102.8	103.2	103.7	22	103.2	103.4	103.6	24	104.2	104.5	104.7	24
3/27	105.0	105.3	105.7	23	102.2	102.4	102.6	19	102.1	102.7	103.1	19	102.7	102.9	103.3	23	103.7	103.9	104.2	23

Total Dissolved Gas Saturation at Mid Columbia River Sites

	Rock Island				Rock I. Tlwr				Wanapum				Wanapum Tlwr				Priest Rapids			
	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#
Date	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
3/14	103.2	103.9	127.1	16	105.3	106.1	129.0	16	---	---	---	0	108.8	109.5	110.1	24	111.0	112.9	117.1	24
3/15	101.0	101.6	102.3	24	105.4	108.4	111.7	24	---	---	---	0	106.3	108.1	109.3	24	108.7	109.4	109.9	24
3/16	105.4	106.5	107.1	24	106.4	107.4	108.1	24	---	---	---	0	112.8	113.8	115.1	24	108.8	110.4	112.4	24
3/17	103.9	104.2	104.7	24	105.4	105.9	106.3	24	---	---	---	0	111.0	111.6	112.6	24	110.1	111.6	112.9	24
3/18	105.1	105.8	106.5	21	107.4	108.3	109.3	24	---	---	---	0	110.5	110.5	113.0	11	107.2	107.2	108.0	11
3/19	106.7	107.3	107.9	24	107.8	108.5	109.8	24	---	---	---	0	115.4	116.9	118.9	24	115.7	117.2	118.0	24
3/20	107.4	107.9	108.2	24	108.4	108.8	109.5	24	---	---	---	0	115.2	116.4	117.5	23	113.5	114.7	115.1	23
3/21	106.3	107.8	132.3	20	107.5	108.6	132.6	20	---	---	---	0	113.7	114.5	116.2	24	113.7	114.6	115.4	24
3/22	104.6	105.0	105.5	24	105.9	107.6	113.7	24	---	---	---	0	112.6	115.9	116.5	24	114.9	115.5	116.0	24
3/23	103.4	104.1	106.0	24	105.3	107.1	112.0	24	---	---	---	0	112.9	115.4	117.4	24	113.8	116.0	117.3	24
3/24	102.2	102.6	104.0	23	103.3	103.8	105.4	23	---	---	---	0	112.2	114.2	115.3	24	113.2	114.0	115.3	24
3/25	103.2	103.9	104.2	24	104.2	104.9	105.4	24	---	---	---	0	---	---	---	0	---	---	---	0
3/26	102.8	103.0	103.1	24	104.1	104.2	104.4	24	---	---	---	0	---	---	---	0	---	---	---	0
3/27	102.3	102.5	102.9	23	103.6	103.8	104.1	23	---	---	---	0	---	---	---	0	---	---	---	0

Total Dissolved Gas Saturation (%) - Average of 12 Highest Hours, 24 h Average and 24 h High

Total Dissolved Gas Saturation Data at Lower Columbia and Snake River Sites

	Priest R. Dnst				Pasco				Dworshak				Clrwtr-Peck				Anatone			
	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#
Date	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
3/14	112.5	114.3	116.5	24	---	---	---	0	104.5	104.8	105.1	24	101.5	101.7	101.9	24	101.3	101.5	102.0	24
3/15	108.1	109.3	110.5	24	---	---	---	0	103.9	104.3	104.7	24	101.4	101.9	102.3	24	101.1	101.7	102.2	24
3/16	111.5	112.7	114.6	24	---	---	---	0	112.0	112.4	112.7	24	105.5	106.2	106.5	24	101.8	102.5	102.8	24
3/17	111.3	112.8	114.0	24	---	---	---	0	111.8	112.2	112.7	24	105.2	105.5	106.1	24	101.2	101.6	102.1	24
3/18	110.3	110.3	111.2	11	---	---	---	0	110.9	111.1	111.3	24	104.7	105.1	105.4	24	101.0	101.0	102.4	13
3/19	115.6	116.6	117.6	24	---	---	---	0	111.5	111.8	112.2	24	105.6	106.2	106.5	24	101.8	102.4	103.2	24
3/20	113.7	113.7	114.1	9	---	---	---	0	110.8	111.1	111.7	24	105.1	105.4	105.7	24	101.2	101.5	102.1	22
3/21	---	---	---	0	---	---	---	0	110.9	111.2	111.6	24	105.3	105.8	106.1	24	101.3	102.0	102.7	24
3/22	---	---	---	0	---	---	---	0	115.0	115.6	115.9	24	108.3	109.1	109.6	24	101.4	102.2	103.1	24
3/23	---	---	---	0	---	---	---	0	115.3	115.5	116.4	24	108.6	109.0	109.3	24	101.5	102.2	103.0	24
3/24	110.3	110.3	112.3	12	---	---	---	0	115.7	115.9	116.0	24	109.2	109.8	110.3	24	101.7	102.7	103.5	24
3/25	---	---	---	0	---	---	---	0	116.7	116.9	117.3	24	110.0	110.3	110.8	24	102.0	102.4	103.0	24
3/26	---	---	---	0	---	---	---	0	116.9	117.1	117.4	24	110.0	110.4	110.7	24	101.7	102.3	103.1	24
3/27	---	---	---	0	---	---	---	0	116.8	117.0	117.3	23	109.4	109.4	109.8	13	101.1	101.1	101.8	13

Total Dissolved Gas Saturation Data at Snake River Sites

	Clrwtr-Lewiston				Lower Granite				L. Granite Tlwr				Little Goose				L. Goose Tlwr			
	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#
Date	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
3/14	110.5	120.2	124.0	24	---	---	---	0	102.9	103.2	103.4	24	---	---	---	0	103.9	105.1	106.0	24
3/15	100.4	101.4	102.1	24	---	---	---	0	109.2	112.7	114.3	24	---	---	---	0	107.0	110.3	110.8	24
3/16	102.8	104.6	105.1	24	---	---	---	0	111.3	111.8	112.1	24	---	---	---	0	108.8	109.1	109.3	24
3/17	102.8	103.3	104.1	24	101.7	101.7	102.5	13	106.5	110.4	111.3	24	---	---	---	0	109.3	113.7	115.8	24
3/18	102.4	103.3	104.0	24	101.5	101.8	102.1	24	103.8	106.1	109.9	24	104.7	104.9	105.3	14	111.1	115.0	116.0	24
3/19	103.3	104.3	105.1	24	102.2	102.3	102.4	24	103.0	104.0	111.6	24	106.5	106.8	107.2	24	107.7	109.0	111.8	24
3/20	102.5	103.2	104.0	24	101.3	101.5	101.7	24	101.1	101.3	101.6	23	104.5	104.7	105.8	23	104.3	104.7	105.8	23
3/21	102.7	103.8	104.6	24	101.9	102.1	102.3	24	101.5	101.8	102.1	24	103.8	104.3	104.7	24	103.5	104.0	104.5	24
3/22	104.0	106.0	107.0	24	101.9	102.2	102.3	24	101.5	101.8	102.0	24	102.3	102.5	102.6	24	102.1	102.4	102.5	24
3/23	105.0	106.1	107.3	24	102.1	102.2	102.3	24	101.7	101.9	102.0	24	102.3	102.6	103.4	24	101.9	102.1	102.4	24
3/24	105.4	107.0	108.0	24	102.7	103.2	104.0	24	102.4	103.0	103.5	24	101.9	102.1	102.4	24	102.1	102.7	102.9	24
3/25	106.2	107.1	107.7	24	104.8	105.1	105.5	24	105.0	106.0	110.7	24	103.6	104.0	104.3	24	103.7	104.1	104.2	24
3/26	106.5	107.5	108.0	24	105.9	106.0	106.0	24	105.6	105.9	107.5	24	104.5	105.0	105.5	24	104.1	104.3	104.7	24
3/27	105.6	106.1	106.8	23	105.9	105.9	106.2	13	105.8	105.8	106.7	13	103.9	104.1	104.3	23	103.5	103.7	103.8	23

Total Dissolved Gas Saturation Data at Snake and Lower Columbia River Sites

	Lower Mon.				L. Mon. Tlwr				Ice Harbor				Ice Harbor Tlwr				McNary-Oregon			
	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#	24 h	12 h		#
Date	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
3/14	---	---	---	0	110.5	111.6	112.6	24	---	---	---	0	111.4	113.4	116.0	24	---	---	---	0
3/15	---	---	---	0	112.3	114.7	116.8	24	---	---	---	0	109.9	111.0	113.8	24	---	---	---	0
3/16	---	---	---	0	113.4	114.0	114.6	24	---	---	---	0	112.1	113.6	114.8	24	---	---	---	0
3/17	---	---	---	0	110.3	113.5	114.8	24	---	---	---	0	111.5	113.1	113.4	24	---	---	---	0
3/18	103.6	103.6	106.0	11	110.2	113.7	114.8	23	107.8	107.8	108.1	15	111.0	112.8	112.9	23	---	---	---	0
3/19	104.0	105.0	105.4	24	108.6	111.7	114.2	24	107.5	107.8	108.1	24	109.6	111.7	112.5	24	---	---	---	0
3/20	106.1	106.7	107.2	23	107.1	107.5	108.1	23	107.2	107.4	107.6	23	107.2	108.3	112.2	23	---	---	---	0
3/21	104.6	105.0	105.6	24	105.0	105.4	106.0	24	105.9	106.1	106.3	24	105.3	105.8	105.9	24	---	---	---	0
3/22	103.3	103.6	104.3	24	103.8	104.0	104.9	24	106.5	106.8	107.1	24	106.1	106.5	106.7	24	---	---	---	0
3/23	102.8	103.0	103.3	24	103.4	103.5	103.6	24	106.4	106.6	107.0	24	105.9	106.2	106.4	24	---	---	---	0
3/24	102.2	102.4	102.8	24	102.9	103.2	103.9	24	106.0	106.2	106.5	24	105.6	106.0	106.2	24	---	---	---	0
3/25	103.1	103.3	103.6	24	103.7	104.0	104.1	24	106.8	106.9	107.1	24	106.2	106.4	106.5	24	---	---	---	0
3/26	103.1	103.2	103.3	24	103.9	104.1	105.0	24	106.4	106.4	106.5	24	105.8	106.0	106.3	24	---	---	---	0
3/27	102.3	102.7	102.9	23	103.0	103.3	103.5	23	105.0	105.4	105.9	23	104.9	105.5	106.3	23	---	---	---	0

Total Dissolved Gas Saturation (%) - Average of 12 Highest Hours, 24 h Average and 24 h High

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

	McNary-Wash				McNary Tlwr				John Day				John Day Tlwr				The Dalles			
	24 h	12 h		#	24 h	12 h		#	24h	12h		#	24h	12h		#	24h	12h		#
Date	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	AVG	High	hr
3/14	109.5	110.3	111.3	18	112.9	113.2	114.2	18	104.9	105.1	105.2	18	105.1	105.2	105.4	18	104.1	104.2	104.6	18
3/15	107.3	107.7	108.0	24	112.3	112.6	112.9	24	105.2	106.2	107.6	24	107.7	110.6	112.3	24	104.1	104.7	105.4	24
3/16	108.8	109.6	110.8	24	112.1	112.4	112.6	24	110.1	111.4	112.0	24	113.3	113.7	113.9	24	107.8	109.2	109.8	24
3/17	108.2	109.4	110.9	24	111.5	111.8	112.6	24	109.8	110.6	111.7	24	111.5	112.6	113.4	24	107.4	108.3	109.7	24
3/18	105.6	105.9	106.3	24	111.0	111.5	112.2	24	107.5	107.7	108.4	23	110.7	111.8	112.3	23	106.7	107.4	107.6	23
3/19	106.8	107.3	107.7	24	113.1	114.4	116.1	24	107.3	107.5	107.7	24	108.8	110.7	112.1	24	106.9	107.4	107.8	24
3/20	106.1	106.4	106.8	23	113.6	115.1	115.6	23	105.7	106.0	106.5	23	109.5	110.8	111.1	23	105.1	105.3	105.5	23
3/21	107.0	107.8	109.1	24	112.5	113.2	115.4	24	104.8	105.0	105.1	24	106.4	108.0	110.8	24	104.9	105.2	105.4	24
3/22	109.4	110.0	110.6	24	111.6	112.0	112.4	24	105.2	105.7	106.3	24	105.3	105.7	106.0	24	104.5	104.9	105.1	24
3/23	110.4	110.9	111.3	24	110.9	111.1	111.8	24	105.8	106.2	106.6	24	105.9	106.2	106.6	24	105.1	105.3	105.4	24
3/24	110.8	111.0	111.3	24	111.7	112.0	112.3	24	106.8	107.4	108.0	24	106.9	107.7	108.3	24	105.7	106.2	106.8	24
3/25	111.7	111.9	112.2	24	111.5	112.4	112.7	24	109.5	110.0	110.3	24	109.5	110.0	110.3	24	107.9	108.3	108.4	24
3/26	112.5	112.9	113.1	24	113.0	113.1	113.3	24	110.6	111.0	111.2	24	110.6	110.9	111.1	24	109.1	109.4	109.5	24
3/27	110.7	111.9	112.7	23	112.8	113.8	117.4	23	110.3	110.5	110.7	23	110.2	110.5	110.6	23	109.0	109.3	109.5	23

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

	The Dalles Dnst				Bonneville				Warrendale				Camas\Washougal				Cascade Island			
	24 h	12 h		#	24 h	12 h		#	24h	12h		#	24h	12h		#	24h	12h		#
Date	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr
3/14	104.2	104.4	104.7	18	103.5	103.7	104.1	18	103.9	104.0	104.7	18	105.3	105.6	106.4	14	---	---	---	0
3/15	105.0	106.5	107.8	24	103.5	103.8	103.9	24	104.9	105.9	106.9	24	103.6	104.2	104.7	24	---	---	---	0
3/16	110.1	111.0	111.4	24	104.7	105.1	105.7	24	107.7	108.0	108.2	24	106.5	107.6	108.3	24	---	---	---	0
3/17	109.0	110.1	111.3	24	106.0	106.2	106.4	24	106.7	107.3	107.9	24	105.6	106.0	106.4	24	---	---	---	0
3/18	108.8	109.6	110.3	23	106.9	107.3	107.6	23	108.0	108.3	109.0	23	107.3	108.7	109.5	23	---	---	---	0
3/19	108.1	108.6	109.5	24	108.3	108.6	108.8	24	109.1	109.5	110.0	24	107.8	108.3	108.9	24	---	---	---	0
3/20	106.1	106.6	107.7	23	106.0	106.5	107.7	23	107.6	108.4	109.8	23	107.7	108.4	109.2	23	---	---	---	0
3/21	105.4	105.6	105.8	24	106.1	106.4	106.6	24	107.2	107.7	108.6	24	107.4	108.2	109.3	24	---	---	---	0
3/22	104.7	105.0	105.2	24	105.2	105.5	105.7	24	107.0	107.4	107.7	24	106.3	107.4	108.1	24	---	---	---	0
3/23	105.2	105.3	105.5	24	104.9	105.0	105.1	24	105.7	106.0	106.4	24	106.0	106.6	107.0	24	---	---	---	0
3/24	106.0	106.4	106.7	24	105.0	105.4	105.8	24	105.5	106.1	106.3	24	105.2	105.6	105.9	24	---	---	---	0
3/25	107.9	108.3	108.4	24	106.5	107.0	107.2	24	106.8	107.2	107.4	24	105.9	106.3	106.6	24	---	---	---	0
3/26	109.0	109.4	109.6	24	107.2	107.5	107.8	24	107.6	107.8	108.0	24	106.5	106.8	107.1	24	110.9	111.0	112.5	13
3/27	109.1	109.4	109.5	23	107.3	107.5	107.6	23	107.7	107.8	108.0	23	106.6	106.9	107.5	23	110.3	110.7	111.1	23

Two-Week Summary of Passage Indices

Source: Fish Passage Center Updated: 3/28/2014 8:06

Two-Week Summary of Passage Indices

* One or more of the sites on this date had an incomplete or biased sample.
See Sampling Comments: http://www.fpc.org/currentDaily/smpcomments.htm
For clip information see: http://www.fpc.org/CurrentDaily/catch.htm
For sockeye and yearling chinook (Snake only) race information see: http://www.fpc.org/smoltqueries/currentsmpsubmitdata.asp

				COMBINED YEARLING CHINOOK								
		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
03/14/2014	*	201	---	2	---	---	---	---	---	---	---	579
03/15/2014	*	187	208	1	---	---	---	---	---	---	---	285
03/16/2014	*	237	54	6	0	---	---	---	---	---	---	210
03/17/2014	*	121	150	15	1	---	---	---	---	---	---	258
03/18/2014	*	508	171	19	1	---	---	---	---	---	---	450
03/19/2014	*	1,306	111	78	1	---	---	---	---	---	---	452
03/20/2014	*	517	134	96	4	---	---	---	---	---	---	360
03/21/2014	*	5,013	118	66	50	---	---	---	---	---	---	465
03/22/2014	*	1,840	117	98	43	---	---	---	---	---	---	531
03/23/2014		453	91	84	4	---	---	---	---	---	---	446
03/24/2014	*	332	83	106	1	---	---	---	---	---	---	438
03/25/2014		216	49	73	8	---	---	---	---	---	---	269
03/26/2014		414	---	144	0	1,530	---	---	---	---	---	218
03/27/2014		788	---	252	0	3,170	---	---	---	---	---	410
03/28/2014		---	---	---	---	---	---	---	---	---	---	---
Total:		**12,133**	**1,286**	**1,040**	**113**	**4,700**	**0**	**0**	**0**	**0**	**0**	**5,371**
# Days:		**14**	**11**	**14**	**12**	**2**	**0**	**0**	**0**	**0**	**0**	**14**
Average:		**867**	**117**	**74**	**9**	**2,350**	**0**	**0**	**0**	**0**	**0**	**384**
YTD		**13,016**	**1,286**	**1,044**	**120**	**4,700**	**0**	**0**	**0**	**0**	**0**	**12,521**

				COMBINED SUBYEARLING CHINOOK								
		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
03/14/2014	*	0	---	1	---	---	---	---	---	---	---	718
03/15/2014	*	0	0	0	---	---	---	---	---	---	---	665
03/16/2014	*	0	0	0	0	---	---	---	---	---	---	631
03/17/2014	*	0	0	0	0	---	---	---	---	---	---	623
03/18/2014	*	0	0	0	1	---	---	---	---	---	---	731
03/19/2014	*	0	0	0	0	---	---	---	---	---	---	565
03/20/2014	*	0	0	0	0	---	---	---	---	---	---	340
03/21/2014	*	0	0	0	0	---	---	---	---	---	---	667
03/22/2014	*	0	0	0	1	---	---	---	---	---	---	655
03/23/2014		0	0	0	1	---	---	---	---	---	---	499
03/24/2014	*	0	0	0	0	---	---	---	---	---	---	404
03/25/2014		0	0	0	4	---	---	---	---	---	---	348
03/26/2014		0	---	0	9	10	---	---	---	---	---	467
03/27/2014		0	---	0	0	30	---	---	---	---	---	253
03/28/2014		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**0**	**1**	**16**	**40**	**0**	**0**	**0**	**0**	**0**	**7,566**
# Days:		**14**	**11**	**14**	**12**	**2**	**0**	**0**	**0**	**0**	**0**	**14**
Average:		**0**	**0**	**0**	**1**	**20**	**0**	**0**	**0**	**0**	**0**	**540**
YTD		**0**	**0**	**1**	**16**	**40**	**0**	**0**	**0**	**0**	**0**	**22,586**

Two-Week Summary of Passage Indices

				COMBINED COHO								
		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
03/14/2014	*	0	---	0	---	---	---	---	---	---	---	20
03/15/2014	*	0	0	0	---	---	---	---	---	---	---	76
03/16/2014	*	0	0	0	0	---	---	---	---	---	---	0
03/17/2014	*	0	0	0	0	---	---	---	---	---	---	11
03/18/2014	*	0	0	0	0	---	---	---	---	---	---	75
03/19/2014	*	0	0	0	0	---	---	---	---	---	---	57
03/20/2014	*	0	0	0	0	---	---	---	---	---	---	20
03/21/2014	*	0	0	0	0	---	---	---	---	---	---	20
03/22/2014	*	0	0	0	0	---	---	---	---	---	---	89
03/23/2014		0	0	0	0	---	---	---	---	---	---	18
03/24/2014	*	0	0	0	0	---	---	---	---	---	---	34
03/25/2014		0	0	0	0	---	---	---	---	---	---	32
03/26/2014		0	---	0	0	0	---	---	---	---	---	16
03/27/2014		0	---	0	0	10	---	---	---	---	---	32
03/28/2014		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**0**	**0**	**0**	**10**	**0**	**0**	**0**	**0**	**0**	**500**
# Days:		**14**	**11**	**14**	**12**	**2**	**0**	**0**	**0**	**0**	**0**	**14**
Average:		**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**36**
YTD		**0**	**0**	**0**	**0**	**10**	**0**	**0**	**0**	**0**	**0**	**853**

				COMBINED STEELHEAD								
		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
03/14/2014	*	1	---	1	---	---	---	---	---	---	---	0
03/15/2014	*	2	32	0	---	---	---	---	---	---	---	0
03/16/2014	*	1	13	0	0	---	---	---	---	---	---	21
03/17/2014	*	1	19	2	0	---	---	---	---	---	---	21
03/18/2014	*	0	43	0	1	---	---	---	---	---	---	19
03/19/2014	*	2	24	4	2	---	---	---	---	---	---	0
03/20/2014	*	0	25	4	1	---	---	---	---	---	---	0
03/21/2014	*	3	32	3	3	---	---	---	---	---	---	20
03/22/2014	*	3	12	5	0	---	---	---	---	---	---	53
03/23/2014		0	14	2	4	---	---	---	---	---	---	18
03/24/2014	*	0	11	0	1	---	---	---	---	---	---	17
03/25/2014		0	8	0	2	---	---	---	---	---	---	63
03/26/2014		0	---	1	0	260	---	---	---	---	---	16
03/27/2014		0	---	1	5	260	---	---	---	---	---	0
03/28/2014		---	---	---	---	---	---	---	---	---	---	---
Total:		**13**	**233**	**23**	**19**	**520**	**0**	**0**	**0**	**0**	**0**	**248**
# Days:		**14**	**11**	**14**	**12**	**2**	**0**	**0**	**0**	**0**	**0**	**14**
Average:		**1**	**21**	**2**	**2**	**260**	**0**	**0**	**0**	**0**	**0**	**18**
YTD		**22**	**233**	**24**	**21**	**520**	**0**	**0**	**0**	**0**	**0**	**278**

Two-Week Summary of Passage Indices

				COMBINED SOCKEYE								
		WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
03/14/2014	*	0	---	0	---	---	---	---	---	---	---	20
03/15/2014	*	0	0	0	---	---	---	---	---	---	---	38
03/16/2014	*	0	0	0	0	---	---	---	---	---	---	84
03/17/2014	*	0	0	0	0	---	---	---	---	---	---	75
03/18/2014	*	0	0	0	0	---	---	---	---	---	---	56
03/19/2014	*	0	0	0	0	---	---	---	---	---	---	151
03/20/2014	*	0	0	0	0	---	---	---	---	---	---	160
03/21/2014	*	0	0	0	0	---	---	---	---	---	---	323
03/22/2014	*	0	0	0	0	---	---	---	---	---	---	390
03/23/2014		0	0	0	0	---	---	---	---	---	---	660
03/24/2014	*	0	0	0	0	---	---	---	---	---	---	741
03/25/2014		0	0	0	0	---	---	---	---	---	---	569
03/26/2014		0	---	0	0	470	---	---	---	---	---	638
03/27/2014		0	---	0	0	370	---	---	---	---	---	489
03/28/2014		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**0**	**0**	**0**	**840**	**0**	**0**	**0**	**0**	**0**	**4,394**
# Days:		**14**	**11**	**14**	**12**	**2**	**0**	**0**	**0**	**0**	**0**	**14**
Average:		**0**	**0**	**0**	**0**	**420**	**0**	**0**	**0**	**0**	**0**	**314**
YTD		**0**	**0**	**0**	**0**	**840**	**0**	**0**	**0**	**0**	**0**	**4,469**

				COMBINED LAMPREY JUVENILES								
		WTB	IMN	GRN	LEW	LGR†	LGS	LMN	RIS	MCN	JDA	BO2
Date		(Coll)	(Coll)	(Coll)	(Coll)	(Samp)	(Coll)	(Coll)	(Coll)	(Coll)	(Coll)	(Coll)
03/14/2014	*	0	---	0	---	---	---	---	---	---	---	96
03/15/2014	*	0	0	0	---	---	---	---	---	---	---	144
03/16/2014	*	0	0	0	0	---	---	---	---	---	---	208
03/17/2014	*	0	0	0	0	---	---	---	---	---	---	684
03/18/2014	*	0	0	0	0	---	---	---	---	---	---	456
03/19/2014	*	0	0	0	0	---	---	---	---	---	---	712
03/20/2014	*	0	0	0	0	---	---	---	---	---	---	1,592
03/21/2014	*	0	0	0	0	---	---	---	---	---	---	336
03/22/2014	*	0	0	0	0	---	---	---	---	---	---	376
03/23/2014		0	0	0	0	---	---	---	---	---	---	464
03/24/2014	*	0	0	0	0	---	---	---	---	---	---	504
03/25/2014		0	0	0	0	---	---	---	---	---	---	472
03/26/2014		0	---	0	0	0	---	---	---	---	---	448
03/27/2014		0	---	0	0	0	---	---	---	---	---	344
03/28/2014		---	---	---	---	---	---	---	---	---	---	---
Total:		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6,836**
# Days:		**14**	**11**	**14**	**12**	**2**	**0**	**0**	**0**	**0**	**0**	**14**
Average:		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**488**
YTD		**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7,532**

Two-Week Summary of Passage Indices

* See sampling comments http://www.fpc.org/currentDaily/smpcomments.htm

Smolt indices, clipped & unclipped or combined, are presented in the following order: yearling chinook (chinook 1's,) subyearling chinook (chinook 0's), steelhead, coho, sockeye, and lamprey juveniles. Two classes of fish counts are shown in these tables:
Two classes of fish counts are shown in these tables:
Sample counts (Samp) are provided for juvenile lamprey at LGR. See note below for details †.
Collection counts (Coll), which account for sample rates but are not adjusted for flow;
Passage indices (INDEX), which are collection counts divided by the proportion of water passing through the sampled powerhouse.
Passage indices are not population estimates, but are used to adjust collection counts for daily fluctuations in the site's or project's operations.
The classes of counts presented in the report are defined below for each site. Most samples occur over a 24-hr period that spans two calendar days. In this report, the date shown corresponds with the sample end date.
Combined lamprey juvenile collection counts are provided for all sites. Combined lamprey juveniles is a combination of pacific lamprey ammocoetes, brook lamprey ammocoetes, unknown lamprey ammocoetes, pacific lamprey macropthalmia, and unidentified lamprey species.
† In 2013 it was confirmed that juvenile lamprey can escape the sample tank at LGR which would lead to unreliable estimates of collection. Therefore, only sample counts are provided in this report.

Definitions for Smolt Index Counts

WTB (Collection) = Salmon River Trap at Whitebird : Collection Counts
IMN (Collection) = Imnaha River Trap : Collection Counts
GRN (Collection) = Grande Ronde River Trap : Collection Counts
LEW (Collection) = Snake River Trap at Lewiston : Collection Counts
LGR (Index) = Lower Granite Dam Bypass Collection System : Passage Index Counts
Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}
LGS (Index) = Little Goose Bypass Collection System : Passage Index Counts
Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}
LMN (Index) = Lower Monumental Dam Bypass Collection System : Passage Index Counts
Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}
RIS (Index) = Rock Island Dam Second Powerhouse Bypass Trap : Passage Index Counts
Passage Index = Collection Counts / {Powerhouse 2 Flow / (Powerhouse 1 & 2 Flow + Spill)}
MCN (Index) = McNary Dam Bypass Collection System : Passage Index Counts
Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}
JDA (Index) = John Day Dam Bypass Collection System : Passage Index Counts
Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}
BO2 (Index) = Bonneville Dam Second Powerhouse Bypass Collection System : Passage Index Counts
Passage Index = Collection Counts / {Powerhouse 2 Flow / (Powerhouse 1 & 2 Flow + Spill)}

JDA and BO2 data collected for the FPC by Pacific States Marine Fisheries Commission.
RIS data collected for the FPC by Chelan Co. PUD.
LGR, LMN, and MCN data collected for the FPC by Washington Dept. of Fish and Wildlife.
LGS and GRN data collected for the FPC by Oregon Dept. of Fish and Wildlife.
IMN data collected for the FPC by the Nez Perce Tribe.
Fall (post SMP season) trapping at the Imnaha River Fish Trap (IMN) is funded by the Lower Snake River Compensation Program (LSRCP)
WTB and LEW data collected for the FPC by Idaho Dept. of Fish and Game.

Cumulative Adult Passage at Mainstem Dams Through: 03/27

		Spring Chinook						Summer Chinook						Fall Chinook					
	END	2014		2013		10-Yr Avg.		2014		2013		10-Yr Avg.		2014		2013		10-Yr Avg.	
DAM	DATE	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack
BON	03/26	174	3	158	2	117	0	0	0	0	0	0	0	0	0	0	0	0	0
TDA		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JDA	03/25	5	5	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0
MCN		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IHR	02/28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LMN		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGS		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGR	03/25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PRD		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WAN		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RIS		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RRH		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WEL		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WFA	03/27	12	0	18	0	66	0	0	0	0	0	0	0	0	0	0	0	0	0

		Coho						Sockeye			Steelhead						Lamprey		
	END	2014		2013		10-Yr Avg.				10-Yr			10-Yr	Wild	Wild	10-Yr			10-Yr
DAM	DATE	Adult	Jack	Adult	Jack	Adult	Jack	2014	2013	Avg.	2014	2013	Avg.	2014	2013	Avg.	2014	2013	Avg.
BON	03/26	5	-2	0	0	0	0	2	0	0	2260	1347	1817	721	384	446	0	-1	0
TDA		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JDA	03/25	0	1	0	0	0	0	0	0	0	2317	0	2150	866	0	366	-1	0	0
MCN		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IHR	02/28	0	0	0	0	0	0	0	0	0	498	0	0	164	0	0	0	0	0
LMN		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGS		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGR	03/25	0	0	0	0	0	0	0	0	0	4310	3778	3495	1632	1364	874	0	0	0
PRD		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WAN		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RIS		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RRH		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WEL		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WFA	03/27	9	0	2	0	0	0	0	0	0	2892	3532	4235	0	0	0	0	0	0

PRD does not post wild steelhead numbers.
These numbers were collected from USACE, Grant PUD, Douglas PUD, Chelan PUD, ODFW and DART.
Wild steelhead numbers are included in the total. Wild Steelhead are defined as unclipped fish.
Historic counts (pre-1996) were obtained from CRITFC and compiled by the FPC.
Historic counts 1997 to present were obtained from the Corps of Engineers.

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