# FISHWATCH 2023 MONTHLY REPORT NOVEMBER 2023 by Edward Kikumoto

COVID19 STATUS - The Big Bend Pool is open to the public this year until further notice to the contrary.

Compliance with CDC guidelines are recommended, especially for those who are unvaccinated and have underlying health concerns.

The FishWatch Caretaker is no longer social distancing, so please let me know if you are, so I can make sure not to compromise your health.

## **DISCLAIMER**

The opinions in this report are strictly my own, and do not reflect the views and opinions of the U.S. Forest Service, the Oregon Department of Fish & Wildlife, or The North Umpqua Foundation.

Greetings from the Big Bend Pool,

#### THE END OF THE FISHWATCH 2023 SEASON

My last full day at the Big Bend Pool was on November 26.

I spent the following 3 days clearing out the Airstream and prepping it for the move.

The weather after Thanksgiving up to November 29 was cold, but sunny and dry – lows into the 20s, and highs in the 30s and 40s.

The Airstream was towed back to its winter home at Steamboat on November 30.

The weather forecast was for an extended period of wet weather beginning on November 30. The resulting high flows will give the steelhead still holding in the Big Bend Pool cover from observation, and provide water volume upstream and in the feeder creeks where they will spawn.

### Steelhead on the move.

There were few opportunities to count the steelhead in the Big Bend Pool this month. Overcast skies, and fluctuating water levels made for poor visibility conditions for seeing and counting steelhead.

11.11	10 steelhead.
11.12	21-22 steelhead
11.16	8 steelhead.
11.18	20-22 steelhead
11.24	28-30 steelhead
11.25	35 steelhead.
11.26	80 steelhead.

November 26 was my last count of the season. The Canton gage was reading 164 cfs at 14:00, when I made my count. It was a sunny day, and the pool was in full sunlight.

I think the fluctuation in numbers is caused a combination of three factors: (a) time of the year, that is, closer to spawning time in February and March; (b) higher water flows, which allow the steelhead to move into parts of the upper Steamboat Creek and its tributaries that are inaccessible during the low water flows of summer; and (c) late summer steelhead moving quickly upstream motivated by the first two reasons.

The drier conditions at the end of the month and subsequent lower flows cause the steelhead moving up to stop in the Big Bend Pool before moving again with more rain forecast in early December.

Being able to see and count steelhead in the Big Bend Pool at this time of year is serendipitous.

See the weather and flow reports below.

#### **OVERVIEW**

## **Bad Behavior**

I have not observed any illegal, unlawful or unacceptable behavior at the Pool during this period.

## **Visitors**

There were 30 days in November.

Days away from the Pool -

I was away from the Pool on 15 days during daylight hours (approximately 10-5) - 13 weekdays, and 2 weekend days.

On 1 day that I was away from the Pool, I had 2 visitors to the Pool before I left in the morning.

Days at the Pool -

On the 15 days I was present at the Pool during daylight hours I had 14 visitors, for an average of 0.9 visitors/day.

On the 6 weekend days out of the 15 days I was present at the Pool, I had 8 visitors for a weekend day average of 1.3 visitors/day. I had no visitors on 1 day.

On the 9 weekdays I was present at the Pool, I had 4 visitors, for an average of 0.4 visitors/day. I had no visitors on 6 weekdays.

The total number of visitors to the Pool while I was present was 14. 11 of the visitors were hunters, and the other 3 were a group of older guys out on a drive.

## Visitors to Steamboat Creek Basin

Most of the folks I saw in the Basin in November were hunters. The first week of November saw the tail end of gun season for bucks (male deer with antlers, and the beginning of the gun season for bull elk (11.11 to 11.17). After that I would see the occasional upland game bird hunter. Given the overcast and rainy weather I didn't expect to see many sightseers.

## Weather

The month started out wet and mild with daytime temperatures in the 50s and nights in the low 40s. When it rained the temperatures were mild because of the cloud cover. When high pressure moved in with sunny weather, it got cold. We were not getting winter storms.

On November 6 heavy rainfall blew out Steamboat Creek, with the Canton Gage peaking at 2800 cfs at 11:30 am.

It remained mostly cloudy with showers and occasional heavy rainfall through November 22.

Beginning on November 23, Thanksgiving, the forecast was for a week of sunny days but also very cold nighttime temperatures.

On November 25 the low was 24.8°F and the high was 36°F.

Temperatures remained in the 20s and 30s through November 29.

The forecast for November 30 into the first week of December was for rain and milder temperatures (40s and 50s).

# Stream Flow

There was a huge fluctuation in stream flow levels this month.

Note the very high flows and very quick drops in flow. In October the highest volume was in the mid-700 cfs. Here you are seeing flow volumes in the thousands. What happened in the first week of December is mind-boggling, with a high of 17,400 cfs on December 3. Flows over 10,000 cfs will strip the bottom of a stream or creek of its spawning gravels and will kill small fish.

What this also tells me is that the ground is finally 100% saturated, which accounts for the very quick rise and fall in volume. The amount of rainfall in October and November were not that different – much of the rain in October was being soaked up by the dry ground. In November most of the rainfall was turning into runoff. The snow level in November was, for the most part, above 4500 feet. The Big Bend Pool is at 1,654 feet.

The high flows in the first week of December are a combination of snowpack melt due to very mild temperatures, and heavy rains.

DATE	TIME	CFS	SH	COMMENT	
11.01	15:00	99.9			
11.02	04:45	96.0		Low flow peak.	
11.02	08:30	110.0		Rising.	
11.03	16:30	196			
11.04	18:30	336		Rising.	
11.05	03:00	2820		High flow peak. Blown.	
11.07	10:00	1820		Spate.	
11.08	10:00	966		Water level at high water mark.	
11.09	10:00	562		Snow on the ridgeline (5,000 ft.)	
11.10	19:30	343			
11.11			10		
11.12	14:00	237	21-22		
11.13	00:30	222		Low flow peak.	
11.13	20:30	296			
11.14	12:30	293			
11.15	04:45	307		High flow peak.	
11.16	13:15	269	8	Lowering.	
11.17	15:30	225			
11.18	10:00	204	20-22		
11.19	11:30	1200		High flow peak. Spate.	
11.19	17:30	1060			
11.20	10:45	733			
11.21	10:45	487		Lowering.	
11.22	09:30	370		Lowering.	
11.23	10:15	269		Lowering.	
11.24	10:00	225	28-30	Lowering.	
11.25	13:30	185	35	Lowering.	
11.26	14:00	164	80	Lowering. Visibility good.	
11.27	13:30	146		Lowering.	
11.28	13:30	132		Lowering.	
11.29	13:30	121		Lowering.	
11.30	05:15	116		Low flow peak.	
11.30	15:30	127		Rising. Rain.	
12.01	14:00	435		Rising. Rain.	
12.02	15:30	2730		Rain.	

12.03	15:00	17400	High flow peak. Rain.
12.03	16:30	14800	Rain.
12.03	19:30	11100	Rain.
12.04	18:30	4890	Rain.

CFS - cubic feet per second.

SPATE – creek full, but not, for the most part, overflowing the banks of its current streambed. High and dirty.

BLOWN – flowing over its banks, into streamside vegetation, dirty and raging (a danger to man, beast or fish).

SH - Steelhead count.

## Water Temperatures

I didn't take any water temperatures in November.

#### INFRASTRUCTURE

## Airstream

The Airstream is in good working condition for FishWatch purposes.

# Propane

The 250 gallons propane tank has 31% (77.5 gallons) remaining as of the end of November. Propane is used by the refrigerator and the catalytic heaters.

## Generators

I have been occasionally using the Honda EU1000i (gas) when I've only turned on the generator for short periods of time (no more than 2 hours). At all other times I use the Honda EU2200i, which runs on propane, and is sourced from the Airstream's 250-gallon propane tank.

I run a generator for at least 2-hours <u>every evening</u> to maintain the batteries, and provide AC power to charge my electronics and for overhead lighting. Running a generator for longer periods of time depends on the need for overhead lighting and computer use late into the evening. The refrigerator is the primary drain on the battery charge.

### Portable Toilets

The toilets were cleaned on schedule on the second Friday of the month. The toilets were used very infrequently this month, other than my use. There are very few visitors in Steamboat Creek Basin as noted above in my visitors tally. I clean and maintain the toilets as necessary.

## **Road Conditions**

**3.5 Mile Post "SLOW CREEP"** – One lane due to the pavement slowly sliding off of the hillside. This was supposed to be temporarily patched, however it has not been repaired, and instead there are red warning cones where it is unsafe to drive.

With the heavy equipment and logging trucks using the road through the summer, I expect that road conditions here are going to get worse sooner than later. PLEASE BE CAREFUL DRIVING THIS SECTION ESPECIALLY ON WEEK DAYS DURING DAYLIGHT HOURS, WHEN HEAVY EQUIPMENT WILL ALSO BE ON THE ROAD – IT'S A BLIND CURVE.

Rain is beginning to cause debris (rock slides and falling trees) to fall on the road, but much less than I normally expect. The firefighters have cleared much of the roadside vegetation on the first five miles of Steamboat Creek Road into Steamboat Creek Basin as a contingency fire line. Along with understory vegetation, any trees that were assessed as roadside hazards were removed.

I was told that a contingency fire line along a road was 30 feet of each side of the road. This does not mean the ground was stripped bare. It appears to me that the understory (including small trees and large bushes) is cleared and the density of the trees is reduced by removing the smaller trees, which are more likely to burn.

# Logging and Heavy Equipment

There was no logging activity in Steamboat Creek Basin in November.

Logging and maintenance work usually ends in Steamboat Creek Basin by the end of October.

#### **WILDLIFE SIGHTINGS & BEHAVIOR**

Wildlife sightings have been few and far between in Steamboat Creek Basin in November.

The occasional ruffed grouse on the road.

One adult blue heron quietly passed over the Pool on one day.

I have seen a young osprey, a couple of times, which appears to be roosting somewhere upstream of the Big Bend Pool.

**END OF NOVEMBER 2023 REPORT** 

Respectfully submitted,

Ed Kikumoto FishWatch 2023 Caretaker

AFTERWORD: What the number of steelhead in the Big Bend Pool this year means, if anything.

ODFW reported a low return forecast for wild summer steelhead to the North Umpqua River watershed this year, and closed the North Umpqua River.

On July 28, ODFW (Oregon Department of Fish and Wildlife) issued an order closing *all fishing* on the North Umpqua River from July 31 through November 30, 2023.



The reason for the closure was because of the low return rate through July of the North Umpqua River's wild summer steelhead, which was "just under half the amount needed to expect meeting the critical abundance for the year."

On July 31, the Oregon Department of Fish and Wildlife (ODFW) closed all of the North Umpqua River to fishing because of the likelihood of a low return of wild summer steelhead and "hot" water temperatures.

ODFW News Release July 28, 2023

All angling on North Umpqua River and tributaries closed July 31 - Nov. 30.

Roseburg, Ore – All angling on the North Umpqua River and its tributaries is closed at 12:01 a.m. July 31 through Nov. 30, 2023. Low numbers of returning wild summer steelhead prompted state fishery managers to enact the angling closure from the mouth to the marker below Soda Springs Dam.

ODFW biologists project the run will not meet the 1,200 returning wild fish "critical abundance level" – the point where conserving the population could be in jeopardy if a downward trend continues. This threshold is defined in the CMP (Coastal Multispecies Conservation and Management Plan).

Current counts of wild summer steelhead passing Winchester Dam are just under half the amount needed to expect meeting critical abundance for the year. Low water flows and water temperatures approaching 80 degrees in the lower North Umpqua and mainstem Umpqua rivers also play a role in this emergency angling closure.

Similar conditions and low returns also <u>closed fishing in this area in 2021</u>. Last year, returns were slightly over critical abundance level.

Several factors affecting the low wild summer steelhead returns are at play.

A primary factor is ocean conditions, which play a major role in fish survival and ultimately run size. Once entering the Umpqua River, returning summer steelhead often face less than ideal conditions with very warm water.

Predation from non-native smallmouth bass and striped bass also has potentially increased, likely contributing to lowered runs. Lastly, habitat conditions in many areas of the Umpqua Basin must be improved to help cool water and provide better conditions for native fish.

District Biologist Greg Huchko says he's seeing issues across species in the Umpqua with fish populations not performing as well as many other coastal basins, but particularly with coho and summer steelhead.

While ocean conditions are a global challenge, Huchko says ODFW and partners are focusing state and federal funds to improve riparian and in-stream habitat to benefit native fish.

Wild summer steelhead counts are determined from Winchester Dam video of migrating fish.

Contact: Evan Leonetti, 541-464-2175, evan.leonetti@odfw.oregon.gov

Greg Huchko, 541-464-2177, greg.f.huchko@odfw.oregon.gov

(**BOLD** type added for emphasis.)

Generally speaking 60 to 70% of the wild summer steelhead returning to the North Umpqua River do so in June and July, which means the return through July should have been 720 to 840 to reach the Critical Abundance Level of 1,200 for the year. The remaining 1/3 or so of the run return in August through November.

As noted in the press release, the Critical Abundance Level threshold for the North Umpqua River wild summer steelhead is 1,200, which is to say that the total return through July was less than 600 wild summer steelhead.

A visitor to the Big Bend Pool told me that the count used for the forecast was 580 wild summer steelhead through July. This count is conducted at the viewing window at the Winchester Dam fish ladder.

#### **CONCLUSIONS: What do we know?**

A) ODFW reported the total return of wild summer steelhead to the North Umpqua River watershed to be 960.

It has been reported that 37% of the North Umpqua River wild summer steelhead spawn in the Steamboat Creek watershed.

So my 2023 high count of 265 wild summer steelhead in the Big Bend Pool, 28%, is close, assuming that (1) most of the steelhead in Steamboat Creek over the summer were in the Big Bend Pool, and (2) keeping in mind that this does not include the number of steelhead still in the North Umpqua River waiting for fall rains and late season spawning urges.

Below are the years I have been the FishWatch Caretaker. The percentage of steelhead I observe in the Big Bend Pool in comparison to the total annual return to the North Umpqua River watershed is very variable.

2018	1,851(250 in the Big Bend Pool, 13.5%)
2021	450 (55 in the Big Bend Pool, 12%)
2022	1,346 (440-450 in the Big Bend Pool, 33%)
2023	960 (265 in the Big Bend Pool, 28%)

B) It isn't possible to forecast what the returns will be for the 2021 or 2023 progeny, or for any other year for that matter.

For the most part, the North Umpqua River wild summer steelhead is five years old when it returns to spawn for the first time. So we won't know the impact of the low return rate in 2021 and 2023 until 2026 and 2028, and

that will be is dependent on many environmental risk factors over that fiveyear period.

C) The return rates for the past seven-years (2016 to 2022) for North Umpqua River wild summer steelhead are (FN1):

2016	3,691
2017	2,505
2018	1,851
2019	1,947
2020	1,468
2021	450
2022	1,346
2023	960

2021 and 2023 are below the Critical Abundance Level threshold of 1,200, and are historical lows.

### **FOOTNOTES:**

FN1. Winchester Dam Fish Counts (<a href="https://myodfw.com/winchester-dam-fish-counts">https://myodfw.com/winchester-dam-fish-counts</a>) – What you will find here is the historical and yearly return counts for anadromous fishes into the upper North Umpqua River by year and month. For steelhead, you will find counts for both wild and hatchery summer steelhead. On this page scroll down to the bottom of the page to <a href="https://www.view.com/view

#### **Summer Steelhead at Winchester Dam**

(May 1 to November 30)



Year	Wild	Hatchery	Total
1946	3,361		3,361
1947	5,113		5,113
1948	2,762		2,762
1949	1,672		1,672
1950	2,835		2,835
1951	3,361		3,361
1952	4,443		4,443
1953	2,844		2,844
1954	3,117		3,117
1955	3,430		3,430
1956	2,927		2,927
1957	2,228		2,228
1958	2,041		2,041
1959	1,356	693	2,049
1960	1,782	950	2,732
1961	2,437	704	3,141
1962	1,318	1,186	2,504
1963	2,907	1,920	4,827
1964	2,340	560	2,900
1965	3,445	1,983	5,428
1966	3,139	3,046	6,185
1967	2,160	2,658	4,818
1968	1,430	3,748	5,178
1969	4,084	10,847	14,931
1970	2,727	12,853	15,580
1971	2,509	13,676	16,185
1972	3,159	10,573	13,732
1973	2,932	6,172	9,104
1974	3,875	4,547	8,422
1975	4,189	4,957	9,146
1976	2,736	3,969	6,705
1977	5,153	4,588	9,741
1978	3,766	5,625	9,391
1979	5,689	5,251	10,940
1980	5262	5,032	10,294
1981	4,267	2,053	6,320
1982	3,397	2,213	5,610
1983	3,301	905	4,206
1984	8,333	5,817	14,150
1985	7,499	7,658	15,157

Year	Wild	Hatchery	Total
1986	7,743	11,999	19,742
1987	5,388	15,337	20,725
1988	3,800	11,524	15,324
1989	3,602	8,906	12,508
1990	2,986	7,590	10,576
1991	2,534	2,339	4,873
1992 <sup>a</sup>	1,650	2,126	3,776
1993	2,931	2,483	5,414
1994	2,599	2,111	4,710
1995	3,696	2,706	6,402
1996	3,361	3,972	7,333
1997	2,109	5,900	8,009
1998	3,327	5,812	9,139
1999	2,690	2,700	5,390
2000	4,375	5,742	10,117
2001	5,472	5,859	11,331
2002	3,703	5,472	9,175
2003	3,835	4,162	7,997
2004	4,351	4,806	9,157
2005	3,867	3,120	6,987
2006	4,374	3,295	7,669
2007	2,733	1,819	4,552
2008	4,385	2,289	6,674
2009	3,701	1,292	4,993
2010	4,415	1,000	5,415
2011	4,405	2,192	6,597
2012	4,830	1,517	6,347
2013	2,285	1,600	3,885
2014	2,223	2,444	4,667
2015b	1,633	1,636	3,269
2016	3,691	3,209	6,900
2017	2,505	1,793	4,298
2018	1,851	668	2,519
2019	1,947	964	2,911
2020	1,468	1,216	2,684
2021	450	180	630
2022	1,346	2,520	3,866
2023	960	67	1,027

<sup>&</sup>lt;sup>a</sup>counts from 1992-2014 are total counts from a video camera.

	Ten Year Average Counts			
	Wild	<u>Hatchery</u>	<u>Total</u>	
1946-50	3,149		3,149	
1951-60	2,753	822	2,917	
1961-70	2,599	3,951	6,549	
1971-80	3,927	6,439	10,366	
1981-90	5,032	7,400	12,432	
1991-00	2,927	3,589	6,516	
2001-10	4,084	3,311	7,395	
2011-20	2,684	1,724	4,408	
2021-22	919	922	1,841	

**Average Counts** 

Wild	<u>Hatchery</u>	<u>Total</u>
3,315	4,132	6,758
1,807	1,470	3,277
	3,315	3,315 4,132

bcounts from 2015-present are sub-sample estimates (May 1-Nov 20).

Ten Year Average Counts