# FISHWATCH 2024 MONTHLY REPORT September 2024 by Edward Kikumoto

## **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, Steamboat Creek, in the *Frank and Jeanne Moore Wild Steelhead Special Management Area* (established March 12, 2019).

# CLOSURE, WEATHER, WATER TEMPERATURES, STREAM FLOW, STEELHEAD

The Steamboat Creek Basin remains closed to public access due to wildfires.

On August 19, I received final approval from the fire management team to visit the Big Bend Pool daily between the hours of 10:00 to 14:00.

In September I visited the Pool five times to check the area, take water temperatures, observe steelhead behavior, and try to count the steelhead.

DATE	FORECAST	HIGH TEMP	LOW TEMP	CANTON GAGE	COUNT
1	85/54			37.9 @ 15:30	
2	76/55			36.7 @ 13:00	500+NC
3	85/59			35.5 @ 14:30	
4	98.67			35.5 @ 20:30	
5	102/65			34.3 @ 06:30	
6	94/64			36.7 @ 10:30	NC+NC
7	87/61			36.7 @ 19:30	
8				36.7 @ 13:00	
9	87/57			35.5 @ 18:30	
10	80/52			34.3 @ 20:30	
11	64/55			50.9 @ 19:30	
12	69/50			61.2 @ 10:30	NC+100

13		55.2 @ 13:00
14	74/55	45.4 @ 21:30
15	79/49	42.8 @ 17:30
16	71/53	41.5 @ 11:30
17	65/55	41.5 @ 16:30
18	75/52	42.8 @ 18:30
19	77/50	41.5 @ 09:30 <b>525+100</b>
20	74/47	40.3 @ 12:30
21	78/52	36.7 @ 10:30
22		36.7 @ 14:00
23	85/61	36.7 @ 13:30
24	94/57	35.5 @ 20:30
25	68/56	35.5 @ 13:00
26		36.7 @ 13:00
27	79/52	36.7 @ 12:30 <b>NC+NC</b>
28	80/49	35.5 @ 22:30
29	72/45	
30	75/53	33.2 @ 14:30

FORECAST – High/Low Temperatures at Idleyld Park, the closest location to the Big Bend Pool with a weather forecast.

Idleyld Park is at 774 feet in elevation. Steamboat is at 1,118 feet in elevation. The Big Bend Pool is at 1,654 feet in elevation.

The air temperature differential between the Pool and Idleyld Park is about 10 degrees hotter in the spring and summer, and colder in the fall and winter.

CANTON GAGE – USGS Streamflow Gage at Canton Creek Campground. This gage measures the combined flow from Steamboat Creek and Canton Creek. The flow is recorded every 30 minutes, by height and volume.

[Steelhead] COUNT – The first number is the Big Bend Pool, the second number (+), if included, is the Little Bend Pool (just downstream). NC is No Count, which means I looked, but conditions didn't make it possible to get an accurate count.

## The risk factors for fire weather potential:

- Temperature (Hot)
- Low relative humidity (Dry, below 30%)
- Surface wind speed (Windy)
- Soil moisture content (Low)
- Fuel availability (dry vegetation, woody debris, old burns)
- Drought

#### The Weather

The first ten days of September were typical of mid-summer temperatures with 3 hot days (90 plus), and warm days in the 80s.

The last 20 days saw cooler temperatures except for two hot days (23 & 24), and 6 days of rain or showers (3/3).

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Hot (90+) - 4 days.
Warm (80+) - 9 days.
Mild (70+) - 13 days.
Chilly (60+) - 4 days.
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Nighttime temperatures were consistently in the 50s and high 40s, except for the 4 hot days, when nighttime temperatures were in the 60s.

## Fire Danger Levels

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September 1 to 19 – Fire Danger: High 3, IFPL 2, PUR 2.
September 20 to 22 – Fire Danger: Moderate 2, IFPL 2, PUR 0.
September 23 to 30 – Fire Danger: Moderate 2, IFPL 1, PUR 0.
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#### USFS Fire Danger Levels 1-5

- Low 1
- Moderate 2
- High 3
- Very High 4
- Extreme 5

#### Industrial Fire Precaution Levels (IFPL) 1-4

For Oregon Department of Forestry Protection west of the Cascades.

#### IFPL I. Fire Season

• Fire season requirements are in effect. In addition to other fire prevention measures, a Firewatch is required at this and all higher levels unless otherwise waived.

#### IFPL II. Limited Shutdown

The following may operate only between the hours of 8 P.M. and 1 P.M.:

- Power saws except at loading sites;
- Feller-bunchers with rotary head saws;
- Cable yarding;
- Blasting;

Welding, cutting, or grinding of metal.

#### IFPL III. Restricted Shutdown

The following is prohibited except as indicated:

Cable yarding - except that gravity operated logging systems employing non-motorized carriages or approved motorized carriages (defined below), may operate between 8 P.M. and 1 P.M. when all blocks and moving lines are suspended 10 feet above the ground except the line between the carriage and the chokers and during rigging.

The following are permitted to operate between the hours of 8 P.M. and 1 P.M. where mechanized equipment capable of constructing fire line is immediately available to quickly reach and effectively attack a fire start:

- Ground-based operations (defined below);
- Power saws on ground-based operations;
- Rotary head saw feller-bunchers with a continuous Firewatch;
- Non-rotary head saw feller-bunchers;
- Tethered logging systems (defined below).

The following are permitted to operate between the hours of 8 P.M. and 1 P.M.:

- Power saws at loading sites;
- Loading or hauling of any product or material;
- Blasting;
- Welding, cutting, or grinding of metal;
- Any other spark emitting operation not specifically mentioned.

### IFPL IV. Complete Shutdown

• All operations are prohibited.

#### PUR (Public Use Restrictions) 0-3

#### Level 0 No Restrictions

- Campfires
- Stoves
- Smoking
- Generators
- Motorized vehicles
- Firewood cutting

#### Level 1

- Campfires must be in Forest Service constructed fire rings or fireplaces in designated sites. Campfires are also allowed in Wilderness areas or in fireplaces inside buildings with approved screens or spark arrestors.
- Stoves are allowed.
- Smoking is restricted to enclosed vehicles, watercraft, and areas that are clear of flammable material of at least a 3-foot diameter.
- Generators are restricted to designated sites.

- Motorized vehicles are restricted to forest development roads, designated parking areas, roads, trails, and ATV areas identified as open to motorized travel on the Motor Vehicle Use Map.
- Fireworks and other pyrotechnic devices (including smoke bombs and exploding targets) are illegal on National Forests, year-round.

#### Level 2

- Campfires must be in Forest Service constructed fire rings or fireplaces in designated sites.
- Campfires are not allowed in dispersed sites or in wilderness areas
- Commercial campfires must be solely pressurized by liquid fuel or propane. Not allowed are smudge pots, wood stoves, charcoal, and briquettes.
- Smoking is restricted to enclosed vehicles, watercraft, and areas that are clear of flammable material of at least a 3-foot diameter.
- Generators, with approved spark arrestors, are restricted to designated sites.
- Motorized vehicles are restricted to forest development roads, designated parking areas, roads, trails, and ATV areas identified as open to motorized travel on the Motor Vehicle Use Map.
- Firewood cutting must be done in compliance with the terms of the 2024 Forest Removal Permit within the hours of 8 pm to 10 am followed by a one-hour fire watch. Electric chainsaw use is exempt from this order and allowed all day followed with a 30-minute fire watch.

#### Level 3 Fire Restrictions

#### **Prohibitions:**

- 1. To ignite, build, maintain, attend, or use a fire with solid fuels such as wood stoves, charcoal, pellet grills, smudge pots, and briquettes anywhere within the Umpqua National Forest. except: [36 CFR § 261.52(a)]
  - a. When using commercial stoves, lanterns, or campfires solely pressurized by liquid fuel or propane, within Forest Service developed recreation sites listed in Exhibits A.
- 2. Using an explosive. [36 CFR § 261.52(b)]
- 3. Possessing, discharging, or using any kind of firework or other pyrotechnic device. [36 CFR § 261.52(f)]
- 4. Welding or operating an acetylene or other torch with open flame. [36 CFR § 261.52(i)]
- 5. To smoke, except:
  - a. Within an enclosed vehicle, building, or designated recreation site.
  - b. While aboard a watercraft while navigating or at rest on a waterway. [36 CFR § 261.52(d)]
- 6. To operate an internal combustion engine, with the following exceptions:
  - a. While in a motor vehicle on Forest Development Roads or within designated parking areas.
  - b. While aboard watercraft while navigating or at rest on a waterway.
  - c. Generators in designated recreation sites as listed in Exhibit A, in a cleared area at least five feet from any flammable material.

- d. On roads and trails identified as open to motorized travel on the Umpqua National Forest Motor Vehicle Use Map. [36 CFR § 261.52(h)]
- 7. Violating any state law specified in the order concerning burning, fires or which is for the purpose of preventing, or restricting the spread of fires. [36 CFR § 261.52(k)]

## **Water Temperatures**

Generally speaking (for the Pacific Northwest) steelhead begin stressing when water temperatures are over 64°. Between 64° and 68° any additional stress (e.g., being caught and released) may cause fatalities. Temperatures above 74° are lethal – not enough oxygen.

The reason the wild summer steelhead hold in the Big Bend Pool all through the summer is because of the cold water in the pool – the result of cold spring water that enters the pool from Big Bend Creek, just up stream. I've been told that the spring that flows into Big Bend Creek comes out of the ground at 43°F (5°C). In the summer (once the spring runoff has ended), a fair amount of the water flowing out of Big Bend Creek into the Big Bend Pool is spring water.

The water flowing through the Pool is striated both vertically and horizontally (the waters from Steamboat Creek and Big Bend Creek don't completely mix until they get to the back of the Pool), so that the steelhead find the coldest water flows to hold in – normally at the top of the pool where Big Bend Creek water hasn't mixed yet with Steamboat Creek water – and is the coldest spot in the pool. For the most part, as Big Bend Creek and Steamboat Creek water passes downstream, the colder Big Bend Creek water will be beneath the warmer Steamboat Creek water until it mixes toward the back of the pool – where the pool shallows.

DATE	HI-AIR	AIR	BBC	SC	BBP	W1105
09.02 @ 12:00		79.0	56.1	66.0	59.1	
09.06 @ 12:15			56.6			
09.12 @ 12:20			54.4	61.8	57.9	
09.19 @ 11:45		64.6	51.8	59.3	54.7	

- Highest air (AIR) temperature is around mid-day.
- The Big Bend Creek (BBC) water temperature is taken just above its confluence with Steamboat Creek.
- The Steamboat Creek (SC) temperature is taken above Big Bend Creek.
- The Big Bend Pool (BBP) water temperature is taken at the bottom of the Pool where it flows out mixed (Steamboat Creek and Big Bend Creek).
- Bulldog Creek (W1105) originates on Reynolds Ridge and is the source of the spring water that cools the Big Bend Pool. Bulldog Creek enters Big Bend Creek about 1/2-mile above the Big Bend Creek confluence with Steamboat Creek.

W1105 (at 3,846 feet) is a marked firefighting water source that crosses NF 3850-300, which is the road to Bullpup Lake.

Water temperature readings are being taken on a ThermoWorks ThermaCheck Plus digital thermometer.

Water temperatures continue to fall and Big Bend Pool is now in the 50s, well below the upper level of steelhead's comfort zone, which is 64°F. This is reflected in steelhead behavior as they are not limited by high water temperatures to hold in only specific parts of the pool – at the head of the pool where the cooler Big Bend Creek water enters, and near the bottom where the colder water settles. With the colder water temperatures and low current speeds (low flow) the steelhead are loosely holding in the main current from mid-pool to the tailout, and high in the water column – just beneath the surface – which indicates that the water temperature near the surface is well within their comfort zone now.

### **Streamflow**

For September the stream flow stayed in the low 40 cfs (cubic feet per second) to high 30 cfs. A touch of rain helped maintain a little higher flow than normal for late summer. Nevertheless, these flows allow the steelhead to hold in the main current, if water temperatures allow.

High flow was on September 12 at 61.2 cfs – a rain bomb. Low flow was the last day of the month at 33.2 cfs, close to the lowest flows of the summer.

Normal mid to late summer flows are between 30 and 50 cfs. The Canton Gage is reported to be not very accurate below 40 cfs, but close enough for FishWatch.

#### **Steelhead Count**

Here are some total return numbers for the North Umpqua River.

These are numbers reported at the Winchester Dam fish ladder viewing window live stream by UMPQUAFISH.COM.

August 21 – 1,810 summer steelhead (1,738 wild, 72 hatchery) September 5 – 2,024 summer steelhead (1,943 wild, 81 hatchery). It is estimated that 96% of the summer steelhead counted are wild. The total return this year of WILD SUMMER STEELHEAD is estimated to be 10% higher than the most recent 10-year average (1,807), which means that this year's total return will be 1,988. Given the September reported return, I expect the year-end total will be a bit higher than 1,988.

## **Wildfires Update**

Steamboat Creek Basin remains closed to public access.

Conditions are still dry despite the cooling trend and occasional rainfall. It will take a solid week of rain to saturate the ground and begin to see the end of wildfire season. The forecast for October is more rain, but the question is how much?

There were seven named wildfires in Steamboat Creek Basin on July 16. Three of the smaller wildfires (Lost Bucket, Salmon 33 & Reynold's Butte) are contained and being monitored.

The No Man Fire on the western flank of the basin, and Horse Heaven Fire at the back of the basin remain active, as well as the now combined Fuller Lake and Bullpup Lake fires (Fuller Fire) on Reynold's Ridge into the Boulder Wilderness. The Fuller Fire has doubled in size in September. (See maps comparison below).

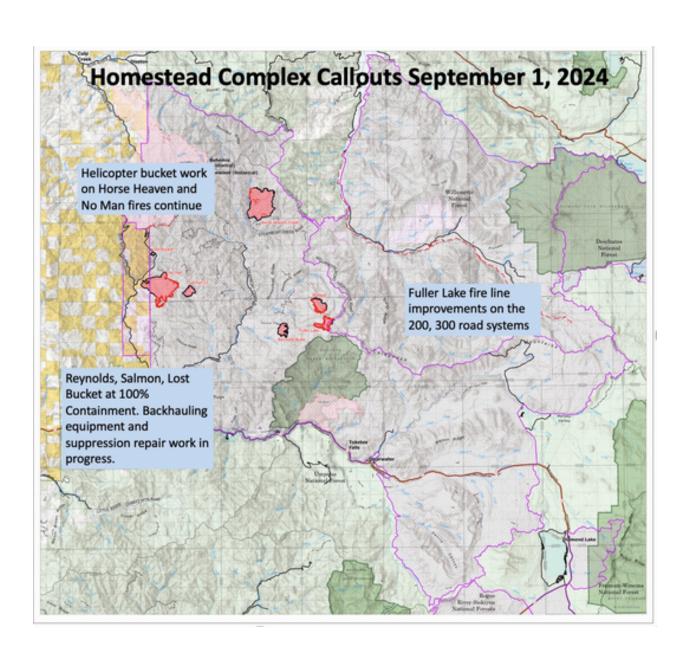
Staffing levels remain high, which means firefighting traffic in the basin also remains high.

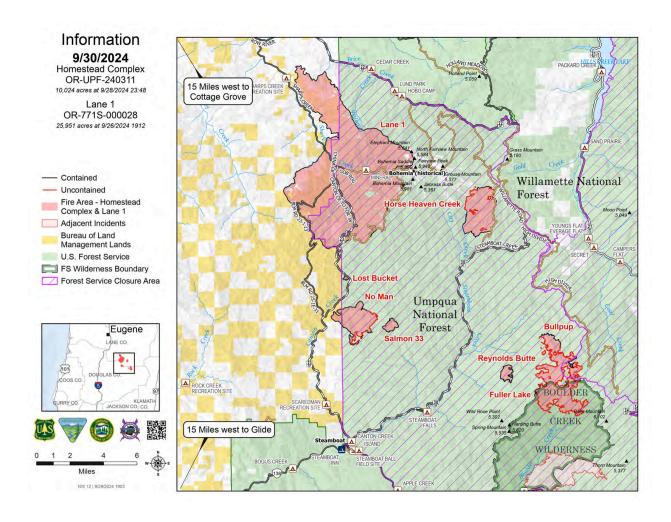
Homestead Complex (Steamboat Creek Basin), as of September 30. 10,041 acres, 35% contained.

No Man Fire – 2,148 acres, 44% contained.

Horse Heaven Fire – 2,300 acres, 56% contained.

Fuller Fire – 5,500 acres, 0% contained.





You can see how small the Bullpup (476 acres) and Fuller (418 acres) fires were on September 1, and how big it got by September 30 – over 5,500 acres. The terrain on the ridgeline that separates Reynold's Ridge from the Boulder Creek Wilderness is incredibly steep, and for most of the fire season the two fires were not contained at all.

# FISHWATCH ACTIVITIES

## **Bad Behavior**

No report. Steamboat Creek Basin is closed to public access due to wildfires.

#### **Visitors**

There were 30 days in September.

FishWatch was not a presence at the Big Bend Pool in September because of the UNF Fire Emergency Closure for Steamboat Creek Basin, except for brief visits between 10:00 and 14:00 on five days to check on the steelhead in the Pool.

On September 19, between 11:30 and 13:20, four people stopped by the Pool – one was the Sutherlin Septic driver, and the others (3) were fire management team staff.

Hours spent at the Pool – 6 hours and 15 minutes over 5 days. Days spent at the Pool – 0. Number of visitors encountered – 4.

## The September Count of Wild Summer Steelhead

COUNT – The first number is the Big Bend Pool, the second number (+), if included, is the Little Bend Pool (downstream). I include them here because there is occasional movement (in both directions) of steelhead between the lower pool and the Big Bend Pool.

September 2 – 500+NC. September 6 – NC+NC. September 12 – NC+75-100, one CHINOOK. September 19 – 500-525+100, one CHINOOK. September 27 – NC+NC.

No count (NC) – means I looked but couldn't count how many steelhead there were.

# **INFRASTRUCTURE**

#### Airstream

The Airstream was removed from the Big Bend Pool on August 3, and returned to its pad at Steamboat, and remains there in September.

# **Propane – Suburban Propane**

The 288 gallons tank was removed from the Big Bend Pool on or about August 5.

# Portable Toilets - Southern Septic

The portable toilets were no longer at the Big Bend Pool on August 2, when I went there to dismantle FishWatch.

# WILDLIFE - SIGHTINGS & BEHAVIOR

The five days I drove into Steamboat Creek Basin in September gave me little chance to observe the local residents.

However, I did notice another nest atop a tree at the Little Bend Pool. This tree overhangs the creek. I have never seen a raptor perched there so I don't know if it would be an osprey or a bald eagle. The osprey do use the other larger nest set back from the creek, and I see bald eagles frequently on this section of the creek in the summer.

I saw an adult blue heron perched at Big Bend Creek when I was taking a water temperature. Is this my first sighting of the FishWatch season?

Ruffed grouse, turkeys, and does and fawns on the road, as I drive in and out of the basin. About a half-dozen, in total.

On September 12 and 19, I think I saw a Chinook salmon amongst the steelhead in the Big Bend Pool. It was bigger than the steelhead and has a distinct forked tail. The back edge of the steelhead's tail is square. The steelhead are also beginning to show a very distinct red band along their sides at this time of year. The Chinook has very distinct black spots and is a more uniform black and white.

During the summer I also think I saw a couple of steelhead that had clipped adipose fins, which signify that they are hatchery raised steelhead. This would not be surprising since a very small number of hatchery steelhead will "follow the crowd," as it were, and show up in the Pool, almost every year. It is only surprising this year because of the low number of hatchery

steelhead reported to be in the North Umpqua River this year – less than 100 in total.

END OF REPORT.

Respectfully submitted,

Ed Kikumoto FishWatch 2024 Caretaker