

FISHWATCH 2024 MONTHLY REPORT
JULY 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).

HEATWAVE, WILDFIRES, CHANGE IN PLANS

The latter half of June was unseasonably warm. The trend continued into July, setting up the Umpqua National Forest for wildfires.

On July 16, Tuesday, a dry lightning thunderstorm passed over the eastern half of the Umpqua National Forest including Steamboat Creek Basin in the early evening. It eventually resulted in over 27 wildfires in the eastern half of the Umpqua National Forest, and seven wildfires in Steamboat Creek Basin.

On July 20, the Umpqua National Forest was closed to public access from Steamboat Creek Basin to its eastern border with the Fremont-Winema National Forest, due to wildfires.

You might recall that wildfires closed Steamboat Creek Basin last year on August 28, and mostly reopened to public access on September 20, with a few exceptions for areas in close proximity to the fires. All of Steamboat Creek Basin was reopened to public access on October 24.

On July 23, FishWatch was informed that its request for a waiver to the public access closure was denied, and was ordered to remove all FishWatch infrastructure at the Big Bend Pool as soon as a temporary waiver was authorized to do so.

All of this has resulted in a radical change in plans, from quietly watching the Big Bend Pool and the forest change through the seasons, to monitoring the wildfires from home, and not knowing what's happening at the Pool and its wild summer steelhead.

As of July 31, I am waiting for permission to travel to the Big Bend Pool to dismantle and extract FishWatch infrastructure.

The Weather

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

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

DATE	FORECAST	HIGH TEMP	LOW TEMP	CANTON GAGE	COUNT
1	82/54	89.4/29%	50.7/97%	96.0 @ 09:30	
2	82/53	94.6/11%	49.6/91%	92.2 @ 09:30	
3	86/59	97.3/10%	46.2/83%	90.3 @ 13:00	110+20
4	97/68	103.8/10%	50.4/85%	88.4 @ 13:00	NC
5	99/70	109.6/10%	53.8/85%	82.9 @ 18:30	125-130
6		111.9/10%	56/1/84%	81.1 @ 13:00	170
7		110.3/10%	52.7/74%	77.6 @ 13:00	NC
8	105/70	110.8/10%	55.6/71%	74.1 @ 12:30	
9	104/65	106.7/12%	60.4/78%	72.4 @ 11:30	
10	93/60	101.1/17%	59.9/74%	70.8 @ 13:00	NC
11	90/58	97.7/21%	54.7/77%	67.5 @ 13:00	
12	91/61	100.0/20%	54.5/83%	65.9 @ 11:30	
13	95/64	103.3/20%	56.5/82%	65.9 @ 13:00	200 (guess)+65-70
14	93/63	101.1/19%	59.4/79%	64.3 @ 13:00	NC
15	96/69	104.9/11%	57.9/76%	62.7 @ 11:30	
16	91/57	108.9/10%	57.4/71%	61.2 @ 13:00	
17	85/58			64.3 @ 13:00	
18	90/58	98.2/15%		61.2 @ 13:00	NC+80
19	92/62	94.8/20%	55.0/80%	56.6 @ 19:30	NC
20	91/59	90.0/30%	54.7/81%	56.6 @ 16:30	NC
21	79/54			56.6 @ 07:30	
22	82/53			56.6 @ 09:30	
23	86/55			56.6 @ 21:30	
24	85/54			55.2 @ 09:30	

25	80/52			55.2 @ 11:30	
26	84/53			53.7 @ 08:30	
27	83/54			53.7 @ 13:30	
28	77/55				
29	79/61			50.9 @ 11:30	
30	84/59			52.3 @ 11:30	
31	93/65				

I put in the Steamboat forecast to show the difference between temperatures at Steamboat and the Big Bend Pool. Steamboat is at 1,118 feet in elevation. The Big Bend Pool is at 1,654 feet in elevation. There seems to be a 5 to 10 degrees difference in highs and lows all year round. The higher mid-day temperatures and relative low humidity are contributing factors to potential wildfires.

It was unseasonably hot from July 1 to July 20, with extremely low humidity during the day – a harbinger of things to come. The temperature forecasts for the second half of the month were more seasonal, but the drying out in late June and early July set the stage for wildfires.

Steamboat Creek Basin was closed to public access on July 20 because of wildfires, which is why the actual highs and lows, and fish counts are missing from the chart, above.

Fire Danger Levels

- July 1 – Fire Danger: Moderate 2, IFPL 1, PUR 1.
- July 5 – Fire Danger: High 3, IFPL 1, PUR 1.
- July 8 – Fire Danger: High 3, IFPL 2, PUR 1.
- July 19 – Fire Danger: High 3, IFPL 2, PUR 2.
- July 28 – Fire Danger: Very High 4, IFPL 2, PUR 2.
- July 29 – Fire Danger: Very High 4, IFPL 3, PUR 3.

The risk factors for fire weather potential:

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

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:

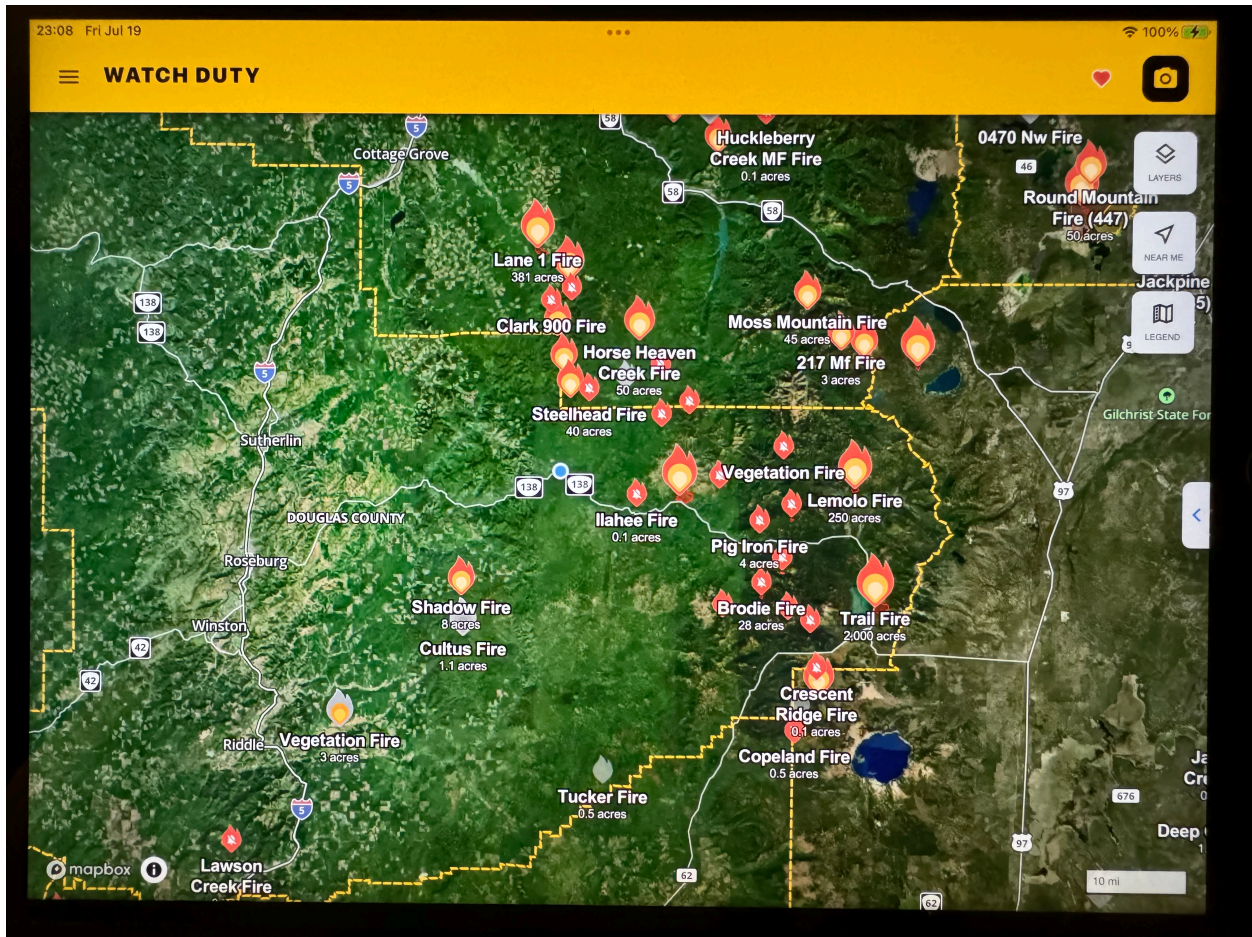
1. *To ignite, build, maintain, attend, or use a fire with solid fuels such as wood stoves, charcoal, pellet grills, smudge pots, and briquettes anywhere within the*

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)]*

Wildfires

On July 16, Tuesday, in the early evening, a forecast dry lightning thunderstorm passed over the eastern half of the Umpqua National Forest including Steamboat Creek Basin, which eventually resulted in over 27 wildfires in the eastern half of the Umpqua National Forest, and seven wildfires in Steamboat Creek Basin.



I just so happened to be at home that day because I went fishing. While I was out fishing I noticed a heavy cloud cover forming, which was not in the weather forecast from the previous day. When I got home from fishing I checked the weather forecast and saw that there was a Red Flag Warning for thunderstorms, along with the possibility of rain – a far cry from the fair weather that I was expecting.

That evening, after the thunderstorm had passed over around 20:30, I drove up to the Big Bend Pool to shut down the refrigerator, DC power and propane, and returned home for the evening so that I could begin monitoring the potential wildfires situation in the Basin. I expected to be home for at least a couple of days, and possibly longer, which necessitated shutting down the Airstream.

As I entered the Basin to drive up to the Big Bend Pool that evening I noticed heavy smoke over Steamboat Creek, which was a bit foreboding.

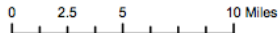
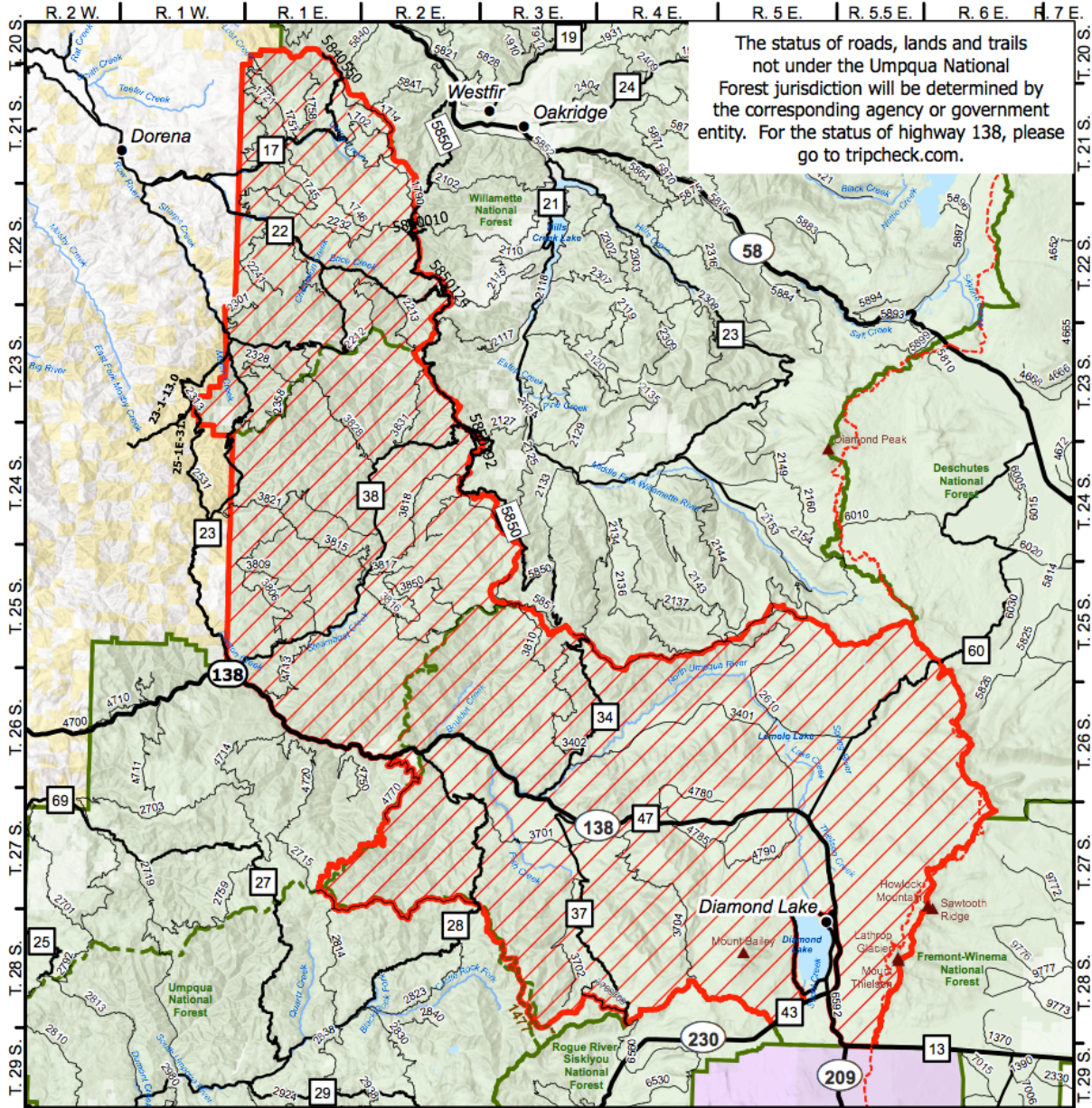
I did not see any flames. It was drizzling, and it appeared that there had been quite a heavy rainfall at the Big Bend Pool. And despite the early evening pyrotechnics there were still a lot of folks camping in the Basin.

On July 17, early reports said that there had been 66 lightning strikes and five lightning fires in Douglas County – locations unknown. At 23:00 the Watch Duty app showed no wildfires in Steamboat Creek Basin.

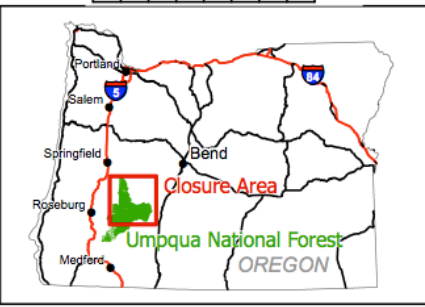
On July 18, after checking early reports for wildfires in Steamboat Creek Basin – there were no reports – I decided to return to the Big Bend Pool, which I proceeded to do at noon. Ten wildfires were reported in other parts of the Umpqua National Forest. I started up the Airstream and put everything back with plans to continue my duties as usual. As far as the public was concerned it was business as usual in the Basin. Firefighters were continuing to chase down lightning strike "incidents" from the June 17 thunderstorm. At 20:30 the Umpqua National Forest issued its first Wildfires Update and reported two fires in Steamboat Creek Basin, and 17 wildfires in other parts of the Umpqua National Forest.

On July 19, I returned home to check on the wildfires situation only to find that thunderstorms were once again likely over the weekend. Given that I was beginning to hear reports of more lightning strike fires in the Basin – two more fires, for a total of four, and the possibility of even more lightning strikes over the weekend – I decided to shutdown the Airstream once again and monitor the situation from home.

Ironically, on July 20, the Umpqua National Forest closed the forest to public access from Steamboat Creek Basin to its eastern border with the Fremont-Winema National Forest, due to wildfires.



Diamond Complex Closure Exhibit A
Closure Number 06-15-24-03
Umpqua National Forest 541-440-4930



- Area Closure
- Pacific Crest Trail
- Trails
- Ranger District Boundary
- USFS Admin Boundary
- National Forest Land
- Bureau of Land Management
- Bureau of Indian Affairs
- National Park Service
- Other Federal Land
- Other Land, Including Private



"38" on the map is Steamboat Creek Road. The Big Bend Pool is on 38 between the 3815 and 3821 roads.

FishWatch Curtailed

On July 23, FishWatch was informed that its request for a waiver to the public access closure was denied, and was ordered to remove all FishWatch infrastructure at the Big Bend Pool as soon as a temporary waiver was authorized to do so.

July 31 – I am waiting to hear from the CIMT (Complex Incident Management Team), the firefighting folks, as to when I can go up to the Big Bend Pool and begin the process of extracting the Airstream.

OVERVIEW

Bad Behavior

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

Visitors

There were 31 days in July.

However, FishWatch was only at the Big Bend Pool to July 19.

I was overnight at the Pool for 16 days.

I was overnight at Home for 15 days, which includes the three days I was overnight at Home because of thunderstorm activity.

On the 16 overnight days, I was at the Pool during daylight hours for 8.5 days.

I went Home during daylight hours on 7.5 days.

On the 8.5 days I was present during the day, I had 99 visitors.

On July 20 (the day the Emergency Fire Closure Order was effective), when I made a short run to the Pool, a big group of 11 people camping in Steamboat Creek Basin stopped by.

The total number of visitors I saw in July was 110.

I had 35 visitors over the four day July 4 holiday weekend.

On the five weekend days (including July 20), I had 68 visitors.

I didn't receive the Umpqua National Forest email notification of the Closure Order until 21:30 on July 20, so the folks visiting the Pool on July

20 didn't know that they were going to be kicked out of the Basin soon.

The July Count of Wild Summer Steelhead

July 3 – 110 +20
July 4 – No count.
July 5 – 125-130
July 6 – 170
July 7 – No count.
July 10 – No count.
July 13 – 200 (guess) +65-70
July 14 – No count.
July 18 – No count.
July 19 – No count.
July 20 – No count.

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

The plus (+) number – is the number of steelhead I saw in a nearby lower pool. I include them here because there is occasional movement (in both directions) of steelhead between the lower pool and the Big Bend Pool.

When I'm guessing at the number, I am counting (poorly at best) and extrapolating a number from the size of the massed steelhead (pod). Experience in counting and having some idea of how many steelhead are in a similar size pod helps in making a guess.

This July, because of the extremely high daytime temperatures, Big Bend Creek water temperatures entering the Big Bend Pool were reaching 64°F, which is on the high side of comfortable for the steelhead. Steamboat Creek water temperatures above Big Bend Creek were in the mid 70s (76.1°F on July 14), killing temperatures for steelhead. As a result, almost all of the steelhead were holding in a tight group at the very top of the Pool where the cold flow from Big Bend Creek enters the Pool. The steelhead are so bunched up in this situation, that they can't be counted.

On July 18, which was the one-day I was back at the Pool between the thunderstorms on July 16 and July 20, I received a report from a visitor, that he saw a dead steelhead at Little Falls lying on the bank on the

previous day. He said it was a 30-inches hen with no signs of injury. This is the second report of a dead steelhead at Little Falls this season. I reported this to the proper authorities.

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 water 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
07.07 @ 10:30	110.3	81.3	57.3	68.1	62.4	
07.07 @ 20:00	110.3	80.4	64.4	73.5	68.7	
07.14 @ 11:10	101.1	83.3	60.5	71.2	65.0	
07.14 @ 20:00	101.1	79.5	65.5	76.1	69.7	

- *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.

I did not take readings at **W1105** because I didn't want to drive up to it in the extremely high daytime temperatures and dry conditions – a potential for wildfires.

Streamflow

The high flow at the Canton Gage on July 1 was at 96.0 cfs (cubic feet per second).

The flow gradually lowered over the entire month, ending at a low of 50.9 cfs, on July 29.

The little spikes in flow on July 17 and July 30 were due to some rain.

Normal mid to late summer flows are between 30 and 50 cfs.

Weather

The daytime high air temperatures at the Pool are generally 10 degrees hotter in the summer than the local area weather forecasts. The daytime highs in the Fall are generally 10 degrees colder. Being next to Steamboat Creek eases the extreme hot and cold conditions especially at night, and cools the daytime breeze.

Lowest LOW: 46.2.
Highest HIGH: 111.9.

Unseasonably warm/hot days: 20

- 85-89 – 1 day.
- 90-99 – 7 days.
- 100+ – 12 days

July started out hot and remained hot until July 21, when temperatures began to moderate somewhat, with daytime highs at the Pool just reaching 90 degrees.

The daytime humidity bottomed out at 10% (as low as my gauge measures).

Humidity remained below 30% for the 20 days I was taking readings.

Below 30% humidity is considered a potential wildfire hazard.

Nighttime temperatures, because of the creek effect, were just right for sleeping, ranging from 46.2 to 60.4 degrees.

INFRASTRUCTURE

Airstream

All the Airstream's necessary bells and whistles are working for FishWatch purposes.

I have not seen or heard any mice in the Airstream so I'm assuming that all the holes in the exterior continue to be sealed.

Propane – Suburban Propane

On July 30, the 288-gallons tank was 75% full (216 gallons).

The only use for propane, at this time, is the refrigerator. The other uses are the catalytic heaters, and the Honda EU2200i generator, which will go back on line in the Fall.

Portable Toilets – Southern Septic

The toilets were cleaned on schedule on the second Friday of the month. The toilets saw moderate use. With the public access closure of Steamboat Creek Basin on July 20, the only folks using the toilets, while they remain in place, are firefighters. I maintain the cleanliness of the toilets as necessary.

WILDLIFE – SIGHTINGS & BEHAVIOR

What makes this July particularly interesting is what I am not seeing this year, and what I have seen that I haven't seen in many years.

I have not seen any beaver or otter.

I'm also seeing very few of our native crayfish, which is often a very bright reddish orange.

The otters spend a lot of time foraging for crayfish up and down Steamboat Creek.

Is the lack of the crayfish a reason why I haven't seen any otters?

I can't account for not seeing the beavers at the Big Bend Pool this year. The water level dropped pretty much on schedule, slowing the flow where they normally den, and there is a fair amount of willow, a primary food source, although not as abundant as in previous years.

There is an occasional non-resident osprey, and one sighting of a low flying bald eagle.

The osprey nest downstream from the Big Bend Pool is empty this year.

No blue heron.

On the other hand, on July 2, I saw two turkeys on Steamboat Creek Road.

I wonder if seeing turkeys is related to last year's wildfires opening up what is very dense forest, and the new growth covering the burned forest floor.

On July 14, a vulture decided to hang out at the Big Bend Pool. It flew low over the Pool and sat on the other side of the Pool, acting more like an osprey or blue heron. It was the sole vulture hanging around, although they frequently cruise the thermals high along the ridgelines. When it initially

flew low over the Pool, I mistook it for a bald eagle or a blue heron, much of a similar size, and moving at about the same speed.

I'm also seeing a few more grouse roadside but still not as many as in previous years.

Of the flying critters, a bat in the daytime is a bit unusual. On July 5 a bat landed on surface of the Big Bend Pool at 11:00, it sat there momentarily with its wings spread flat on the water, and then flew off. All the commotion didn't disturb the steelhead one bit.

Much fewer yellowjackets than last year, when I got stung more than once. The deer flies and horseflies showed up with the heat. Not a lot of gnats and no-see-ums either.

The most distinctive sound at the Big Bend Pool in the late spring into early summer is the call of the Swainson's Thrush, rarely seen because of its drab plumage, but heard throughout the day, but much more insistently in the late afternoon into dusk.



Swainson's Thrush

END OF REPORT.

Respectfully submitted,

Ed Kikumoto
FishWatch 2024 Caretaker