

Babb Fire

AKV-221- Incident #NES-2151

Wildland Fire Investigation Report

September 7, 2020

Prepared for:

DNR – Northeast Region

Colville, Washington

Prepared by:

Washington Department of Natural Resources

Southeast Region



Sergeant Gary Margheim

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STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES
WILDLAND FIRE INVESTIGATION REPORT

Case File Number

20-V- AKV

Other Related No.

WA--NES--2151

INCIDENT INFORMATION

Incident Name: Babb	WildCAD Incident No. 2151	Incident Date: 09/07/2020
Program Index: <input checked="" type="checkbox"/> 221 <input type="checkbox"/> 222	Project Code: AKV	Region Fire No. 522
Investigation Report By: G. Margheim		Acres Burned: 15,266
Other Agents/Officers: Eugene DuPrey INV(t), John McDonald INV, Terry Liebrecht INV		Reporting Office: Northeast
Case Ref. No.		

Origin Location

Region: Northeast	District: Arcadia	County: Spokane
Lat. (D° dM'): N 47° 16.317'	Long. (D° dM'): W -117° 23.370'	Twp: 21 N Rng: 43 <input checked="" type="checkbox"/> E <input type="checkbox"/> W Sec: 33 ¼ ¼:
Ownership: <input checked="" type="checkbox"/> Private <input type="checkbox"/> DNR <input type="checkbox"/> WDFW	Federal: <input type="checkbox"/> USFS <input type="checkbox"/> USFW <input type="checkbox"/> BLM <input type="checkbox"/> NPS <input type="checkbox"/> BIA <input type="checkbox"/> Other:	
Jurisdiction: <input checked="" type="checkbox"/> WA DNR <input type="checkbox"/> Federal <input checked="" type="checkbox"/> WFS: SCFD3 <input type="checkbox"/> Other:	Protection: <input checked="" type="checkbox"/> FFPA <input type="checkbox"/> N/A	

Regulations and Restrictions

Burn Ban in Effect: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Fire Danger Rating: <input type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High <input checked="" type="checkbox"/> Very High <input type="checkbox"/> Extreme
IFPL Zone: 674 <input type="checkbox"/> N/A	IFPL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4
Fire Tool Inspection: <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Violation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Type: <input type="checkbox"/> IFPL <input type="checkbox"/> Burn Ban <input type="checkbox"/> Burn Permit <input type="checkbox"/> Other:
Citation Issued: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Citation Number:
Issued By:	
Referral: <input type="checkbox"/> Yes <input type="checkbox"/> No	Referral to:
Date: / /20	

Fire Behavior Conditions

Red Flag Warning: <input checked="" type="checkbox"/> Yes (attach Red Flag Warning) <input type="checkbox"/> No	Lightning: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Weather Source: <input type="checkbox"/> On-Scene Observations <input type="checkbox"/> WildCAD	<input checked="" type="checkbox"/> RAWs Station: Turnbull <input type="checkbox"/> Other:
Temperature °F: 72	Relative Humidity %: 29
Wind Direction: NE	Wind Speed (mph): 18
Gusts: 34	
Aspect: N	Slope %: 0
Elevation: 2180	Fuel Type at Origin: Grass, brush & trees
Character of Fire: <input checked="" type="checkbox"/> backing <input type="checkbox"/> creeping <input type="checkbox"/> smoldering <input checked="" type="checkbox"/> running <input checked="" type="checkbox"/> torching <input checked="" type="checkbox"/> spotting <input type="checkbox"/> crowning	

Sequence of Events

Estimated Ignition: / /2020 at : <input type="checkbox"/> AM <input type="checkbox"/> PM (For Incendiary Cases only)	
Fire Reported: 09/07/2020 at 11: 59 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	Reported by: Douglas Swiger
Origin Protected: 09/07/2020 at : <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	Protected by: Spokane Fire District 3
Investigator Notified: 09/07/2020 at 4: 30 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	Requested by: DJ Greene
Origin Released: 09/09/2020 at 4: 03 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	Released by: G Margheim

SUMMARY

On September 7, 2020, at approximately 11:59 a.m., a wildfire was reported to the Northeast Washington Interagency Communications Center (NEWICC) in the area of East Babb Road in south Spokane County (T 12, R 43, S 33). The fire was located approximately 5 miles northeast of Malden, Washington. The wildfire was designated as the Babb Fire.

Firefighting personnel and resources from Spokane County Fire District 3, Whitman County Fire District 7 and the Washington State Department of Natural Resources (DNR) responded. Additional resources consisting of fixed and rotary wing aircraft, dozers and additional engines were requested due to the wind driven fire and the numerous homes threatened. The region was under a red flag warning for high winds and low relative humidity. The Babb Road Fire continued to grow until a Type 2 Incident Management Team was deployed. The fire has burned approximately 15,266 acres including a majority of the town of Malden, WA.

The DNR wildland fire investigation determined that the Babb Fire started due to a branch from a multi-dominant Ponderosa Pine tree came into contact with an Avista Utilities power distribution line causing a fire to start in the seasonally dried grasses, bushes and timber. Approximately 121 primary residences, 8 commercial buildings and 94 other structures were destroyed in this fire.

Cause Determination

Code:	E = Excluded; I = Included; P = Possible (if Included or Possible is used, further explain in the Details Section below).	
E	Lightning	Strike activity. No lightning activity in the area at the time of the fire
E	Campfire	Uncontrolled/Unattended/Escaped/Rekindle. No evidence of camping in the area at the time of fire
E	Smoking	Tobacco: Cigarette, Cigar, Pipe; Cannabis; Paraphernalia: Matches, Pipes, Filters, Clips, etc. No evidence of smoking in the area
E	Debris Burning	Agricultural, Burn Barrel/Incinerator, Dumpsite, Garbage, Pile/Slash, Prescribed, Holdover, Unattended/Uncontrolled. No evidence of debris or agricultural burning in the area
E	Incendiary	Arson: Matches, Cigarette, Lighter; Time-Delay Ignition Device: Rope, Rubber Band, Candles, Wire. No evidence of incendiary devices in the area
E	Equipment Use	Operation Of Mechanical Equipment, Brakes, Catalytic Converter, Exhaust/Exhaust System Particle, Sparks, Fuel, Fluids, Lubricant, Friction, Electrical, Grading, Harvesting, Land Clearing, Logging, Mowing, Rock Strike, Mechanical Breakdown/Malfunction, Vegetation Buildup on Hot Surface. No equipment was seen in the area by a witness that day.
E	Railroad	Railroad Operation/Personnel/Rolling Stock: Brakes, Equipment, Exhaust/Carbon Particle, Track/Right-Of-Way Maintenance. No railroads in the area of the fire. Milwaukee – John Wayne Trail is a right-of-way only
E	Children	Ignition Activities Associated with Children – 12 Years of Age or less: Matches, Lighter. No evidence of children in the area of the fire.
I	Miscellaneous	Power Line, Fireworks, Cutting, Welding, Grinding, Firearms Use, Exploding Target, Spontaneous Heating, Coal Seam Fire, Electric Fence, Refraction/Reflection/Magnification, Blasting, Flare, Flare Stack/Pit Fire, Flying Lantern, Wind Turbine, Outdoor Wood Burning Furnace, Structure. A power distribution line transects the fire's origin that showed damage and discoloration on two of the three top lines and the lower line adjacent to a down branch of a Ponderosa Pine tree

INVESTIGATION

DETAILS

On Sunday, September 6, 2020, the National Weather Service issued a Red Flag Warning for much of eastern Washington including the Spokane and Palouse areas. Red Flag Warnings are issued for weather events which may contribute to extreme fire behavior. The Red Flag Warning was for Monday, September 7, 2020, from 11 a.m. to 8 p.m. The predicted weather warning was for winds northeast 20 to 35 MPH with gusts 40 to 50 MPH and relative humidity's of 12 to 22 percent. Impacts of this type of weather conditions are rapid fire spread with any new or ongoing fires are expected.

The National Weather Service describes a Red Flag Warning as: "A Red Flag Warning is issued for weather events which may result in extreme fire behavior that will occur within 24 hours. A Red Flag Warning is the highest alert".

On Monday, September 7, 2020, several wildland fires were reported in eastern Washington. A few of these fires spread in excess of 1000 acres due to the high winds and low humidity before being contained and controlled. This is noted in the satellite map provided by the US Forest Service showing a time-lapse video of fires starting and spreading from the wind event.

On Monday, September 7, 2020, I learned of several fires being reported in the Arcadia District of the Northeast Region. I called Arcadia Fire Management Officer DJ Greene at approximately 4:19 p.m. and left a voice message requesting a return call inquiring if they needed assistance in investigating wildfires in his area. A short time later Mr. Greene returned my call and asked that I coordinate the investigation of the Babb Road Fire in the south Spokane County area that had burned structures. I advised him that I, and Senior Wildland Fire Investigator (SWFI) Eugene DuPrey, would respond the following day to conduct the investigation.

On Tuesday, September 8, 2020, SWFI DuPrey and I arrived in the general vicinity of East Babb Road located north of the fire at about 3:25 p.m. This area is in a rural part of south Spokane County near the Whitman County line. I stopped to talk to a gentleman, later identified as Mr. Douglas Swiger, sitting outside of a 5th wheel trailer on the south side of Babb Road near a barn. I asked him if he had seen where the wildfire started, and he said he did. He advised he had been sitting outside of his 5th wheel trailer most of the day on Monday keeping an eye on the property due to the high winds when a friend stopped by. While talking with his friend he saw smoke to the south of his location in the trees below the Milwaukee Railroad Corridor – John Wayne Trail. Mr. Swiger pointed to the south of his location across an agricultural field to where he saw the first smoke. As his cell phone does not work well in the area he had his friend use their cellular phone to call 911 to report the fire. At the time of the 911 call he advised the fire was just inside the tree line at the base of the hill that leads up to the John Wayne Trail, which he estimated the size of the fire to be about 40 foot in diameter and growing quickly moving towards the south. I asked him if he saw anyone in the area when he saw the fire, he said he had not seen anyone in that area all day. SWFI DuPrey obtained a written statement from Mr. Swiger.

Mr. Swiger suggested we speak to the landowner of the property, Mr. Bill Widman, who had just returned home. I walked across the road and met Mr. Widman outside his residence. I asked him if he knew anything about the fire. He said that he had been over to an area that he believes is the area of the origin as there was a tree with a yellow ribbon around it next to the power lines. Mr. Widman advised he was retired from Inland Power and Light Company, but the distribution line where the fire started belonged to Avista Power which feeds the natural gas station located on Babb Road west of his residence. By this time SWFI DuPrey joined in on the conversation and later obtained a written statement from Mr. Widman. Mr. Widman provided directions on how to access the fire where he believed it started.

Following the directions provided by Mr. Widman and the location pointed out by Mr. Swiger, SWFI DuPrey and I arrived at the area at approximately 4:08 P.M.. I noted the access road to the origin area is off of Morrow Road to the west, which consisted of a small two-track dirt/gravel road that separates a barley field to the north and feral timber land with Ponderosa Pine trees, grasses and shrubs to the south. The dusty road appears to be primarily used for agricultural purposes. A power distribution line also parallels the dirt access road to the south until a southerly jog of the road then it parallels the road to the north. Further to the south and mid-way up a hill is the Milwaukee Railroad Corridor, also known as the John Wayne Trail managed by the Washington State Parks, which crosses eastern Washington.

Upon entering the fire area I began assessing the surrounding area ruling out potential causes. The area is far from residential homes and I saw no signs of children in the area. I considered equipment use in the area, the barley field had not been harvested and Mr. Swiger said he had not seen anyone in the area that day. Railroad was considered, although there is an old Rail line on the hillside south of the access road, it no longer supports railroad operations. Campfire/Recreation was also considered, this area does not have established places to camp or campgrounds nearby. Debris burning was considered, however I did not observe any signs of timber harvest, land clearing, agricultural clearing or signs of any debris piles in the area.

Upon further observation, on the south side of the access road there was a flagged off area with yellow fire line barrier tape. Inside the flagged off area was a multi-topped Ponderosa Pine tree with a portion of the tree bent to the south in the direction of the power lines with the top resting on the ground under the power distribution lines. There was also a second Ponderosa Pine adjacent to the first noted tree to the north northwest with very little separation. The power distribution lines adjacent to the tree were still intact and attached to the east and west power poles. Photo Log #8 Photograph Cropped (right). Just east of the flagged area was, what appeared to be, a recently created access point I believe was created by suppression crews accessing the power line right-of-way to the east.



The power pole to the west of this section of power lines was resting on the ground partially suspended by the power lines and the lower portion of the wood pole was missing. I noticed the mild predominate wind was out of the northeast at the time of our arrival, which is consistent with the previous day's expected high winds.

Shortly after we arrived, a representative from Avista Utilities drove up to our location and introduced himself as Brian Bothman. We spoke with Mr. Bothman about the distribution line, he told us this line fed the natural gas pump station northwest of our location. I asked Mr. Bothman when this section of the right-of-way had been inspected as part of their vegetation management assessment. Mr. Bothman said that Asplundh Tree service had just been through the area in May or June of this year. I asked him what the right-of-way clearance was for this section of distribution line, he thought it was 10 feet each side of center making it a 20 foot wide right-of-way. Prior to leaving, I observed Mr. Bothman obtain photographs of the tree using his cellular phone. Mr. Bothman also confirmed that the distribution lines we were working around were de-energized.

Just west of the yellow flagged off area on the south side of the road I observed an area of wood chips typically seen where vegetation management work has been performed. This observation would support Mr. Bothman's report of Asplundh Tree Experts conducting vegetation management operations.

The overhead power distribution lines in the area consisted of four overhead lines supported by wood poles. There were three lines that were roughly parallel (same height above the ground) supported by a cross arm, with the fourth line being lower. The top three lines appeared to be non-insulated twisted aluminum cables. These electrical power distribution lines are often referred to as conductors as the electrical power passes through from one point to another.

I visually inspected the overhead conductors using binoculars. I observed two of the top three conductors had sustained damage to the conductors. The damage appeared to be missing portions of the twisted wires. The two lines were the north two lines. I also noted dark/black discoloring on those same lines near where the damage occurred on the conductors. I also noted similar damage and discoloration on the lower conductor in line with the other two upper conductors.

Both power poles on either side of the noted conductor damage remained upright and none of the conductors/wires involved appeared to come to ground. The power pole to the west of the damaged lines was pole number 045355.

Next we focused our attention to determining the area of origin. As SWFI DuPrey is currently in training status, I tasked him with the origin determination under my supervision. Not knowing who put up the yellow tape around the pine tree, SWFI DuPrey and I walked around the area to determine if the yellow flagging was placed there to protect the general area for investigative purposes as is typically done on scene. We walked the dirt access road to the west of the flagged tree reviewing the macroscale fire pattern indicators along the road and south to hillside. I noted a large Ponderosa Pine tree located near the base of the south hill that is southwest of the flagged off area that showed advancing macroscale fire pattern indicator of angle of scorch indicating the fire progression was in a southwest direction at that point. I walked south in a counter-clockwise direction towards the large Ponderosa Pine tree west of the flagged area from the road. At this point I started to see the backing fire pattern indicators change to lateral fire pattern indicators, mostly observing angle of char, protection and grass stems. As we proceeded along observing the fire pattern indicators, we marked the various vectors using pin flagging; red for advancing, yellow for lateral and blue for backing. SWFI DuPrey was also taking photos as we progressed.

We continued south where I observed advancing fire pattern indicator of damage differential, or the lack of grass stems by where the grass fuels were consumed more heavily than other areas. At this point we were between the flagged off area and the large Ponderosa Pine tree that displayed the angle of scorch. In about a 10 foot area we observed two advancing runs separated by lateral transition zones. These transition zones had standing grass stems and angle of char. As we proceeded southeast in the counter-clockwise direction we began observing lateral fire pattern indicators transitioning to backing fire pattern indicators. We stopped at the barbwire fence that ran from the south side of the access road in a southeast direction. Once at the fence, we turned around and verified the fires progression based on the fire pattern indicators observed. Looking south southwest towards the John Wayne Trail, the two advancing runs merged.

I then walked the access road east from the flagged area looking at fire pattern indicators. The indicators along the road north northwest of the flagged area showed a backing fire based on the light burn, protection on grasses and small bushes and lack of angle of char. I then walked up the recently created access road just east of the flagged off area reviewing the burn indicators on both sides of the access point. Fire pattern indicators in this area all indicated the fire was backing into this area. I continued south observing more backing fire pattern indicators, mostly consisting of protection around grass clumps and grass stems. I turned to the southwest towards the barbwire fence where I started seeing lateral fire pattern burn indicators, these indicators were protection, angle of char and grass stems. Once at the fence I stopped and walked back verifying the indicators I observed.

At this time we were confident the fire progressed out of the flagged off area noting that as our general origin area (GOA). From this point we went back to the main advancing part of the fire southwest of the fence line. Working from the advancing portion of the fire, we worked in a zig-zag pattern noting advancing indicators until we located lateral fire pattern indicators and we did this working towards the general origin area of the fire. We did this for both advancing runs. When we got to the fence we checked the wires with our fingers to see if we could determine the fires progression through the fence wires. We did observe sooting on the barbwire fence on the side of the flagged off area, also indicating the fire advanced through the area from northeast to the southwest. We also checked the fence wires in other areas and did not see the amount of sooting on the northeast side of the wires where backing or lateral zones were noted.

We crossed the fence line and took up the zig-zag pattern where we left off. We quickly found the fire pattern indicators became microscale indicators meaning we were getting close to the origin area. We moved to the north area of the fire just south of the access road and began reviewing the fire pattern indicators in this area working back towards the advancing indicators. We continued reviewing the fire pattern indicators, such as protection, cupping and grass stems, to the south to about where the top of the branch rested on the ground. At this point we felt we were in the Specific Origin Area (SOA), which was approximately a 6' – 8' area.

During the review of the GOA, we continued to eliminate potential causes. We found no evidence of foot trails coming off the John Wayne Trail or dispersed camping areas with rock campfire rings. Due to the distance from the dirt access road to the GOA, the slight elevation gain and location of the trees, I could eliminate equipment use in the GOA. We did observe foot prints in the GOA on top of the ash, which I believe were done when the yellow flagging was placed.

While reviewing the SOA, we had to work around the tree branch on the ground. Due to limited room available for both us to be working this area, I had asked DuPrey to review the fire pattern indicators and to keep me apprised of his findings. In this area, the fire pattern indicators were microscale indicators, mostly relying on protection, cupping, grass stems and sooting/staining on rocks.

While SWFI DuPrey worked the Specific Origin Area (SOA), I began looking at the Ponderosa Pine tree. I did not observe any marks consistent with a lightning strike. I did note on the upper portion of the failed branch was a strip of peeled bark hanging down from a branch. The bark appeared to be stripped from the bottom up as though it had contacted something as it was pulled across an object. The picture to the right (photo log picture #14) shows hanging bark and its location to the bare branch above it. Photo log picture #19 (IMG0074) also shows the hanging bark after the top had been removed.



A short time later SWFI DuPrey asked me to look at a few of the indicators as he felt he was near the origin area in a couple different areas. The area he was looking at had sustained a light burn where the flashy fuels had not been fully consumed. This is an indication we were in the ignition area as the fire had not yet fully established itself into an advancing fire. This was found in different areas of the SOA leading us to believe there had been more than one ignition area in the SOA. This area was below the power distribution lines and slightly south which aligned with the wind direction at the time of the fire's discovery.

SWFI DuPrey continued reviewing the SOA for any signs of a cause and using a magnet to sweep the area for ferrous metals. SWFI DuPrey could not locate any incendiary devices, or device remnants or carbon particles. No items related to smoking were observed. Several miscellaneous causes were also considered and ruled out such as fireworks, grinding/cutting, firearms use, electric fence, spontaneous heating, refraction/reflection, flares and structures to list a few. The only miscellaneous cause that could not be excluded at this time was power line. As the power distribution lines transect the origin area and a nearby tree with striations on the upper portion of the branch lying on the ground could not be disregarded.

Having seen trees react when coming into contact with overhead electrical power distribution lines, they tend to shower sparks from the power lines to the ground in a wide area. These showers of sparks consisting of burning organic material and aluminum would be a competent heat source to ignite the light flashy fuels below, which could cause more than one ignition point. Fine fuels such as grass (cellulosic fuel) will ignite between 500 degrees to 700 degrees, aluminum melts at approximately 1200 degrees, well above the ignition point for grass.

NFPA 921 section 9.9.5.2 states in part, "When aluminum is involved in faulting, the particles may actually burn as they fly and continue to be extremely hot until they burn out or are quenched by landing on some material. Burning aluminum sparks, therefore, may have a greater ability to ignite fine fuels than do sparks of copper or steel."

When SWFI John McDonald arrived on scene, I asked him to see if he could contact DNR Forest Pathologist Dan Omdal to have him respond to the scene to inspect the tree. Unfortunately Mr. Omdal was on a fire assignment and not available. SWFI McDonald suggested calling Ms. Melissa Fischer who is the agency's entomologist assigned to the DNR's Northeast Region. I asked him to contact her and have her respond to the scene if available, she was available and would be at the scene in a couple hours.

Later that day Mr. Bothman returned to the area along with Avista Foreman Jeff Murto who was conducting an inspection of the transmission distribution lines and power poles that needed to be replaced. I advised them I wanted to obtain any segments of the conductors for evidentiary purposes they were planning to remove due to extensive damage. These items were adjacent to the partially failed tree as part of the required maintenance to bring the system back up and operational. I offered to stay on scene until the crew arrived to obtain any possible evidence they cut out, but the foreman said it would be sometime between 8 p.m. tonight until sometime tomorrow morning. We agreed they would provide whatever parts of the conductor they removed, would be placed on the ground inside the yellow flagged off area.

On September 9, 2020, at approximately 8:34 A.M., Senior Wildland Fire Investigators (SWFI) McDonald, DuPrey and I arrived at the origin area. I noted that two of the four overhead power line conductors had been spliced. Upon further observations I found two segments of conductor in the flagged off area near the top of the tree at approximately 8:42 A.M. I collected the two segments of wire conductor, tagged each with a corresponding evidence number (E-1 & E-2) and placed them inside my assigned work vehicle. Both segments of wire showed damage to the twisted wires along with discoloration on both sides of the damage.

Shortly after we arrived at the scene, Avista Utilities Area Representative Brian Bothman arrived at the scene. He advised that Line Foreman Jeff Murto's crew had placed two segments of power line conductor within the flagged off area and wanted to ensure we found the items, I advised him we did and thanked him for their help in obtaining them. Mr. Murto had also stopped by to verify we found the items his crew left for us.

As SWFI McDonald was documenting the Ponderosa Pine tree, he noted the distance from the centerline of the right-of-way power line to the tree trunk was approximately 29 feet 9 inches. With an approximately 20 foot wide right-of-way, 10 feet either side of the centerline, puts this tree approximately 20 feet outside of the right-of-way.

Mr. Bothman also advised that one of their managers had responded to the scene earlier this morning to obtain photographs of the tree.

Later that morning DNR Forest Health Specialist Melissa Fischer arrived on scene to inspect the tree that had a branch fail into the power line. Ms. Fischer specializes in entomology and works in the DNR's Northeast Region in the Landowner Assistance program assessing timber stands. Ms. Fischer inspected the tree and noted that it appeared to her the tree was initially damaged by Porcupines at a young age. She explained that Porcupines will climb a tree and girdle the tree near the top of the tree causing it to die. She pointed out other trees in the vicinity that showed similar damage causing co-dominate tops to form. Ms. Fischer advised she located, what she believed to be, the original tree top/leader when it died at an early age, and

three other branches that were attempting to become dominant leaders. Ms. Fischer noted areas where the tree had experienced stress in the past along with signs of Gall Rust disease.

At about 11:22 A.M., I called Mr. Brian Bothman and explained to him that I needed a crew to cut down the tree located near the power lines as I was concerned with its proximity to the power lines and the potential for the tree to fall into the lines. He said he would see if he could locate a crew to remove the tree. Moments later I was advised By SWFI DuPrey that SWFI McDonald had contacted the Avista Utility crew leaving the area and they agreed to fall the tree for us.

Once the tree was on the ground, SWFI McDonald and I measured the length of the failed branch from tip to ground and found it to be 54 feet 10 inches. DNR Forest Health Specialist Fischer was then able to conduct a better inspection of the tree. Once she completed her review of the tree we asked her what parts of the tree we needed to remove to be held as evidence, besides the top. She requested the section where the branch joins the main trunk of the tree to above where the failure of the branch occurred. SWFI McDonald requested a sawyer from the local strike team assigned to the division, a member of Lincoln County Fire District 1 arrived to assist with our request.

During the initial falling of the tree by Avista Utilities, the top of the Ponderosa Pine tree broke off, however I wanted two more whorls below the break. At my direction, the sawyer cut off the section requested (Evidence #'s E-3A & E-3B). Next the sawyer cut out the section noted by Ms. Fischer. This was removed in two sections (Evidence #'s E-4 & E-5) for lifting and transporting purposes.

Upon further inspection of the top portion of the branch, we observed marks or striations perpendicular on the branch that did not appear to be natural. These marks appeared to similar in size to the conductors we obtained by the Avista Utility crew. The photo to the right shows the striations on the branch. Photo log #18 (IMG0073) cropped and rotated.



The evidence, consisting of the two powerline conductors and four sections of the tree, were collected and placed in the back of my assigned work vehicle and transported to the DNR Evidence Storage facility near Tumwater, WA the following day where they were logged into the evidence system.

On Wednesday, September 16, 2020, while I waited for DNR Forest Pathologist Dan Omdal to arrive, I contacted a DNR engine parked along Morrow Rd. I spoke to the DNR Engine Lead, Scott Polley, to see if he had information on the Babb fire. He said he was dispatched to the fire in the early afternoon and assigned to the north side of the fire. I asked him if he knew who had placed the yellow flagging around the pine tree near the access road. He said he didn't know but thought he may have heard something over the radio about it, but added that it was pretty hectic that day. Mr. Polley thought it may be either Spokane Fire District #3 or #12. As most of his engine crew had already been released for the season, he would see what he could learn.

A short time later, I met DNR Forest Pathologist Dan Omdal alongside Morrow Rd where he followed me to the origin area for him to conduct an inspection of the tree that had a branch fail and came into contact with the overhead power distribution line. Mr. Omdal wanted to inspect the tree before he looked at the section of the tree that was being held as evidence in Tumwater, WA. Mr. Omdal pointed out this tree had many lateral branches/Leaders (LBL) vying for dominance due to the initial tree top death at an early age. He also pointed out numerous small holes created by insects and disease. Further, Mr. Omdal pointed out a failure of a branch that had failed some years earlier as noted by the scarring being created to protect the

tree along the edge of the break. Mr. Omdal felt this break was due to either high winds or heavy snow loading. I advised Mr. Omdal that the break he pointed out looked similar to the damage I observed on the segment of tree we took as evidence.

On Saturday, September 19, 2020, I met Forest Pathologist Dan Omdal and US Bureau of Alcohol, Tobacco and Firearms Electrical Engineer Michael Abraham at the Tumwater Evidence Facility located on Jones Road SW south of Tumwater, WA. I had requested both subject matter experts to review the evidence obtained during the investigation of the Babb fire investigation. Mr. Omdal inspected the tree segments while Mr. Abraham inspected the conductors obtained from Avista Utilities of the power distribution lines (Both agreed to provide a report of their findings for this report).

On Wednesday, September 30, 2020, Senior Wildland Fire Investigator Terry Liebrecht and I drove to the area of the origin to forensically map the area using a total station system. I assisted Liebrecht with capturing data using a prism when needed. I also asked Liebrecht if he could determine the distance for Mr. Swiger's trailer to the area of the origin, he was able to capture the distance noting it was just under 500 yards across the open field.

During our time on scene I borrowed Liebrecht's assigned metal detector to sweep the area of the origin. In doing so I observed what appeared to be melted aluminum droppings on the east side of the wire fence located under the south edge of the overhead power distribution lines. These items were photographed, location documented and collected as evidence, items E-6 & E-7. I transported the items to the DNR Evidence Facility in Tumwater and placed into the evidence system.

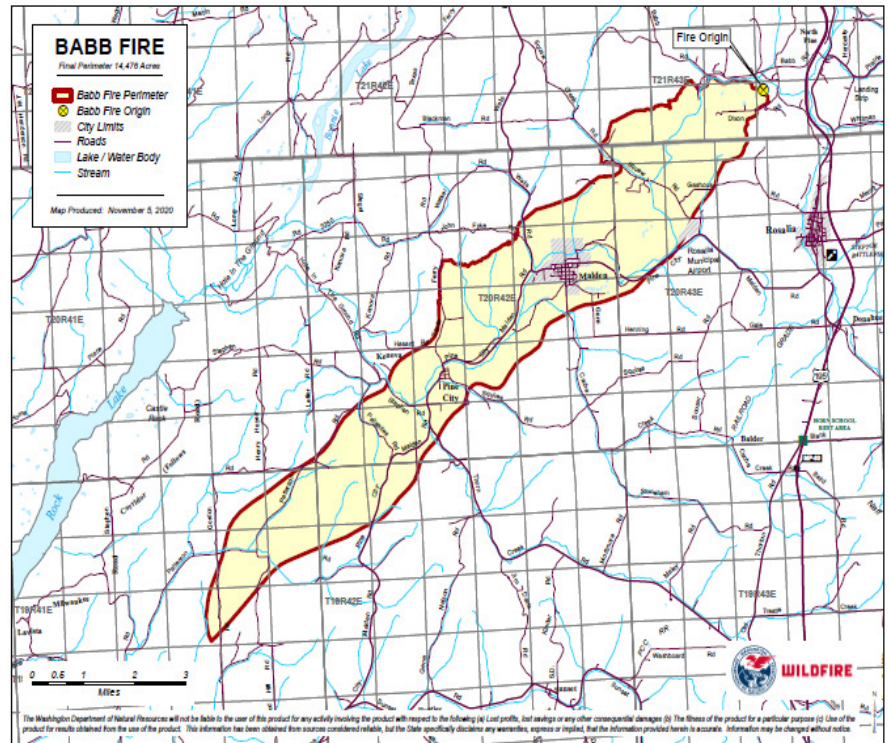
On Wednesday, November 4, 2020, I sent a request for information mailed to Avista Utility in Spokane, WA requesting distribution line data related to fluctuations of voltage, amperes and related data indicating line disruption. This request was for 30 days prior to September 7, 2020 to the time the circuit was opened, either automatically or manually. As of the submission of this report, no response to the request for information have been received.

On November 5, 2020, I received a supplemental report from DNR Engine Lead Scott Polley stating he believed the yellow flagging may have been put in by Spokane County Fire District #12 (SCFD12). However, according to SWFI McDonald, SCFD12 was not in that general area the day the fire was reported, but instead further south. Furthermore, the power pole Mr. Polley noted in his statement as being down in the trees was a separate power pole that have burned off at the base west of the origin area.

On Tuesday, March 2, 2021, I submitted a request for public records from Spokane Regional Emergency Communications (SERC) center for the Computer Aided Dispatch (CAD) log and audio call of the reporting party involved in the Babb fire. I received a call from their public records person advising they no longer had the audio recording requested. They also advised that I would have to contact the Spokane County Sheriff's Office to obtain the CAD log for the Babb fire as they are not handled by the their department. Spokane County Sheriff's Office was called and a request for requests was made to them.

On Monday, March 8, 2021, I requested Ms. Fischer's documented observations of the pine tree suspected in starting the Babb fire. On March 9, 2021, I received her report, which reflected what she advised me during her initial review of the tree.

The weather for September 7, 2020 recorded at the Turnbull remote automated weather station showed the winds begin to pick up around 8 A.M. with average wind speed of 8 MPH with gusts to 21 MPH. Near the time of fire start, the average wind speed was 18 MPH with gusts to 34 MPH out of the north northeast with an relative humidity of 29 percent and fuel temperature of 72 degrees. Historically the winds in this area are out of the southwest this time of year. The picture to the right depicts the Babb fire as a wind driven fire based on the long narrow fire perimeter. The towns of Malden and Pine City were southwest of the origin for this fire.



The Babb fire consumed approximately 15,266 acres, including residential homes, commercial businesses, local government buildings, out buildings, agricultural crops, timber, etc. The towns of Malden and Pine City were in the path of the wind driven fire on September 7, 2020, and were severely damaged.

I reserve the right to change my opinion or conclusions based on any additional information or data received.

EVIDENCE / PROPERTY

All evidence was obtained by G Margheim and is being stored at the Jones Rd Evidence Storage Facility.

- E-1 Segment of power line
- E-2 Segment of power line
- E-3A Top of Ponderosa Pine tree – Part 1 of 2
- E-3B Top of Ponderosa Pine tree – Part 2 of 2
- E-4 Segment of tree trunk – Lower Section
- E-5 Segment of tree trunk – Upper Section
- E-6 Molten piece of Aluminum located on fence
- E-7 Molten pieces of Aluminum located on ground near fence

CONCLUSION / FINDINGS

The Babb fire was observed in its early stage by a witness across from an open field who reported the fire and smoke to be approximately 40' in size at the base of trees progressing south up the hill. Upon arrival to the area I found a Ponderosa Pine tree branch on the ground under the power distribution lines with a tree flagged off.

Upon completion of the origin area examination and witness interviews, I was able to eliminate several cause categories. The National Wildfire Coordinating Group has identified nine general fire cause categories according to the ignition source or the general human activity in the where the fire originated. The nine categories are; lightning, campfire, smoking, debris burning, incendiary, equipment use, railroad, children and miscellaneous.

All nine categories were considered and using a systematic approach, a process of elimination was used, based on the known facts and details. There was no report of lightning activity on the day of the fire. There was no evidence of recreational camping or outdoor activities in the area. No evidence of smoking or similar devices were found. There were no operational railroads in the immediate area, and no evidence of incendiary devices were found. The location of the fire was not near any residences with children. No evidence of debris burning was found or reported. There was no evidence of equipment use in the immediate area of the fire. The only other cause category is miscellaneous, which includes several sub-causes. All could be eliminated except for Power lines.

An Avista Utilities power distribution line transected the origin area. A multi-dominate Ponderosa Pine tree just north of the noted power lines was found to have a large branch laying on the ground under the power lines. A branch on this tree had striations on the upper part of the branch and the upward peeling of the bark where it appeared the branch was pulled across a hard surface, such as a power line.




DNR Forest Pathologist Omdal reviewed the tree noting several multi-dominant tops, signs of stress, both previous and recent, as well as insect infestation. Forest Pathologist Omdal summed up finding as; "It is my opinion that because of the unusual configuration of this tree, and its proximity to the powerline, a closer inspection was warranted. A nearer inspection of the tree should have revealed the cut LBL ends and its previous failure, and necessitated determination of the failure potential of the adjacent LBL, implicated in starting the Babb Road Fire".

Attachments (check all that apply)

<input checked="" type="checkbox"/> Burn Ban Order	<input checked="" type="checkbox"/> Weather Observations RAWS	<input checked="" type="checkbox"/> Fire Perimeter Map	<input checked="" type="checkbox"/> Photograph Log(s)
<input type="checkbox"/> Burn Permit	<input type="checkbox"/> Fire Weather Watch	<input checked="" type="checkbox"/> Fire Origin Location Map	<input checked="" type="checkbox"/> Statement(s)
<input type="checkbox"/> Citation(s)	<input checked="" type="checkbox"/> Red Flag Warning	<input checked="" type="checkbox"/> Fire Scene Sketch	<input type="checkbox"/> Field Notes
<input type="checkbox"/> Incident Narrative	<input checked="" type="checkbox"/> WildCAD Incident Card	<input checked="" type="checkbox"/> Lightning Detection Map(s)	<input checked="" type="checkbox"/> Contacts (list)
<input checked="" type="checkbox"/> Other: Property/Evidence Control and Chain of Custody (Transfer) Form			
<input type="checkbox"/> Other: IFPL (Tool Inspection)			
<input checked="" type="checkbox"/> Other: Supplemental report from; SWFI J. McDonald, SWFI T. Liebrecht, SWFI E. DuPrey, Forest Pathologist D. Omdal, Entomologist M. Fischer			
<input type="checkbox"/> Other:			

Signatures

I, the undersigned investigator, certify under penalty of perjury under the laws of the State of Washington that the foregoing is true and accurate to the best of my knowledge.

Investigator (print): Gary Margheim, Sergeant	Signature: 	Date: 04/28/2021
Reviewed By (print): Terry Liebrecht, SWFI	Signature: 	Date: 04/23/2021
Approved By (print): Larry Raedel, Chief	Signature: 	Date: 04/26/2021



WASHINGTON DEPARTMENT OF NATURAL RESOURCES
WILDLAND FIRE INVESTIGATION REPORT
CONTACTS

Case File Number

20-V- AKV

Other Related No.

WA--NES--2151

1	Name (Last, First,	Bothman, Brian					/ Driver's License								
Gende	M	Heigh		Weigh		Eye Color		Hair Color		POB		DOB	/	/	
Site Address						City						State		Zip	
Mailing	702 SR270					City	Pullman					State	WA	Zip	99163
Email Address	brian.bothman@avistacorp.com					Phone	(509) 284-7575					Phone (Cell)	(509)863-3981		
Vehicle Make			Model		Year		Color						State/Plate	/	
Summary	Avista Utilities Local Representative								Written Statement		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
2	Name (Last, First,	Brian Swiger					/ Driver's License								
Gende		Heigh		Weigh		Eye Color		Hair Color		POB		DOB	/	/	
Site Address	1311 E Babb Rd					City	Rosalia					State	WA	Zip	99170
Mailing						City						State		Zip	
Email Address						Phone	() -					Phone (Cell)	() -		
Vehicle Make			Model		Year		Color						State/Plate	/	
Summary	Witness to fire in its infancy stage								Written Statement		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
3	Name (Last, First,	Widman, William (Bill)					/ Driver's License								
Gende		Heigh		Weigh		Eye Color		Hair Color		POB		DOB	/	/	
Site Address	1311 E Babb Rd					City	Rosalia					State	WA	Zip	99170
Mailing						City						State		Zip	
Email Address						Phone	() -					Phone (Cell)	() -		
Vehicle Make			Model		Year		Color						State/Plate	/	
Summary	Local resident where above witness resides at near barn								Written Statement		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
4	Name (Last, First,	Murto, Jeff					/ Driver's License								
Gende		Heigh		Weigh		Eye Color		Hair Color		POB		DOB	/	/	
Site Address						City						State		Zip	
Mailing						City						State		Zip	
Email Address						Phone	() -					Phone (Cell)	(509)981-2108		
Vehicle Make			Model		Year		Color						State/Plate	/	
Summary Info	Avista Utilities Line Foreman who assisted us in obtaining the two conductors								Written Statement		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
5	Name (Last, First,	Abraham, Michael					/ Driver's License								
Gende		Heigh		Weigh		Eye Color		Hair Color		POB		DOB	/	/	
Site Address	ATF Fire Research Laboratory					City						State		Zip	
Mailing						City						State		Zip	
Email Address	michael.abraham@atf.gov					Phone	() -					Phone (Cell)	(301)758-6601		
Vehicle Make			Model		Year		Color						State/Plate	/	
Summary Info	Conducted a non-destructive review of the conductors								Written Statement		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
6	Name (Last, First,	Omdal, Daniel					/ Driver's License								
Gende		Heigh		Weigh		Eye Color		Hair Color		POB		DOB	/	/	
Site Address						City						State		Zip	
Mailing						City						State		Zip	
Email Address						Phone	() -					Phone (Cell)	() -		
Vehicle Make			Model		Year		Color						State/Plate	/	
Summary Info	Inspected the tree, both on scene in Spokane Co, and segments held as evidence.								Written Statement		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				



WASHINGTON DEPARTMENT OF NATURAL RESOURCES
WILDLAND FIRE INVESTIGATION REPORT
CONTACTS

Case File Number

20-V- AKV

Other Related No.

WA--NES--2151

7	Name (Last, First,		Fischer, Melissa				/ Driver's License				
Gende	M	Heigh		Weigh		Eye Color		Hair Color		DOB	/ /
Site Address							City			State	Zip
Mailing							City	Pullman		State	WA Zip
Email Address							Phone	()		Phone (Cell)	()-
Vehicle Make				Model		Year		Color		State/Plate	/
Summary		Agency Entomologist reviewed the Ponderosa Pine on-site						Written Statement		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

8	Name (Last, First,		Polley, Scott				/ Driver's License				
Gende		Heigh		Weigh		Eye Color		Hair Color		DOB	/ /
Site Address							City			State	WA Zip
Mailing		225 S Silke Rd					City	Colville		State	WA Zip 99114
Email Address							Phone	() -		Phone (Cell)	(509) 953-3382
Vehicle Make				Model		Year		Color		State/Plate	/
Summary		DNR Engine Lead assigned to fire						Written Statement		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

9	Name (Last, First,						/ Driver's License				
Gende		Heigh		Weigh		Eye Color		Hair Color		DOB	/ /
Site Address							City			State	WA Zip
Mailing							City			State	Zip
Email Address							Phone	() -		Phone (Cell)	() -
Vehicle Make				Model		Year		Color		State/Plate	/
Summary								Written Statement		<input type="checkbox"/> Yes <input type="checkbox"/> No	

10	Name (Last, First,						/ Driver's License				
Gende		Heigh		Weigh		Eye Color		Hair Color		DOB	/ /
Site Address							City			State	Zip
Mailing							City			State	Zip
Email Address							Phone	() -		Phone (Cell)	(509)981-2108
Vehicle Make				Model		Year		Color		State/Plate	/
Summary Info								Written Statement		<input type="checkbox"/> Yes <input type="checkbox"/> No	

11	Name (Last, First,						/ Driver's License				
Gende		Heigh		Weigh		Eye Color		Hair Color		DOB	/ /
Site Address							City			State	Zip
Mailing							City			State	Zip
Email Address							Phone	() -		Phone (Cell)	()-
Vehicle Make				Model		Year		Color		State/Plate	/
Summary Info								Written Statement		<input type="checkbox"/> Yes <input type="checkbox"/> No	

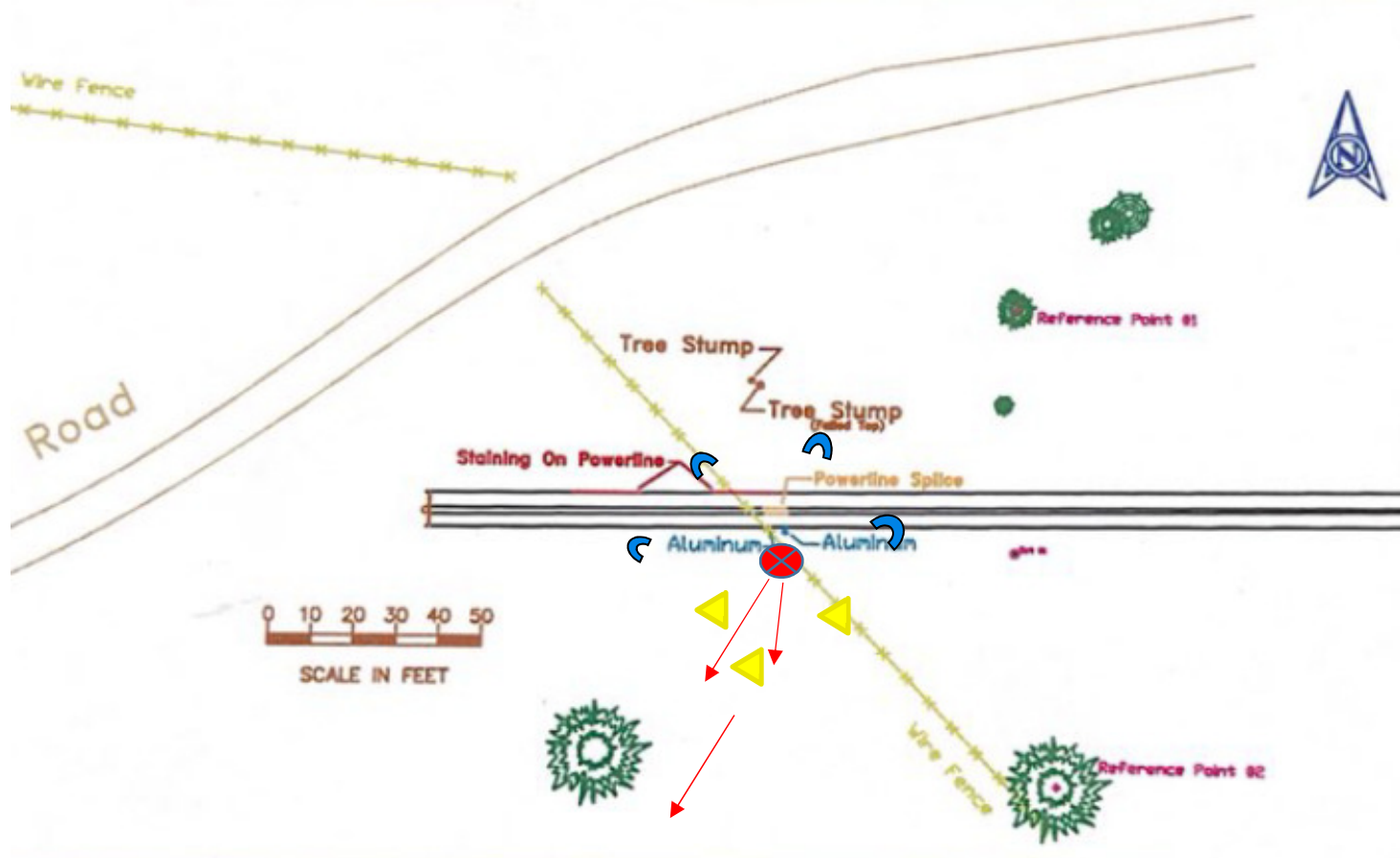
12	Name (Last, First,						/ Driver's License				
Gende		Heigh		Weigh		Eye Color		Hair Color		DOB	/ /
Site Address							City			State	Zip
Mailing							City			State	Zip
Email Address							Phone	() -		Phone (Cell)	() -
Vehicle Make				Model		Year		Color		State/Plate	/
Summary Info								Written Statement		<input type="checkbox"/> Yes <input type="checkbox"/> No	



STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES
WILDLAND FIRE INVESTIGATION
ORIGIN AREA PROGRESSION SKETCH/DIAGRAM

Case File No.
20-V- AKV
Other Related No
WA--NES--2151

(Not To Scale)



John Wayne Trail – WA State Park

Incident Name: Babb Fire

Incident Date: 09-07-2020

Drawn By: Liebrecht / Margheim

Sketch Date:

LEGEND

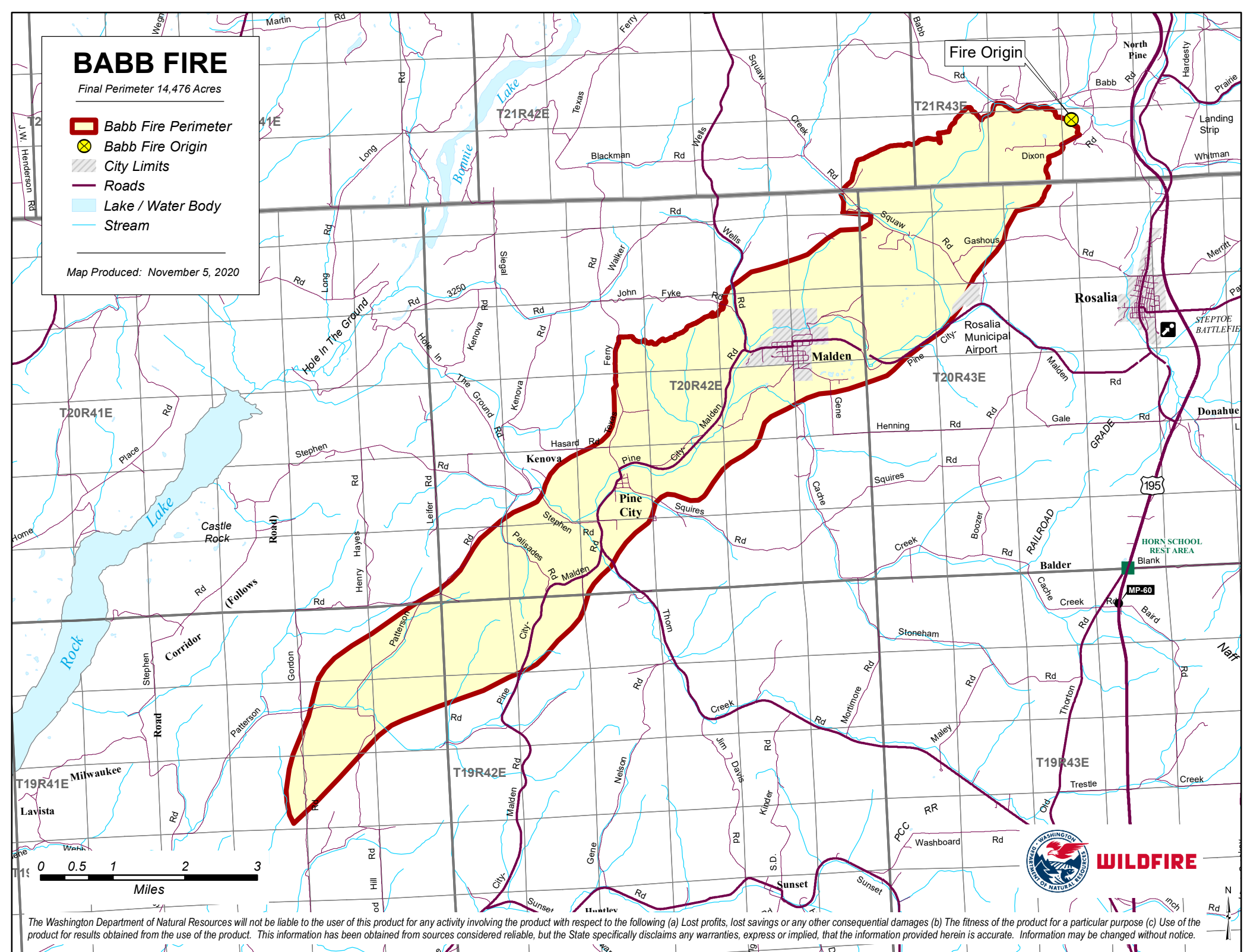
Advancing Fire Indicator	Wind (Direction/Speed)	Trail	Power line
Lateral Fire Indicator	(/)	Fence	Structure
Backing Fire Indicator	Creek	Secondary Road	Aerial Retardant Drop
Fire Perimeter	Reference Point(s)	Highway	Completed Dozer Line
Fire Origin	Spot Fire	Railroad	Completed Hand Line

BABB FIRE

Final Perimeter 14,476 Acres

-  Babb Fire Perimeter
-  Babb Fire Origin
-  City Limits
-  Roads
-  Lake / Water Body
-  Stream

Map Produced: November 5, 2020



The Washington Department of Natural Resources will not be liable to the user of this product for any activity involving the product with respect to the following (a) Lost profits, lost savings or any other consequential damages (b) The fitness of the product for a particular purpose (c) Use of the product for results obtained from the use of the product. This information has been obtained from sources considered reliable, but the State specifically disclaims any warranties, express or implied, that the information provided herein is accurate. Information may be changed without notice.



STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES
WILDLAND FIRE INVESTIGATION REPORT
PHOTO LOG

Case File No.

20--V-- AKV

Other Related No.

WA--NES--2151

Incident Name: Babb Fire

Region: Northeast

District: Arcadia

Incident Date: 9/7/2020

All Photos Taken or Received By: G. Margheim

Camera Used: Brand/Model: iPhone7

ADDITIONAL PHOTOS MAY HAVE BEEN TAKEN OF THIS FIRE, AND IF SO, THEY ARE ON FILE WITH THE INVESTIGATOR. THE PHOTOS SHOWN HERE ARE THE MOST RELEVANT TO THE INVESTIGATION. THE PHOTOS SHOWN HAVE ONLY BEEN RESIZED OR ROTATED. ALL ORIGINAL PHOTOS HAVE BEEN STORED IN THEIR ORIGINAL, UNALTERED FORMAT.



1

IMG0051 looking east/northeast at Ponderosa Pine tree that had a branch fail.



2

IMG0052 view of tree looking southeast from dirt access road off Morrow Rd.



3

IMG0053 Photo looking south



4

IMG0054 Photo looking southeast



5

IMG0056 view from power pole #045355 looking east showing trees proximity to the power lines



6

IMG0058 depicts for moving from left to right through the pine tree with angle of char indicator



7

IMG0059 view of tree and power lines with new splices looking north/northeast



8

IMG0060 pine tree looking west



9

IMG0061 closer view of failed branch



10

IMG0062 conductor left by Avista maintenance crew



11

IMG0063 Conductor left by Avista maintenance crew



12

IMG0064 Close up of IMG0063



13

IMG0065 closer view of IMG0063



14

IMG0066 center of photograph is a scrape from bottom up with hanging bark barely attached



15

IMG0067 different side of IMG0066 also showing second scrape mark on different branch



16

IMG0069 power pole number on pole west of the failed pine tree



17

IMG0071 looking north at pine tree



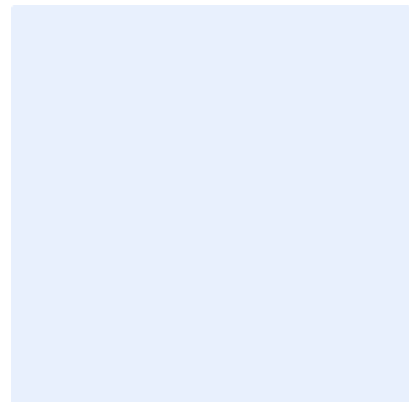
18

IMG0073 marks perpendicular to branch below tag



19

IMG0074 different view of photograph IMG0066 (14)
with attached hanging bark



20

PHOTO DESCRIPTION

Subject: Technical Assistance; Babb Road Fire

September 11, 2020

To: DNR Fire Investigation

On September 9, 2020, I met with John McDonald (Senior Wildland Fire Investigator) to inspect the tree that was purportedly the source of ignition for the Babb Road Fire. A branch from this tree reportedly failed/broke and fell against a live power line.

Examination

The tree in question was a ponderosa pine, approximately 44 years old (based upon an on-site ring count at the base of tree after the tree was felled), with multiple leaders.

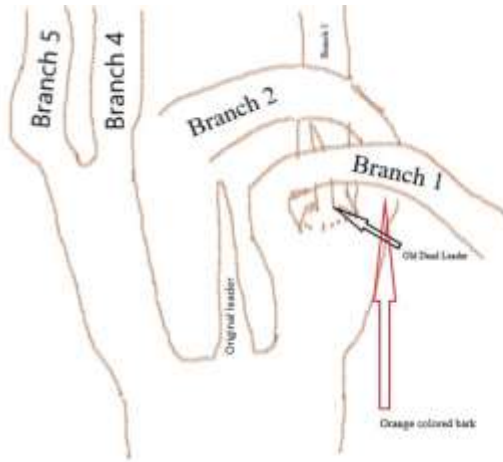


Image 1: NW view of ponderosa pine tree whose branch failed, hitting the powerline that ignited the Babb Road Fire. Babb Road is behind the tree. Note there is a second tree present on the left.



Image 2: SW view of ponderosa pine tree whose branch failed, hitting the powerline that ignited the Babb Road Fire. The powerline is behind the tree. Note the second tree present on the right.

I arbitrarily assigned numbers to the main branches of the ponderosa pine (see diagram below) for ease of assessment and discussion regarding defects located within the tree.



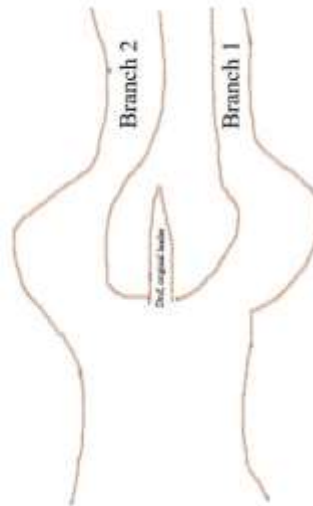
Drawing (not to scale) of the main branches of the ponderosa pine whose branch failed and struck the powerline that ignited the Babb Road Fire, facing NW. Branch 2 is the branch that failed and hit the powerline. Branch 2 fell on Branch 1, breaking that branch. Branch 1 was dead at the tip.



Branch 2 was the branch that initially failed, striking the powerline. This branch was 54 feet 10 inches in length, from the tip to the base of the tree. Branch 2 hit branch 1 when it failed, breaking that branch as well. There is no evidence that branch 1 hit the powerline.



Image 3. View of the tree facing SW, after the adjacent tree, and branches 3, 4, and 5 were removed.



Likely position of branches 1 and 2 prior to the wind event and failure of branch 2 (facing SW towards the powerline).

Initial assessment of the tree revealed several defects, including western gall rust (*Endocronartium harknessii*), porcupine damage, and areas of tension/ compression.

Evidence of western gall rust included galls on the branches (Image 4), potential cankers (compressed/ flattened areas) located on branches 2 and 4 (Image 5), and elongated/ malformed tertiary branches at the base of the crown.



Image 4. Western gall rust gall



Image 5. Pinched area denoting a potential gall rust canker on branch 4

Evidence of porcupine damage included old, dead leaders (Image 6), recent bark that had been stripped away in areas throughout the crown, and multiple tops/ leaders. Evidence of tension/ compression included orange coloration on one side of branch 2 (Image 7). Orange coloration can also denote an older ponderosa pine (> 100 years of age), but given the fact that this tree was approximately 44 years old, this orange coloration can confidently be attributed to tension/ compression.



Image 6. Old, dead leader resulting from porcupine damage



Image 7. Orange coloration of bark on one side of branch 2 denoting an area of tension/ compression

Close inspection of branch 2, the branch that failed, revealed several defects, including:

1. A compressed/ flattened area below the failure denoting a potential western gall rust canker within the branch (Images 8 and 9),
2. Orange coloration of the bark on the NW facing side (opposite side) of the failure/ split denoting an area of tension/ compression (Image 10),
3. A potential canker or old wound on the NW facing side (opposite side) of the failure/ split with resin running from the crack (Image 10),
4. Tightly compressed growth rings opposite wide rings inside the branch denoting tension/ compression (Image 11),
5. White mycelium inside of the failure point/ split on branch (Image 12) and
6. A pitch moth globule (Image 13).



Images 8 and 9. A compressed/ flattened area below the failure point on branch 2 denoting a potential western gall rust canker.



Image 10. The NW facing side of the failure/ split on branch 2 showing a potential canker or old wound. Note also the orange coloration of the bark on this side, denoting an area of tension/ compression. Resin was running from the crack.



Image 11. Tightly compressed growth rings opposite wide growth rings inside branch 2 denoting tension/ compression.



Image 12. White mycelium inside of the failure point/ split on branch 2 denoting rot.



Image 13. Pitch moth globule.

Proposed Cause of Failure:

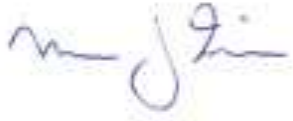
Based on the indicators present (compressed area of branch below failure, orange coloration of the bark behind the failure, tight growth rings opposite wide growth rings inside the branch) it is my opinion that branch 2 fell on the powerline during the wind event of September 7, 2020 due to a tension/ compression failure. The wound located on the opposite side of the breakage point on branch 2 was likely the entry court for the fungi/ rot found inside the branch and likely contributed to the failure of branch 2 through loss of structural integrity at that location. The pitch moth globule located on the branch would not have contributed to the failure of this branch. I pointed out its presence so that it was not confused with potential bark beetle damage.

Evidence of the potential for the failure of branch 2 would not have been easily visible from the road. Indicators such as the compressed area of the branch, orange coloration of the branch and the wound located on the NW side would have been hard to see, especially given the fact that branch 3 was likely obscuring these visuals. Indicators such as the tight rings opposite wide rings and the white mycelium inside the branch would not have been visible without cutting the branch. In order to have seen evidence of the potential for failure of branch 2, a close inspection of the tree would have to have been made.

Although the tree did not fail at a V-fork due to the presence of multiple tops, the potential for this type of failure would have been visible from the road.

Please let me know if you have further questions regarding my assessment.

Sincerely,

A handwritten signature in blue ink, appearing to read "m j fischer".

Melissa Joy Fischer, PhD

Forest Entomologist



U. S. Department of Justice

Fire Research Laboratory
BUREAU OF ALCOHOL, TOBACCO, FIREARMS AND EXPLOSIVES
6000 Ammendale Road
Beltsville, MD 20705-1250
Phone: 202-648-6200

Laboratory Report

ANAB ISO/IEC 17025:2017
Accredited Forensic Testing Laboratory

To: **Special Agent Christopher Smith**
Bureau of Alcohol, Tobacco,
Firearms and Explosives
Spokane I Field Office
1313 N Atlantic Ave, Suite 4100
Spokane, WA 99201

Date of Report: **April 26, 2021**
Lab Number: **2020-F-000032S(2)**
Reference: **787060-20-0092**
Title of Investigation: **Babb Road Fire –**
Malden, WA
Type of Exam: **Electrical**

EXAMINATION REQUEST

Evidence was examined by Electrical Engineer Michael G. Abraham on behalf of Special Agent/Certified Fire Investigator (SA/CFI) Christopher Smith. The following exhibits were retained in the custody of the Washington State Department of Natural Resources Police at their facility located at 9703 Jones Rd SW in Olympia, WA. The examination was conducted on September 20, 2020.

EXHIBITS

Exhibit #E1 Power Line Conductor

Exhibit #E2 Power Line Conductor

Exhibit #3A Top Section of a Ponderosa Pine Tree

EXAMINATION/ANALYSIS AND INTERPRETATION OF RESULTS

Two evidence items were in paper bags sealed with signed evidence tape. Within the bags were two sections of power line conductors identified as Exhibit #E1 and Exhibit #E2. The third evidence item consisted of sections of a tree with parts in a plastic bag that were identified as Exhibit 3A.

Exhibit #E1 consisted of a section of power line conductor recovered from the scene of a wildfire. Localized differential damage to the stranded conductors was observed in various locations consistent with arc melting.

Exhibit #E2 consisted of a section of power line conductor recovered from the scene of a wildfire. Localized differential damage to the stranded conductors was observed in various locations consistent with arc melting.

Exhibit #3A consisted of a section of a Ponderosa Pine Tree. A portion with thermal damage and the imprint of stranded conductors were observed.

DISCUSSION

The following background information was provided by investigators. The sections of power line conductors were recovered in the area of an agricultural access road off of Morrow Road in Spokane County, WA. The Avista utility line was serving a natural gas pumping station. Based on a review of photos from the scene, the overhead distribution line consisted of three-phase conductors and a neutral. The recovered sections of power conductor were located up stream of utility pole number 045355 in the vicinity of an approximately 58-foot-tall Ponderosa Pine tree. The power lines were setback from the tree approximately 30 feet. A portion of the tree was observed to have fallen in the area of the power lines.

CONCLUSION

The conclusions stated in this report are applicable only to the items examined.

The observed damage to the section of the tree with the imprint is consistent with the tree coming into contact with an energized power line

The tree contacting an energized conductor can cause it contact another energized conductor or the system neutral, resulting in arcing. Sparks produced by arcing can be a suitable ignition source for a variety of fuels including brush and other wildland vegetation.


PHOTOGRAPHS, IMAGES AND/OR VIDEO

Photographs, radiographic (X-ray) images and/or video taken during the examination are stored in the FRL's data retrieval system, FireTOSS. A log of the photographs, images and/or videos stored in FireTOSS is provided in the Appendix of this report.

DISPOSITION OF EXHIBITS


All exhibits were retained by the Washington State Department of Natural Resources Police.

Case Engineer:

 Digitally signed by
MICHAEL ABRAHAM
Date: 2021.04.26
16:36:34 -04'00'


Michael G. Abraham, P.E.
Electrical Engineer
ATF Fire Research Laboratory

Approved by:

 Digitally signed by
JEREMY NEAGLE
Date: 2021.04.30
13:41:13 -04'00'

Jeremy Neagle, P.E.
Acting Chief, Engineering Section
ATF Fire Research Laboratory

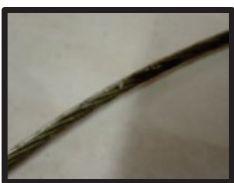
Reviewer:

 Digitally signed by
CAMERON NOVAK
Date: 2021.04.27
09:59:58 -05'00'

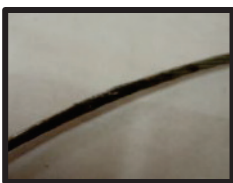
Cameron J. Novak, P.E.
Electrical / Fire Research Engineer
ATF Fire Research Laboratory



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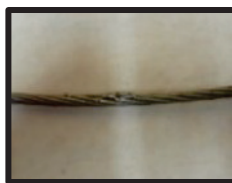
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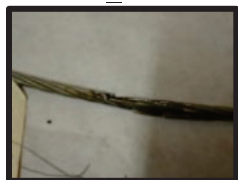
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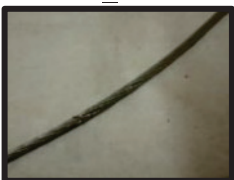
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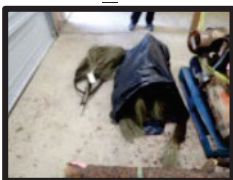
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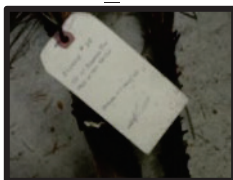
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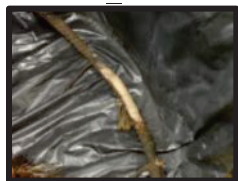
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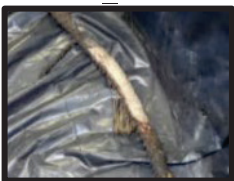
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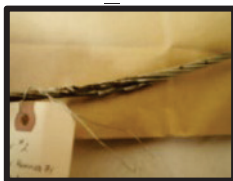
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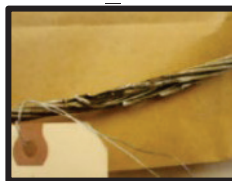
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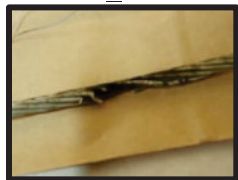
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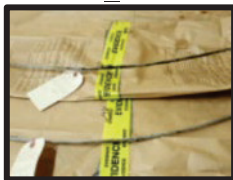
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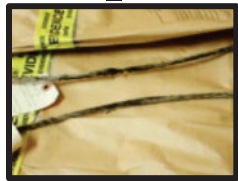
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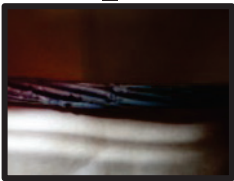
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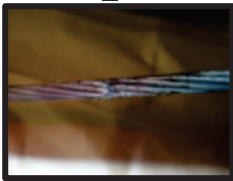
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144323_604924



STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES

WILDLAND FIRE INVESTIGATION SUPPLEMENTAL REPORT

Fire Name	Case File No.	Region	Program
Babb	20 -V- AKV	North East Region	221-AKV
Report By: SWFI E. DuPrey INV (t)		Lead Investigator: Sgt. G. Margheim	Incident Date: 09/07/2020
Other Officer(s):			Ref. Case No.

DETAILS

On Monday, September 7, 2020, at approximately 11:59 a.m., a wildfire was discovered burning approximately 2.1 miles northwest of Rosalia, Washington, in southern Spokane County. The wildland fire was designated as the Babb Fire.

On Tuesday, September 8, 2020, I responded to the Babb Fire to assist Department of Natural Resources (DNR) Sgt. Margheim with the wildfire origin and cause investigation. Sgt. Margheim was my assigned mentor and under his guidance I assisted him with the investigation.

At approximately 3:25 p.m., Sgt. Margheim and I arrived in the general vicinity of East Babb Road. We made contact with a gentleman, later identified as Mr. Douglas Swiger located by a 5th wheel trailer next to a large barn located on the south side of Babb Road (1311 E. Babb Road, Spokane County, Washington). Sgt. Margheim made initial contact with Mr. Swiger to inquire if he had knowledge where the wildfire had started. Sgt. Margheim was able to obtain that Mr. Swiger was a witness reference the Babb Fire, and agreed to discuss what he witnessed on the day of the fire.

Mr. Swiger stated that he was sitting outside of his 5th wheel trailer most of the day on Monday monitoring the property due to the high winds. Mr. Swiger stated that a friend stopped by his residence and while they were having a conversation, he saw smoke to the south of his location in the trees below a trail identified as the Milwaukee Railroad Corridor-John Wayne Trail. Mr. Swiger pointed to the south of our location where he first saw the smoke. The area that he pointed to was located south of a barley field. Mr. Swiger stated that his friend use their cell phone to call 911 to report the fire.

Mr. Swiger stated the fire had spread into the tree line at the base of the hill which leads up to the John Wayne Trail. Mr. Swiger estimated the size of the fire to be approximately 40 foot in diameter and was rapidly spreading towards the south.

Mr. Swiger suggested that Sgt. Margheim speak to the landowner of the property Mr. Widman. Sgt. Margheim walked across the street and met with Mr. Widman. I remained with Mr. Swiger and obtain a written statement. As Mr. Swiger filled out the statement form he stated that he was the caretaker of the property and that he enjoyed the view of the countryside where the fire started. Mr. Swiger stated that he had not observe any human activity in that area within the past two weeks, nor did he hear any explosions, gunshots and/or fireworks. I obtained a written statement from Mr. Swiger.

I met with Sgt. Margheim and a gentleman identified as Mr. Bill Widman. Sgt. Margheim briefed me that Mr. Widman is the property owner of 1311 E. Babb Road. Mr. Widman had informed Sgt. Margheim that he had been over to an area that he believes is the area of the origin. Mr. Widman described a tree with yellow ribbon around it next to the power lines. Mr. Widman stated that he was retired from Inland Power and Light Company. Mr. Widman provided me with a voluntary hand written statement.

While at the Widman's property, a female identified herself as Ms. Linda Pritchett had pulled up to my vehicle and wanted to speak to me about the fire. Ms. Pritchett stated that she had information on the fire. Ms. Pritchett said she went outside after she lost power at her residence looking for down power lines around her property due to the high wind gusts. She immediately saw smoke south of her address. She drove to a bridge located on Morrow Road to investigate where the smoke was coming from. She pointed to the same location provided by the other witnesses and stated that she took a short video from the bridge located northeast of where the fire had started. She did not witness the fire actually start and

had only been told the fire was caused by a tree into power lines by neighbors. Ms. Pritchett, via e-mail, was able to send a copy of the short video of the smoke and fire she observed advancing to the southwest. (See Photo File)

I followed Sgt. Margheim to the area pointed out by the witnesses. We drove south on So. Morrow Road from Babb Road, across a bridge. On the westside of So. Morrow Road we located a dirt access road that ran in a general east/west direction primarily used for agricultural purposes.

I made the following observations concerning the general area. The area was rural agricultural land that supported dry land farming. Between the cleared agricultural lands were areas that supported timber growth. The dirt track road separated a barley field to the north and timber land with Ponderosa Pine Trees, seasonal grasses and shrubs to the south. An overhead power distribution line ran parallel to a dirt road to the south and eventually crossed over the dirt road to the north. Further to the south and mid-way up the hill was the Milwaukee Railroad Corridor, also known as the John Wayne Trail.

On the southside of the dirt access road there was an area that was marked off with yellow fire line barrier tape. Inside the flagged off area was a multi-topped Ponderosa Pine tree. A portion of the tree bent to the south in the direction of the overhead power lines. I observed that the top of the tree was resting on the ground under the power distribution lines. There was a second Ponderosa Pine located right next to the first noted tree to the northwest.

Sgt. Margheim and I observed the power distribution lines adjacent to the tree were still intact and attached to the east and west power poles. Sgt. Margheim pointed out an area just east of the flagged area that appeared to be recently created access point. Sgt. Margheim believed that the access point may have been suppression crews accessing the power line right-of-way.

Sgt. Margheim and I observed a power pole to the west of our location that was resting on the ground and the lower portion of the wood pole was missing.



(Photo taken westside of the fire scene of showing fallen tree and power lines)

As we were preparing to conduct our wildland fire investigation in the fire scene, a representative from Avista Utilities drove up to our location and introduced himself as Brian Bothman. Mr. Bothman was able to inform us that the distribution line fed the natural gas pump station located northwest of our location. Sgt. Margheim asked Mr. Bothman when this section of right-of-way had been inspected as part of vegetation management assessment. Mr. Bothman stated that Asplundh Tree Service had just been through the area in May or June of this year. Mr. Bothman provided information reference the right-of-way as being 10 feet each side of the center making it a 20 foot right-of-way. Mr. Bothman stated that the distribution lines we were working around were de-energized.

Sgt. Margheim and I observed that the overhead distribution lines consisted of four lines supported by wood poles. I observed that the wires were supported by a cross arm attached to the wood poles. Sgt. Margheim stated that these electrical power distribution lines are often referred to as conductors as the electrical power passes from one point to another.

I was able to observe the missing portions of the twisted wires that Sgt. Margheim described to me when he was checking the lines. I was able to observe dark/black discoloration on those lines near where the damage had occurred on the conductors. I was able to observe damage and discoloration located on the lower conductor in line with the other two conductors. Both power poles located on either side of the conductor were upright and none of the wires appeared to have come to the ground after coming in contact with the tree.

Since we had no knowledge who had placed the yellow ribbon around the pine tree, Sgt. Margheim tasked me with the origin determination. First responders usually use ribbon to protect an origin area for wildfire investigative purposes. Sgt. Margheim tasked me with the origin determination.

Sgt. Margheim and I walked along the dirt access road west of the flagged tree. We were reviewing the macroscale fire pattern indicators located along the road to the hillside. Sgt. Margheim observed a large Ponderosa Pine tree located near the base of the south hill that is southwest of the flagged off area. The Ponderosa Pine tree showed advancing macroscale fire pattern indicator of angle of scorch indicating that the fire was heading in a southwest direction at that point.

We walked south in a counter-clockwise direction towards the large Ponderosa Pine tree. Sgt. Margheim and I observed backing fire pattern indicators that transitioned to lateral fire pattern indicators. The fire pattern indicators consisted of angle of char, protection, and grass stems.

We continued south where we observed lack of grass stem where the grass fuels were consumed in a high intensity forward run indicating we were in the advancing fire. We were located between the Ponderosa Pine tree that displayed angle of scorch and the flagged off area. Approximately within a 10 foot area we observed two advancing fire indicators that were separated by lateral transition. The fire indicators in the transition zones consisted of standing grass stems and angle of char. As we proceeded southeast in a counter-clockwise direction we began observing lateral fire patterns transition into backing fire indicators. We stopped at the barbwire fence that ran from the southside of the access road in a southeast direction. We reached the barbwire fence and we turned around to verify the fire pattern indicators we had observed.

Sgt. Margheim and I walked the access road to the east from the flagged area following the fire pattern indicators. The fire pattern indicators along the road located north/northwest of the flagged area we observed backing indicators. The fire pattern indicators consisted of protection and grass stems. We walked up the recently created path just east of the flagged off area to review the burn indicators on both sides of the access point. We observed more backing indicators, consisting of protection around the grass clumps and grass stems. We walked to the southwest towards the barbwire fence in a clockwise direction where the backing indicators transitioned into lateral fire indicators. The fire pattern indicators were protection, angle of char, and grass stems. At the fence we stopped and walked back to verify the indicators observed. I also noted that the fence did not have an electric fence controller anywhere on this section of the degrading fence line.

Sgt. Margheim and I determined that the fire progressed out of the flagged off area noting that as our general origin area. We proceed to walk back to where the fire had advanced on the southwest side of the fence line. Working from the advancing fire patterns indicators, we walked in a zig-zag pattern following the advancing indicators that transitioned with lateral fire pattern indicators as we worked towards the origin area of the fire. We worked both of the advancing runs following the fire indicators towards the fence. When we reached the fence, I checked the wires on the fence to determine the direction of the fire progression through the fence wires. We observed sooting on the barbwire fence on the side of the flagged off area indicating that the fire advanced through the area from the northeast to the southwest. I used my pointer/index finger (inside fence) and thumb (flag side of fence) the soot was on my thumb which confirm our observations on the fire direction heading from northeast to southwest. We continued to check the fence line in other areas and we did not observe the amount of sooting on the northeast side of the wires where the backing or lateral

indicators were noted.

We crossed the fence line walking in a zig-zag pattern in the area where we left off. The fire pattern indicators became microscale indicators indicating that we were getting closer to the origin area. We walked to the north side of the fire just south of the access road. We began reviewing the fire pattern indicators slowly working back towards the advancing fire indicators. The fire pattern indicators were protection, cupping and grass stems that continued south to about where the top of the branches rested on the ground from the fallen tree. We determined that we were in the specific origin area. Within the specific origin area we had to work around the branch on the ground. I reviewed the burn indicators and conveyed to Sgt. Margheim what I was seeing. The microscale fire pattern indicators consisted of protection, cupping, grass stems, sooting on rocks. We determined that the specific origin area as being approximately 6'-8' in size and that the ignition area was within this area. I used a magnet in the ignition area using a systematic pattern which overlaps to ensure entire area is covered by the magnet surface and was consistently checked on each pass to identify any objects collected and where the item came from. No ferrous metals were taken as evidence. I used colored pin flagging to mark the fire indicators. Red for advancing, yellow for lateral, and blue for backing. I photographed and produced a Wildland fire sketch of the Babb Road Fire.

While I was working the specific origin area, Sgt. Margheim was examining the top of Ponderosa Pine Tree and pointed out a branch that had hanging bark that appeared to have come in contact with something.

Mr. Bothman returned to the area along with Avista Utility Foreman Jeff Murto. Sgt. Margheim requested that whatever parts of the conductor they removed be released to us for our investigation. Mr. Bothman could not provide a time when a crew would be in the area but agreed to place the conductors within the yellow ribbon area.

On Wednesday, September 9, 2020 at approximately 11:00 a.m., while assisting with the ongoing investigation into the Babb fire, the property representative identified as Mr. Richard C. Schmidt made contact with me near the fire scene. Mr. Schmidt verbally consented to the tree being removed from his father's property for our investigation. Mr. Schmidt stated that he is in charge of the property and has power of attorney over his elderly father's estate. Mr. Schmidt stated that he never received a letter, phone call or in person contact from either Avista or Asplundh reference removal of any trees on his property located near power lines. Mr. Schmidt stated that he always had been concerned that some of the trees were extremely close to the power lines. He stated that he was surprised that the trees had not been removed by the power company prior to this date.

Avista Utility work crew assisted in cutting the tree down. Portion of the tree and sections of the power line wires were taken as evidence by Sgt Margheim at the scene.

On September 10, 2020 at approximately 1:09 p.m., I being the DNR evidence custodian for wildfire investigations, met with Sgt. Margheim to process evidence from the Babb Fire to be stored at the Jones Road Evidence Facility. I assisted Sgt. Margheim in packaging the conductors in paper evidence bags. We made sure the evidence was properly tagged and logged into the evidence log book. The evidence was placed in a secured area within the Jones Road Evidence Facility.

On November 10, 2020 at approximately 10:46 a.m., I took custody of additional evidence related to the Babb Fire from Sgt. Margheim to be stored at the Jones Road Evidence Facility.

ATTACHMENTS

Wildland Fire Sketch /Witness Statements/Photo Log

CONTACTS**Witness**

Swiger, Douglas (Doug) DOB: 3-06-1950
1311 E. Babb Road
Rosalia, Washington 99710
(509)288-0368

Witness

Widman, William (Bill) DOB: 1-03-1951
1311 E. Babb Road
Rosalia, Washington 99170
(509) 270-7024

Witness

Pritchett, Linda E DOB: 4-13-1975
41911 South Morrow Road
Rosalia, Washington 99170
(509)339-4068

Avista Utilities**Local Rep-Tekoa-Rosalia**

Bothman, Brian
5702 SR 270
Pullman, Washington 99153
(509)863-3981
Brian.Bothman@avistacorp.com

Property Representative

Schmidt, Richard Charles "Chuck" DOB: 08/06/1958
2110 E. Babb
Rosalia, Washington 99170
(509)994-2133

Submitted By:

I, the undersigned investigator, certify under penalty of perjury under the laws of the State of Washington that the foregoing is true and accurate to the best of my knowledge.

_____

05/11/2021

Date

Name: Eugene J. DuPrey

Title: Senior Wildland Fire Investigator

Phone: (360)529-7370



STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES
WILDLAND FIRE INVESTIGATION SUPPLEMENTAL REPORT

Fire Name Babb Road Fire	Case File No. 20 -V- AKV	Region Northeast	Program 221
Report By: T. Liebrecht		Lead Investigator: Sgt. G. Margheim	Incident Date: 09/07/2020
Other Officer(s): J. McDonald, G. DuPrey			Ref. Case No. NES-2151

DETAILS

On Monday, September 7, 2020, at approximately 11:59 a.m., a wildland fire was discovered burning approximately 2.1 miles northwest of Rosalia, Washington, in southern Spokane County. The wildland fire was reported to the Spokane County Emergency Dispatch Center. Local and state firefighting resources were dispatched to the area of the wildland fire. The wildland fire was designated as the Babb Road Fire.

On Wednesday, September 30, 2020, Sergeant G. Margheim and I contacted the General Origin Area (GOA) of the Babb Road Fire. Sergeant Margheim had requested assistance with mapping and measuring the Babb Road Fire. We access the GOA via a dirt road that ran west from So. Morrow Road. The GOA was approximately .35 miles from So. Morrow Road.

Upon arrival at the GOA, I made the following mental observations of the area. The GOA was located to the south of the dirt road. On the north side of the dirt road was an open dry land crop field that had been harvested. There was a post/wire fence through the GOA, which ran in a northwest/southeast direction. The GOA was located at the base of a hill that rose toward the south. Approximately mid slope was the John Wayne Pioneer Trail (Formerly the Milwaukee Railroad grade).

On the south side of the dirt road was feral land that supported standing timber and natural vegetation found in eastern Washington consisting of seasonally dry grasses, small bushes and brush. There was an overhead electrical power distribution line that ran generally east/west, through the GOA.



(Looking South at the GOA – Google Earth Photograph)

After gathering a mental image of the general area, Sgt. Margheim related the following details concerning his wildland fire investigation of the Babb Road Fire. His investigation had determined that a multiple top pine tree, growing to the north of the overhead powerlines had one of the co-dominant tops failed in a high wind event. The broken top fell into the overhead powerlines, causing the fire.

To the north of the overhead powerlines were two stumps. Both trees had been cut off and were lying to the southwest of the stumps. Sgt. Margheim stated that one of the co-dominant multiple tops had come into contact with the power lines. The portion of the tree had been in contact with the power lines had been taken and was currently being held in the DNR evidence system.

During the walk around I noted that the overhead electrical power distribution lines consisted of a total of four wires. Three wires were all at roughly the same height, the fourth wire was suspended much lower. Two of the power lines had splice connectors and one of the powerlines had a black discoloration.

After completing our walk through of the GOA, I then set up the Sokkia Set 5/30R Total Station. The unit was set up in an area to the southeast of the GOA. Two reference points (RP) were established at the base of two separate pine trees. RP1 was located to the north of the set point, RP2 was located to the south of the set point.

The GOA and the surrounding area were then mapped and measured utilizing the Sokkia Set 5/30R Total Station. All the measurements were captured and stored on the Trimble Electronic Data Recorder and later downloaded to create an electronic diagram.

Sgt. Margheim requested the electric power lines be mapped and measured. For purpose of diagram identification, the top three power lines were numbered 1, 2, and 3, with the lower power line being number as 4. The top three power lines were identified as 1 being the power line on the north side, 2 being the center power line, and number 3 being the south power line.

Power lines 2 and 4 had splice connectors. There were two splice connectors on each line, approximately 5 ½ feet apart. The wire between the splice connectors appeared to be new wire as it did not display the normal weathering appearance. Power line number 1 had dark colored spots and sections, similar to sooting or staining from being close to an open flame. These items of interest were measured.

After the items of interest to the Babb Road Fire had been mapped and measured, we did a close examination of the GOA and the surrounding area. An area was located that contained small pieces of aluminum metal that had melted and then cooled lying on the ground. These molted pieces of aluminum were located on the east side of the post/wire fence, almost directly under the overhead power lines. A small piece of melted aluminum was also located on one of the metal strands of the wire fence. These items were marked, photographed, and mapped and measured. I then assisted Sgt. Margheim with gathering the items.

This completed my on-scene involvement. The electronic data gather using the Sokkia Set 5/30R Total Station was downloaded and an electronic diagram of the scene was generated. Utilizing the measurements recorded, I also generated a scale diagram and side view of the scene. The side view of the scene would provide a view from the east side of the scene, looking towards the west.

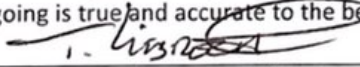
This concluded my involvement with the Babb Road Fire investigation.

ATTACHMENTS

1. AutoCad overhead diagram of the Babb Road Fire.
2. AutoCad side view diagram of the Babb Road Fire (from the east/looking towards the west)
3. Photo Logs

Submitted By:

I, the undersigned investigator, certify under penalty of perjury under the laws of the State of Washington that the foregoing is true and accurate to the best of my knowledge.



Signature

October 12, 2020

Date

Name: T. Liebrecht

Title: Senior Wildland Fire Investigator

Phone: (509) 607-0981



STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES
WILDLAND FIRE INVESTIGATION REPORT
PHOTO LOG

Case File No.

20-V- AKV

Other Related No

WA-NES-2151

Incident Name: Babb Road Fire

Region: Northeast

District: Arcadia

Incident Date: 09/07/2020

All Photos Taken or Received By: T. Liebrecht

Camera Used: Brand/Model: Nikon D3200

Photo Log Start Date & Time: 09/30/2020 at : ☐ AM ☐ PM

Photo Log End Date & Time: 09/30/2020 at : ☐ AM ☐ PM



1

DSC 01-Looking west



2

DSC 02-Looking west at the GOA



3

DSC 03 – Looking West



4

DSC 04 – Looking Southwest

ADDITIONAL PHOTOS MAY HAVE BEEN TAKEN OF THIS FIRE, AND IF SO, THEY ARE ON FILE WITH THE INVESTIGATOR. THE PHOTOS SHOWN HERE ARE THE MOST RELEVANT TO THE INVESTIGATION. THE PHOTOS SHOWN HAVE ONLY BEEN RESIZED OR ROTATED. ALL ORIGINAL PHOTOS HAVE BEEN STORED IN THEIR ORIGINAL, UNALTERED FORMAT.



5
DSC 05- Looking Northwest



6
DSC 06 – Looking Northwest/Reporting Party's location



7
DSC 07 – Looking West at the GOA



8
DSC 08 – Looking West

ADDITIONAL PHOTOS MAY HAVE BEEN TAKEN OF THIS FIRE, AND IF SO, THEY ARE ON FILE WITH THE INVESTIGATOR. THE PHOTOS SHOWN HERE ARE THE MOST RELEVANT TO THE INVESTIGATION. THE PHOTOS SHOWN HAVE ONLY BEEN RESIZED OR ROTATED. ALL ORIGINAL PHOTOS HAVE BEEN STORED IN THEIR ORIGINAL, UNALTERED FORMAT.



9
DSC 09 – Looking South



10
DSC 010 – Looking South



11
DSC 011 – Looking East



12
DSC 012 – Looking East

ADDITIONAL PHOTOS MAY HAVE BEEN TAKEN OF THIS FIRE, AND IF SO, THEY ARE ON FILE WITH THE INVESTIGATOR. THE PHOTOS SHOWN HERE ARE THE MOST RELEVANT TO THE INVESTIGATION. THE PHOTOS SHOWN HAVE ONLY BEEN RESIZED OR ROTATED. ALL ORIGINAL PHOTOS HAVE BEEN STORED IN THEIR ORIGINAL, UNALTERED FORMAT.



13
DSC 013 – Looking East



14
DSC 014 – Looking Northeast



15
DSC 015 – Looking West at the stumps



16
DSC 016 – looking West at the stumps

ADDITIONAL PHOTOS MAY HAVE BEEN TAKEN OF THIS FIRE, AND IF SO, THEY ARE ON FILE WITH THE INVESTIGATOR. THE PHOTOS SHOWN HERE ARE THE MOST RELEVANT TO THE INVESTIGATION. THE PHOTOS SHOWN HAVE ONLY BEEN RESIZED OR ROTATED. ALL ORIGINAL PHOTOS HAVE BEEN STORED IN THEIR ORIGINAL, UNALTERED FORMAT.



17

DSC 017 – Looking East at the stumps



18

DSC 018 – looking South at the GOA



19

DSC 019 – Looking South at the GOA



20

DSC 020 – Looking East at the GOA

ADDITIONAL PHOTOS MAY HAVE BEEN TAKEN OF THIS FIRE, AND IF SO, THEY ARE ON FILE WITH THE INVESTIGATOR. THE PHOTOS SHOWN HERE ARE THE MOST RELEVANT TO THE INVESTIGATION. THE PHOTOS SHOWN HAVE ONLY BEEN RESIZED OR ROTATED. ALL ORIGINAL PHOTOS HAVE BEEN STORED IN THEIR ORIGINAL, UNALTERED FORMAT.



STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES
WILDLAND FIRE INVESTIGATION REPORT
PHOTO LOG

Case File No.

20-V- AKV

Other Related No

WA-NES-2151

Incident Name: Babb Road Fire

Region: Northeast

District: Arcadia

Incident Date: 09/07/2020

All Photos Taken or Received By: T. Liebrecht

Camera Used: Brand/Model: Nikon D3200

Photo Log Start Date & Time: 09/30/2020 at : ☐AM ☐PM

Photo Log End Date & Time: 09/30/2020 at : ☐AM ☐PM



1

DSC 021 – Looking East at the GOA



2

DSC 022 – Looking North at the GOA



3

DSC 023 – Looking North at the GOA



4

DSC 024 – Looking North at the GOA

ADDITIONAL PHOTOS MAY HAVE BEEN TAKEN OF THIS FIRE, AND IF SO, THEY ARE ON FILE WITH THE INVESTIGATOR. THE PHOTOS SHOWN HERE ARE THE MOST RELEVANT TO THE INVESTIGATION. THE PHOTOS SHOWN HAVE ONLY BEEN RESIZED OR ROTATED. ALL ORIGINAL PHOTOS HAVE BEEN STORED IN THEIR ORIGINAL, UNALTERED FORMAT.



5

DSC 025 – Looking Northwest at the GOA



6

DSC 026 – Looking Northwest at the GOA



7

DSC 027 – Looking at the Aluminum droppings



8

DSC 028 – Looking at the Aluminum Droppings

ADDITIONAL PHOTOS MAY HAVE BEEN TAKEN OF THIS FIRE, AND IF SO, THEY ARE ON FILE WITH THE INVESTIGATOR. THE PHOTOS SHOWN HERE ARE THE MOST RELEVANT TO THE INVESTIGATION. THE PHOTOS SHOWN HAVE ONLY BEEN RESIZED OR ROTATED. ALL ORIGINAL PHOTOS HAVE BEEN STORED IN THEIR ORIGINAL, UNALTERED FORMAT.



9
DSC 029 – Aluminum Droppings



10
DSC 030 – Aluminum on the fence wire



11
DSC 031 – Aluminum on the wire fence



12
DSC 032 – Aluminum Dropping on the Ground

ADDITIONAL PHOTOS MAY HAVE BEEN TAKEN OF THIS FIRE, AND IF SO, THEY ARE ON FILE WITH THE INVESTIGATOR. THE PHOTOS SHOWN HERE ARE THE MOST RELEVANT TO THE INVESTIGATION. THE PHOTOS SHOWN HAVE ONLY BEEN RESIZED OR ROTATED. ALL ORIGINAL PHOTOS HAVE BEEN STORED IN THEIR ORIGINAL, UNALTERED FORMAT.



13
DS 033 – Aluminum Dropping on the Ground



14
DSC 034 – Aluminum on the Ground



15
DSC 035 – Aluminum on the Ground



16
DSC 036 – Aluminum on the Ground

ADDITIONAL PHOTOS MAY HAVE BEEN TAKEN OF THIS FIRE, AND IF SO, THEY ARE ON FILE WITH THE INVESTIGATOR. THE PHOTOS SHOWN HERE ARE THE MOST RELEVANT TO THE INVESTIGATION. THE PHOTOS SHOWN HAVE ONLY BEEN RESIZED OR ROTATED. ALL ORIGINAL PHOTOS HAVE BEEN STORED IN THEIR ORIGINAL, UNALTERED FORMAT.



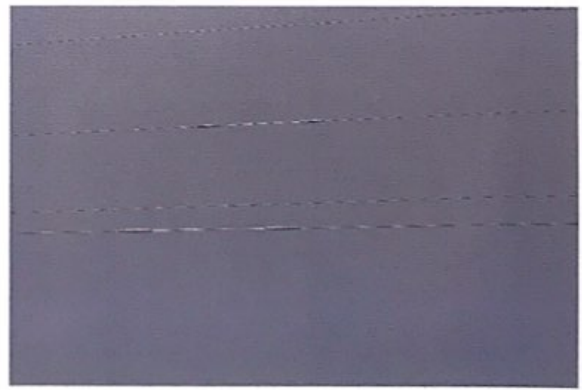
17
DSC 037 – Aluminum on the Ground



18
DSC 038 – Aluminum on the wire fence



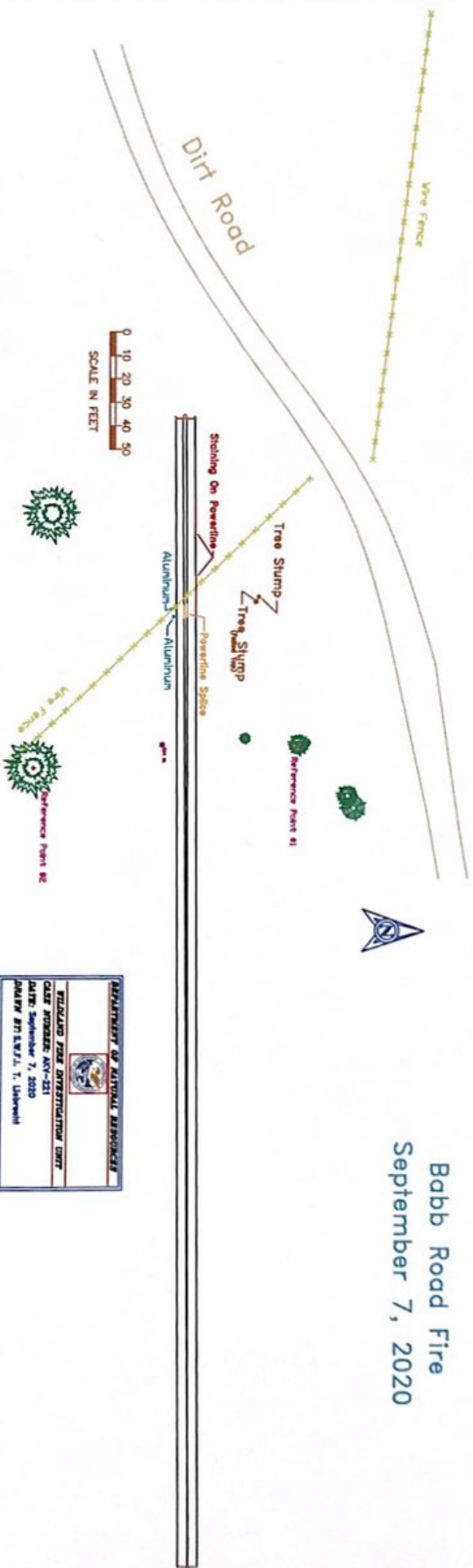
19
DSC 039 – Aluminum on the wire fence



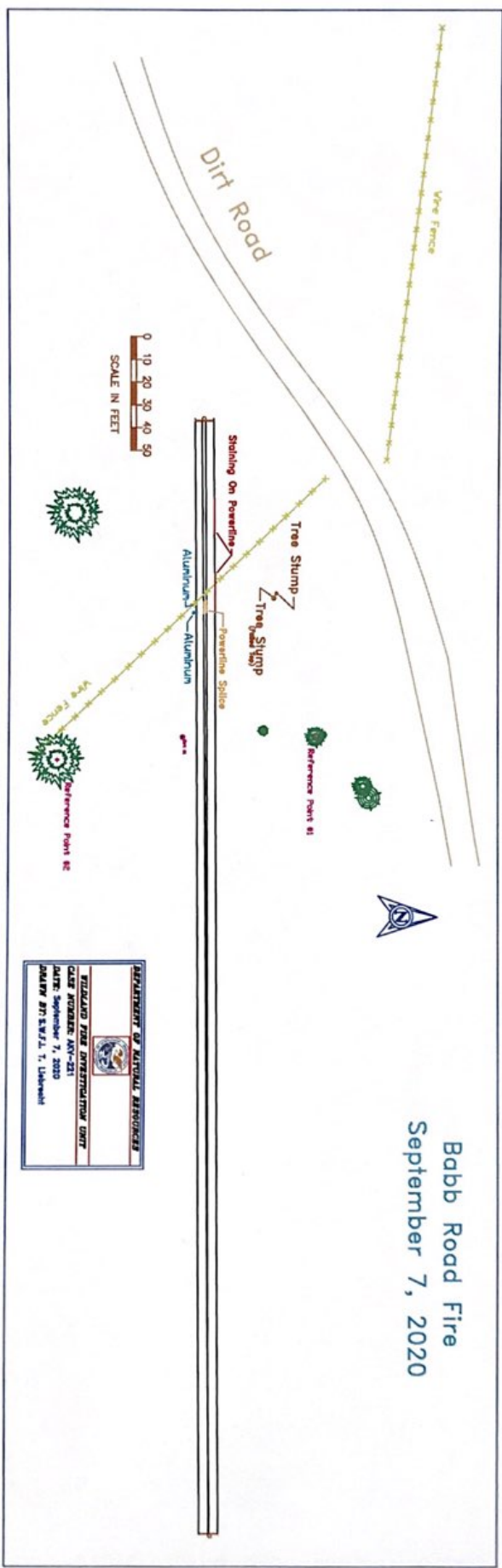
20
DSC 040 – Overhead Power Lines/Splicer Connectors

ADDITIONAL PHOTOS MAY HAVE BEEN TAKEN OF THIS FIRE, AND IF SO, THEY ARE ON FILE WITH THE INVESTIGATOR. THE PHOTOS SHOWN HERE ARE THE MOST RELEVANT TO THE INVESTIGATION. THE PHOTOS SHOWN HAVE ONLY BEEN RESIZED OR ROTATED. ALL ORIGINAL PHOTOS HAVE BEEN STORED IN THEIR ORIGINAL, UNALTERED FORMAT.

Babb Road Fire September 7, 2020



Babb Road Fire September 7, 2020





Reference Point #1

Tree Stump

Tree Stump
(Failed Top)

Staining On Powerline

Powerline Splice

Aluminum

Set #1



Wire Fence



Reference Point #2



Reference Point #1

Tree Stump
(Failed Top)

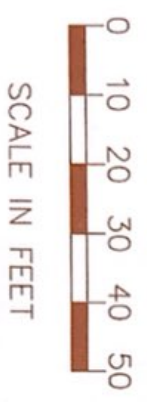
Tree Stump

Staining On Powerline

Powerline Splice

Aluminum

Set #1



SCALE IN FEET

Wire Fence

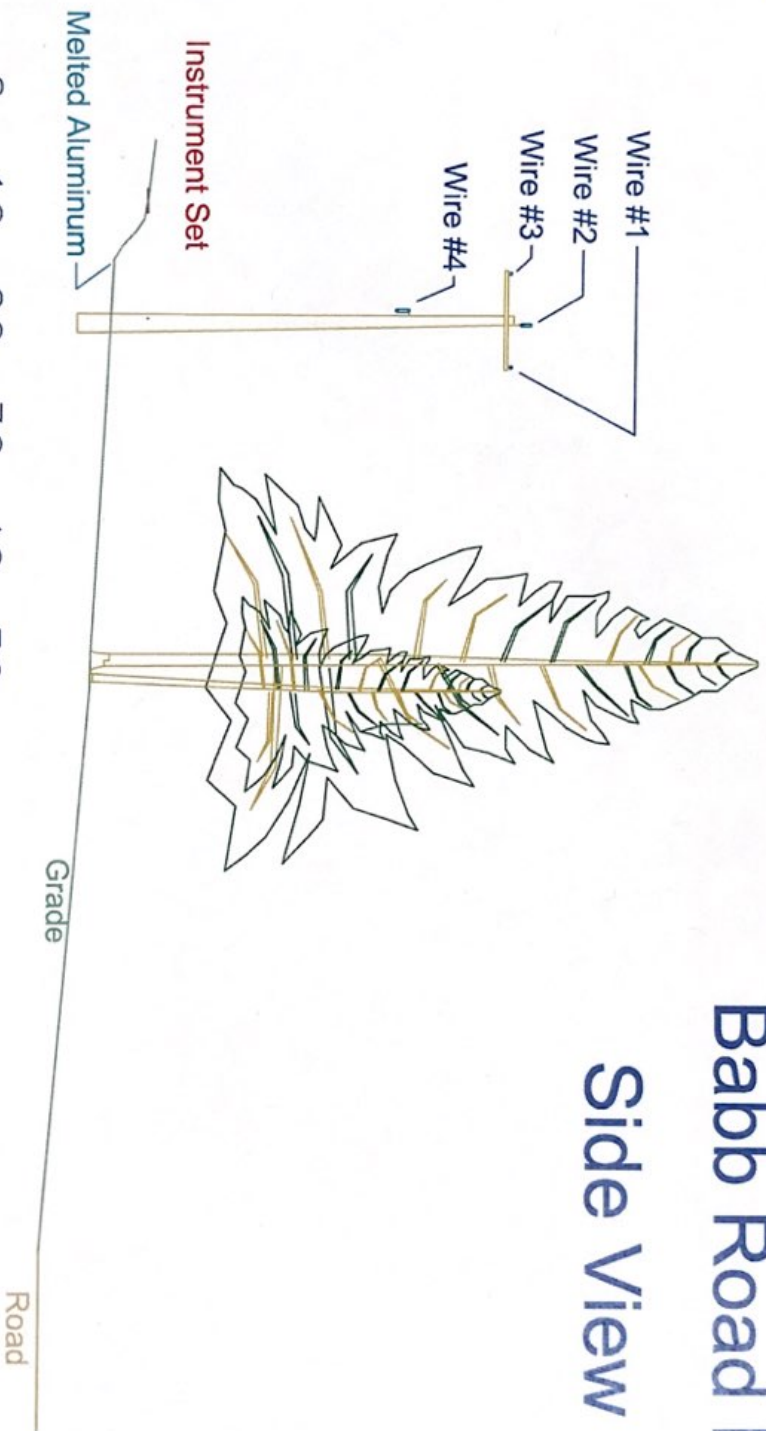


Reference Point #2





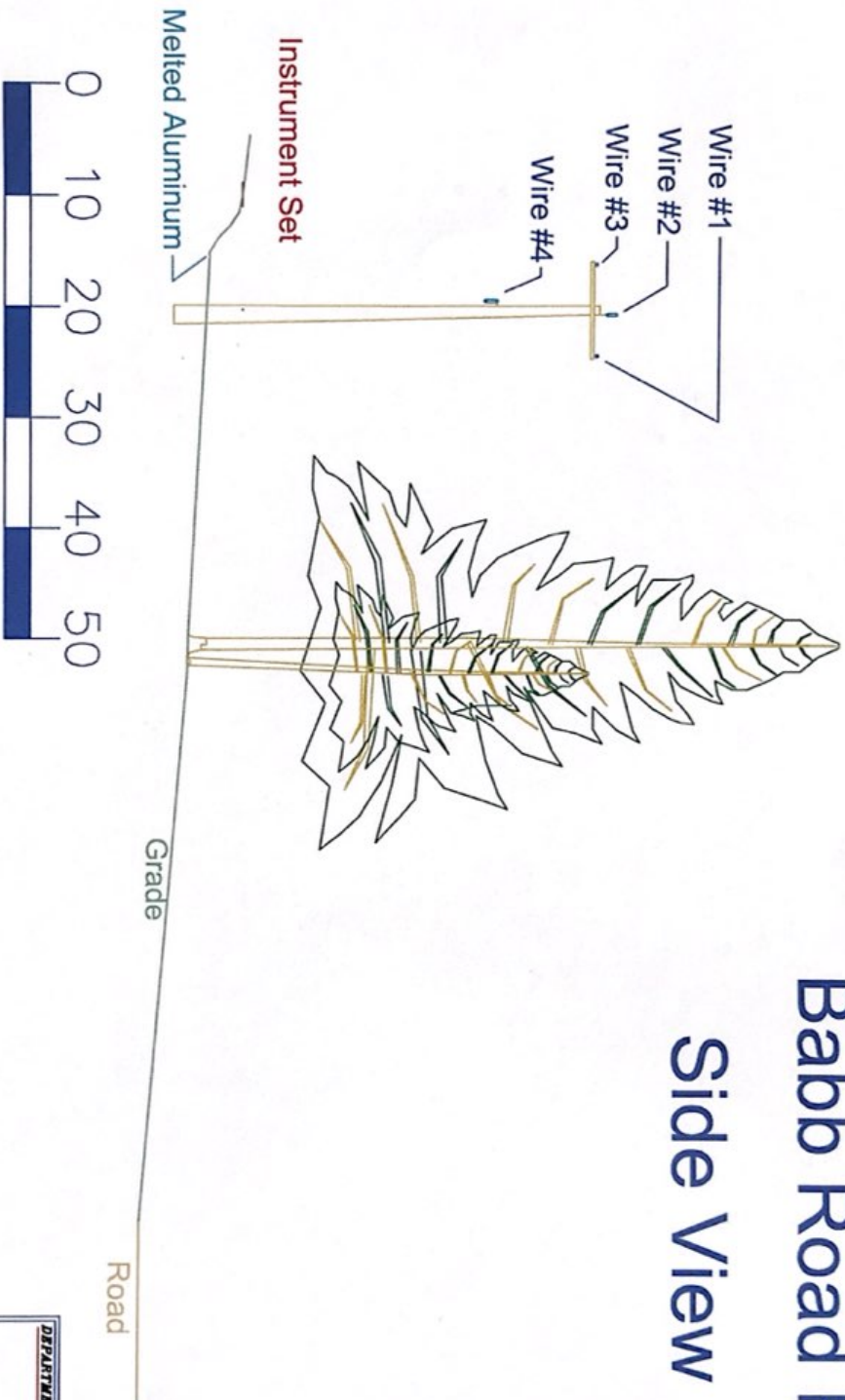
Babb Road Fire Side View



DEPARTMENT OF NATURAL RESOURCES	
WILDLAND FIRE INVESTIGATION UNIT	
CASE NUMBER: AKV/231	
DATE: September 7, 2020	
DRAWN BY: SMOY T. Lohmeyer	



Babb Road Fire Side View



SCALE IN FEET

DEPARTMENT OF NATURAL RESOURCES	
WILDLAND FIRE INVESTIGATION UNIT	
CASE NUMBER: ANV-221	DATE: September 7, 2020
DRAWN BY: SWF1 T. Liebrecht	



STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES
WILDLAND FIRE INVESTIGATION SUPPLEMENTAL REPORT

Fire Name	Case File No.	Region	Program
Babb Fire	20 -V- AKV	Northeast	221
Report By: Gary Margheim, Sergeant		Lead Investigator: Gary Margheim	Incident Date: 9/7/2020
Other Officer(s):			Ref. Case No.

DETAILS

1. On April 30, 2021, I received the report from US Bureau of Alcohol, Tobacco & Firearms Electrical Engineer Michael Abraham noting his findings from the review of the evidence he conducted on September 20, 2020 at the DNR evidence facility in Thurston County. He noted the imprint on the tree was consistent with the tree coming into contact with an energized power line. He also noted that a tree coming into contact with an energized conductor is sufficient to cause sparks and those sparks can be a suitable ignition source for a variety of fuels including brush and other wildland vegetation. See attached report for further details.

ATTACHMENTS

ATF Report from Electrical Engineer Michael Abraham

Submitted By:

I, the undersigned investigator, certify under penalty of perjury under the laws of the State of Washington that the foregoing is true and accurate to the best of my knowledge.



Signature

May 10, 2021
Date

Name: Gary Margheim
Title: Sergeant, LE and FIU
Phone: 509-607-6723



STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES

WILDLAND FIRE INVESTIGATION SUPPLEMENTAL REPORT

Fire Name	Case File No.	Region	Program
Babb	20-V-AKV	Northeast	221
Report By: John McDonald		Lead Investigator: Gary Margheim	Incident Date: 09/07/2020
Other Officer(s):			Ref. Case No.

DETAILS

1. On Monday, September 7, 2020, a wind event blew through the eastern side of Washington State. This wind event produced sustained winds of 20 to 30 miles per hour, gusting up to 60 miles per hour. This wind was from the north and northeast. This wind event created blowing dust, trees falling, power lines down and resulted in numerous large wild fires.
2. On Tuesday, September 8, 2020, Sergeant Margheim requested that I to respond to the Babb fire to assist in the origin and cause investigation. I responded from Omak, Washington and arrived at the fire at approximately 1925 hours. Sergeant Margheim and Senior Wildland Fire Investigator Eugene DuPrey were already on scene and processing the General Origin Area (GOA).
3. Sergeant Margheim briefed me on the fire situation, the work that been accomplished on the origin and cause investigation and what my role was to be in the process. My assignment included documenting the failed tree, the clearance of the tree to the power line right of way and the surrounding vegetation (to include any other trees near the right of way).
4. I began my part in the investigation by walking around the established GOA and observing the fire pattern indicators, pin flagged by DuPrey. These fire pattern indicators revealed that the fire had started under the power lines and advanced to the south and southwest, spread laterally to the east and west and backed to the north. The area of the failed tree branch revealed that most of the fire damage had occurred after the tree branch fell to the ground. These indicators are indicative of an aerial ignition from the power lines.
5. I took nighttime pictures of the damage to the power lines, where the tree limb met both the neutral and the primary distribution lines. This picture is included in the attached photo logs. At this point in the investigation, the team made the decision that we would return to the scene in the morning and complete the origin and cause investigation.
6. I had made contact with Melissa Fisher, DNR Forest Health Specialist, to request that she respond to the Babb fire to examine the failed tree. Melissa was unable to respond on September 8, 2020 but would be on scene on September 9, 2020 to examine the tree.
7. On Wednesday, September 9, 2020, the investigation team returned to the fire scene to complete the origin and cause investigation. During the overnight hours, Avista had replaced the damaged power lines affected by the failed tree limb. The Avista crews left the damaged sections of line inside the GOA, as previously requested by Sergeant Margheim. Avista utility crews were still in the area replacing poles and lines throughout the day.
8. I started examining the tree by taking photographs on all sides. These photographs are included with this supplemental report.
9. After photographing the tree, the line clearance and the failed section, my next process was to determine the height of the tree and the length of the failed section. Sergeant Margheim and I measured the total height of the tree to be 68 feet. The length of the failed limb was 54 feet 10 inches from the tip to the trunk. The centerline of the Avista power lines was 29 feet and 9 inches to the trunk of the tree.

10. At approximately 1130 hours on Wednesday, September 9, 2020, I made contact with the Matt Smith, Line Foreman for Avista Utilities, to see if he had a tree faller on his crew. He stated that they could fell the tree for us. The crew brought a boom truck to the tree and proceeded to section the tree from the top down. Once the tree was no longer a hazard to the power lines Avista stopped cutting and left the area. I made contact with the Strike Team Leader, assigned to this part of the fire, to see if there was a faller on the strike team. He stated he did an engine that could come and assist with cutting the failed section out of the tree. Once the engine crew arrived, they cut the failed section to be collected for evidence. Sergeant Margheim transported the tree sections to the evidence storage facility in Tumwater, Washington the following morning.

ATTACHMENTS

Photo Logs

Submitted By:

I, the undersigned investigator, certify under penalty of perjury under the laws of the State of Washington that the foregoing is true and accurate to the best of my knowledge.



Signature

10/22/2020

Date

Name: John McDonald

Title: Senior Wildland Fire Investigator

Phone: (509) 998-2814



STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES
WILDLAND FIRE INVESTIGATION REPORT
PHOTO LOG

Case File No.

20-V- AKV

Other Related No

WA--NES--2151

Incident Name: Babb Rd

Region: Northeast

District: Arcadia

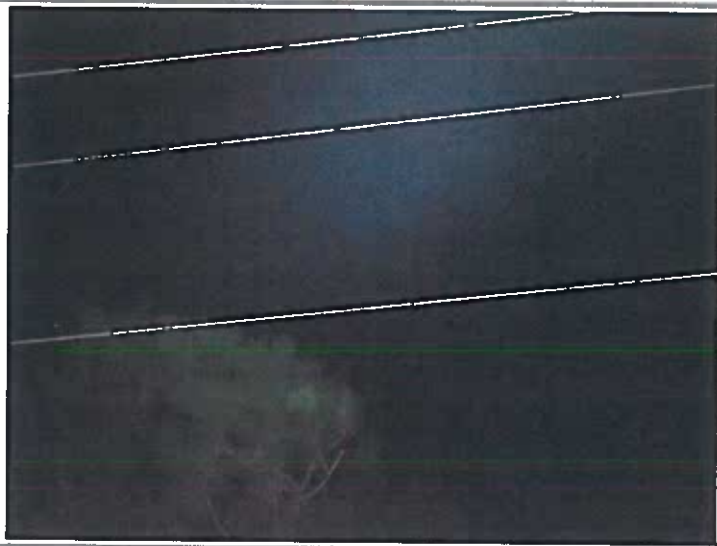
Incident Date: 09/07/2020

All Photos Taken or Received By: John McDonald

Camera Used: Brand/Model: Olympus G5

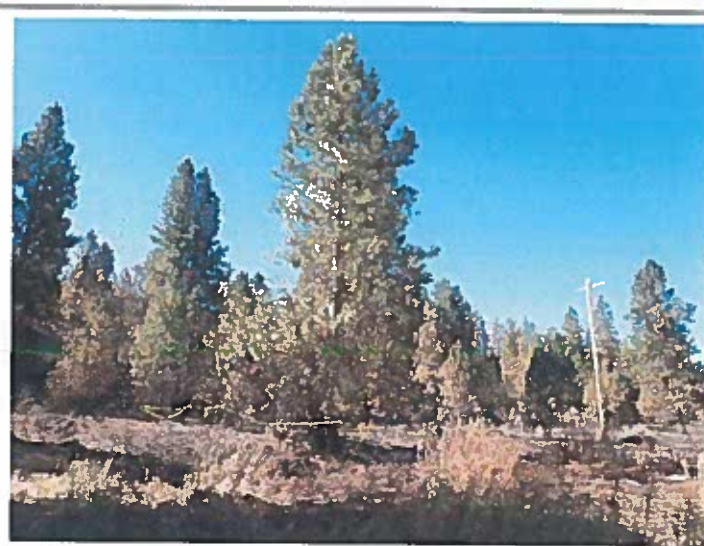
Photo Log Start Date & Time: 09/08/2020 at 7:36 ☐ AM ☒ PM

Photo Log End Date & Time: 09/09/2020 at 9:16 ☒ AM ☐ PM



1-004

Photo taken prior to Avista replacing the lines affected by the tree.



2-007

Photo taken looking southwest and is showing an overall view of the tree and power lines,



3-008

Photo taken looking east and is showing the overall view of the tree and power lines.



4-009

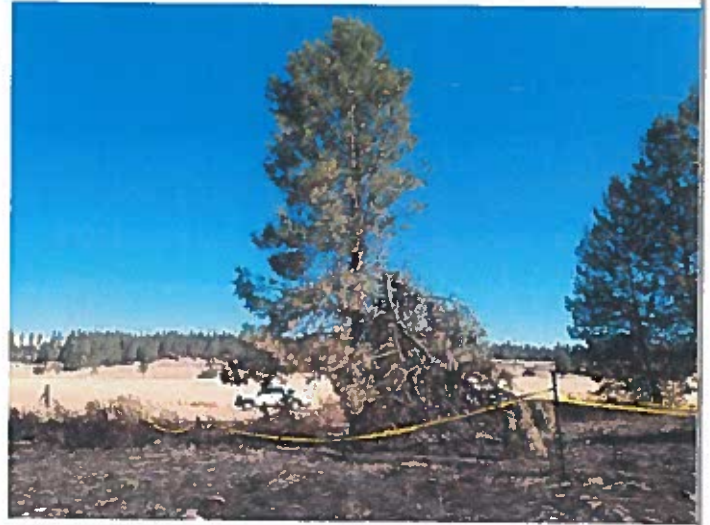
Photo taken looking northeast and is showing the overall view of the tree and power lines.

ADDITIONAL PHOTOS MAY HAVE BEEN TAKEN OF THIS FIRE, AND IF SO, THEY ARE ON FILE WITH THE INVESTIGATOR. THE PHOTOS SHOWN HERE ARE THE MOST RELEVANT TO THE INVESTIGATION. THE PHOTOS SHOWN HAVE ONLY BEEN RESIZED OR ROTATED. ALL ORIGINAL PHOTOS HAVE BEEN STORED IN THEIR ORIGINAL, UNALTERED FORMAT.



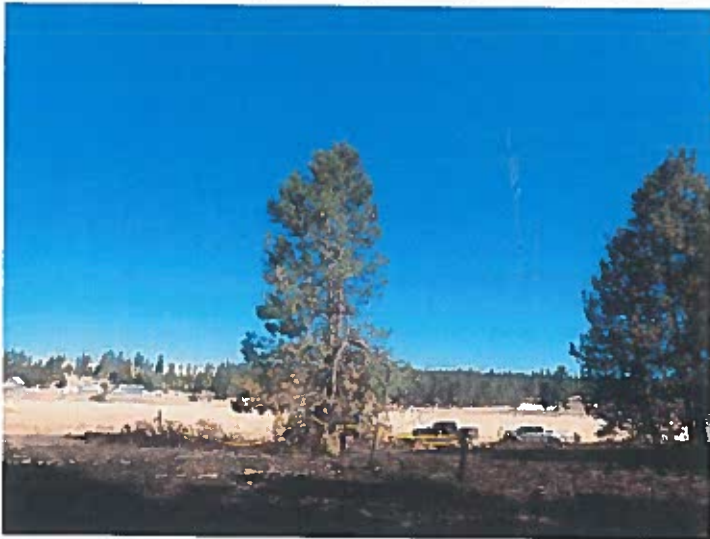
5-010

Photo taken looking east and is showing the overall view of the tree and power lines.



6-011

Photo taken looking north and is showing the overall view of the tree and power lines.



7-012

Photo taken looking north and is showing the overall view of the tree and power lines.



8-013

Photo taken looking west and is showing the overall view of the tree and the power lines.

ADDITIONAL PHOTOS MAY HAVE BEEN TAKEN OF THIS FIRE, AND IF SO, THEY ARE ON FILE WITH THE INVESTIGATOR. THE PHOTOS SHOWN HERE ARE THE MOST RELEVANT TO THE INVESTIGATION. THE PHOTOS SHOWN HAVE ONLY BEEN RESIZED OR ROTATED. ALL ORIGINAL PHOTOS HAVE BEEN STORED IN THEIR ORIGINAL, UNALTERED FORMAT.



9-014

Photo taken looking at the east side of the tree and is showing the defect in the limb that failed.



10-015

Photo taken looking at the east side of the tree and is showing the defect in the limb that failed.



11-016

Photo taken looking at the east side of the tree and is showing the defect in the limb that failed.



12-017

Photo taken looking at the east side of the tree and is showing the defect in the limb that failed.

ADDITIONAL PHOTOS MAY HAVE BEEN TAKEN OF THIS FIRE, AND IF SO, THEY ARE ON FILE WITH THE INVESTIGATOR. THE PHOTOS SHOWN HERE ARE THE MOST RELEVANT TO THE INVESTIGATION. THE PHOTOS SHOWN HAVE ONLY BEEN RESIZED OR ROTATED. ALL ORIGINAL PHOTOS HAVE BEEN STORED IN THEIR ORIGINAL, UNALTERED FORMAT.



13-018

Photo taken looking at the east side of the tree and is showing the defect in the limb that failed.



14-019

Photo taken looking north from the power lines and is showing the limb that failed



15-020

Photo taken looking northeast and is showing the opposite side of the failure in the limb.



16-021

Photo is a close view of the end of the failed limb. This is the area, of the tree, that contacted the power lines.

ADDITIONAL PHOTOS MAY HAVE BEEN TAKEN OF THIS FIRE, AND IF SO, THEY ARE ON FILE WITH THE INVESTIGATOR. THE PHOTOS SHOWN HERE ARE THE MOST RELEVANT TO THE INVESTIGATION. THE PHOTOS SHOWN HAVE ONLY BEEN RESIZED OR ROTATED. ALL ORIGINAL PHOTOS HAVE BEEN STORED IN THEIR ORIGINAL, UNALTERED FORMAT.



17-022

Photo is a close view of the fire pattern indicators on the pine needles. It is showing the fire was backing at this point.



18-023

Photo is a close up of the scar from the power line.



19-024

Photo is a close up view of the scar from the power line.



20-025

Photo is a close up view of the scar from the power line.

ADDITIONAL PHOTOS MAY HAVE BEEN TAKEN OF THIS FIRE, AND IF SO, THEY ARE ON FILE WITH THE INVESTIGATOR. THE PHOTOS SHOWN HERE ARE THE MOST RELEVANT TO THE INVESTIGATION. THE PHOTOS SHOWN HAVE ONLY BEEN RESIZED OR ROTATED. ALL ORIGINAL PHOTOS HAVE BEEN STORED IN THEIR ORIGINAL, UNALTERED FORMAT.

Subject: Technical Assistance, Babb Road Fire

October 29, 2020

To: DNR Fire Investigation

On September 14, I received a message from Sergeant Gary Margheim (DNR Senior Investigator), requesting my services to examine a tree that purportedly was involved in starting the Babb Road Fire on September 7, 2020, in south Spokane County. On 9/16, I met Sergeant Margheim at the suspected origin site near East Babb Road (T12, R43, S33) to examine the tree from which a branch reportedly broke and landed on a live power line.

Observations:

The suspect tree is a ponderosa pine with a complex constitution. In gymnosperms, such as pines and firs, the terminal leader elongates more each year than the lateral branches beneath it, producing a single central stem and a conical crown. Not so with the suspect pine, which has undergone significant alterations and deviates greatly from its prescribed excurrent growth habit.

On or about age ten the suspect pine was injured, resulting in death of the terminal shoot and upper lateral branches. Temporarily lost were the phytohormones produced in the shoots apex (apical meristem) that suppress lateral bud break and help maintain the monopodial crowns of conifers. Now lacking strong apical dominance in the leader, two equally-aged, lateral branches each assumed dominance and height growth resumed. However, because of the delay in height growth due to the death of its leader, the suspect pine was soon overtopped by a ponderosa pine that had established itself to the south and immediately adjacent to it.

Ponderosa pine have a low capacity to endure shade and are vulnerable to overcrowding. For example, when underneath a light overstory which casts 50% shade, their growth may slow by half from full sun conditions. Not surprisingly, plants, and pines are no exception, have sophisticated mechanisms to interpret environmental stimuli so as to optimize resource allocation at any time. Light, being indispensable for plant growth and photosynthesis, is an important factor that determines stem orientation. Plants can also sense gravity, which enables stems and branches to maintain their position with regard to a given axis.

The phototropic response of the two equally-aged lateral branches on the suspect pine caused each to grow towards the sunlight and out from the shade of the now overtopping, neighboring

pine. Each lateral branch has since assumed properties of a leader, annually setting a terminal bud designed to become the new leader, surrounded by lateral buds set to become branches. This radical departure in form, from lateral branch to leader, and growth across the axis of the trunk in the case of the leader that failed and is suspected of starting the fire, resulted in clear dynamic responses of the woody tissue. In ponderosa pine, it is compression wood that forms beneath the branch, or at the branch-trunk juncture, and is visible in cross section of the suspect pine (Fig. 1).

The use of compression wood means that these leaders are stouter and more rigid than they would otherwise be, and more likely to snap at their midpoint due to wind or ice loading. Similarly, as the lateral branch/leader gets larger, additional compression tissue must be added, not just at the trunk juncture but along the branch/leader, which further increases its weight and clearly places a limit on its length.



Figure 1. Cross section of the lateral branch/leader at juncture with stem revealing reaction wood.



Figure 2. Failed lateral branch/leader with indicators of bark beetle activity.

The use of compression wood in conifers to resist bending forces also means that very large and very long lateral branches cannot be supported, as they can be in hardwoods. In older hardwoods, for example, it is not unusual to find side branches or forks greater than 1 m in diameter and extending more than 10 m. This is almost never seen in large conifers. The stress due to torque on the relatively weaker wood of a conifer will simply snap in such a configuration, which is what appears to have happened to both of the lateral branches/leaders (LBL) on the suspect pine (Fig. 2).

Regarding these two, the LBL that originated on the side of the suspect pine nearer the power lines, appears to have broken/split two to three years ago. Evidence to support this date includes the presence of callous tissue at the wound margins where the LBL split (Fig. 3), and larval galleries with boring material and oval exit holes left by emerging adult wood boring beetles (Fig. 4). Wood borers commonly occur in dead and dying trees and are generally considered secondary agents of mortality. Most species are non-aggressive, attacking only dead and dying trees, or their parts, and are frequently found in trees infested or killed by other agents, such as bark beetles or root disease. Figure 2 shows an egg laying bark beetle attack (pitch tube) most likely western pine beetle, and a possible bark beetle exit hole made by brood emerging from the tree. While symptoms of bark beetles and wood borers are abundant on this LBL, the absence of physical signs of the insects suggest that they have since abandoned this portion of the tree.



Figure 3. Callous tissue formation along margin of wound on failed lateral branch/leader.



Figure 4. Wood borer gallery and exit hole on failed lateral branch/leader.

The second LBL, the one suspected of starting the Babb Road Fire, appears to have broke/split more recently. Its attributes, or lack thereof, are consistent with those of a LBL that has failed more recently. Callous tissue at the margins of the wound is lacking, suggesting that the tree has yet to initiate sealing of the break/split. Resin at the margins of the break/split was still “tacky” to the touch and there was no evidence of insects commonly associated with damaged trees (Fig 5).

Other defects noted on the suspect pine include galls caused by *Endocronartium harknessii*, causal agent of western gall rust, and old wounds. Neither of these directly contributed to the LBL failure, although there is evidence of earlier wounding, potentially caused by porcupine feeding several years prior, that may have indirectly contributed to its failure (Fig. 6).



Figure 5. “Fresh” wound, lacking callous at the margins and still “sticky” to the touch.



Figure 6. Previous damage being “sealed” over after ca. 14 years of growth.



Figure 7. Portion of LBL, revealing split and cut ends, which failed prior to LBL implicated in Babb Road Fire.

Conclusions:

I suspect that the ponderosa pine in question actually failed twice. Three to four years ago, the LBL nearest the powerline split/broke when the mechanical properties of the wood were overcome, likely either by the force of wind or the weight of snow. It appears that the two ends of this LBL were then cut, removing any foliage and further limiting its ability to nourish itself, thereby predisposing it to attack by bark beetles and wood borers (Fig. 7). More recently, the second LBL failed when the mechanical properties of the wood that make up that structure were likely overcome by the force of wind during an event on September 7, 2020.

It is my opinion that because of the unusual configuration of this tree, and its proximity to the powerline, a closer inspection was warranted. A nearer inspection of the tree should have revealed the cut LBL ends and its previous failure, and necessitated determination of the failure potential of the adjacent LBL, implicated in starting the Babb Road Fire.

Please contact me should you have further questions regarding my evaluation.

Sincerely,

Daniel Omdal, PhD

Forest Pathologist

References:

Herrera, R., Krier, C., Lalanne, C., Ba, E., Stokes, A., Salin, F., Fourcaud, T., Claverol, S., and Plomion, C. 2010. (Not) Keeping the stem straight: a proteomic analysis of maritime pine seedlings undergoing phototropism and gravitropism. BMC Plant Biol 10, 217 (2010). <https://doi.org/10.1186/1471-2229-10-217>.

Loehle, C. 2016. Biomechanical constraints on tree architecture. Trees 30:2061-2070.

Rouvinen S. and T. Kuuluvainen. 1997. Structure and asymmetry of tree crowns in relation to local competition in a natural mature Scots pine forest. Can. J Forest Res. 27:890-902.



**State of Washington
Department of Natural Resources**

SUPPLEMENTAL INVESTIGATION REPORT

INCIDENT NUMBER: 2151

LOCATION OF INCIDENT: E Babb Rd, Rosalia, WA 99170

DATE OF INCIDENT: 9/7/2020

INVESTIGATION/INFORMATION:

On September 7th 2020 at approximately 1230 hours, Arcadia Engine 7405 was dispatched to a report of fire off of Babb Rd in Rosalia Washington. Myself who was in charge of Engine 7405 as well as 3 firefighters responded with an approximate 45 minute estimated time of arrival. Engine 7405 arrived on scene of incident number 2151 and saw a rapidly moving fire with a well established column of smoke. Engine 7405 arrived at the Incident Command Post and tied in with Aaron Bollar, (Battalion Chief with Spokane County Fire District 3) who was functioning as Chief Operations for incident 2151. Chief Bollar gave me the assignment of Division Zulu which was located on the Right flank or North side of the Babb fire. I was issued 3 brush trucks and two dozers. At Approximately 2100 hours Chief Josh Evans with Spokane County Fire District 12 Reported to me that he suspected that he had located an origin and potential cause of fire.

Chief Evans informed me that he saw one of the power poles he had been working around during initial attack on incident 2151 appeared to have been blown over by the high winds we were experiencing and that the power lines attached to the pole had been laid over the surrounding timber. Chief Evans mentioned that he believed that the power poles were owned by Inland Power. I instructed Chief Evans to have his crew flag off the potential area of Origin and to prevent any other crews from working with in that area.

Engine 7405 and myself gave a briefing on all information regarding the power lines and potential area of origin to Chief Ryan Power (Division Chief, Spokane County Fire District 3) who would be functioning as the night Incident Commander of Incident 215. At Approximately 2300 Arcadia Engine 7405 and myself was released from the incident.

Supplemental Investigation Report

Page 2

ATTACHMENTS:

SUBMITTED BY:

I CERTIFY (OR DECLARE) UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF WASHINGTON THAT THE FOREGOING IS TRUE AND CORRECT (RCW 9A.72.085).

A handwritten signature in black ink, appearing to read "Matt Pelley", is written over a horizontal line.

11-5-2020
Date Signed

DEPARTMENT OF NATURAL RESOURCES



NATIONAL WEATHER SERVICE

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Red Flag Warning / Fire Wx Watch

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WWUS86 KOTX 062101

[RFWOTX](#)

URGENT - FIRE WEATHER MESSAGE

National Weather Service Spokane WA

201 PM PDT Sun Sep 6 2020

...WINDY AND DRY ON MONDAY...

.A strong cold front out of Canada will bring windy conditions across eastern Washington on Monday. North to northeast winds will start to increase late Sunday night into Monday morning. There will be a burst of wind in the morning associated with the front, and then windy conditions will remain through the afternoon. Relative humidity values are expected to be in the teens to mid 20s. Rapid fire spread with any new or ongoing fires is expected.

WAZ673-674-676-677-684-071500-

/O.CON.KOTX.FW.W.0010.200907T1800Z-200908T0300Z/

East Washington Northern Columbia Basin (Zone 673)-

East Washington Palouse and Spokane Area (Zone 674)-

East Washington South Central Cascade Valleys (Zone 676)-

East Washington Central Cascade Valleys (Zone 677)-

East Washington Okanogan/Methow Valleys (Zone 684)-

201 PM PDT Sun Sep 6 2020

...RED FLAG WARNING REMAINS IN EFFECT FROM 11 AM TO 8 PM PDT MONDAY FOR WIND AND LOW RELATIVE HUMIDITY FOR OKANOGAN VALLEY INTO THE WATERVILLE PLATEAU...COLUMBIA BASIN...CASCADE VALLEYS...SPOKANE AND PALOUSE AREAS...

* Affected Area: Fire Weather Zone 673 East Washington Northern Columbia Basin (Zone 673), Fire Weather Zone 674 East Washington Palouse and Spokane Area (Zone 674), Fire Weather Zone 676 East Washington South Central Cascade Valleys (Zone 676), Fire Weather Zone 677 East Washington Central Cascade Valleys (Zone 677) and Fire Weather Zone 684 East Washington Okanogan/Methow Valleys (Zone 684).

- * Winds: Northeast 20 to 35 mph with gusts 40 to 50 mph.
- * Relative Humidities: 12 to 22 percent.
- * Impacts: Rapid fire spread of any new or ongoing fires will be possible. Heed burn ban restrictions. Outdoor burning is not recommended.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Red Flag Warning means that critical fire weather conditions are either occurring now....or will shortly. A combination of strong winds...low relative humidity...and warm temperatures can contribute to extreme fire behavior.

&&

\$\$

WAZ686-687-071500-
/O.CON.KOTX.FW.W.0010.200907T1800Z-200908T0300Z/
East Washington Northeast (Zone 686)-
East Washington Okanogan Highlands (Zone 687)-
201 PM PDT Sun Sep 6 2020

...RED FLAG WARNING REMAINS IN EFFECT FROM 11 AM TO 8 PM PDT
MONDAY FOR WIND AND LOW RELATIVE HUMIDITY FOR NORTHEAST
WASHINGTON AND THE OKANOGAN HIGHLANDS...

- * Affected Area: Fire Weather Zone 686 East Washington Northeast (Zone 686) and Fire Weather Zone 687 East Washington Okanogan Highlands (Zone 687).
- * Winds: Northeast 15 to 25 mph with gusts up to 35 mph. Local winds 20 to 30 mph with gusts up to 45 mph around Deer Park and the Spokane Reservation.
- * Relative Humidities: 14 to 30 percent.
- * Impacts: Rapid fire spread of any new or ongoing fires will be possible. Heed burn ban restrictions. Outdoor burning is not recommended.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Red Flag Warning means that critical fire weather conditions are either occurring now....or will shortly. A combination of

strong winds...low relative humidity...and warm temperatures can contribute to extreme fire behavior.

& &

\$ \$



[US Dept of Commerce](#)
[National Oceanic and Atmospheric Administration](#)
[National Weather Service](#)
[Spokane Weather Forecast Office](#)
2601 N. Rambo Rd., Spokane, Washington 99224
(509) 244-0110
w-otx.webmaster@noaa.gov

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NATIONAL WEATHER SERVICE

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

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WWUS86 KOTX 071213

[RFWOTX](#)

URGENT - FIRE WEATHER MESSAGE

National Weather Service Spokane WA

513 AM PDT Mon Sep 7 2020

...WINDY AND DRY TODAY...

.A strong cold front out of Canada will bring very windy conditions across eastern Washington and north Idaho. There will be a burst of wind in the morning associated with the front, and then windy conditions will remain through the afternoon. Relative humidity values are expected to be 10 to 20 percent. Rapid fire spread with any new or ongoing fires is expected.

IDZ101-080300-

/O.EXA.KOTX.FW.W.0010.200907T1800Z-200908T0300Z/

Northern and Central Idaho Panhandle (Zone 101)-

513 AM PDT Mon Sep 7 2020

...RED FLAG WARNING IN EFFECT FROM 11 AM THIS MORNING TO 8 PM PDT THIS EVENING FOR WIND AND LOW RELATIVE HUMIDITY FOR THE NORTHERN AND CENTRAL IDAHO PANHANDLE...

The National Weather Service in Spokane has issued a Red Flag Warning for wind and low relative humidity, which is in effect from 11 AM this morning to 8 PM PDT this evening.

- * Affected Area: Fire Weather Zone 101 Northern and Central Idaho Panhandle.
- * Winds: Northeast 15 to 25 mph with gusts up to 35 mph. Down the Purcell Trench (Highway 95 from the Canadian border to Coeur d'Alene) Northeast winds 20 to 30 mph with gusts to 45 mph. Local gusts 50 to 55 mph through the early afternoon.
- * Relative Humidities: 17 to 25 percent in the valleys and 25 to 40 percent over the higher terrain.

- * Impacts: Rapid fire spread of any new or ongoing fires will be possible. Heed burn ban restrictions. Outdoor burning is not recommended.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Red Flag Warning means that critical fire weather conditions are either occurring now....or will shortly. A combination of strong winds...low relative humidity...and warm temperatures can contribute to extreme fire behavior.

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WAZ673-674-676-677-684-080300-
/O.CON.KOTX.FW.W.0010.200907T1800Z-200908T0300Z/
East Washington Northern Columbia Basin (Zone 673)-
East Washington Palouse and Spokane Area (Zone 674)-
East Washington South Central Cascade Valleys (Zone 676)-
East Washington Central Cascade Valleys (Zone 677)-
East Washington Okanogan/Methow Valleys (Zone 684)-
513 AM PDT Mon Sep 7 2020

...RED FLAG WARNING REMAINS IN EFFECT FROM 11 AM THIS MORNING TO 8 PM PDT THIS EVENING FOR WIND AND LOW RELATIVE HUMIDITY FOR OKANOGAN VALLEY INTO THE WATERVILLE PLATEAU...COLUMBIA BASIN... CASCADE VALLEYS...SPOKANE AND PALOUSE AREAS...

- * Affected Area: Fire Weather Zone 673 Northern Columbia Basin, Fire Weather Zone 674 Palouse and Spokane Area, Fire Weather Zone 676 South Central Cascade Valleys, Fire Weather Zone 677 Central Cascade Valleys and Fire Weather Zone 684 Okanogan/Methow Valleys.
- * Winds: Northeast 25 to 35 mph with gusts up to 50 mph. Down the Okanogan Valley northeast winds 30 to 40 mph with gusts up to 60 mph possible.
- * Relative Humidities: 10 to 19 percent.
- * Impacts: Rapid fire spread of any new or ongoing fires will be possible. Heed burn ban restrictions. Outdoor burning is not recommended.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Red Flag Warning means that critical fire weather conditions

are either occurring now....or will shortly. A combination of strong winds...low relative humidity...and warm temperatures can contribute to extreme fire behavior.

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WAZ686-687-080300-
/O.CON.KOTX.FW.W.0010.200907T1800Z-200908T0300Z/
East Washington Northeast (Zone 686)-
East Washington Okanogan Highlands (Zone 687)-
513 AM PDT Mon Sep 7 2020

...RED FLAG WARNING REMAINS IN EFFECT FROM 11 AM THIS MORNING TO 8 PM PDT THIS EVENING FOR WIND AND LOW RELATIVE HUMIDITY FOR NORTHEAST WASHINGTON AND THE OKANOGAN HIGHLANDS...

- * Affected Area: Fire Weather Zone 686 Northeast Washington and Fire Weather Zone 687 Okanogan Highlands.
- * Winds: Northeast 20 to 30 mph with gusts up to 35 mph. Local winds 25 to 35 mph with gusts up to 45 mph around Deer Park and the Spokane Reservation.
- * Relative Humidities: 14 to 30 percent.
- * Impacts: Rapid fire spread of any new or ongoing fires will be possible. Heed burn ban restrictions. Outdoor burning is not recommended.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Red Flag Warning means that critical fire weather conditions are either occurring now....or will shortly. A combination of strong winds...low relative humidity...and warm temperatures can contribute to extreme fire behavior.

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US Dept of Commerce
National Oceanic and Atmospheric Administration
National Weather Service
Spokane Weather Forecast Office
2601 N. Rambo Rd., Spokane, Washington 99224
(509) 244-0110
w-otx.webmaster@noaa.gov

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Lightning Data Map from Blitzortung. Org for September 7, 2020

-  Texas
-  Florida
-  New York
-  Minnesota
-  California
-  Dominican Rep.

Date:

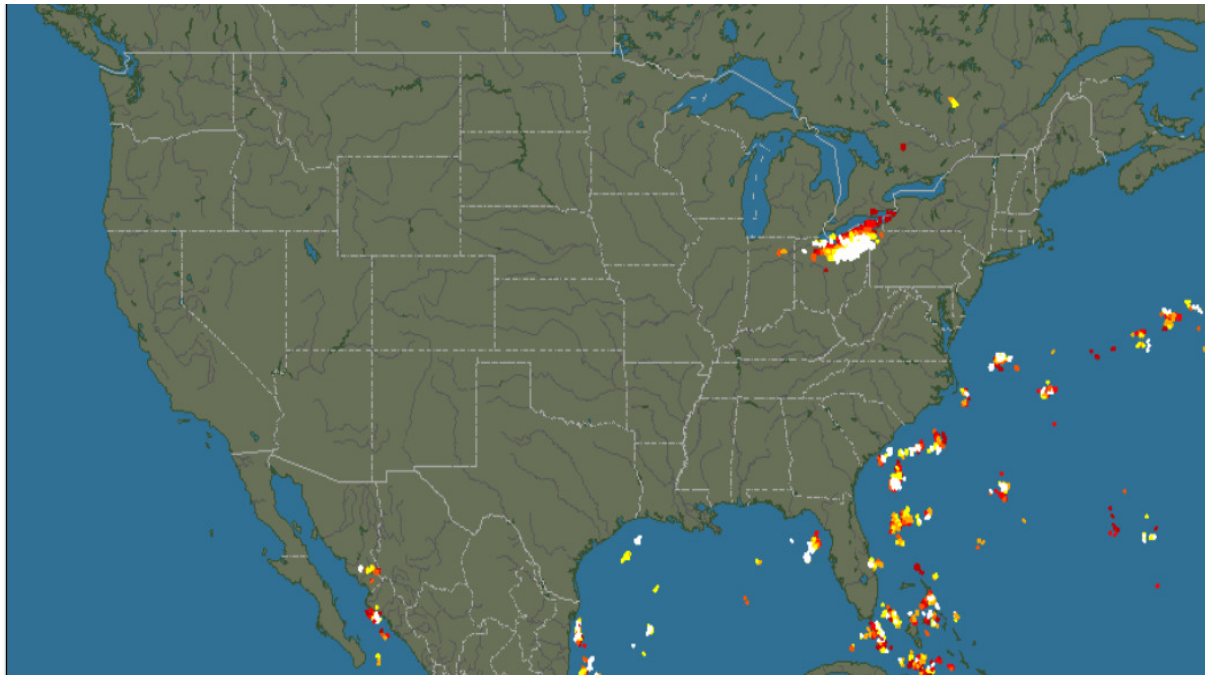
07 Sep 2020 ▼

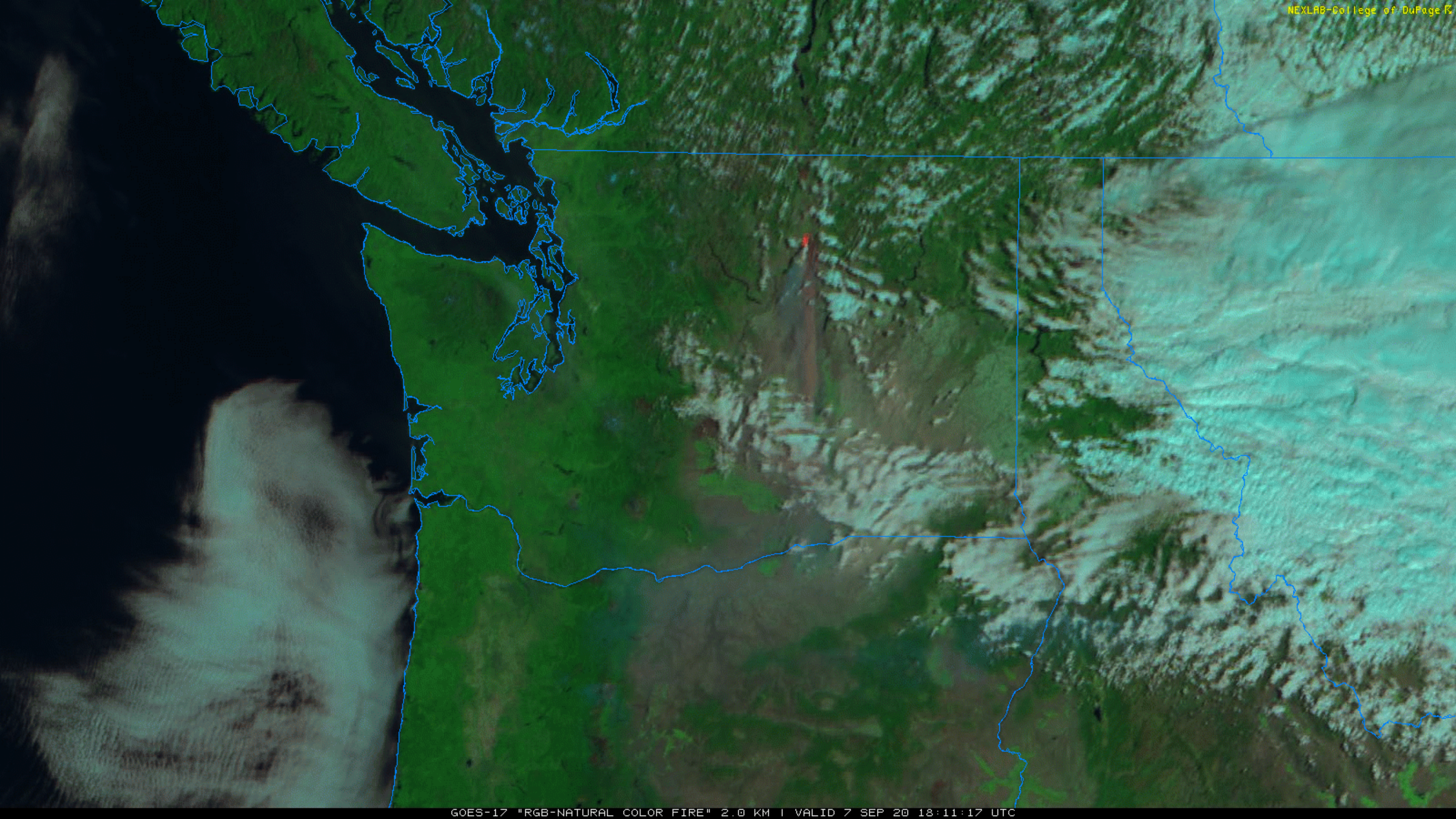
Time (UTC):

◀ 13:00 ▼ ▶

Review

Single Image ▼





COMMISSIONER'S ORDER

NUMBER 202017

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

Hilary S. Franz, Commissioner of Public Lands

WHEREAS, RCW 76.04 defines the lands within the State of Washington where the Department of Natural Resources is responsible for fire protection; and

WHEREAS, RCW 76.04 authorizes the Department of Natural Resources to regulate the use of fire on the forest lands for which it has fire protection responsibility; and

WHEREAS, RCW 76.04 authorizes the Department of Natural Resources in times and localities of unusual fire danger to prohibit the use of fire in those locations; and

WHEREAS, unusual fire danger exists and is forecast to continue through September 30, 2020, on forest lands protected by the Department of Natural Resources; and

WHEREAS, wildfires result in large expenditures of public funding that can be avoided through prudent actions to prevent them;


THEREFORE, outdoor burning, the use of charcoal briquettes, and prescribed burns are banned on all forest lands within the State of Washington under Department of Natural Resources fire protection through September 30, 2020. This date may be extended or shortened based upon ongoing fire conditions. The following exceptions will apply:

1. Recreational fires in approved fire pits within designated state, county, municipal or other campgrounds.
2. As approved in writing by the Commissioner of Public Lands or Department Supervisor, approved prescribed fire for ecological purposes, when conducted by trained professionals.
3. As approved in writing by the Commissioner of Public Lands or Department Supervisor when there are compelling reasons for such an exception.

Effective July 28, 2020, this order takes precedence over and supersedes all other burn bans currently in effect on forest lands within the state of Washington under Department of Natural Resources fire protection.

Dated this 27th day of July, 2020.

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES



Hilary S. Franz
Commissioner of Public Lands



Turnbull NWR Washington

Daily Summary for

September 7, 2020

Hour of Day	Total Solar Ending at L.S.T.	Rad. ° ly.	Ave. mph	Wind V. Dir. Max. Deg mph	Air Temperature Mean Deg. F.	Fuel Temperature Mean Deg. F.	Fuel Moisture Mean Percent	Relative Humidity Mean Percent	Dew Point Deg. F.	Wet Bulb Deg. F.	Total Precip. inches
1 am	0.0	1.0	97	3.0	49.0	44.0	5.6	62	37	43	0.00
2 am	0.0	2.0	274	3.0	49.0	45.0	6.1	60	36	42	0.00
3 am	0.0	3.0	336	9.0	70.0	65.0	6.6	37	43	54	0.00
4 am	0.0	3.0	10	11.0	68.0	63.0	6.7	38	41	53	0.00
5 am	0.3	4.0	356	13.0	67.0	63.0	7.0	37	40	52	0.00
6 am	2.9	4.0	6	12.0	69.0	69.0	7.2	34	39	52	0.00
7 am	20.3	4.0	344	14.0	72.0	76.0	7.0	30	39	53	0.00
8 am	36.6	8.0	1	21.0	72.0	79.0	6.7	28	37	52	0.00
9 am	33.4	17.0	42	34.0	65.0	71.0	6.4	33	35	49	0.00
10 am	54.4	17.0	48	31.0	63.0	70.0	6.3	35	35	48	0.00
11 am	69.0	17.0	53	33.0	64.0	73.0	6.2	33	34	48	0.00
12 pm	72.1	18.0	47	34.0	64.0	72.0	5.9	29	31	47	0.00
1 pm	69.8	16.0	46	33.0	65.0	72.0	5.7	26	29	47	0.00
2 pm	62.0	16.0	54	32.0	65.0	70.0	5.6	24	27	46	0.00
3 pm	51.1	13.0	60	31.0	66.0	69.0	5.7	22	26	46	0.00
4 pm	36.0	15.0	55	31.0	64.0	65.0	5.5	20	22	44	0.00
5 pm	19.7	11.0	44	27.0	62.0	61.0	5.4	18	18	43	0.00
6 pm	3.9	9.0	48	22.0	59.0	56.0	5.3	21	19	41	0.00
7 pm	0.0	7.0	44	15.0	57.0	54.0	5.3	22	19	40	0.00
8 pm	0.0	7.0	54	12.0	55.0	51.0	5.3	25	20	40	0.00
9 pm	0.0	5.0	35	14.0	54.0	50.0	5.3	27	21	39	0.00
10 pm	0.0	7.0	46	12.0	52.0	49.0	5.3	30	22	39	0.00
11 pm	0.0	9.0	50	15.0	52.0	50.0	5.4	30	22	39	0.00
12 am	0.0	6.0	81	12.0	48.0	45.0	5.4	36	22	37	0.00

DAILY STATISTICS

Total Solar Rad. ° ly.	Ave. mph	Wind V. Dir. Max. Deg mph	Air Temperature Mean Deg. F.	Fuel Temperature Mean Deg. F.	Fuel Moisture Mean Percent	Relative Humidity Mean Percent	Dew Point Deg. F.	Wet Bulb Deg. F.	Total Precip. inches
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Total	531.3								0.00
Ave.	9.1	36	61.3	61.7	6.0	32	30	46	
Max.		34.0	72.0	79.0	7.2	62			
Min.			48.0	44.0	5.3	18			

Copyright: Western Regional Climate Center - Desert Research Institute - Reno, Nevada.

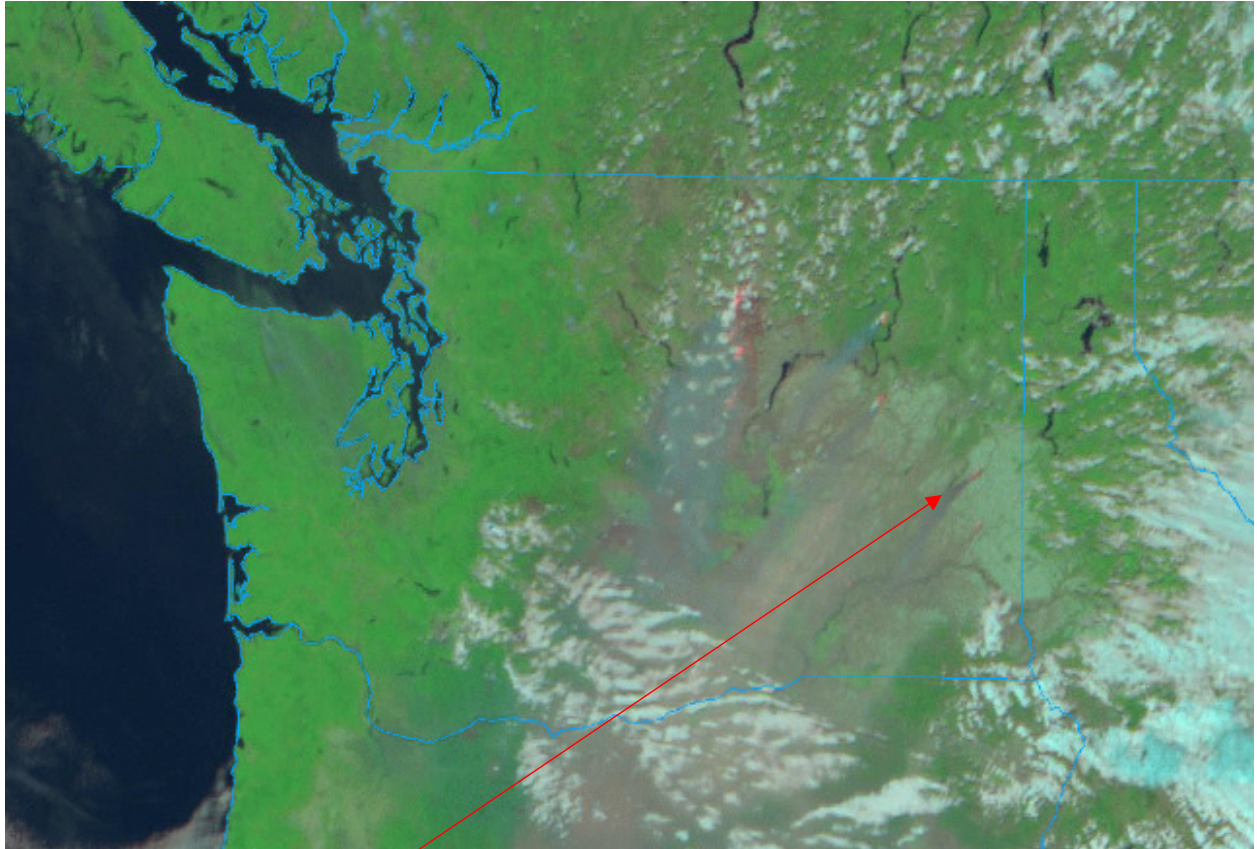
NOTES:

- Daily averages might vary slightly from the average of the hourly values printed due to rounding of the hourly values.
- Data are subject to further review and editing. Please refer any questions to the Western Regional Climate Center.

$$^{\circ} 1 \text{ ly} = 1 \text{ cal/cm}^2 = 4.1855 \text{ J/cm}^2 = 3.6855 \text{ BTU/ft}^2 = .01163 \text{ KW-hr/m}^2$$

US Forest Service Satellite Image

CODNEXLAB-GOES-West-subregional-Pac_NW-natcolorfire-02 26Z-20200908_map_-100-1n-10-100



Satellite view of Babb Fire



STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES
VOLUNTARY STATEMENT

Incident Name BABBS
Incident No. 20J AKV WA-NES-2151 Program/Project No. 221 AKV
Interview Location ADDRESS OF INVOLVED PARTY
Statement Date 09/08/2020 Time 1530 HRS
Statement Provided by DOUGLAS SWAGER DOB 3-6-50
Address 1311 F BARR Rd
City ROSALIA State WA Zip 99170
Contact Phone 509-288-0368

I, DOUGLAS, do hereby make this voluntary statement of the facts and circumstances known to me concerning the above named incident. This information is given of my own free will to GEORGE DUPREY whom I know to be an Investigator with the DEPARTMENT OF NATURAL RESOURCES. It may be used for whatever purposes it might serve.

ON 7-9-2020 AT @ 11:45 AM, I SPOTTED
SMOKE TO THE SOUTH JUST PAST A BARLY
FIELD BEHIND MY R.V. & CALLED 911
DID NOT SEE ANY HUMAN'S OUT IN THE
FIELD FOR WILS - I THINK IT WAS SPARKED
FROM WIND & DRY LIMBS & DRY GROUND

Doug Swager



STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES
VOLUNTARY STATEMENT
(Continued)

Incident Name _____

Incident No. _____

Program/Project No. _____

Statement by _____

Statement Date _____

This statement's pages were written by me. I have read this statement consisting of _____ pages and I have made any additions, deletions or corrections necessary. I have also initialed any changes that I have made and I certify that the facts contained herein are true and accurate to the best of my knowledge. _____ (Initials)

Signature of person providing statement

Signed this 6 day of SEPTEMBER, 2020 at 4:45 P.M.
Day Month Year Time

Eugene D. Frey
Witness Name (Print)

[Signature]
Witness Signature

Witness Name (Print)

Witness Signature



STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES
VOLUNTARY STATEMENT

Incident Name BABB
Incident No. 20 V AKV
WA-NRS-2151 Program/Project No. 221-AKV
Interview Location ADDRESS OF INVOLVED PARTY
Statement Date 08/08/2020 Time _____
Statement Provided by WILLIAM "BILL" WIDMAN DOB 1-3-51
Address 1311 E BABB ROAD
City ROSALIA State WA Zip 99170
Contact Phone 509-270-7024

I, WM. WIDMAN, do hereby make this voluntary statement of the facts and circumstances known to me concerning the above named incident. This information is given of my own free will to S. DuPuy whom I know to be an Investigator with the DEPARTMENT OF NATURAL RESOURCES. It may be used for whatever purposes it might serve.

ON MONDAY SEPTEMBER 7 @ 11:55 AM WAS
ALERTED BY MY SISTER OF A FIRE ACROSS
FIELD FROM MY HOUSE. ACCORDING TO MY
FRIEND DOUG IT HAD STARTED APPROX. 10
MINUTES EARLIER @ ABOUT 11:45 AM.
WHEN I FIRST SAW FIRE IT HAD BURNED
PROBABLY AN ACRE OR SO BUT WAS
QUICKLY GETTING BIGGER AS THE WIND
WAS PUSHING IT UP THE HILL TO THE
SOUTH. IN JUST A FEW MINUTES THE
FIRE PRETTY MUCH WAS HUGE AND OUT
OF SIGHT HEADING SOUTH.

I WAITED FOR FIRE TRUCKS AND
IN ABOUT 30 MINUTES OR SO THEY
WERE ON SCENE.

I MUST ADD THAT FROM MY
VIEWPOINT THE FIRE APPEARED TO
START UNDER OR NEAR THE POWERLINE.



STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES
VOLUNTARY STATEMENT

(Continued)

Incident Name BABIncident No. 221Program/Project No. 221-AKVStatement by WILLIAM WIEMANStatement Date 09/08/2020

I BELIEVE THAT MY FRIEND DOUG WAS
THE PERSON THAT REPORTED THE FIRE BY
CALLING 911.

This statement's pages were written by me. I have read this statement consisting of ____ pages and I have made any additions, deletions or corrections necessary. I have also initialed any changes that I have made and I certify that the facts contained herein are true and accurate to the best of my knowledge. WW (Initials)

William Wieman

Signature of person providing statement

Signed this 8 day of SEPTEMBER, 2020 at 5:00PM
Day Month Year Time

E. DePoy
Witness Name (Print)

E. DePoy
Witness Signature

Witness Name (Print)

Witness Signature

Reporting Party: AR DO

Initial Report On Conditions:

SPFN 3 REPORTING FIR @ 302 W BABB RD

Initial Location: SPOKANE COUNTY - WEST BABB ROAD

Lat: 47°, 16.925', Lon: 117°, 25.644', T21N, R43E, SENW Sec 30

Actual Location (09/07/2020 19:48): SPOKANE COUNTY - WEST BABB ROAD

Lat: 47°, 16.925', Lon: 117°, 25.644'

Incident Notes:

IFPL: 686, County: SPOKANE, FDRA: Upper Basin AR 25 DJ GREENE

Dispatcher: UPPER BASIN ZONE **Status:** Open **Sub-Type:** DNR Statistical
DNR Statistical: 522

Fiscal Codes: PNNKA9-1502 AKV - 221

Web Comment:

TYPE 3 TEAM IN PLACE

Incident Commander(s):

09/07/2020 1515 E 531 Effective ARRIVAL ANNA GRAVES

09/07/2020 1515 EZ 10 Effective 9/7/20 @ 1515 ANDREW STENBECK

09/10/2020 1858 LAWSON, AL Effective 9/10/20 @ 1800 TYPE 2 TEAM

09/08/2020 1403 TYPE 3 TEAM Effective 9/7/20 @ 2145 SE TYPE 3 TEAM, TEAM 2 -- BOB

GEAR 509-528-1650

Resource Details:

AR 25:

Responding at 09/13/2020 11:40:48, On Scene at 09/13/2020 12:28:09, Returning at 09/13/2020 16:53:56, Released at 09/13/2020 17:59:51

HT 43:

Responding at 09/13/2020 08:13:15, On Scene at 09/13/2020 08:48:54, Released at 09/13/2020 19:31:51

AR 7405:

Responding at 09/07/2020 12:21:54, On Scene at 09/07/2020 12:56:47, Returning at 09/07/2020 21:48:27, Released at 09/07/2020 23:00:32

DNR 33:

Responding at 09/08/2020 16:23:09, On Scene at 09/08/2020 19:25:41, Released at 09/08/2020 21:01:58, Responding at 09/09/2020 06:15:38, On Scene at 09/09/2020 08:20:44, Released at 09/09/2020 16:17:24

E Zone 10:

Responding at 09/07/2020 13:09:38, On Scene at 09/07/2020 13:09:43, Returning at 09/07/2020 21:48:30, Released at 09/07/2020 22:58:37

NE 08:

Responding at 09/07/2020 15:58:12, On Scene at 09/07/2020 18:31:03, Returning at 09/07/2020 22:17:59, Released at 09/07/2020 22:31:56

NE 09:

Responding at 09/07/2020 14:03:42, Released at 09/07/2020 22:31:56

E 531:

Responding at 09/07/2020 12:00:56, On Scene at 09/07/2020 12:56:47, Returning at 09/07/2020 21:42:06, Released at 09/07/2020 22:17:15

Entry Date/Time	From	To	Details
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Entry Date/Time	From	To	Details
09/07/2020 11:59:48	AR DO	CR	SPFN 3 REPORTING FIR @ 302 W BABB RD, 21/43/30, HAVE 7404 START RESPONDING THAT WAY, NOT 100% WE HAVE JURISDICTION // ALSO HAVE E-531
09/07/2020 12:00:38	E 531	CR	0+30 ETE
09/07/2020 12:01:57	AR DO	CR	DO WE KNOW IF TBR HAS OH IN SVC TODAY? // IF ONE IS AVAIL WOULD LIKE ONE TO HEAD THAT WAY
09/07/2020 12:02:27	BC 51	CR	COMMITTED TO COLD SPRINGS, NO OH AVAIL TO SEND FROM TBR, ASLO 531 HAS ICT4 ON BOARD
09/07/2020 12:11:28	AR DO	CR	DIST REPORTING LG COLUMN, MULTIPLE STRUCTURES THREATENED, WHAT IS AVAIL OF AIR? // WE DO HAVE AIR, BUT BEING ADVISED WE NEED LOCAL WIND BEFORE ANY LAUNCH
09/07/2020 12:13:04	HS	LOG	AIR IS GROUNDED FROM THE WIND
09/07/2020 12:17:34	AR DO	E 531/CR	ONLY HAVE YOU HEADED THAT WAY, NO OH CURRENTLY // WHAT IS AVAIL OF DOZER OR TWO, AND HTS CREWS? // HAVE 2 HTS CREWS COMMITTED IN LI CO,
09/07/2020 12:20:46	7405	CR	C/4 0+25 ETE
09/07/2020 12:21:35	CR	E 531	ONE OR TWO DOZERS? // ONE FOR NOW, IF WE COULD GET A SECOND AND A SECOND HEQB READY, THIS ISN'T GOING TO SLOW DOWN ANY TIME SOON, NOT ON SCENE YET SO NOT SURE IF IT'S IN TIMBER YET, BUT IF NOT IT WILL BE SOON, TOO WINDY FOR ANY AIRCRAFT TO FLY DOWN HERE
09/07/2020 12:28:48	E 531	CR	ON SCENE, 100-200 ACRES IN TIMBER, DIST IS FALLING BACK AND ASSUMING STRUCTURE PROTECTION // WORKING ON GETTING SECOND DOZER ORDERED
09/07/2020 12:30:46	CR	AR DO	RELAYED UPDATE FROM E 531
09/07/2020 12:32:29	CR	AR DO	ETMAN IS DOZER ENR, WORKING ON SECOND
09/07/2020 12:32:59	CR	E 531	ETMAN D
09/07/2020 12:33:20	JJ	Email	Email NES-2020-2151 BABB: NEW FIRE: SP CO, NW OF ROSALIA, 100-200 ACRES IN TIMBER, DIST PULLED BACK AND ARE DOING POINT PROTECTION, 2 DOZERS ORDERED. http://maps.google.com/maps?q=47.28209,-117.4274 Sent to: DNR Fires group
09/07/2020 12:33:36	JJ		FireCode Requested
09/07/2020 12:40:56	IC	CR	ANY LEO TO HELP WITH EVACUATIONS
09/07/2020 12:45:43	JJ	SP DISPATC	CALLED SPOKANE COUNTY LAW ENFORCEMENT - PASSED ON REQUEST - SHE WILL CHECK WITH FIRE DISPATCH.
09/07/2020 12:56:42	7405	CR	ON SCENE
09/07/2020 13:04:03	IC	CF UC	GOT UNIFIED COMMAN CONTIGENCY LINES AND ROUGHLY 400 ACRES
09/07/2020 13:09:10	EZ 10	CS	ENR BABB
09/07/2020 13:09:54	IC	CR	NO COMMS ON CHENEY EXCEPT ON REAL HIGH SPOT, NO IDEA HOW BIG OR WHERE HEAD OF FIRE IS, 400 ACRES IS CONSERVATIVE ESTIMATE, DIST RESOURCES VERY FEW AND FAR, TRYING TO FIGURE OUT WHAT HOUSES WE CAN SAVE NOW
09/07/2020 13:11:46	JJ	Email	Email NES-2020-2151 BABB: FIRE UPD: 400+ ACRES, LIMITED IINFORMATION, CANNOT SEE HEAD OF FIRE, MULTIPLE STRUCTURES THREATENED, STILL TRYING TO GET LE OUT FOR EVACS. Sent to: DNR Fires group
09/07/2020 13:13:22	AR DO	CR	EZ 10 DIVERTED FROM 2144 TO 2151, ALSO WORKING WITH KAN DO TO GET HEQB-T ENR
09/07/2020 13:14:20	CR	AR DO	RELAYED INFO FROM IC RE: SIZE AND STRUCTURE PROTECTION //
09/07/2020 13:18:17	IC	CR	FIRE HAS MADE IT ALL THE WAY TO ROSALIA AIRPORT, CROSSED PINES-MALDEN ROAD, THREATENING TOWN OF MALDEN
09/07/2020 13:20:25	CR	AR DO	RELAYED UPDATE // STILL NO GO FOR AIR? // AFFIRM, STILL NO GO // NO RESOURCES TO SEND CURRENTLY, WILL KEEP TRYING
09/07/2020 13:26:01	FULLER	JJ	SEND SOUTH TO ARCADIA - CHECK IN WITH DJ.
09/07/2020 13:40:15	IC	CF	REQUESTING A TYPE 1 OR TYPE 2 TEAM AND MULTIPLE STRUCTURES HAVE BEEN LOST
09/07/2020 13:45:48	TL		Acres set to 400
09/07/2020 13:46:22	CR	AR DO	RELAYED INC IS REQUESTING A T1 OR T2 TEAM, BUT NONE AVAILABLE // JUST TALKED TO TIM LOVE, THEY ARE TRYING TO ROLL 2151 IN WITH COLFAX INC AND GET A SE TYPE 3 TEAM ON IT, EZ 10 SHOULD BE ON SCENE OF THAT INC SOON AND SHOULD BE ABLE TO HELP SORT THAT OUT

Entry Date/Time	From	To	Details
09/07/2020 14:03:21	NE 9	CR	1+15
09/07/2020 14:09:54	CS	IC	PEPLINSKI DOZER IS IN ROSALIA, WHERE CAN HE MEET YOU? // ICP CORNER OF MARROW AND BABB
09/07/2020 14:13:40	IC	CR	HALF TOWN OF MALDEN BURNT DOWN, MULTIPLE STRUCTURE, HARD TO TELL WHERE MAIN FIRE IS, BUT MULTIPLE SPOTS THAT ARE GROWING AS BIG AS MAIN, FIRE IS ABOUT 35 MI ACROSS, AIR STILL GROUNDED? // AFFIRM, WILL NOTIFY AS SOON AS WE HAVE WORD IF THEY CAN FLY // WANT ALL THE VLATS ONCE THEY CAN FLY // ALSO THE PEPLINSKI DOZER GOT A BIT TURNED AROUND, BUT ENR TO MORROW & BABB NOW
09/07/2020 14:14:26	AR DO	CR	WILL HAVE NACCARATO RESPOND AS HEQB FOR ONE OF THOSE, SHE SHOULD GIVE ETA SHORTLY
09/07/2020 14:30:13	JJ	Email	Email NES-2020-2151 BABB: FIRE UPD: HALF THE TOWN OF MALDEN HAS BURNT, SPOT FIRES ARE GROWING AS LARGE AS MAIN FIRE, FIRE IS 35 MILES ACROSS. REQUESTING AIR - STILL UNABLE TO FLY. Sent to: DNR Fires group
09/07/2020 14:33:09	EZ 10	CR	ON SCENE, WHERE IS ICP? // REPORTING LOC IS BABB RD & MORROW RD, AND YOU SHOULD BE ABLE TO REACH GRAVES ON VTAC-11
09/07/2020 15:14:55	CHIEF 9	JJ	IS WORKING ON STATE MOB REQUEST.
09/07/2020 15:15:02	EZ 10	CR TX IC	TX IC FROM GRAVES TO ANDREW STENBECK
09/07/2020 15:17:12	NE 9	CR	ON SCENE
09/07/2020 15:17:31	CR	IC	NE 8 ENR AS HEQB, APPX 1+30 ETE
09/07/2020 15:32:21	EZ10	CF	MADE CONTACT WITH TYPE 3 TEAM AND WILL BE SETTING CAMP UP IN COLFAX AND WILL BE GOING OVER SANITATION PLAN
09/07/2020 15:33:00	TIM LOVE	JJ	WANTING TO COMPLEX FIRES AND ORDER A TYPE 1 TEAM.
09/07/2020 15:58:00	NE 08	EB	ENR 2H ETA
09/07/2020 16:06:46	EZ10	CF	ENROUTE TO COLFAX TO MEET TYPE 3 TEAM AND MIGHT NOT HAVE RADIO SERVICE WILL BE IN CONTACT VIA PHONE IF NEEDED
09/07/2020 16:19:05	NACCARATO	CR	IN AREA
09/07/2020 16:23:44	JJ	NE1	JUST ORDERING TYPE 1 UNDER BABB UNTIL WE CAN FIGURE OUT WHAT WE ARE COMPLEXING.
09/07/2020 16:23:55	JJ	LOG	PUT IN TYPE 1 LONG TEAM AND SENT UP TO NWC
09/07/2020 16:35:47	E 531	CR	FIRE ALMOST ALL THE WAY DOWN TO ROCK LAKE, IF YOU CAN RELAY TO EZ 10
09/07/2020 17:25:17	CR	EZ 10	LEFT VM FOR EZ 10 @ 1657 RE: UPDATE FROM 531
09/07/2020 18:31:23	NE8	CF	ON SCENE OF THE INCIDENT
09/07/2020 18:47:32	EZ 10	CR	BACK IN RADIO COVERAGE, HEADED BACK TO 2151
09/07/2020 18:56:01	IC	CR	CORRECTION TO REPORT THAT FIRE GOT TO ROCK LAKE, I'M AT WESTERNMOST TIP OF FIRE, STOPPED BY SEVERAL PILLARS, CROSS OF PATTERSON & GORDON IN WHITMAN COUNTY, 2 MI SHORT OF ROCK LAKE
09/07/2020 19:20:46	LOVE	JJ	BRETT WALKER WITH SHERIFF TO VERIFY LOSS OF LIFE AT EACH TOWN - BOTH MALDEN AND PINE CITY. NONE VERIFIED.
09/07/2020 19:28:22	LOVE	JJ	PER NE1, EZ 10 HAS CONFIRMED THEY HAVE STOPPED BABB FIRE ON THE SOUTH AND WEST SIDED. FARMERS USING DISKS IN THE WHEAT STUBBLE MADE THE DIFFERENCE. EZ 10 IS GOING INTO MALDEN AND HOOKING UP WITH WALKER AND POWERS
09/07/2020 21:42:00	531	TL	RELEASED AND EN ROUTE TO TBR
09/07/2020 21:44:13	EZ10	JJ	FIRE HAS BEEN TRANSFERRED TO MOB TEAM AT ROSALIA - IN THE PROCESS OF RELEASING DNR RESOURCES, GALLAGHER AND WALKER ARE BACK AT STAGING GETTING READY TO BE RELEASED. NACCAROTO TIED IN WITH TEAM AND WILL LET US KNOW WHEN RELEASED. HE IS RELEASED, ENROUTE HOME 2 HOUR ETA.
09/07/2020 21:48:21	7405	JJ	RELEASED.
09/07/2020 22:17:08	E 531	VR	OOS
09/07/2020 22:17:53	NE 8	VR	RELEASED, STAYING THE NIGHT IN SPOKANE. WILL LET YOU KNOW WHEN I'M OOS
09/07/2020 22:25:50	AR 7405	VR ORDER	4 FF DINNERS FROM WENDY'S ON N DIVISION
09/07/2020 22:31:45	NE 8	VR	OOS, ALONG WITH NE 9
09/07/2020 22:58:32	EZ 10	VR	BACK AT MY RESIDENCE, OOS

Entry Date/Time	From	To	Details
09/07/2020 23:00:28	AR 7405	VR	OOS
09/08/2020 13:49:09	CCC	CR	4 BABB ROAD, SPOT STARTING TO FLARE UP, 10 X 10 PARTIALLY IN BLACK, COUPLE HUNDRED FEET FROM NEAREST RESIDENCE
09/08/2020 13:56:24	CR	IC	TRIED TO CALL BOB GEAR, NO ANS, LEFT VM
09/08/2020 13:57:21	CR	OPS	TRIED TO CALL RICH ELLIOTT, OPS, NO ANS LEFT VM
09/08/2020 14:00:35	CR	LOGS?	CONTACTED MICHAEL @ 948-0441 (GIVEN TO ME BY HEIDI -- LOGS?) -- RELAYED ADDRESS FOR SPOT FIRE, HE WILL CONTACT THE APPROPRIATE DIVISION
09/08/2020 16:23:22	DNR 33	HL	ENR WITH 3 HOUR ETA
09/08/2020 19:25:21	DNR 33	TA	ON SCENE
09/08/2020 19:38:18	VR		Acres set to 8900
09/08/2020 21:02:37	DNR 33	BJ	MYSELF AND THE REST OF THE INVESTIGATION STAFF ARE OF THE INCIDENT AND WILL BE BACK IN THE MORNING
09/09/2020 06:13:13	DNR 33	SMS	2 HR ETE
09/09/2020 08:06:33	DNR 33	CR	SHOW ME OUT AT 2151, AWAITING THE REST OF THE INVESTIGATION TASK FORCE
09/09/2020 12:28:03	HML	LOG	CALLED DNR 33 TO HAVE HIM CALL DNR 4 AS SOON AS POSSIBLE LEFT VM
09/09/2020 12:57:07	DNR 33	HML	CAN YOU RELAY TO SO 60 ON REP THAT HE AHS CELL IF HW WANTS TO TRY AND CALL ME BACK
09/09/2020 14:09:43	CR	LOG 2193	SPFN 3 TONE OUT FOR S MORROW RD & E DIXON RD, WAS FLARE UP INSIDE ORIGINAL PERIMETER FOR 2151, SEE INC 2193 LOG FOR ADD'L INFO
09/09/2020 16:17:10	DNR 33	CR	INVESTIGATION TASK FORCE IS CLEAR OF SCENE
09/10/2020 19:00:03	NE1	JJ	TRANSITION FROM TYPE 3 TEAM TO AL LAWSON - TYPE 2 TEAM AT 1800
09/13/2020 08:11:40	HT 43	JS	ENR W/45 MIN ETA
09/13/2020 08:48:49	HT 43	VR	ARRIVING ON 2151
09/13/2020 11:40:40	AR 25	VR	EN ROUTE TO INC 2151, GOING TO TIE IN WITH COMMAND AND TAKE A LOOK AT THE FIRE.
09/13/2020 12:28:06	AR 25	VR	ARRIVED, CHECKING NORTH PORTION OF THE FIRE.
09/13/2020 16:53:51	AR 25	VR	CLEARING INC 2151
09/13/2020 17:59:35	AR 25	VR	OOS
09/13/2020 19:31:44	HTS 43	SMS	RLSD 1900, BIS

FOOTHILLS:

CHENEY 159.3675 RX 151.4675 TX 156.7 TONE RX&TX ADDED 09/07/2020 12:24:44

TACTICAL:

V-TAC 11 151.1375 RX/TX 156.7 TONE ON TX ONLY ADDED 09/07/2020 14:34:07

V-TAC 12 154.4525 RX/TX 156.7 TONE ON TX ONLY ADDED 09/07/2020 14:36:47

VOR

19nm 133° GEG: SPOKANE VO
 21nm 167° GEG: SPOKANE IN
 22nm 135° SKA: FAIRCHILD
 24nm 190° SFF: SPOKANE/FE
 25nm 172° SFF: FELTS NDB

ATB

358nm 012° LMT: KLAMATH FA
 375nm 019° MFR: MEDFORD AI
 395nm 014° SIY: SISKIYOU A
 402nm 339° BAM: BATTLE MOU
 415nm 015° SCV: FORT JONES

Helibase

373nm 004° DVG: DEVIL'S GA
 382nm 022° MER: MERLIN HEL
 394nm 334° ELK: ELKO HELIB
 403nm 004° BBR: BIEBER HEL
 412nm 000° RAV: RAVENDALE

Initial Report On Conditions

Fuels: **Acres:** **W Speed:** **Dir:** **Slope:** **Aspect:**
Spread: **Complexity:** 1 **Jurisdiction:**
Structures:
Initial Strategy: N/A

Fire Report Information

Fire #: **SubUnit:** 4-AR **SubUnit #:**
Acres: 8900 **Size Class:** G **Elevation:** **Land Status:**
Contain: **Control:** **Out:**
Statistical Cause: **Specific Cause:**
EIRS Complete: 9/8/20 HL HEADER ONLY

Incident Command Post

ICP Location:
MORROW RD & BABB RD
Lat: **Lon:**
Operations - Expanded: RICH ELLIOTT
Operations - ICP: 509-201-6280
Logistics - Expanded: DON RASSMUSSEN
Logistics - ICP: 509-969-3526 // MICHAEL (LOGS?) 509-948-0441

WILDFIRE

Avista says tree limb hitting powerline suspected as cause of Babb-Malden Fire

Avista conducted its own investigation and determined that there were no "deficiencies in its equipment, maintenance activities, or vegetation management practices."

Credit: KREM

Author: **KREM Staff**

Published: **9:03 AM PDT September 21, 2020**

Updated: **10:19 AM PDT September 21, 2020**



MALDEN, Wash. — A tree limb that hit a powerline is suspected to be the cause of the Babb-Malden fire, according to the power company.

"During the course of the storm, an otherwise healthy tree and limbs, located outside Avista's maintenance right-of-way, broke under the extraordinary wind conditions and caused damage to the energy delivery system at or near what is believed to be the area of the origin of the wildfire," said Avista Senior Communications Manager Casey Fielder.

Avista is participating in a Department of Natural Resources investigation into the cause of the Malden fire. That investigation is still ongoing, according to a release from the power company.

Avista conducted its own investigation into the primary cause of the fires in the region and determined that extremely high winds triggered wildfires and affected utilities throughout the Pacific Northwest, according to the release.

Avista didn't find any evidence that the fires were caused by "deficiencies in its equipment, maintenance activities, or vegetation management practices," according to the release.

However, the company did discover "instances where, during the course of the storm, otherwise healthy trees and limbs located in areas outside its maintenance right of way, broke under the extraordinary wind conditions and caused damage to its energy delivery system," according to the release.

KREM reached out to the Department of Natural Resources for comment about its investigation but has not heard back.



PROPERTY/EVIDENCE LOG

CASE NUMBER 20-V-AKV		FIRE NAME Babb Fire	INCIDENT DATE 09/07/2020
INVESTIGATOR G. Margheim		EVIDENCE STORAGE LOCATION Jones Rd Evidence Facility - Tumwater	
PROPERTY/EVIDENCE COLLECTED			
EVIDENCE NUMBER	PROPERTY OR EVIDENCE (P/E)	DESCRIPTION OF PROPERTY/EVIDENCE	
E-1	E	Segment of power line – Phase Line	
E-2	E	Segment of power line – Neutral Line	
E-3A	E	Top of Ponderosa Pine tree – Part 1 of 2	
E-3B	E	Top of Ponderosa Pine tree – Part 2 of 2	
E-4	E	Segment of tree trunk – Lower Section	
E-5	E	Segment of tree trunk – Upper Section	
E-6	E	Molten piece of Aluminum located on fence	
E-7	E	Molten pieces of Aluminum located on ground near fence	



State of Washington Department of Natural Resources – Wildland Fire Investigation Program

PROPERTY / EVIDENCE
CONTROL LOG AND CHAIN OF CUSTODY REPORT

CASE FILE NO. 20-V-AKV	FIRE NAME DAB3 ROAD	REGION NE FIU	INCIDENT DATE 9-7-20	TIME 1159 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM
INVESTIGATOR MARGHEIM	REGION LES/FIU	STORAGE LOCATION JONES Rd	INCIDENT (WILDCAD) NO. 2151	REFERENCE CASE AGENCY NO.

LOCATION WHERE PROPERTY / EVIDENCE WAS OBTAINED

921 R 43E S33

PURPOSE FOR WHICH PROPERTY / EVIDENCE WAS OBTAINED

☒ EVIDENCE ☐ PROPERTY ☐ OTHER (DESCRIBE) -

PROPERTY / EVIDENCE OWNER

☐ UNKNOWN ☒ KNOWN (IDENTIFY) - **AVISTA UTILITY**

CONTROL LOG (PROPERTY / EVIDENCE COLLECTED)

EVIDENCE NUMBER	QUANTITY	DESCRIPTION OF PROPERTY (INCLUDE MAKE, MODEL, SERIAL NUMBER, CONDITION, HOW SECURED, ETC.)
E6	1	MOLTEN PIECE OF ALUMINUM FROM FENCE
E7	7	MOLTEN PIECES OF ALUMINUM FROM GROUND

CHAIN OF CUSTODY (PROPERTY / EVIDENCE TRANSFER)

EVIDENCE NUMBER(S)	DATE	TIME	FROM (NAME & SIGNATURE)	TO (NAME & SIGNATURE)	PURPOSE FOR CHANGE OF CUSTODY
E-6/E-7	11-10-20	1046	GARY MARGHEIM 	ELCANE DUTRAIN 	

REMARKS/COMMENTS -

SUBMITTED BY (Print)

GARY MARGHEIM

(Signature)

DATE

11-9-20

DNV-ATLANTIC Forensic Investigation Program
 (LAWENCL) Certified & Licensed Forensic UCLIF



PROPERTY/EVIDENCE REPORT

Page of

(CHECK ONLY ONE)

☒ EVIDENCE

☐ PROPERTY

OBTAINED BY: (Last, First MI)

MARGHEIM, GARY

REGION

FIU

CASE NUMBER

20-V-AKV

☒ OWNER

☐ DEFENDANT

LOCATION OBTAINED (Address/Township, Range, Section)

T21 T243E S33

NAME (LAST, FIRST, MI)

AVISTA UTILITY

DATE OF BIRTH

DATE OBTAINED

9-30-20

STREET ADDRESS

P.O. Box 3727

HOME PHONE

TIME OBTAINED

1400

CITY, STATE, ZIP CODE

SPOKANE, WA 99220

WORK PHONE

DATE DEPOSITED

11-10-20

TIME DEPOSITED

1046

☐ ADDITIONAL DEFENDANT

☐ OWNER

☐ ADDITIONAL DEFENDANT

☐ OWNER

NAME (LAST, FIRST, MI)

DATE OF BIRTH

NAME (LAST, FIRST, MI)

DATE OF BIRTH

STREET ADDRESS

STREET ADDRESS

CITY, STATE, ZIP CODE

CITY, STATE, ZIP CODE

HOME PHONE

WORK PHONE

HOME PHONE

WORK PHONE

ITEM #

QTY

PROPERTY DESCRIPTION - LIST SERIAL #, MODEL #, ETC.

E-6

1

MOLTEN PIECE OF ALUMINUM

RECEIVED BY:

SIGNATURE OF PROPERTY CUSTODIAN / TITLE

DATE/TIME

ADDITION REMARKS:

☐ Disposal

☐ Return to Owner/Claimant (For Property/Evidence Custodian Only)

PEC Signature: _____ DATE/TIME: _____

Owner/Claimant Signature: _____ DATE/TIME: _____

Witness Signature: _____ DATE/TIME: _____

FIU EVIDENCE FORM
REV: 1/2019

DISTRIBUTION: ORIGINAL TO BE SUBMITTED WITH EVIDENCE TO THE PROPERTY EVIDENCE CUSTODIAN
ONE COPY SHALL BE MAINTAINED IN THE CASE FILE



PROPERTY/EVIDENCE REPORT

Page of

(CHECK ONLY ONE)

☐ EVIDENCE

☐ PROPERTY

OBTAINED BY: (Last, First MI)

MARCHEM, GARY

REGION

F.I.U.

CASE NUMBER

20-V-AKV

☒ OWNER

☐ DEFENDANT

LOCATION OBTAINED (Address/Township, Range, Section)

T21 R43E S33

NAME (LAST, FIRST, MI)

AUSTA UTILITY

DATE OF BIRTH

9-30-20

STREET ADDRESS

P.O. Box 3727

HOME PHONE

1410

CITY, STATE, ZIP CODE

SPokane, WA 99220

WORK PHONE

11-10-20

TIME DEPOSITED
1046

☐ ADDITIONAL DEFENDANT

☐ OWNER

☐ ADDITIONAL DEFENDANT

☐ OWNER

NAME (LAST, FIRST, MI)

DATE OF BIRTH

NAME (LAST, FIRST, MI)

DATE OF BIRTH

STREET ADDRESS

STREET ADDRESS

CITY, STATE, ZIP CODE

CITY, STATE, ZIP CODE

HOME PHONE

WORK PHONE

HOME PHONE

WORK PHONE

ITEM #

QTY

PROPERTY DESCRIPTION - LIST SERIAL #, MODEL #, ETC.

E-7

7

MOLTEN PIECES OF ALUMINUM

RECEIVED BY:

SIGNATURE OF PROPERTY CUSTODIAN / TITLE

DATE/TIME

ADDITION REMARKS:

☐ Disposal

☐ Return to Owner/Claimant (For Property/Evidence Custodian Only)

PEC Signature: DATE/TIME:

Owner/Claimant Signature: DATE/TIME:

Witness Signature: DATE/TIME:



PROPERTY/EVIDENCE REPORT

Page of

(CHECK ONLY ONE)

☐ EVIDENCE

☐ PROPERTY

OBTAINED BY: (Last, First MI) MARCHEM, GARY		REGION FIU	CASE NUMBER 20-V-AKV
<input checked="" type="checkbox"/> OWNER <input type="checkbox"/> DEFENDANT		LOCATION OBTAINED (Address/Township, Range, Section) T21 R43E S33	
NAME (LAST, FIRST, MI) AJISTA UTILITY		DATE OF BIRTH	DATE OBTAINED 9-30-20
STREET ADDRESS P.O. Box 3727		HOME PHONE	TIME OBTAINED 1410
CITY, STATE, ZIP CODE SPokane, WA 99220		WORK PHONE	DATE DEPOSITED 11-10-20
TIME DEPOSITED 1046			
<input type="checkbox"/> ADDITIONAL DEFENDANT <input type="checkbox"/> OWNER		<input type="checkbox"/> ADDITIONAL DEFENDANT <input type="checkbox"/> OWNER	
NAME (LAST, FIRST, MI)		DATE OF BIRTH	NAME (LAST, FIRST, MI)
STREET ADDRESS		STREET ADDRESS	
CITY, STATE, ZIP CODE		CITY, STATE, ZIP CODE	
HOME PHONE	WORK PHONE	HOME PHONE	WORK PHONE
ITEM #	QTY	PROPERTY DESCRIPTION - LIST SERIAL #, MODEL #, ETC.	
E-7	7	MOLTEN PIECES OF ALUMINUM	
RECEIVED BY: [Signature] SIGNATURE OF PROPERTY CUSTODIAN / TITLE			
11/10/2020 1046 DATE/TIME			
ADDITION REMARKS:			
<input type="checkbox"/> Disposal <input type="checkbox"/> Return to Owner/Claimant (For Property/Evidence Custodian Only)			
PEC Signature: _____ DATE/TIME: _____			
Owner/Claimant Signature: _____ DATE/TIME: _____			
Witness Signature: _____ DATE/TIME: _____			

FIU EVIDENCE FORM
REV: 1/2019

DISTRIBUTION: ORIGINAL TO BE SUBMITTED WITH EVIDENCE TO THE PROPERTY EVIDENCE CUSTODIAN
ONE COPY SHALL BE MAINTAINED IN THE CASE FILE



**DEPARTMENT OF
NATURAL RESOURCES**

**POLICE / WILDLAND FIRE
INVESTIGATIONS**

713 BOWERS
ELLENSBURG, WA 98926

509-925-0932

GARY.MARGHEIM@DNR.WA.GOV
WWW.DNR.WA.GOV

November 4, 2020

Avista Utilities
Customer Service, MSC-34
P.O. Box 3727
Spokane, WA 99220-3727

Subject: Request for Data Information

Dear Avista Utility Manager,

I am requesting utility data associated with the protective relay system and/or electronic monitoring system for the primary and/or secondary distribution lines impacted during the events associated with the Babb wildfire. This includes any data that can show the substation where the circuit originates, routing of the line, and any terminations or connections to loads and/or customers. Provide any data that shows changes or fluctuations in protective relay device status, or changes that show any system related parameter changes that are monitored (Voltage, Current, etc.) that were impacted leading up-to, during, and after the event. The data shall include any remotely and locally stored data at the substation that may be associated with the distribution line impacted, including date and time associated with faults or manual opening of the circuit. Provide a point of contact for discussion and interpretation of the data provided as needed.

I am looking for 30 days prior to the start of the Babb Fire, which occurred on September 8, 2020, until the opening of the circuit, electronically or manually. The distribution line referenced has pole number 045355 WWP WFCO 12/94. The line proceeds west from Morrow Road just north of, and adjacent to, the Milwaukee Railroad Corridor/John Wayne Trail. Please call if you have questions on line location.

Electronic submission of the information is preferred. If the information cannot be processed electronically, please let me know. I can be reached at the below listed phone number.

Respectfully,

Gary D. Margheim
Natural Resource Police Sergeant
Cell Phone (509) 607-6723
gary.margheim@dnr.wa.gov

C: Babb Fire Investigation

09/07/2020 : 18:29:34 amanda.vandenberg Narrative: v823 I adv other unit to clear scene as well
09/07/2020 : 18:16:54 amanda.vandenberg Narrative: ok to pick those up
09/07/2020 : 18:16:33 amanda.vandenberg Narrative: V823 left some barricades last week on latah creek rd
09/07/2020 : 18:12:46 amanda.vandenberg Narrative: V823 copeis will clear
09/07/2020 : 18:11:56 amanda.vandenberg Narrative: they are still working on malden, many structures lost though, SCOPE units can clear on spokane side
09/07/2020 : 16:51:08 Tera.Zajack Narrative: 206-914-9964 cr111
09/07/2020 : 16:32:54 galactic\JCARRILLO Narrative: COUNTY FIRE TO HANDLE. THE FIRE IS NOW MAINLY IN WHITMAN COUNTY

09/07/2020 : 14:58:48 janet.hawkins Narrative: State J290 has Cheney Spangle closed at Rupp Rd.
09/07/2020 : 14:43:27 amanda.vandenberg Narrative: at wells/cheney plaza
09/07/2020 : 14:43:14 amanda.vandenberg Narrative: A511 w/citizens trying to put out smaller fires
09/07/2020 : 14:29:14 amanda.vandenberg Narrative: fire adv
09/07/2020 : 14:29:08 amanda.vandenberg Narrative: a511 - see spot fire on wells jno squaw creek
09/07/2020 : 14:20:33 amanda.vandenberg Narrative: fire spans several miles now
09/07/2020 : 14:20:10 amanda.vandenberg Narrative: A511 headed back to CP from malden area
09/07/2020 : 14:19:00 amanda.vandenberg Narrative: will need sirt units at - wells/blackman, babb/cheney plaza, babb/195
09/07/2020 : 14:17:38 amanda.vandenberg Narrative: town of malden is gone, unk if everyone got out in time
09/07/2020 : 14:02:32 janet.hawkins Narrative: A511: WITH FIRE WELLS AND PLAZA RD - APPARENTLY THE WHOLE TOWN OF MALDEN IS ON FIRE AND THEY ARE NOT ABLE TO GET VERY MANY PEOPLE OUT NOW.
09/07/2020 : 13:18:26 janet.hawkins Narrative: WHITMAN COUNTY ADVISES THEY HAVE ALREADY HANDLED THE TOWN OF MALDEN AND STARTING EVACUATION
09/07/2020 : 13:17:10 amanda.vandenberg Narrative: fire trying to reach whitman county to adv fire moving quickly their way
09/07/2020 : 13:17:02 janet.hawkins Narrative: SIRT PAGED
09/07/2020 : 13:16:59 amanda.vandenberg Narrative: no cell service here
09/07/2020 : 13:15:17 amanda.vandenberg Narrative: maybe Malden?
09/07/2020 : 13:15:01 amanda.vandenberg Narrative: town of molter is SW of loc
09/07/2020 : 13:14:55 amanda.vandenberg Narrative: 1 sirt cheney plaza/babb to keep them from going SE towards stage area
09/07/2020 : 13:14:43 amanda.vandenberg Narrative: 1 sirt at babb/195 to cut off traffic wb
09/07/2020 : 13:14:25 amanda.vandenberg Narrative: evac starting on town of Molter?
09/07/2020 : 13:08:37 amanda.vandenberg Narrative: need a couple sirt units
09/07/2020 : 13:07:56 amanda.vandenberg Narrative: a511 trying to reestablish a better CP, fire already a mile long towards teh border
09/07/2020 : 13:04:39 amanda.vandenberg Narrative: at CP w/fire [Local Only]
09/07/2020 : 13:01:26 amanda.vandenberg Narrative: fire req assist w/evac
09/07/2020 : 13:01:10 amanda.vandenberg Narrative: fire CP is morrow /babb
09/07/2020 : 12:59:39 amanda.vandenberg Narrative: Narrative added from associated Call #: 5906 - likely same as cfs 5779
09/07/2020 : 12:58:12 Grant.Schwallie Narrative: 509 523 3095. CR141
09/07/2020 : 12:56:21 KJ.Petersen Narrative: Narrative added from associated Call #: 5906 - CR122
09/07/2020 : 12:56:19 KJ.Petersen Narrative: Narrative added from associated Call #: 5906 - fire jso.
09/07/2020 : 12:55:45 KJ.Petersen Narrative: Narrative added from associated Call #: 5906 - Remote CFS# 2020059777 Created by [Infor]
09/07/2020 : 12:55:45 system Narrative: Narrative added from associated Call #: 5906 - Created call 2020059777 [Infor]
09/07/2020 : 12:55:42 system Narrative: Narrative added from associated Call #: 5906 - Call transfer initiated to Infor
09/07/2020 : 12:46:48 janet.hawkins Narrative: FIRE advises they do not have official evacuation going yet. Was advised to keep LE informed if/when that changes

09/07/2020 : 12:45:34 janet.hawkins Narrative: NEWICK dispatch center is asking for assist with evacuation
09/07/2020 : 12:37:10 galactic\JCARRILLO Narrative: CODE
09/07/2020 : 12:26:38 amanda.vandenberg Narrative: fire can ask for that, not civilian
09/07/2020 : 12:26:13 Mathew.Eaton Narrative: cr193
09/07/2020 : 12:26:09 Mathew.Eaton Narrative: comp from 509 994 2133 states lots of vehs in area req traffic control from LE
09/07/2020 : 12:25:29 Michael.Fagin Narrative: fire on scn
09/07/2020 : 12:23:44 Abby.Clark Narrative: 509 523 4832. CR144
09/07/2020 : 12:11:40 Mathew.Eaton Narrative: cr193
09/07/2020 : 12:11:38 Mathew.Eaton Narrative: fire updated
09/07/2020 : 12:11:11 Mathew.Eaton Narrative: my caller stating morrow/ dickson 5099942133
09/07/2020 : 11:57:06 Kait.Clark Narrative: CR164
09/07/2020 : 11:56:44 Kait.Clark Narrative: Remote CFS# 2020059747 Created by [Infor]
09/07/2020 : 11:56:44 system Narrative: Created call 2020059747 [Infor]
09/07/2020 : 11:56:40 system Narrative: Call transfer initiated to Infor
09/07/2020 : 11:56:38 Kait.Clark Narrative: seeing flames, trees on fire