Incident Summary Page for the 100 Fires Project

Incident Name: Twisp River Fire	**Incident Date & Time:** 08/19/2015 @ 15:00
Incident Location: Twisp River Road, 5 miles west of Twisp, Washington	**Incident Size:** 11,922 final acreage 50+ acres at time of entrapment
Types of resources involved: US Forest Service Type 6 engine and Washington Department of Natural Resources heavy equipment group	**# of Fatalities/injuries:** 3 fatalities / 1 critically burned 3 deployed fire shelters with minor injuries

Reason this fire was selected for the 100 Fires list:

- 3 or more firefighter fatalities by entrapment

Conditions leading up to the event:

The Twisp River Fire started at 2600 foot elevation along Twisp River Road approximately five miles west of Twisp, Washington. The Twisp River drainage is a major west-to-east drainage running from the Cascade Crest out into the Methow Valley in north central Washington.

The area was classified in "extreme drought" and was snow-free by May. The average temperatures in the area were the warmest on record since 1895. The August 19 forecast for the local fire weather zone called for maximum valley temperatures of 89°-95°; minimum relative humidity of 11-21 %; 20-foot wind speeds upslope/up valley 2-5 mph in the morning, becoming 3-7 mph out of the southwest in the afternoon; with a Haines Index of 5 (Moderate). At the time of the fire, the Okanogan-Wenatchee National Forest (OWF) and Washington Department of Natural Resources (DNR) classified the fire danger for the area as "Extreme". All fuel types and size classes were available to burn during the fire.

The nation and the Northwest Geographic Area were at fire Preparedness Level 5. In Washington there were 18 large wildfires and 2 wildfire complexes. A significant weather event on August 13-14 resulted in 49 new fire starts in the general area. Between August 15 and 18 the area had another 29 new starts. In addition, the local fire resources were well aware of the 2014 Carlton Complex Fire which burned 256,108 areas and 353 homes in the Methow Valley the previous summer.

Brief description of the event:

The Twisp Fire was reported via a 911 call to the Okanogan County Sheriff's Office on August 19 at 12:23. The fire started when tree branches struck a nearby powerline.

The Okanogan County Fire District (OCFD) initiated a full initial attack response that included the Fire District Chief, two Division Chiefs, six engines and two water tenders. The county also notified Northeast Washington Interagency Communications Center (NEWICC) who dispatched a DNR Heavy Equipment Boss w/trainee, dozer w/operator, two engines and two helicopters.

An off-duty US Forest Service employee noticed the fire around this time and called the Winthrop Ranger District Duty Officer who requested through Central Washington Interagency Communications Center (CWICC) a Forest Service (FS) Incident Commander Type (ICT3) with trainee along with local FS Engine-642. Another request was made for an engine, a Type 2 IA hand crew, a dozer with operator and Heavy Equipment Boss from Black Canyon Fire, a contractor. And a third request was made for a COOP Engine from Bear Mountain Fire, another contractor.

While enroute to the fire the FS ICT3 trainee ordered a heavy airtanker, heavy helicopter and Air Attack also through CWICC.

First on scene, the OCFD Chief assumed command. The fire was initially reported below a residence on Woods Canyon Road, although the fire was not immediately threatening structures on this road the Fire District Chief drove up the narrow steep one way 1/2 mile road and evacuated the residents.

Resources started arriving around 12:30; the Fire District Chief was joined by the FS ICT3 with trainee and much later a DNR overhead to establish a Unified Command structure. NEWICC was the contact Dispatch Office and a staging area was established below the fire near Twisp River Road and Woods Canyon Road.

The fire was moving to the northwest aligned with the slope and wind, through grass and light brush, away from Twisp River Road and away from Woods Canyon Road, but had additional structures ahead of it. A plan was put into motion to anchor and flank the fire from the point of origin. A left flank and a right flank "Point of Contact" (POC) individual were established, with separate tactical radio frequencies. Working with helicopters, resources began putting in hoselays and building handline on the priority left flank. The fire was an active 10+ acres and crews were dealing with spot fires. On the right flank the fire was backing into the bottom of Woods Canyon Road, the heel of the fire.

Incident Summary Page for the 100 Fires Project

Around 14:00 FS Engine-642 went up Woods Canyon Road on the right flank, to assess the structures and met up with another FS engine crew who were on foot scouting line location for the dozer and working a helicopter near house #1 to cool off the right flank heel. They had a quick briefing noting their escape route was down the road, their safety zone was the staging area, and the weather forecast from the Fire Behavior Analyst at Black Canyon Fire had predicted a wind shift around 15:00.

About this time the contract dozer with the DNR Heavy Equipment Boss and trainee had arrived, off loaded east of the fire, walked cross-country and, deciding against direct attack, began right flank line construction at house #2 above the heel of the fire. The dozer line was indirect and on a bench between the main fire to the west with the houses and Woods Canyon Road to the east. Unburned fuels in the drainage between the dozer line and the main fire included a heavier Ponderosa pine overstory, bitterbrush, sage and grass.

Around 14:30 the right flank POC requested additional engines for structure protection; in response the COOP engine, a contract engine, and a OCFD engine proceeded up Woods Canyon Road. During this time the fire continued to back and spot towards the heel on the right flank, threatening home #1. The helicopter which had been cooling things down left to refuel. On the left flank the fire was estimated to be 50+ acres and running, so the ICT3 trainee requested additional air support. The left flank POC noted the winds were shifting and contacted the right flank POC to offer more air resources. Air Attack also noticed the column standing straight up and was able to see the structures much better.

At 14:45 the wind shifted, from the southeast to the southwest. The Heavy Equipment Boss on the right flank noticed ash falling on the dozer line and exhorted the dozer to quickly tie into house #3. The right flank POC felt the wind *"like a blast."* The fire instantly blew up, trees and brush were being totally consumed, the fire was running up hill, up drainage from the west and from the heel and towards the engines and dozer.

The right flank POC called for all resources to escape down Woods Canyon Road to the safety zone. FS Engine-642, with Rick Wheeler, Andrew Zajac, Tom Zbyszewki and Daniel Lyon, at house #2, initially started driving uphill but were directed by the right flank POC to turn around. They were the first engine to head down the road toward the safety zone. The fire overtook the road as they were driving, visibility was reduced to zero. Survivor Daniel Lyon, sitting in the back seat remembers *"the truck kind of like jumping down, and I felt like a couple of the tires blew on the truck cause we were driving through the fire."* They continued driving for a few moments after the truck lurched, then they went off the road and down an embankment. The truck came to rest when the front axle became high centered. The driver tried to get the truck unstuck to no avail. Daniel bailed out of the truck through the left rear door, forced his way through the flames, made it back up to the road, and ran down the road to find help. The contract engine and the COOP engine along with the POC drove past the stuck FS Engine-642 but did not see them due to the heat and flames. The FS firefighters on foot working near house #1, in the lower right flank heel area, safely made it below the fire run. Daniel Lyon, badly burned, was found and aided by these resources and the two engines.

The right flank DNR Dozer Group (dozer operator, Heavy Equipment Boss, and trainee) along with an OCFD Engine were at a house #3 at the upper end of the right flank. The Dozer Group huddled between the dozer and the garage hoping to ride it out, but as conditions got too hot they took refuge in the garage. The OCFD Engine sprayed water attempting to cool the area around the house and garage and dozer. As the fire front passed the garage and house were on fire, the engine saw an opening and proceeded down the road. With the garage now on fire and roof collapsing the Dozer Group left the garage, ran down the driveway to Woods Canyon Road and deployed fire shelters. The dozer operator had left his fire shelter on the dozer, the three shared two shelters. In direct communication with Air Attack, the Heavy Equipment Boss requested and received retardant drops that had a significant effect on reducing the amount of heat.

At 15:08 after the wind shift and blow up, the FS IC ordered all resources to disengage and return to Twisp River Road. The FS IC and the right flank POC then began the search for FS Engine-642 and the DNR Dozer Group. After things cooled down a bit they drove up Woods Canyon Road and saw fire shelters, they were relieved when the all three individuals from the Dozer Group emerged. Returning down the road they noticed skid marks and spotted FS Engine-642 off the right side of the embankment, there were no survivors.

Fire behavior factors that were present during the event:

Long term drought
All fuel classes were available
High temperatures, low relative humidity
Shift in wind direction
Topography including alignment of slopes and drainages

Operational lessons available for learning from this incident:

Wildland firefighters and structures:

- additional risks and stress
- narrow focus, lose sight of "bigger picture"

Incident Summary Page for the 100 Fires Project

Coordination with multiple agencies:
- qualifications and experience differences
- communications between two dispatch centers and three agency ICs in Unified Command

Escape Routes and Safety Zones:
- resources were 1/4 to 3/4 mile from a safety zone
- vehicles were required to quickly reach a safety zone
- dozer group did not have access to a safety zone

Anchor point at heel of fire:
- had unburned fuel
- was depending on aviation assets

Notable impact or historical significance for the wildland fire service from this incident:

Not applicable

Links to more information on this incident:

https://lessons.wildfire.gov/incident/twisp-river-fire-entrapments-and-fatalities-2015
http://lessonslearned-prod-media-bucket.s3.us-gov-west-1.amazonaws.com/s3fs-public/2023-02/Fall2016TwispRiverNarrative3.pdf
http://wlfalwaysremember.net/2015/08/19/wheeler-zajac-zbyszewski/
http://wildfiretoday.com/tag/twisp-river-fire/
http://en.wikipedia.org/wiki/Okanogan_Complex_Fire
https://www.fs.usda.gov/detailfull/okawen/fire/?cid=fseprd535581

Video:
- www.youtube.com/watch?v=1q1JlP11xbY

This summary page was proudly provided by:
Larry Edwards, former Superintendent Helena Hotshot Crew

May 2024

Local monument for Rick Wheeler, Andrew Zajac, and Tom Zbyszewki

Figure 8—A photo of the post fire scene (paved road is Twisp River Road and the dirt road is Woods Canyon Road).

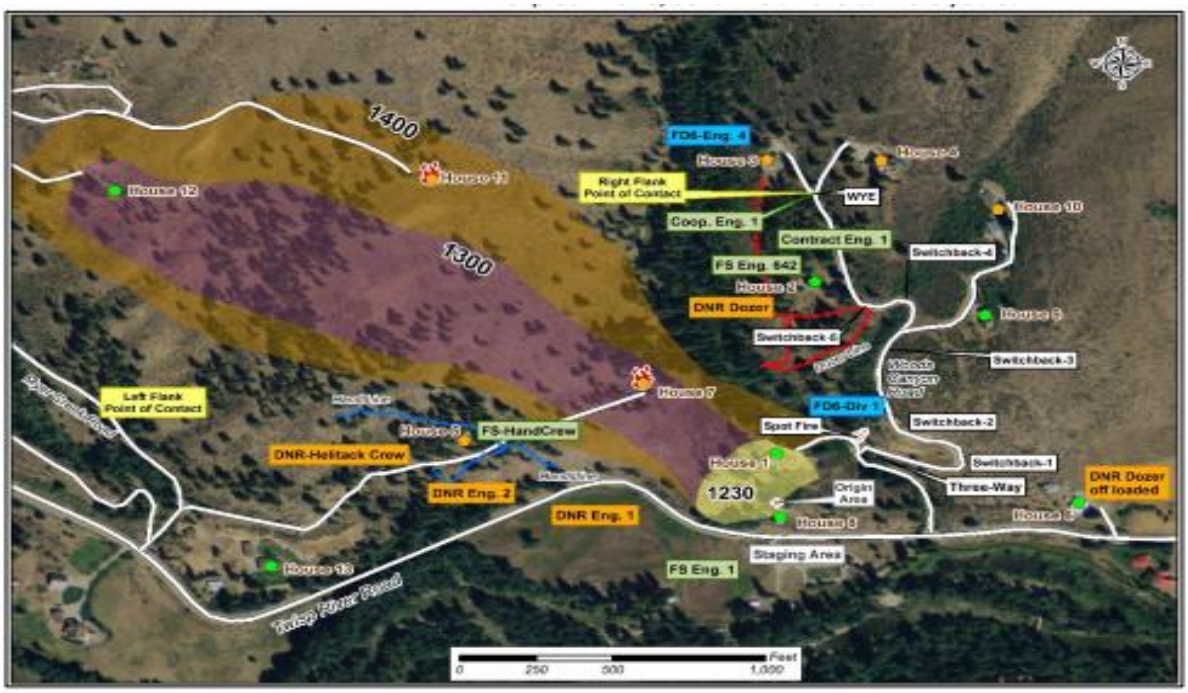

Figure 8: This map shows the Twisp River Fire area with approximate resource locations prior to the wind shift. Orange houses were burned in the fire; green houses survived.

Final location of Engine 642

Figure 7—A depiction of how the dozer group was oriented while in the two shelters. The remnants of house 3 and dozer are in the background of the photo.