

Faust Fire Tests West Onaqui Hazardous Fuel Reduction Treatments

On August 5, 2012, a lightning strike on the east side of the Onaqui Mountains in Tooele County, Utah ignited the Faust Fire. The fire burned a total of 22,045 acres or roughly 34 square miles. The community of Terra, located north of the fire, was threatened as the fire pushed west and north. After the smoke cleared, firefighters commented on the positive impact that previous fuels treatments had on suppression tactics that ultimately resulted in containment of the fire. They were referring to the West Onaqui Hazardous Fuels Reduction Project which began implementation in 2005. Approximately 2,900 acres of the project was impacted by the Faust Fire. As shown in Figure 1, the project included treatments with a variety of prescriptions, objectives, and completion dates.

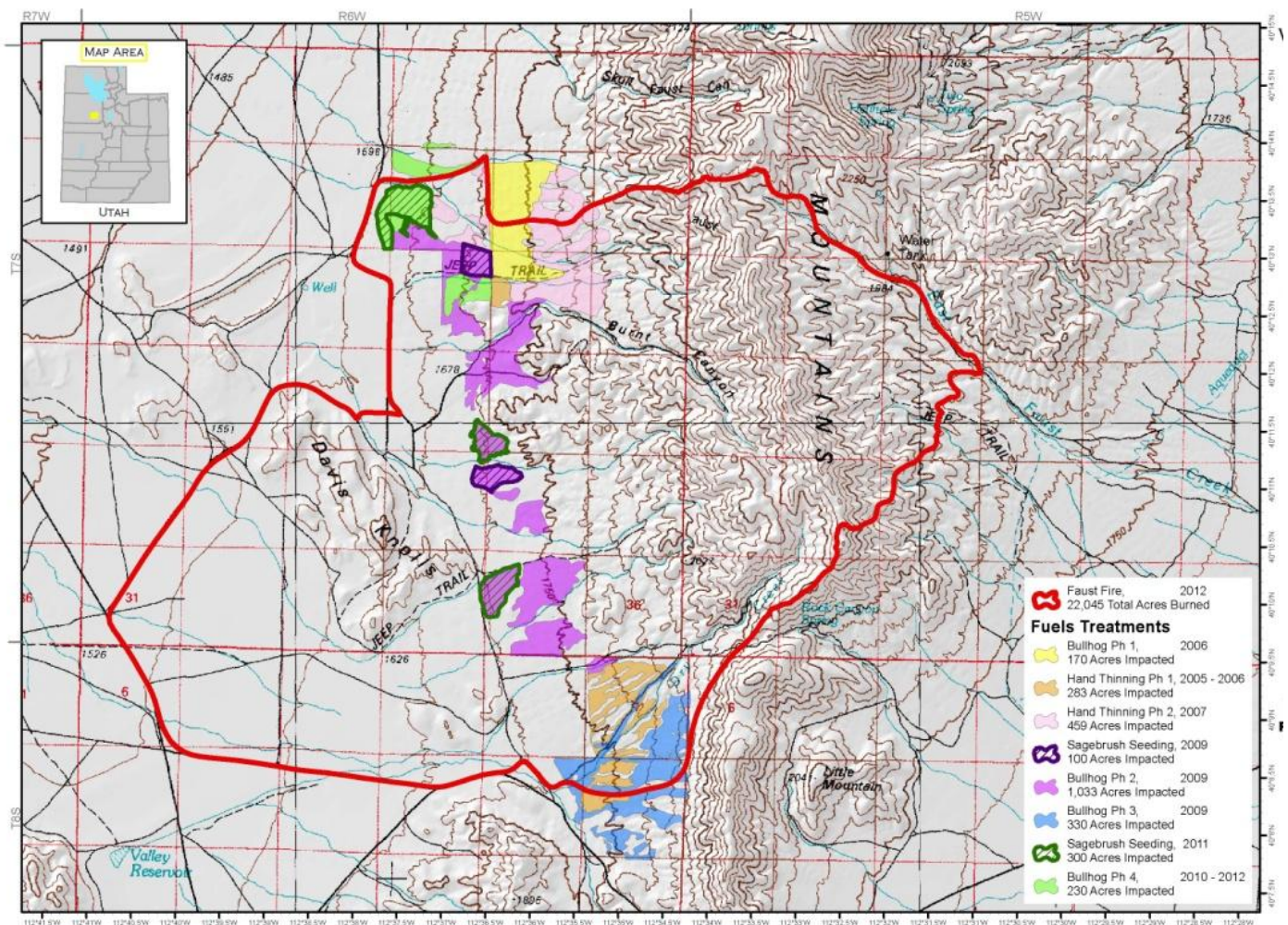


Figure 1 – Map of Faust Fire perimeter and West Onaqui Hazardous Fuels Reduction Project treatments.

The Faust Fire Incident Commander, Nate Hunter, explained how the treatments in the area aided in suppression efforts. “Overall it gave us more options and tactics to use while containing this [western] portion of the fire,” said Hunter. These tactical advantages assisted the suppression forces in stopping the fire’s advance to the north, toward the community of Terra. The primary advantages were:

- **Improved access for ground resources.** Juniper trees had been thinned within 100 feet of the roadways, allowing safer access for engines and opportunities to contain the fire.

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- **Moderated fire intensity.** Fire behavior was altered in the treatment areas from crown fire in juniper to surface fire where the juniper had been shredded. This enabled firefighters to safely fight the fire and establish control lines.
- **Increased effectiveness of aerial application of water and retardant.** The spacing between juniper trees allowed water and retardant dropped from helicopters and air tankers to reach the ground, impeding the fire's spread.



Figure 2. Juniper thinning on the west side of the Onaqui Mountains.

Though fire protection is a main objective for these treatments, it is not the only reason they occur. Thinning

junipers enhances wildlife habitat by preserving important sagebrush ecosystems. Treatments also increase water availability which promotes species diversity and overall ecosystem resilience. The juniper thinning was accomplished primarily through mechanical means, using a "bullhog." A bullhog is commonly an excavator with a rotating drum head with carbide teeth used to masticate the juniper. This method shreds the tree and produces the effect seen in the foreground of Figure 2.

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