

## Climate Crisis: The Burntfields Reality

*Roy Thun* ([roy.thun@ghd.com](mailto:roy.thun@ghd.com)) (GHD, Irvine, CA., USA)

**Background/Objectives.** Climate change has rapidly influenced the frequency and severity of wildfires around the world. As recently witnessed in the Western United States, Australia, Brazil and even the Arctic, wildfires are non-discriminatory in their global occurrence. Vast areas with once thriving communities have been devastated by wildfire. From 2017 through 2021 the United States suffered over 297,000 wildfires that resulted in the burning of 40-million acres. According to NOAA the five most destructive wildfires over the last five years resulted in \$80 billion in associated damages and 217 related deaths. Rebuilding entire communities from the ground up is a massive challenge. For many fire ravaged communities above ground power systems were destroyed and local water supplies contaminated with chemicals released during the fire.

**Approach/Activities.** This presentation will explore the growing complexities of managing wildfire related risks within the wildland urban interface (WUI) through case studies and statistics. The audience will also be introduced to the term Burntfields™, which are wildland urban interface areas and properties that have been or could be environmentally, socially, and economically harmed by wildfire.

**Results/Lessons Learned.** Changes in population distribution, vegetation conditions, and wildfire behavior due to climate change requires a new strategy to managing wildfire risks. The Burntfields™ lifecycle management approach integrates underutilized skilled private sector resources to help agencies, communities and businesses prepare and protect themselves against devastating wildfires.