

Wildfire Issues: GRIDWIDE FIRE-SPY Provides a Game-Changing Solution

The solution uniquely leverages existing distribution grid assets to create a fast-to-install, "Always-On" outdoor overhead monitoring and public safety sensor network.

hroughout the last decade, wildfires have continued to increase in frequency, size, and their utterly mind-boggling post-event statistics. Once upon a time, there was a reasonably well-defined wildfire season. Now there is no longer such a season; wildfires are lighting up our country (and throughout the world) during nearly every month of the entire year. The overall devastation of wildfires has become a major public safety concern, and a serious budget burden for local, state, and federal governments. However, via innovative technological advancements designed to leverage existing electric grid infrastructure, GRIDWIDE FIRE-SPY[™] aims to meaningfully reverse the nasty

trajectory of these endlessly recurring wildfire nightmares.

GRIDWIDE FIRE-SPY is a novel wildfire prevention and mitigation solution. Fast-to-install environmental and atmospheric conditions sensors are purposefully designed to retrofit onto our existing overhead distribution transformers. By aggregating these specially designed sensors throughout our ubiquitous distribution transformer fleets. community-wide safety monitoring canopies are quickly created. This results in an 'Always-On' outdoor public safety protection solution driven by several unique capabilities including Wildfire Early Detection, Auto Alerts, Wildfire Prevention,

and Ongoing Situational Awareness data for use by utilities and public safety officials during unfolding wildfire/public safety events.

Why is Wildfire Prevention and Mitigation so important?

If you have lived through a wildfire catastrophe, and/or if you have already lost family members or friends to wildfire disasters, then this question is painfully rhetorical. However, for those who have yet to be forever impacted by wildfire devastation, perhaps the following statistics will help to calibrate your thoughts:

Annual US Wildfire Cost Impacts:

Year	Wildfire Damages (est.)
2017	\$111.4 Billion
2018	\$97.5 Billion
2019	\$51.8 Billion
2020	\$114.2 Billion
2021	\$79.2 Billion

Annual US Wildfire GHG Emissions Impacts:

Year	Wildfire GHG Emissions	Wildfire GHG as a Percent of US Auto Emissions
2017	295.1 million Tons	21.4%
2018	258.2 million Tons	18.7%
2019	137.3 million Tons	9.8%
2020	302.4 million Tons	21.4%
2021	209.8 million Tons	14.6%

In short, every year throughout the last five (or more) years, millions of acres have burned, tens of thousands of homes and structures have been destroyed, scores of people have been injured or have perished, massive greenhouse gas emissions have been spewed, and the combination of wildfire suppression costs plus postevent rehabilitation and liability settlement costs has been nearly \$100 Billion.

So where does all of that money come from every year?

In a nutshell that money comes from local, state, and/or federal taxes, increased insurance premiums, increased cost of goods that you purchase, increased services costs that you purchase, etc. In other words, you are paying for each wildfire aftermath. But, this is where the adage comes into play: "An ounce of prevention is worth a pound of cure." In other words, it costs way less to prevent/ reduce than it does to restore/ rehabilitate. Would you rather pay less to prevent and/or reduce damage, or just keep paying to

clean up the mess afterward, time and time again?

Stop the madness: We no

longer have to live in fear of a wildfire ravaging our communities in the middle of the night while we sleep. We no longer have to suffer from catastrophic communitywide and economic damage from wildfires because the authorities did not have ample awareness or empirical data to support their response efforts. And, we no longer have to endure massive environmental damage, including harmful greenhouse gas emissions abuse due to recurring wildfire instances.

By capitalizing on the location, height, and density of our existing overhead distribution transformer fleets, we can install GRIDWIDE FIRE-SPY wildfire mitigation sensors in typically 5-7 total minutes per location. This rapid installation process involves no electric power interruption to customers. The investment for 24X7X365 for 15 years of ongoing monitoring/auto alert canopies equates to about 1/3 to 1/2 the

cost of a cup of coffee per month; or about the cost of 3-4 cups of coffee each year for 24X7 community-wide outdoor monitoring, auto alerts, ongoing situational awareness; and actual wildfire prevention in some instances.

Should we invest the equivalent of 3-4 cups of coffee for an entire year of 24X7 *"Always-On"* outdoor conditions monitoring and public safety protection? Or, should we invest billions annually to rehabilitate communities, revive destroyed economies, pay for liability settlements, etc., while never appropriately addressing lost lives, irreplaceable environmental damage, lost tax revenues, lost personal treasures, or massive greenhouse gas emissions?

Let's get serious: If we now have a technology that is costeffective, fast-to-install, causes no customer interruption during installation, and affords a host of upsides including public safety gains, should we ignore it, or adopt it?

GRIDWIDE FIRE-SPY introduces a game-changing wildfire mitigation strategy, a) by providing early detection of fires/wildfires; regardless of the cause (e.g., grid asset failure, lightning, arson, etc.), b) by providing auto alerts whenever fire/wildfire conditions are detected, c) by providing invaluable intra-grid visibility to utility operators so they can prevent



Alan Snook | Leader

Alan Snook is co-founder and President of

GRID20/20, Inc. since 2011. Under Alan's leadership, the company is now transitioning toward Public Safety Protection Solutions. The company's leading initiative is GRIDWIDE FIRE-SPY™, a wildfire mitigation solution that leverages existing grid architecture and capitalizes on the company's lengthy intra-grid sensor history. GRIDWIDE FIRE-SPY represents an emerging subsidiary movement of the company. grid asset failures, and ensuing fires/wildfires, and d) by providing authorities with ongoing situational awareness when unpreventable public safety events are unfolding.

The statistics presented above (costs, greenhouse gas emissions, etc.) and the associated statistics involving wildfire-induced fatalities, injuries, destroyed structures, destroyed economies, mental anguish, etc., collectively validate that at present, we are not doing enough.

What can you tell us about GRID20/20, Inc. and its focus areas?

GRID20/20, Inc. is a privately-held company that has invested over 11 years in research/development, testing, trials, commercializing, and sustaining intra-grid sensor solutions for the global utility industry. The company's Advanced Transformer Infrastructure (ATI)® solution has been successfully evaluated in 12 countries to date. The company now holds a growing multi-country patent portfolio associated with its ongoing intragrid sensor initiatives. Given the escalating frequency and scope of wildfire catastrophes being experienced in the US and beyond, the company has undertaken a shift toward introducing public safety protection solutions. GRIDWIDE FIRE-SPY is purposefully designed to leverage the company's patented intra-grid sensor technology. The company's legacy ATI solution



Early Detection, Auto Alerts, Prevention ™

has been enhanced with certain environmental and atmospheric sensor capabilities; thereby resulting in wildfire mitigation sensors now riding on the timeproven backbone of the multipurpose ATI technology.

GRID20/20 has worked with utilities to address a myriad of distribution grid challenges. Within the years of effort, the company has worked closely with leading utilities to safely address the novel unfolding grid-edge developments including but not limited to rooftop solar integration, electric vehicle charging, cryptocurrency mining, legal/illegal marijuana growing, aging infrastructure awareness, grid reliability improvements, conservation voltage reduction, accelerated outage awareness/ response, etc.

While a small company, the level of talent and experience within the intra-grid sensor niche is substantial. GRID20/20 prides itself on being a *"Golden Rule"* company that is inspired by the quality and capability of the people on its team.

Final Message: While GRID20/20 has done a lot of tremendous work throughout its years of operation, arguably nothing has been more important to this company than GRIDWIDE FIRE-SPY. Yes, the Advanced Transformer Infrastructure (ATI) technology delivers vital intra-grid awareness and grid safety benefits for utility operators; which is vital during this unprecedented grid modernization era.

But, the genuine purpose of GRIDWIDE FIRE-SPY is to notably improve public safety protections, reduce harmful environmental damage, lessen massive local/ state/federal budget burdens, and decrease corporate liability risk for our valued utility operators.

The holistic value of GRIDWIDE FIRE-SPY is to provide a gamechanging technology that will save lives, save our environment, and noticeably change the trajectory of wildfire frequency and size/ scope impacts for generations to come. GRIDWIDE FIRE-SPY is the team's legacy career contribution to humanity...every wildfire that is prevented or reduced in its magnitude of damage will be a rewarding achievement for this team and its supporters.

GRIDWIDE FIRE-SPY™ is an innovative fire mitigation solution built upon the timeproven patented chassis of its legacy ATI technology."