A COMPREHENSIVE SAFETY GUIDE

WILDFIRE PREPAREDNESS

NASA reports that in the western U.S., wildfires have been steadily increasing since 1950, and burning significantly larger acres of land in the past two decades.[i] The Joint Economic Committee reports that the total economic burden of wildfires in the U.S. is between $394-$893 billion.[ii]

Preparation is essential for your business to ensure the safety of employees and property in the face of wildfires. This checklist outlines vital actions to strengthen your business, reduce damages, and ensure your assets are as protected as possible in the event of a wildfire.

BEFORE AN EVENT

THE BEST WAY TO RESPOND DURING AN EVENT IS TO BE PREPARED BEFOREHAND.

- Have a “go bag” prepared with critical items. This can include files, critical infrastructure, a flash drive with important documentation, and photos of inventory or other real assets.
- Identify how you will notify individuals on the site about requirements to evacuate: broadcasting system, telephone, text, email, or in-person.
- Have an established evacuation plan and way to confirm a safe evacuation for all employees.
- For any disabled individuals that may be on-site, have a plan to help them evacuate safely.
- If a wildfire requires evacuation, follow all instructions from local authorities.

CONSIDER THE FOLLOWING BUILDING COMPONENTS DURING CONSTRUCTION:

- Structural hardening
- Siding
- Hardy board, stone, or other non-combustible materials on the outside of the structure

CONSIDER THE FOLLOWING BUILDING IMPROVEMENTS:

- Roof material
  - Replace combustible roof coverings with more fire-resistive products, such as asphalt fiberglass composition shingles, metal, and class A-rated concrete tiles.
- Vents
  - Install mesh with openings no larger than 1/8 inch.
- Windows
  - Consider double-paned tempered glass and non-combustible framing material.
- Gutters and fences
  - Use non-combustible or ignition-resistant materials.
- Fuel Sources
  - Maintain propane, natural gas, and other utilities at a safe distance.
- Create a defensible space around your structures – **Three Zones of Defensible Space**
  - **Zone #1** is the critical non-combustible zone. It is 0-5 feet from the building and under any decks or combustible platforms. Hardscape and non-combustible mulch products should be used wherever possible (i.e. gravel, rock, or concrete).
  - **Zone #2** extends from 5-30 feet from the building structure. Maintain trees and ensure that shrubs are in well-spaced groups. Tree crowns should be at least 10 in. apart. Remove all dead material and prune tree limbs and branches up to a height of 15 in. For shorter trees, low branches should not exceed 1/3 of the tree's height.
  - **Zone #3** range is 30–100 feet from the building structure. Make sure to maintain vegetation in this zone that will slow down and reduce the energy of a wildland fire if one were to occur. Keep foliage cut back and thinned out to minimize fuel loading as much as possible.
  - Maintaining a defensible space is an ongoing process, with inspections and maintenance necessary to ensure it is completed properly. The defensible space should be maintained in all directions.

- Train employees/team members by utilizing tabletop exercises and trying to create scenarios that are as realistic as possible.
  - Consider evacuation training, periodic drills, and identification of areas of improvement.
- If possible, provide an exterior sprinkler system to minimize the opportunity for ignition by wetting the structure and surrounding property.
  - Sprinkler systems should be able to protect a structure against the three primary wildfire exposures: wind-blown embers, radiant heat, and direct flame contact.
  - Provide a sprinkler system for wet down purposes, not for extinguishing, but for preventative measures.

DURING AN EVENT

- Coordinate with local authorities to monitor weather conditions and fire danger ratings.
- If the local authorities allow, wet down outside landscaping well before the fire enters your structure.
  - If exterior sprinklers are provided on your structure, wet down the structure (roof, siding, etc.) well before the wildfire blows in the direction of the structure.
- Shut down all energized equipment to prevent contributing additional fuel sources to the fire.
- If a wildfire requires evacuation, heed all directions from local authorities.

AFTER AN EVENT

Once permitted by the local authorities to regain access to the property, an authorized employee should conduct a post-event inspection.

THIS SHOULD HELP ANSWER IMPORTANT QUESTIONS, SUCH AS:

- How significant is the damage, including from smoke, water, and/or fire?
- What will it take to get the business back up and operating?
- Was there any damage to critical infrastructure or high-value items?
- Is it safe to turn on utilities? Electrical, mechanical, etc.?
- Is the structure safe to occupy?
  - Consider bringing in a structural engineer to assess the damage prior to re-occupying the building.
- Determine if additional individuals may be needed to inspect the property for structural and smoke damage.
  - Industrial hygiene sampling and monitoring may need to be completed before the re-occupation of a work facility/building can begin.

Preparing employees or third-party experts to answer these critical questions in advance will significantly decrease the time to get operations back up and running after the wildfire is controlled or extinguished.

CONCLUSION

While wildfires can leave significant damage in their wake, using these steps as a starting point can help reduce their impact in the event of a damage or loss. Consult your insurance broker for expert guidance in developing comprehensive wildfire emergency preparedness and business continuity plans.

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Sources:

i: NASA Science Editorial Team. (2018, December 5). *Six trends to know about fire season in the western U.S.* NASA. https://science.nasa.gov/earth/natural-disasters/wildfires/six-trends-to-know-about-fire-season-in-the-western-us/

ii: Joint Economic Committee Democrats. (2023, October 16). *Climate-exacerbated wildfires cost the U.S. between $394 to $893 billion each year in economic costs and damages.* https://www.jec.senate.gov/public/index.cfm/democrats/2023/10/climate-exacerbated-wildfires-cost-the-u-s-between-394-to-893-billion-each-year-in-economic-costs-and-damages