



# Wildfire Mitigation Program

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# Wildfire Threat

- Texas is experiencing “high-velocity” change through rapid population growth and development.
- The majority of the state’s development growth is encroaching on undeveloped wildland areas.
- The junction in which homes and structures intersect with undeveloped wildland areas that contain flammable grass, brush, and trees is known as the **Wildland Urban Interface (WUI)**. The placement of people, homes, and structures within the WUI renders them extremely vulnerable to wildfire.
- Statistics indicate that more than 90% of all Texas wildfires are caused by human activity and about 87% of Texas wildfires occur within two miles of an established community.
- Power lines caused more than 4,000 wildfires in Texas from 2009 to 2013, and according to the National Interagency Fire Center, there were 6,713 wildfires (of all causes) in Texas in 2020 alone.

# PEC's Commitment

- PEC is committed to continuous wildfire mitigation and prevention programs that reduce hazardous conditions, thereby lowering the risks from wildfires.
- PEC's Enterprise Risk Management Committee identified the significant wildfire risk and has taken proactive measures to actively mitigate the risk to the Cooperative, its members, and its communities. PEC has also formed a Wildfire Mitigation and Prevention Subcommittee to focus specifically on developing effective methods to address this risk.
- The Subcommittee recently developed PEC's first comprehensive Wildfire Mitigation and Prevention Program Document.
- PEC's Wildfire Mitigation and Prevention Subcommittee includes:
  - Director, Control Center and Emergency Preparedness
  - Director, Electrical Engineering and Planning
  - Director, Engineering Materials, Standards, and GIS
  - Director, Operations Program Management
  - Director, System Maintenance
  - Manager, System Maintenance

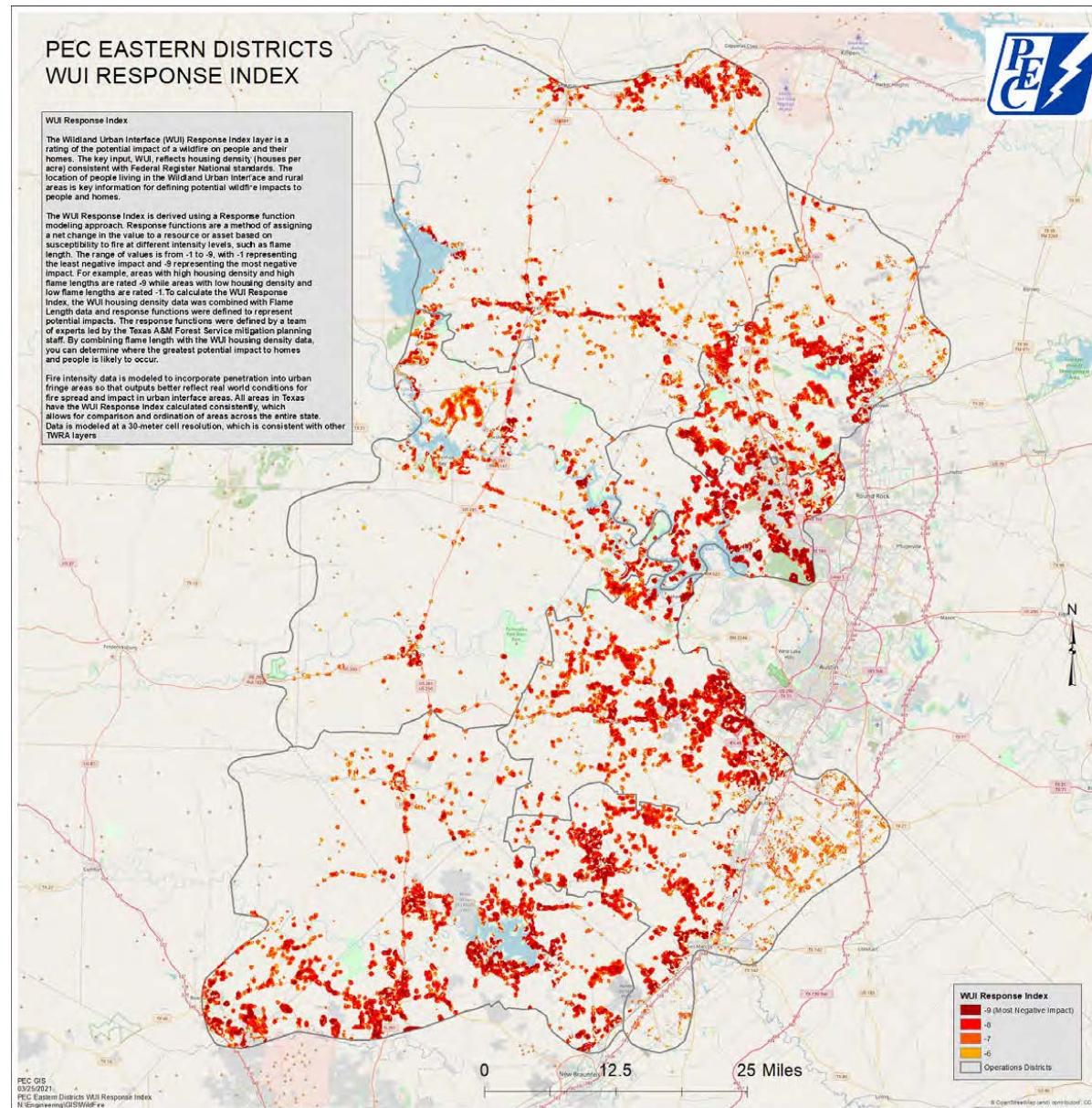
# PEC's Commitment

- PEC has demonstrated its commitment by investing an estimated **\$10 million annually** into system maintenance supporting its wildfire mitigation and prevention program.
  - PEC's program includes: Vegetation Maint., Feeder Maint., and Technical Services.
- PEC launched a wildfire mitigation and prevention community outreach and education program:
  - Under this program, PEC's Public Affairs and Vegetation Maintenance teams partner, develop, and deliver a virtual presentation to our franchise cities and counties.
  - These groups benefit by receiving education about PEC's vegetation management approach around its equipment and rights-of-way, and how it helps ensure safe, reliable power delivery and reduced wildfire risk.
  - Also, as part of this program, PEC encourages community participation in various wildland fire education and mitigation efforts. Mitigation programs help communities plan for wildfires before there is a threat.

# PEC's Mitigation and Prevention Program

- PEC developed wildfire risk maps to prioritize and target its mitigation and prevention efforts. These were created by overlaying data from the Texas Wildfire Risk Assessment Portal (TxWRAP) over the PEC service area.
- The WUI Response Index layer rates the potential impact of a wildfire on people and their homes.
  - The key input, WUI, reflects housing density (houses per acre) consistent with Federal Register national standards.
  - The location of people living in the WUI and rural areas is key information for defining potential wildfire impacts to people and homes.
- The WUI Response Index is derived using a response function modeling approach:
  - Response functions are a method of assigning a net change in the value to a resource or asset based on susceptibility to fire at different intensity levels, such as flame length.
  - The range of values is from -1 to -9, with -1 representing the least negative impact and -9 representing the most negative impact.

# PEC's Mitigation and Prevention Program



# PEC's Mitigation and Prevention Program

- PEC's Engineering Standards team created a Wildfire Mitigation Report that includes an analysis of in-practice and potential wildfire mitigation tools, technologies, materials, and construction practices.
- PEC's Wildfire Mitigation and Prevention Program document methodically prioritizes these tools:
  - **Mitigation Actions Implemented or Construction Standard**
  - **Mitigation Actions In-Progress (Planned Completion: 1–2 Years)**
  - **Mitigation Actions Planned (Next 3–5 Years)**
  - **Mitigation Actions Available (For Future Use)**
- PEC has also been implementing and testing intelligent power line monitoring technologies to mitigate wildfire risks.

# PEC's Mitigation and Prevention Program

PEC maintains a proactive system maintenance program to support wildfire mitigation and prevention:

**Vegetation Maintenance:** PEC vegetation maintenance programs perform targeted, condition-based clearance of encroachments to PEC lines, equipment, and rights-of-way. Vegetation line encroachments are identified and prioritized using aerial imagery from various sources in partnership with IBM, in combination with other business decision drivers (WUI ranking, for example).

**Feeder Maintenance:** PEC feeder maintenance programs facilitate systematic and condition-based inspection and maintenance of certain distribution facilities. This includes three maintenance programs: pole testing and treatment (PTT), overhead feeder maintenance, and URD padmount restoration.

**Technical Services:** PEC's Technical Services Department is primarily responsible for the installation, programming, commissioning, and maintenance of the Cooperative's specialty equipment. This includes all programmable equipment, including voltage regulators, single- and three-phase vacuum reclosers, SCADA controlled air-break switches, URD switchgear, and capacitor banks.



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