Wildfire Mitigation Plan

Updated March 2024

SALEM ELECTRIC
AN ELECTRIC COOPERATIVE

WILDFIRE MITIGATION PLAN

Purpose

The Wildfire Mitigation Plan describes the range of actions that Salem Electric takes to reduce the threat of wildfire ignition, including its various programs, policies, and procedures. Salem Electric has developed this plan based on information from State and local fire agencies, the Oregon Public Utility Commission (PUC), internal risk analysis, and other industry accepted practices. All programs, policies, and procedures will comply with current and anticipated Oregon PUC and National Electric Safety Code (NESC) regulations and guidelines.

Objective

To provide safe and reliable power to our members while continuously developing and deploying an integrated Wildfire Mitigation Plan. In order to meet this goal, Salem Electric constructs, maintains, and operates its electrical lines and equipment in a manner that minimizes the wildfire-related risks posed by its electrical lines and equipment.

Process

A detailed internal analysis of every transmission and distribution circuit operated by Salem Electric was completed in 2020 to identify wildfire risk within the service territory. The Wildfire Mitigation Plan was then implemented to reduce the potential for wildfire ignitions and more effectively respond to wildfire risk conditions.

Service Territory

Salem Electric has a defined service territory of 17.5 square miles serving areas of West Salem, downtown Salem, Northeast Salem, and Keizer, Oregon. This densely populated, urban territory is contained to two counties: Marion County and Polk County.

Risk Analysis Result

Due to an urban service territory, the risk analysis concluded that Salem Electric's wildfire risk is very low (Salem Electric has no high-risk areas). Salem Electric does not own or operate any electrical facilities within a national forest, state forest, BLM, or any other high-consequence area.

Fire departments from Salem and Keizer respond to all areas of Salem Electric's service territory. The combination of a small and urban service territory means a quick response time from local fire departments and reduced wildfire risk.

Figure 1 shows the Advanced Wildfire Risk Explorer risk analysis of Salem Electric's service territory. This analysis was captured with the following layers turned on: overall wildfire risk, wildfire risk to assets, wildfire risk to people and property.

Figure 2 shows the Advanced Wildfire Risk Explorer threat analysis of Salem Electric's service territory. This analysis was captured with the burn probability layer turned on.

Figure 1 - Advanced Oregon Wildfire Risk Explorer Analysis – Wildfire Risk

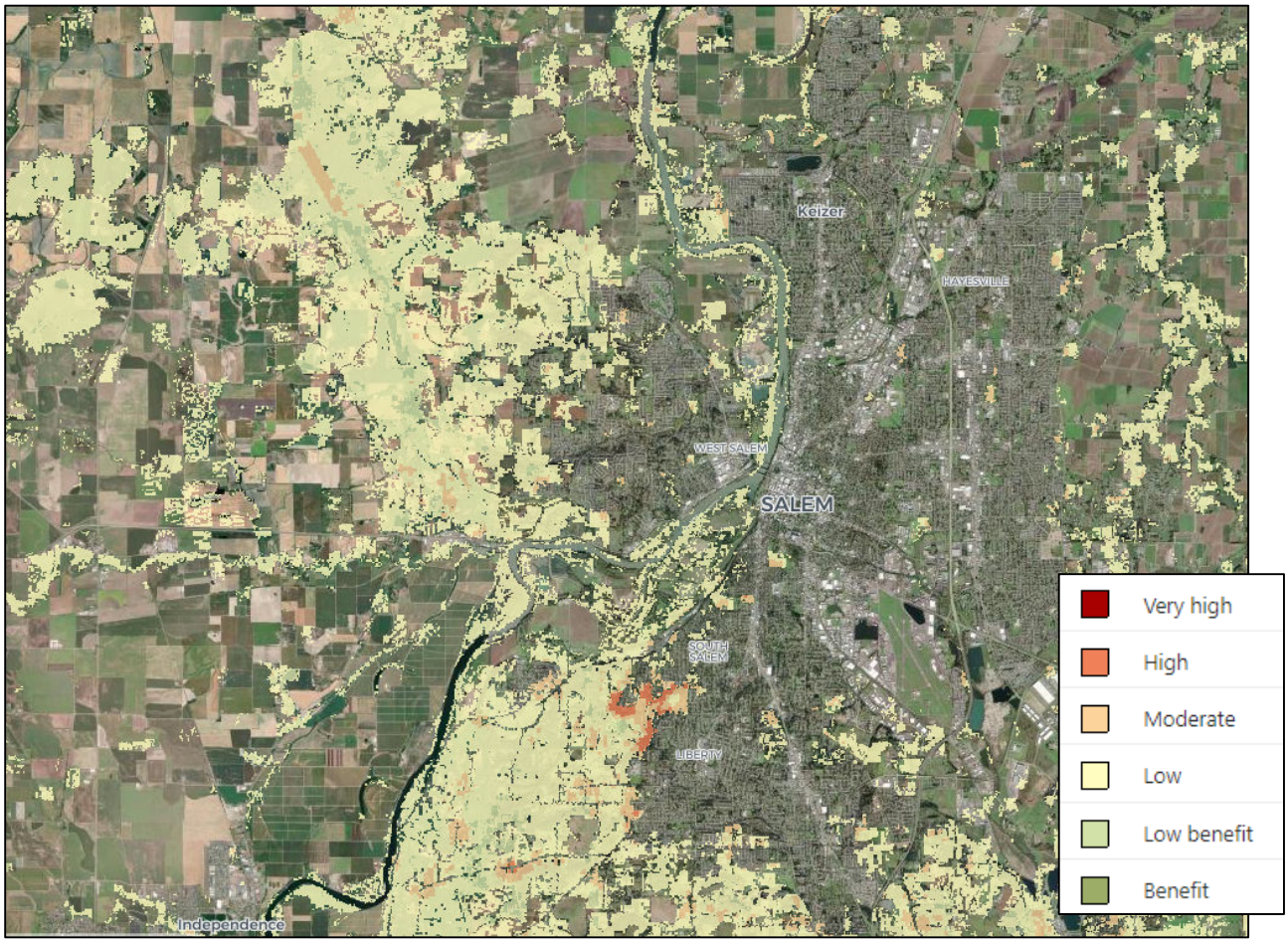
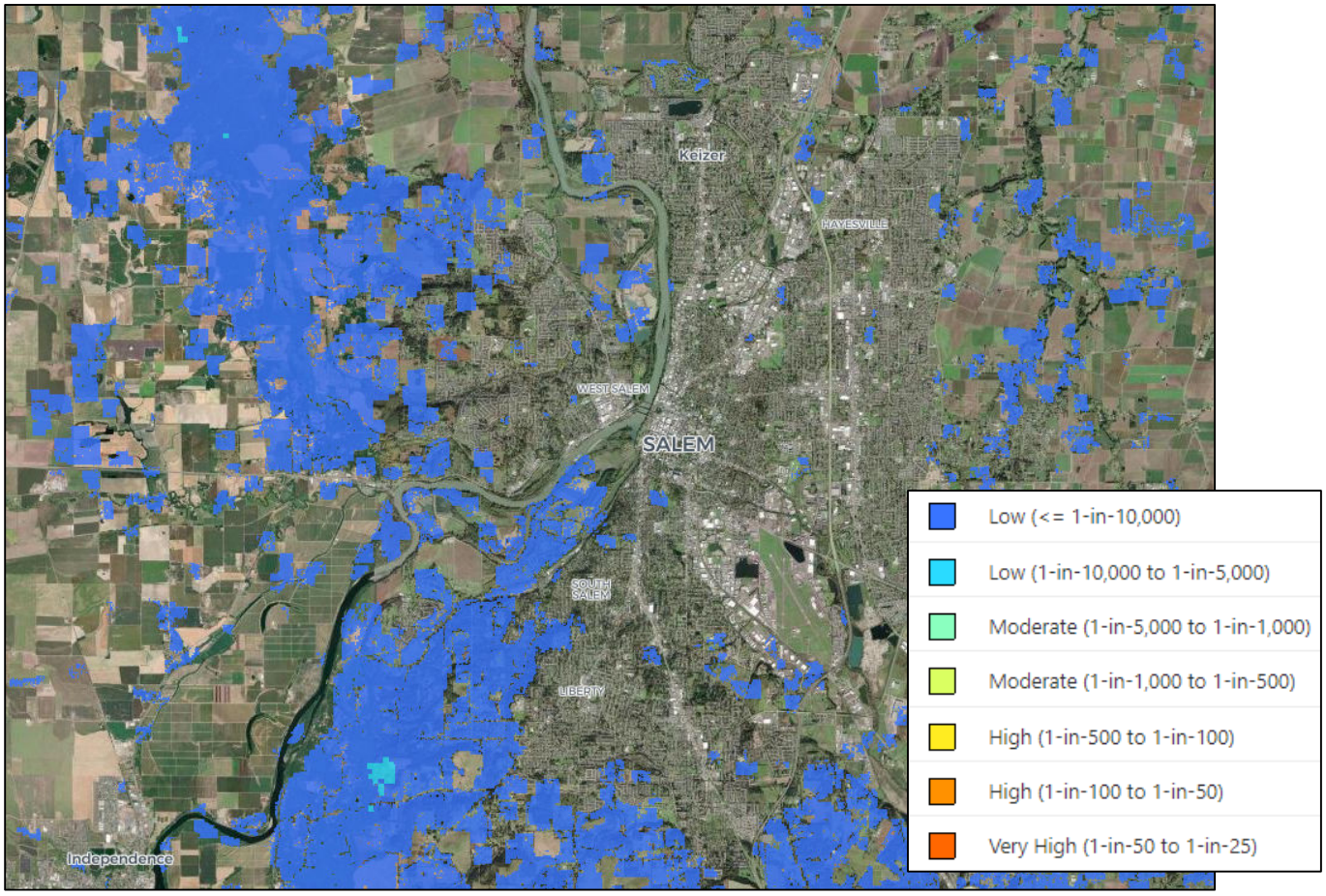


Figure 2 - Advanced Oregon Wildfire Risk Explorer Analysis – Wildfire Threat



The following feeders are located in less urban areas with thicker vegetation: 1213, 1214, 1215, 1231, 1232, 1233, and 1235. Breakers and reclosers associated with these feeders are included in Salem Electric's Wildfire Mitigation Operating Procedures for red flag warnings. Future reclosers will be added to the Wildfire Mitigation Operating Procedures as they are installed on these circuits. See System Coordination section for more details.

Components

Salem Electric's Wildfire Mitigation Plan consists of three main components: Vegetation Management, System Coordination, and System Hardening. The plan was developed using a systematic approach, which will allow for immediate action items as well as short-term and long-term implementation.

Vegetation Management

- A Vegetation Management Plan was developed and implemented. This plan defines the processes and actions taken to maintain adequate clearance between Salem Electric facilities and vegetation.

- Salem Electric crews and contracted tree trimmers shall continue right-of-way trimming according to the Vegetation Management Plan.

- Salem Electric's tree trimming budget has been expanded to allow for additional trimming resources to meet the requirements of the Vegetation Management Plan.

- Continue conducting hazard tree assessment and removal of hazard trees inside and outside of the existing right-of-way.

- Continue vegetation/wildfire inspections in areas with potential risk prior to fire season.

- Analyze results from vegetation/wildfire inspections throughout the service territory. Any vegetation with fire risk will be prioritized and trimmed.

System Coordination

- Dispatchers will review the fire weather map provided by The National Weather Service/NOAA for fire level status throughout Salem Electric's service territory.

    - Dispatchers will activate non-reclose on a group of feeder breakers and reclosers when a red flag warning is in effect for Salem Electric's service territory or at the engineering & operations manager's discretion.

    - Dispatchers will monitor the distribution system via Supervisory Control and Data Acquisition (SCADA) when a red flag warning is in effect during and outside of normal business hours.

- A protection coordination study for Salem Electric's distribution system was completed in 2020. All coordination changes have been implemented and are operating as intended.

- All SCADA tie switches are being replaced with new reclosers and protection relays. These reclosers will provide enhanced sectionalizing when in a closed position and have a non-reclose setting available for red flag events. This project is expected to be completed by the end of 2024.

System Hardening

- Continue to test, treat, and replace wood poles throughout the Salem Electric's service territory.

- Install fiberglass cross arms for any new installation or replacement.

- Project to install a fiber ring between all substations to provide resiliency to the fiber optic network, ensuring reliability during critical events was completed in 2023.

- Salem Electric already has a fiber optic network used for SCADA communication to substations and compatible field devices. Project to install fiber optic

communications to remaining devices (including switches, reclosers, and capacitor banks) is scheduled to be completed by the end of 2024.

- Review wildfire/vegetation inspection reports and create new system-hardening projects to fix issues noted on inspection reports.

Public Safety Power Shutoff

Salem Electric will not implement a Public Safety Power Shutoff (PSPS) for wildfire mitigation purposes. The risk analysis concluded that Salem Electric's wildfire risk is very low and that a PSPS will not be necessary.

Bonneville Power Administration (BPA) is the supplier of Salem Electrics power. BPA has a wildfire mitigation PSPS that could affect Salem Electric's operations. A standard operating procedure has been created for engineering & operations to follow in the event of a BPA PSPS.

Implementation

Implement the Wildfire Mitigation Plan as described above. Identify future system hardening projects and increase budget for wildfire mitigation purposes as needed. Continue to monitor industry best practices for protection and coordination changes that can reduce wildfire hazards. Continue system and vegetation inspections throughout Salem Electric's service territory.