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Fall River Rural Electric Cooperative Wildfire Mitigation Plan

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# OVERVIEW

## COOPERATIVE OVERVIEW

Fall River is an electric cooperative, owned by those served and governed by an elected nine-member Board of Directors.

Fall River Rural Electric Cooperative serves electrical consumers in portions of three states (Idaho, Montana and Wyoming), covering 7 counties (Fremont, Madison, Jefferson, Clark, and Teton ID, along with the counties of Teton WY and Gallatin MT) covering 2,524 square miles. Fall River has over 14,000 electric owner-members, more than 18,000 electric meters and over 6,000 propane members through the Co-op’s subsidiary Fall River Propane.

Four hydroelectric facilities (Chester, Island Park, Buffalo, and Felt) on the Henry’s Fork and Teton rivers.

* 205 miles of transmission line
* 2,217 miles of distribution lines
* 28 substations
* 3 offices (Ashton, Driggs and West Yellowstone)

## PURPOSE DECLARATION

The purpose of Fall River Rural Electric Cooperative (FRREC or the Cooperative) is committed to safely and economically provide reliable energy and other services which bring value to its membership.

The Cooperative works aggressively and proactively to manage and mitigate the risk of wildfire while operating and maintaining its system. The outcome of this approach is diligent stewardship of member/owner investment in the Cooperative as it continues to construct, maintain, and operate its electric distribution system in a manner that minimizes the risk of catastrophic wildfire posed by its electrical lines and equipment. The Cooperative has applied careful consideration in the development of broad strategies to mitigate utility- posed wildfire risks. This Plan is a “living document” and will be reviewed and modified on an ongoing basis as regulations are updated, advances in technology occur and operational circumstances change.

## PURPOSE OF THE WILDFIRE MITIGATION PLAN

This Wildfire Mitigation Plan (WMP or Plan) describes the measures the Cooperative takes to mitigate the threat of Cooperative equipment ignited wildfires.

The goals and activities included in the WMP focus on a comprehensive and integrated assessment of the risks posed by FRREC’s distribution system. This involves an assessment of FRREC’s equipment and facilities, weather conditions, the density and condition of potential fuels such as vegetation, and the potential threat to public safety. FRREC’s commitment to fire safety, prevention, mitigation, response, and recovery is a crucial element of our mission.

This Plan is subject to change and is the responsibility of the CEO/General Manager, management team and staff to ensure the plan is implemented and hazards are identified.

## ORGANIZATION OF THE WILDFIRE MITIGATION PLAN

This Wildfire Mitigation Plan includes the following elements:

* Objectives of the Plan
* Roles and responsibilities for executing the Plan
* Description of wildfire prevention strategies
  + Enhanced Vegetation Management
  + Inspections by both Crews and Certified Forester
  + Revised methods of line design
  + Building Resiliency into Existing Facilities
  + Changing Operational Practices during fire season
* Employee Training
* Situational Awareness and Weather Monitoring
* Identifying areas for improvement and incorporating into the Plan
* Community outreach and public awareness

# OBJECTIVES OF THE FIRE MITIGATION PLAN

## MINIMIZING SOURCES OF IGNITION

The primary goal of this Plan is to minimize the possibility the Cooperative’s facilities may be an original or contributing, however unlikely, source of ignition. The Cooperative has evaluated the system improvements, operational procedures, and training that can help to meet this objective. Further, the Cooperative is updating best management practices to

reflect its commitment to sensible system management and will explore new opportunities each year for improving the efficacy of the Plan.

## RESILIENCY OF THE ELECTRIC GRID

Along with creating a WMP, the Cooperative realizes the opportunity to improve resiliency by hardening the system. System resiliency is defined by the National Infrastructure Advisory Council as the ability to reduce the magnitude and/or duration of disruptive events. As part of the development of this Plan, the Cooperative assesses new industry practices and technologies that may reduce the likelihood of a disruption in service or improve the timeline for restoration of service.

# ROLES AND RESPONSIBILITIES

## FRREC WMP ROLES AND RESPONSIBILITIES

The CEO/General Manager has full operational authority of the Cooperative and reports directly to the Board. The CEO/General Manager provides direction and management to Cooperative staff while implementing Board adopted policy.

The Public Relations Manager, or in the absence of the PR Manager the CEO/General Manager, in coordination with the Operations Manager and the Member Services Manager will be the lead as the Cooperative’s public liaisons to outside agencies as well as responding to requests for information, including proactively providing public awareness outreach and emergency information.

The Operations Manager will assume the WMP operational authority of the CEO/General Manager in the absence of the General Manager. The Operations Manager oversees the daily electric utility operations, including construction, maintenance, energy control, fleet, vegetation management, and other ancillary daily duties.

Cooperative staff have the following responsibilities regarding fire prevention, response, and investigation:

* Conduct work in a manner that will minimize potential fire dangers
* Take all reasonable and practicable actions to prevent fires resulting from the

Cooperative’s electric facilities

* Coordinate with Federal, State, and Local fire management personnel to ensure that appropriate preventative measures are in place
* Immediately report fires, pursuant to specified procedures
* Take corrective action when observing or having been notified that fire protection measures have not been properly installed or maintained
* Ensure that wildfire data is appropriately collected and fire investigation reports are complied
* Maintain adequate training programs for all relevant employees

## COORDINATION WITH EMERGENCY MANAGEMENT AND OTHER ORGANIZATIONS

The Cooperative will support all State, Federal and local emergency agencies in their efforts to contain and control wildfires and will coordinate with them to minimize and protect the Cooperative’s infrastructure.

Some of the other local entities that FRREC will work with are:

* Fremont County Emergency Services
* Targhee and Gallatin National Forest
* BLM and State of Idaho fire crews
* US Forest Service and fire crews
* Fremont County Idaho, Teton County Idaho, Jefferson County Idaho, Madison County Idaho, Teton County Wyoming and Gallatin County Montana Fire Departments.

In addition, FRREC has an Emergency Management Plan that can be implemented if needed. FRREC also follows the FEMA Incident Command System when working with local organizations during crisis situations.

# WILDFIRE PREVENTION STRATEGIES

## IDENTIFICATION OF HIGH-RISK AREAS

The following are the high-risk areas of FRREC’s Transmission service territory:

* 46 kv transmission line from Ashton Power Plant to West Yellowstone (66.52 Miles)
* 115 kv transmission from Green Timber to Last Chance substation (35.84 Miles)
* Henrys Lake substation to Romset substation (11.06 Miles)

The following are high risk areas of FRREC’s distribution system:

* Felt Hydro line to Rocky Mountain Power take off (.5 Miles)
* Drummond under build south (62.27 Miles)
* Bitch Creek to Lamont line (9.43 Miles)
* Moose Creek/ Lucky Dog Creek/ Big Springs/Yale Creek area (11.06 Miles)
* Sheridan Ranch single phase (4.74 Miles)
* Bear Trap to Horse Butte (5.90 Miles)

While we consider all lines to be a potential fire risk those highlighted are in remote locations with very limited access.

## WEATHER MONITORING

The Cooperative monitors current and forecasted weather data from a variety of sources including:

* The National Oceanic and Atmospheric Administration (NOAA)
* United States National Weather Service (NWS)
* United States Forest Service Wildland Fire Assessment System
* National Fire Danger Rating System
* Internal knowledge of local conditions
* The Cooperative will evaluate the cost and benefit of employing other technologies where practicable.

Based on the relevant weather data and knowledge of local conditions, the daily conditions could fall into one of these categories.

1. **Normal**: During normal conditions, no changes are made to operations or work procedures.
2. **Elevated**: During elevated fire-risk conditions, Cooperative staff will perform normal work with an elevated level of observation for environmental factors that could lead to an ignition.
3. **Red Flag Warning**: If the National Weather Service declares a Red Flag Warning (RFW) for any portion of the Cooperative’s service territory, the Cooperative may delay all routine work on overhead energized primary lines. The Cooperative may perform

necessary work to preserve facilities or property.

## ENHANCED VEGETATION MANAGEMENT, CLEARANCE PROGRAM, AND INSPECTIONS

FRREC employs a multi-faceted approach to vegetation management that when combined with its annual inspection program, attempts to minimize the risk that FRREC facilities would be involved in starting a fire.

FRREC has a rotating cycle of tree trimming. Tree trimming is usually performed by Contract crews during the summer and FR crews perform tree trimming or removal during the winter months, usually in conjunction with annual line inspections. FR crews also will remove danger trees during heavy snow loading events or whenever hazardous trees are identified.

FRREC also employs two independent approaches to line inspections. These are:

* FRREC’s line crews patrol the overhead lines formally once every year. Reports are generated documenting damage or line hazards, and repairs are made in a timely manner. The crews may also patrol certain forested areas in the spring outside of the formal inspection cycle.
* The Cooperative also contracts with a pole testing and pole inspection company which inspects poles and reports damaged poles and facilities.

The Cooperative also employs mechanical treatment of ground vegetation in certain areas with thick ground cover.

## REVISED METHODS OF LINE DESIGN

The Cooperative has changed certain aspects of its line design to help mitigate the potential of its facilities being involved in wildfire starts. These are:

* Encouraging new facilities to be built underground
* Animal guards and line coverings on all new service taps
* Raptor spacing
* All Crews will pack water bags as soon as fire danger reaches moderate.

The Cooperative has already moved towards requiring new facilities to be built underground in certain areas. During the line design phase, the design team considers the terrain, cost and other factors and decides whether to require underground.

## BUILDING RESILIENCY INTO EXISTING FACILITIES

Along with creating a WMP, the Cooperative realizes the opportunity to improve resiliency by hardening the system. System resiliency is defined by the National Infrastructure Advisory Council as the ability to reduce the magnitude and/or duration of disruptive events. As part of the development of this Plan, the Cooperative assesses new industry practices and technologies that may reduce the likelihood of a disruption in service or improve the timeline for restoration of service.

To accomplish this, the Cooperative utilizes heavy-loading construction design standards per the Rural Utility Service (RUS) guidelines. The Cooperative’s facilities are designed to withstand sustained heavy wind, and snow and ice loading.

Aggressive vegetation management continues to be a high priority. The Cooperative is treating the bottom of certain key poles with a silicon-based product for protection during fast moving, low-level fires. The Cooperative is also requiring new lines to be underground in certain forest areas where trees outside the easement may fall into the line.

## RECLOSER OPERATIONAL PRACTICE

### Non-Red Flag Warning Operations

During elevated fire risk times or at the beginning of the fire season (which has historically extended from early summer through late fall), FRREC will disable the reclosing on reclosers that feed the following areas:

* Big Springs/Lucky Dog/ Frandsen Mill/Upper Moose Creek
* 46 KV Ashton to Big Bend or this section can be deenergized without interrupting service.
* Yale Creek Area
* Teton Canyon
* Felt Plant lines

These reclosers will be off until the end of fire season.

### Red-Flag Warning Events

When a red-flag warning is issued, FRREC will discuss with line personnel what action should be taken.

Any outages during this time will require a visual inspection before re-energization.

### Effects of Disabling Reclosers

Disabling reclosers, either in elevated fire risk or red-flag conditions, has the effect of both lengthening the duration and increasing the number of outages. An outage that might have

been successfully re-energized with a recloser action would now require crews to go out and visually look at the line before re-energization.

## FIRE SAFETY SHUTOFFS (FSS)

FRREC has the authority to preemptively shut off power due to fire-threat conditions, however, this option will only be used in extraordinary circumstances. FRREC will make a case-by-case decision to shut off power based on any one or more of the following considerations:

* Red-Flag Warnings issued by the National Weather Service for fire weather zones that contain FRREC circuits
* FRREC staff assessments of local conditions, including wind speed (sustained and gust), humidity and temperature, fuel moisture, fuel loading and data from weather stations
* Real-time information from staff located in areas identified as at risk of being subject to extreme weather conditions
* Awareness of mandatory or voluntary evacuation orders in place
* Expected impact of de-energizing circuits on essential services
* Other operational considerations to minimize potential wildfire ignitions, including the blocking of reclosers on the identified circuit(s)
* On-going fire activity throughout the area
* Ability to notify members
* Notifications from local governments and public officials
* Potential impacts to communities and members

## RESTORATION OF SERVICE AFTER FSS

Conditions during an FSS event are continuously monitored and when thresholds are no longer exceeded, lines are patrolled (during daylight) and re-energized.

Lines need to be patrolled so the patroller can visually see that the lines are clear to be re-energized. If the outage occurs at night the patroller needs to patrol that night and again in the daylight hours.

Length of outages depends on several factors and cannot be determined before a specific FSS event occurs.

As experience with FSS is gained, FRREC expects the Plan to evolve incorporating lessons learned to improve the process.

# WORKFORCE TRAINING

FRREC believes that an important line of defense against the ignition of fires is a well-trained and alert workforce. Internally, FRREC has created a culture of fire prevention. To that end, FRREC is developing training programs designed to minimize the likelihood that FRREC facilities or field work would be the source of ignition for a fire.

The Cooperative is developing training programs for its workforce to become familiar with the WMP. All field staff will be:

* Trained in the content of the WMP
* Trained in proper use and storage of fire extinguishers and water bags
* Trained in environmental conditions (current and forecasted weather that coincides with the duration of work for the day)

Generally, all planned FSS will go through chain of command decision-making process. However, during an emergency or quickly developing situations, any trained employee can trigger an FSS with Management follow-up.

The training will also review member communications strategy with employees.

Workforce training additionally will include obtaining feedback from employees for possible incorporation into the Plan.

# INDENTIFYING AND CORRECTING DEFICIENCIES IN THE PLAN

Achieving a robust, effective plan to mitigate wildfire risk is the primary objective of this document. Staff has the role of vetting current procedures and recommending changes or enhancements to build upon non-optimized strategies in the Plan. Either due to unforeseen circumstances, regulatory changes, emerging technologies, or other rationales, deficiencies within the Plan will be sought out and reported to the Cooperative management. The Cooperative’s safety meetings, all employee meetings and the safety compliance committee will in the form of an updated Plan on an annual basis.

The Operations Manager, or their designee, will be responsible for spearheading discussions to address deficiencies when updating the Plan. All stakeholders are empowered to suggest improvement opportunities. These stakeholders include, but are not limited to:

* Employees
* Management
* Auditors
* Fire safety professionals
* Emergency Management personnel
* Members of the public

# COMMUNITY OUTREACH AND PUBLIC AWARENESS

## COMMUNICATIONS WITH MEMBERS ON THE WMP

FRREC employs various methods of communicating with its members and the public. These forms of communications each have their use in terms of differing levels of immediacy and the amount of information one can supply. These forms of communications to the members include:

* Flashes Newsletter articles
* FRREC Website
* FRREC Social Media platforms
* E-Mail
* Interactive Voice Response (IVR) automated phone messaging
* FRREC sponsored Member Forums
* Local Radio and newspapers and other traditional media channels
* Neighborhood meetings
* Coordination with local fire mitigation groups such as the IPSFC

Each of these will be used is some part depending on the urgency of the communications needed and the amount of information that needs to be conveyed.

## OUTREACH TIMELINE

Below is a timeline of the content, media employed and recipients of the different potential communications during fire season.

|  |  |  |
| --- | --- | --- |
| **Content** | **Media** | **Recipients** |
| Update of program at the beginning of fire season | * Newsletter articles * FRREC social media * FRREC Website * E-Mail * Neighborhood meetings | * Members * Local Government Entities * Fire District * County Emergency Management * Local Community Agencies |
| Alert that conditions are approaching critical levels | * FRREC Website * FRREC social media * IVR system | * Members * Local Government Entities * Fire District * County Emergency Management * Local Community Agencies |
| Forecasted FSS Alert (if possible) | * FRREC Website * FRREC social media * IVR System | * Members * Local Government Entities * Fire District 6 * County Emergency Management * Local Community Agencies |
| Notice to membership that Resource Center is set up at Ashton Office | * FRREC Website * E-mail * FRREC social media * IVR System | * Members * Local Government Entities * Fire District * County Emergency Management * Local Community Agencies |
| Imminent De-energization Alert | * FRREC Website * FRREC social media * IVR System | * Members * Local Government Entities * Fire District * County Emergency Management * Local Community Agencies |
| Notification of actual de- energization | * FRREC Website * FRREC social media * IVR System | * Members * Local Government Entities * Fire District * County Emergency Management * Local Community Agencies |

|  |  |  |
| --- | --- | --- |
| De-energization Updates | * FRREC Website * FRREC social media * IVR System | * Members * Local Government Entities * Fire District * County Emergency Management * Local Community Agencies |
| Intent to Restore Alert | * FRREC Website * FRREC social media * IVR System | * Members |
| Restoration is Complete Notification | * FRREC Website * E-Mail * FRREC social media * IVR System | * Members * County Emergency Management * Local Community Agencies |

## POSSIBLE NEGATIVE EFFECTS OF FSS

Because of the way the electric circuits are set up, all power may be out in the area where the FSS occurs. Loss of power to critical loads cannot be avoided. Some of the effects of an FSS include:

* Possible loss of power to high-risk fire areas
* Possible loss of power to members who have medical equipment that runs on power
* Unavailability of domestic or irrigation water, due to
  + Loss of power to critical equipment such well pumps and irrigation
  + Loss of pressure on pumped water systems
* Loss of power to refrigeration
* Electric garage doors and gates may be inoperable

## ASSISTING VULNERABLE MEMBERS DURING FSS EVENTS

While all FRREC members affected by an FSS will experience the effects of loss of power, FRREC is aware of vulnerable groups for whom a loss of power would be a greater hardship or who live in an area where customary communication channels are lacking. These groups include:

* Members reliant on medical devices
* Members who lack mobility
* Members in areas that do not have cell phone service
* Members in areas that do not have internet service

FRREC will coordinate with local emergency agencies to assist these vulnerable members during a predicted FSS. However, it is critical that these members establish their own loss of power emergency plan in the case of an FSS event.

## MEMBERSHIP HELP DURING FSS EVENTS

As part of our plan to support members during Fire Safety Shutoffs, FRREC will work with and coordinate with the respective County Emergency Management personnel to establish a general community resource center/s if gathering is advisable and can be done safely.

This resource center/s will provide members affected by power shutoffs a place to go for information. Members will have access to water, snacks, ice, and cell phone charging.

These resource centers may not be immediately available if the FSS is an emergency but will be established and soon and practically possible. If an emergency FSS outage looks prolonged, FRREC will establish a resource center or centers. If an FSS is predicted, FRREC will open resource center/s and have it available prior to the event.

## WHAT MEMBERS CAN DO TO PREPARE

Members will need to self-supply energy needs if desired during an FSS. Generators are an excellent way to self-generate power during electrical outages. Please contact an electrician or FRREC for more information. Among other things, a member can do the following to prepare:

* Have a back-up source of power. Loss of power to critical equipment such well

pumps, medical equipment, and irrigation cannot be avoided without self-generation or battery back-up.

* Have a plan for household items/medications that need refrigeration or freezing.
* Sign up for FRREC text messages.