CARMEN-SMITH
FIRE RESPONSE & SUPPRESSION COORDINATION PLAN

EUGENE WATER & ELECTRIC BOARD
May 2020

TABLE of CONTENTS

TABLES

APPENDICES

1. Introduction

1.1. Purpose

The primary purpose of this plan is to document EWEB's program for reducing fire risk, define fire preparedness components, and delineate the fire response for facilities within the Carmen-Smith project boundary. This Fire Response Plan has been organized into four topics: planning, hazard reduction, response preparation, and fire response. In order to ensure the Plan remains up to date it shall be reviewed annually.

1.2. Regulatory Requirements

1.2.1. FERC

This plan is written to meet the requirements of the Carmen-Smith 2016 Settlement Agreement License Article 23 "Fire Response and Suppression Coordination Plan." This requirement was incorporated into the 2019 FERC License Order for the Carmen-Smith hydroelectric project.

In addition, this plan is written to address Form L License Article 22, which states that "[T]he Licensee must do everything reasonably within its power, and must require its employees, contractors, and employees of contractors to do everything reasonably within their power, both independently and upon the request of officers of the agency concerned, to prevent, to make advance preparations for suppression of, and to suppress fires on the lands to be occupied or used under the license."
An index that delineates how this Fire Plan addresses each discrete requirement in the license articles listed above is included in the FERC submittal cover letter.

1.3. Relevant Plans and Regulations

Other plans and regulations that are relevant to this Plan:

- Vegetation Management Plan (EWEB)
- Transmission Line Management Plan(EWEB)
- Roads, Waste Areas, and Staging Areas Management Plan
- Exhibit G to the Carmen-Smith 2016 Settlement Agreement
- ODF Industrial Fire Precautionary Regulations (Appendix B)
- USDA Forest Service fire season requirements
- ORS Chapter 477 on fire tools and equipment
- National Forest Protection Act (NFPA)

2. Planning

The planning portion of EWEB's Fire Response Plan covers topics that support the activities in the Plan.

2.1. Annual Meeting

Prior to the fire season EWEB will coordinate an annual meeting with the USDA-Forest Service (Forest Service) McKenzie River Ranger District. EWEB will prepare the agenda and the meeting will cover:

- Review of this Fire Response Plan including at a minimum:
    - Defensible Space Standards
    - Fuels Assessment
    - Communication and coordination protocols
    - Update contact information
    - Schedule for completing updates to the Fire Plan
- Discussion of the possibility of participation on McKenzie River Ranger District Wildfire Situation Analysis exercise
- Report inspection findings related to fire hazard reduction measures (Section 3) and fire response preparedness (Section 4)
- Provide timelines for correcting any outstanding inspection deficiencies
- Report on implementation, monitoring and any maintenance or contingency actions performed during the prior year
- Activities occurring under the Fire Plan during the previous year
- Planning for the upcoming fire season

2.2. Training

Prior to the fire season, EWEB employees that will be working in the Carmen-Smith project boundary shall, as a group:

1. Discuss IFPL levels and associated restrictions
2. Check for required fire tools and their locations
3. Train on how to use any fire tools to suppress a fire, including Pulaskis, axes, and the onsite water truck
4. Review fire response procedures
5. Review evacuation procedures

Table 2-1 Summary of Recurrent Fire Plan Responsibilities

Schedule	Task Description
As Needed	Inspect Contractor Equipment
As Requested	Participate in Forest Service Wildlife Situation Analysis Exercise
Annual	Review Defensible Space Plan
Annual	Review Fuel Assessment
Annual	Review List of Equipment and Responsible Party
Annual	Training for EWEB Carmen-Smith employees
Annual	Inspect EWEB Equipment for compliance with ODF & NFPA
Annual	Review (and update if needed) Fire Response Action Plan
Annual	Review Fire Communication Plan
Annual	Meet with Forest Service

3. Fire Hazard Reduction

3.1. Defensible Space Surrounding EWEB Structures

EWEB will ensure that no fuels are in direct contact with project structures. EWEB will also follow all other relevant instructions listed in ODF's associated brochure (Appendix B) for all "defensible space required" structures listed below (Table 3-1). These additional measures include:

1. Maintain access drives to allow for emergency vehicle access
2. Trim all branches at least 10 feet away from chimneys
3. Remove dead branches overhanging roofs. Also remove accumulated leaves, needles, twigs, bark and any other flammable material from roofs.
4. Keep space under wood decks clean and enclosed.
5. Keep firewood and lumber piles at least 20 feet from structures

Table 3-1 EWEB Structures Requiring Defensible Space

Defensible Space Required
• Smith Dam & Trail Bridge Spill Gate Houses • All Structures at Carmen Campus area • Potable Well Structure at Trail Bridge Campground • Communication buildings • Campus pump house • Carmen & Trail Bridge power houses
Defensible Space Not Required
• Water Tank • Surge chamber • Smith intake tower trolley house • Spawning Channel Building • Trail Bridge concrete bathroom

3.2. Transmission Line Vegetation Clearance

Transmission line vegetation clearance is addressed in the Transmission Line Management Plan.

3.3. Recreation Sites

Fire hazard reduction measures at recreation sites are done in coordination with the Forest Service.

3.4. Public Use Restrictions

The Forest Service will determine public use restrictions. EWEB shall not limit or relieve public use without the authorization of the Forest Service.

3.5. Fuel Management for Waste Areas & Staging Areas

1. Vegetation waste should be piled a minimum of 10 feet from the edge of the cleared area with enough room to get equipment between the waste pile and the edge of the waste area. Keep these buffers clear of all material, including vegetation.
2. The larger the vegetation pile, the more clearance required. Keep piles to a size that can be burned in the winter without damaging the surrounding trees. The minimum distance shall be 30 feet from the outer crown of any trees but the distance will need to be greater as the size of the piles increase.

3.6. Work Restrictions

All work being performed with in the national forest shall comply with the Industrial Fire Precaution Levels (IFPL) restrictions. These are provided in Appendix B.

3.7. Fuel Assessment

EWEB's transmission maintenance crew travels the entire transmission line annually and corrects any areas that are not in conformance with the Transmission Line Management Plan. In addition, EWEB's arborist performs a timber cruise annually to inspect for hazard trees and makes a list for approval and removal.

Any outstanding deficiencies or hazard trees are to be noted and discussed at the Annual Meeting. These deficiencies will be corrected prior to the fire season or within two months of the fuels assessment, whichever comes later.

4. Fire Response Preparedness

4.1. Fire Tools

Fire equipment to prevent and respond to fire starts required by the ODF is described in the document “Fire Equipment Requirements” which is included in Appendix C.

Testing and servicing of EWEB fire equipment will be done annually and is the responsibility of the Carmen-Smith Generation Supervisor. Any deficiencies must be corrected prior to the start of the fire season.

4.2. National Fire Protection Association (NFPA) - Fire Code

Power plants, shops and other EWEB-owned structures shall comply with the NFPA. Inspections of NFPA equipment shall be informally conducted by operations staff during the course of the normal work week.

4.3. EWEB Inspections

Prior to or in conjunction with the annual meeting, EWEB will coordinate an inspection of EWEB’s fire hazard reduction measures in Section 3 and fire tools in Section 4. At the discretion of the Forest Service, EWEB will self-perform all or portions of these inspections. Inspection results and a plan and schedule to remedy any deficiencies will be determined before or during the annual meeting.

4.4. Contractor Inspections

Compliance with fire tool requirements and IFPL restrictions is the sole responsibility of the Contractor. If a contractor is suspected of not being in compliance with these requirements at any time the project manager, Generation Operation Supervisor, or any other EWEB Carmen-Smith employee can perform an inspection. In addition, the Forest Service may perform periodic spot checks. All new EWEB contracts with Contractors working in NFS lands shall include the fire contract language in Appendix D. Work may be halted by EWEB or the Forest Service until deficiencies are remedied.

5. Fire Response

5.1. Communication

5.1.1. Contact Information

EWEB and Forest Service initial communications shall be between primary contacts listed in Table 5-1 and Table 5-2 or as delegated by these contacts. Any deficiency in this communication protocol shall be corrected within 14 days of a noted error.

Primary contact individuals for events that warrant activation of the Incident Command System (ICS) will be determined by ICS protocols for each agency. If there are any updates required in contact information for either EWEB or the Forest Service each will notify the other party with on 30 days the change is noted.

Table 5-1 EWEB Internal Communication

Topic	Primary Contact
Fire Plan Document	Dan Olmstead Sr. Generation Engineer (541) 685-7606 - desk (541) 359-5746 - cell
Project Site Inspections & Inspection Coordination	Chris Taylor, Hydro Generation Supervisor (541) 685-7820 – desk (541) 913-7944 - cell
Transmission Line Fuel Assessment	Nate Alexander EWEB Forester (541) 685-7490 – desk (541) 914-2151 - cell

Table 5-2 Forest Service & EWEB Communication Contacts

Subject	EWEB	Forest Service
Non-Emergency o Inspections o Meetings o Fire Plan	Chris Taylor, Hydro Generation Supervisor (541) 685-7820 –desk (541) 913-7944 - cell	Dirk Rogers Asst. Fire Mgmt Officer (541) 822-7247 (541) 525-4622 (cell) Dan Trapanese (541) 228-8980
Emergency Response	Chris Taylor, Hydro Generation Supervisor (541) 685-7820 –desk (541) 913-7944 - cell Alternate: EWEB Dispatch (541) 685-7234 Real Time Trader (541) 685-7555	Forest Service Dispatch (541) 225-6400

5.1.2. Lane / Linn County 911

Note: The Carmen office doesn't always show up correctly on the 911 data base. Prior to the annual meeting the Generation Operation Supervisor shall contact the County to make sure they know where the Carmen office is located.

5.1.3. Communication Methods

- Email – Sufficient for non-emergency planning type
- Phone – Preferred except for urgent and group type
- Cell Phone – Not recommended as there is limited service in project area
- Radio – EWEB internal will use channel "GEN 2
- Satellite Phone – EWEB 1-480-768-2500 id # 8816-514-34904

5.1.4. Communication Protocol

- Wildland Fire – Notify Forest Service Dispatch
- Structural Fire – County 911

5.2. Fire Response Action Plan

EWEB's response to a fire will be determined by circumstances of that fire.

5.2.1. Small Fires within project boundary

If the fire is small enough to be likely contained using on-hand fire suppression equipment, including the water truck that EWEB keeps on-site, EWEB staff should attempt to extinguish the fire. The Forest Service dispatch and Generation Operations Supervisor shall be contacted for any follow up activities & investigations.

5.2.2. Larger Fires within project boundary

EWEB and its contractors are not to fight large fires. Firefighting activities at this level is the sole responsibility of the Forest Service. When an evacuation is deemed appropriate by EWEB staff or if instructed by the Forest Service EWEB staff shall:

1. Evacuate locally to protect personal safety
2. Notify Generation Operation Supervisor and Forest Service Dispatch
3. Notify EWEB Dispatch and Power Trading
4. Perform pre-evacuation activities as described in Section 5.3
5. Perform evacuation activities as described in Section 5.5

5.3. Pre-evacuation Activities

1. Maintain contact with Forest Service for any changing conditions
2. Maintain contact with Power Trading, EWEB Dispatch, and others
3. Make contingency plans with Power Trading if communication loss is possible
4. Review evacuation procedures and make necessary preparations

5.4. Project Operation Activities

5.4.1. No Threat to Remote Control

Have Power Traders initiate remote project shutdown procedures of the powerhouse and continue to operate the spillway gates to pass flows.

5.4.2. Threat to Remote Control

There could be fires that disrupt the communication links that the Power Traders use to control project gates. If remote control is lost when the gates are positioned to hold the reservoir level constant, the gates will remain capable of adjusting if necessary to pass inflow under the control of a locally automation system. The local Auto Spill system will automatically adjust the gates locally up to and including fully open.

If communication is lost prior to evacuation, and time allows for a controlled reservoir draw down, Operators will open both the Trail Bridge spillway gate and the Smith Dam spillway gate such that they can safely pass all entering flows and lock them into position.

5.5. Evacuation Activities

Evacuations of EWEB personnel and their families is covered by EWEB procedures and evacuations of the public will be handled by the Forest Service.

When a full evacuation of the project is necessary, to the extent possible:

1. Evacuate all families
2. Have Power Traders initiate remote project shutdown procedures of the powerhouse
3. Unlock and open all project road gates
4. Lock all project buildings & powerhouses
5. If time permits, re-locate heavy equipment off site
6. Power Traders to Lower Smith Reservoir to 2585.0
7. Power Traders to Lower Trail Bridge to 2078-2088
8. Leave Carmen Diversion Intake gates where they are at
9. Power Traders to match inf-low with outflow
10. Relocate to a safe location (east on 126, West to McKenzie Bridge, etc.)
11. Maintain radio contact with Supervisor, Power Trading and EWEB Dispatch. Confirm status of evacuation with Forest Service

5.6. EWEB Facility Priorities

Should a situation develop where resources are limited, EWEB priorities in order of importance are:

1. Life safety
2. Dam safety related infrastructure
3. Communication facilities
4. All other EWEB assets

5.7. Hypothetical Scenarios

Scenario #1 Small Fire Onsite at the Carmen Project – No Evacuation
Call Forest Service Dispatch number 541-225-6400. If fire is a structure fire, call 911 in addition to Forest Service Dispatch.
Attempt to extinguish the fire using on-hand fire suppression equipment, including the water truck kept onsite. If the fire becomes too large to be extinguished with on-hand materials, proceed to Scenario #2.
Contact Forest Service dispatch and Generation Operations Supervisor for any follow up activities or investigations

Scenario #2 Fire Onsite at the Carmen Project with Immediate Evacuation
Call Forest Service Dispatch number 541-225-6400. If fire is a structure fire, call 911 in addition to Forest Service Dispatch.
Notify EWEB of the evacuation: Supervisor, Dispatch, and Power Trading
Evacuate Project facilities according to the steps outlined in Section 5.5
Communicate with Power Trading, EWEB Dispatch, and others by EWEB radio
Make contingency plans with Power Trading if the fire is near a communication structure and loss of communication is possible
If communication is lost, have Power Trading spill and match inflow

Scenario #3 Fire is on the Transmission Line
Call Forest Service Dispatch number 541-225-6400 and McKenzie Rural Fire Protection District (541) 822 3439 . If the T-line itself is on fire, call 911 in addition.
Notify EWEB: Supervisor, Dispatch, and Power Trading
Shut down the project if requested by Forest Service and restore station service if lost
Monitor the facility as needed

Scenario #4 Smoke Hazard Only
Notify EWEB Supervisor and Power Trading of need to evacuate
Evacuate to smoke free area according to steps outlined in Section 5
Maintain radio contact and availability to respond to alarms
Maintain contact with Forest Service for current and changing conditions

Appendix A Industrial Fire Precaution Levels

Appendix B ODF Urban Interface Fire Protection

Appendix C Fire Equipment Requirements

Appendix D Contract Fire Restrictions