

Electric Utilities Wildland Fire Prevention Task Force – Final Report, December 2020

Results and Recommendations



WASHINGTON STATE DEPT OF
**NATURAL
RESOURCES**

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Prepared by



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Introduction

The 66th Legislature, in the 2019 regular session, passed Substitute Senate Bill 5305, an act relating to electric utility wildland fire prevention, and added a new section to chapter RCW 76.04 (76.04.780).

The new chapter required the Commissioner of Public Lands, who leads the Washington State Department of Natural Resources (DNR), to convene a Utility Wildland Fire Prevention Task Force with electrical power distribution utilities by July 1, 2019, and meet no less than quarterly thereafter until Dec. 1, 2020.

Task Force Membership

The commissioner, or the commissioner's designee, was to chair the task force and appoint task force members. Task force members were to include entities providing retail electric service, including:

- One person representing each investor-owned utility;
- Two persons representing municipal utilities;
- Two persons representing public utility districts;
- Two persons representing rural electric cooperatives;
- One person representing small forestland owners;
- One person representing industrial forestland owners; and
- Other persons with expertise in wildland fire risk reduction and prevention.

Duties of the Task Force

Pursuant to RCW 76.04.780, the duties of the task force were to advise the department on issues including, but not limited to:

(a) Developing, for consideration by the department and individual electric utilities, a model agreement for managing danger trees and other vegetation that pose a risk of wildland fire and associated utility liability due to the proximity to electrical transmission wires and other utility equipment;

(b) Developing communication protocols and educational exchanges between the department and electric utilities for identifying and addressing issues relating to utility infrastructure to reduce the risks of wildland fires;

(c) Developing protocols, including thresholds, for implementing the relevant provisions of RCW 76.04.015 when the department's investigation involves electric utility infrastructure or potential electric utility liability;

(d) Creating rosters of certified wildland fire investigation firms or persons and third-party qualified

utility operations personnel who may be called upon by the parties as appropriate; and,
(e) Other issues brought forward by task force members.

In addition, in consultation with the task force, the department was directed to:

- Distribute a voluntary model danger tree management agreement to utilities for their consideration for execution with the department;
- Publish the protocols and thresholds for implementing the relevant provisions of RCW 76.04.015;
- Issue a roster of third-party certified wildland fire investigators and qualified utility personnel that may assist the department or utility in understanding and reducing risks and liabilities from wildland fire;
- Update the roster of third-party certified wildland fire investigators and qualified utility personnel no less than every four years; and
- Submit a final report to the legislature.

Acknowledgements

DNR wishes to acknowledge the members of the Electric Utility Wildland Fire Prevention Task Force for their contributions to the development of this report:

Mendy Droke, Seattle City Light

George Geissler, Department of Natural Resources (Chair)

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Dave James, Avista Utilities

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Meetings

The task force met a total of seven times from August 2019 through December 2020. Meetings were initially held in person, but beginning in July 2020 meetings were convened by remote video conference to comply with COVID-19 social distancing protocols issued under the Governor’s “Stay Home, Stay Healthy” order.

All meetings complied with the Open Public Meetings Act.

Looking Ahead

At the conclusion of this task force’s work as directed by the Legislature, the Commissioner of Public Lands intends to maintain a utility advisory committee to advise the department on all matters related to the prevention of electric utility caused wildfires, and other issues deemed necessary by the commissioner.

Recommendations Grouped By Focus Area

- 1. Developing, for consideration by the department and individual electric utilities, a model agreement for managing danger trees and other vegetation that pose a risk of wildland fire and associated utility liability due to the proximity to electrical transmission wires and other utility equipment.**

Background

Utilities in Washington can face risks to infrastructure that are not easily mitigated. For example, trees and other vegetation outside of established rights of way corridors that pose risks to transmission and distribution power lines can be difficult for an electric utility to address because there is often limited authority to remove trees outside of established rights of way.

The task force focused its development of a model agreement on DNR's uplands, interpreting language in RCW 76.04.780(2)(b) that requires DNR to "*distribute a voluntary model danger tree management agreement to utilities for their consideration for execution with the department*" to apply to uplands managed by DNR.

DNR manages rights of way under the authorities of RCW 79.36, as well as fiduciary trust management principles as described in Attorney General's Opinion 1996 No. 11. More specifically, DNR manages rights of way for utility transmission lines under the authority of RCWs 79.36.510, 79.36.520, and 79.36.530. RCW 79.36.520 allows utilities to remove all vegetation within the right of way and grants the right to cut marked danger trees outside of the right of way that pose a risk to the operation and maintenance of a distribution or transmission¹ line upon full payment of the appraised value of the timber.

Deliberations

The task force established a model agreement subcommittee of practitioners of utility rights-of-way vegetation management to ensure that those who are closest to the issue were able to help develop a model agreement. DNR's rights-of-way program manager led the subcommittee.

¹ Both transmission and distribution refer to movement of power after it has been generated at the power plant. "Transmission" is the movement of electricity from power plant to power substations near populations, "distribution" refers to carrying electricity from a substation to end consumers.

The task force charged the subcommittee with developing a model agreement that would achieve the following goals:

- a. Effectively reduce the risk of fire to avoid losses and costs to the state and forest landowners, and reduce liability of utilities.
- b. Identify and define the different categories of trees that pose a danger or hazard for wildfire or damage to utility facilities.
- c. Identify methodologies to mitigate risks from each category of tree.
- d. Establish protocols for communication between utilities and the landowner along with processes and timetables for dispute resolution when mitigating hazards.
- e. Foster consistency with current policy related to DNR State Uplands' easement and rights of way granting.

The subgroup met regularly, either biweekly or weekly, between May and September 2020.

After deliberations, some members of the task force felt the draft model agreement did not present enough flexibility for timely removal of hazard trees outside of the established rights of way on DNR trust lands. Additional deliberations between DNR's uplands rights-of-way program and task force members allowed DNR to better understand certain issues facing utilities like scheduling maintenance activities and related costs that may have a significant impact to utility operations.

Recommendation

The task force believes it is in the interest of improving wildfire prevention and reducing a utility's liability that the work of establishing a comprehensive model agreement should continue beyond the duration of the task force established by the Legislature. The task force and DNR rights of way program have established a road map that will guide discussions to complete a final model agreement.

Model Agreement Roadmap:

- DNR will identify sensitive habitat areas and designate removal thresholds or other operational restrictions that would apply to DNR's management of that habitat area.
- DNR will share GIS data, and define a process to share new data as it is updated, that identifies the sensitive habitat areas.
- DNR will partner with utilities to establish an ongoing training program to ensure utility staff have the knowledge to work within operational restrictions that would apply to DNR's management of the habitat area.
- Utilities may remove any trees on DNR-managed lands outside of the right of way in non-habitat areas that pose a danger to utility facilities without consultation, provided that pictures are taken, notice is sent to DNR, and DNR is compensated for the value of any merchantable timber removed. As part of the agreement, merchantability standards will be established.

- Utilities may remove trees on DNR managed lands outside of the right of way in habitat areas without consultation provided that utilities are operating within operational restrictions that would apply to DNR's management of the habitat area.
- Utilities are responsible for any mitigation required by regulating entities due to utility operations within habitat areas.
- Utilities will coordinate with DNR if upcoming routine vegetation maintenance is planned in habitat areas.

Implementation Recommendation

The task force and DNR will identify individual members willing to continue to participate in the work of finalizing the model agreement, with the goal of completing and publishing an agreement for consideration for by utilities by June 30, 2021.

2. Developing communication protocols and educational exchanges between the department and electric utilities for identifying and addressing issues relating to utility infrastructure to reduce the risks of wildland fires.

Background

State statute provides that, “...When the department considers it to be in the best interest of the state, it may cooperate with any agency of another state, the United States or any agency thereof, the Dominion of Canada or any agency or province thereof, and any county, town, corporation, individual, or Indian tribe within the state of Washington in forest firefighting and patrol.” (RCW 76.04.015(6))

DNR considers it to be in the best interest of the state to cooperate with electric utilities in Washington to prevent forest fires and, thereby, reduce the risk of losses and costs to the state from forest fires.

Deliberations

The task force believes there is a compelling case for improved, proactive communication and information exchanges between DNR, in its capacity as the state’s forestland firefighting agency, and electric utilities, in their capacity as providers of electrical service to residents of Washington. Consistent and clear communication is foundational to achieving the intent of the Legislature in establishing the task force to address the prevention of wildfires in Washington.

Recommendations

1. At the conclusion of this task force’s work as directed by the Legislature, electric utilities in the state, and the Commissioner of Public Lands should continue to maintain a utility advisory committee to advise the department on all matters related to the prevention of electric utility caused wildfires, and other issues deemed necessary by the commissioner.
2. Members of the advisory committee established in the first recommendation, DNR and other entities should establish joint public communications protocols to inform residents of the state of potential critical fire weather events and the potential for power outages or disruptions.
3. DNR and electric utilities’ leadership should proactively work to establish positive working relationships between local utility managers and maintenance personnel and DNR’s regional wildfire suppression and prevention personnel. This should include information sharing related to local wildfire risk assessment data and prevention plans.
4. Electric utilities and DNR should jointly participate in statewide or regional electric utility industry seminars or forums as a means of communicating wildfire prevention messages, the science and methods of vegetation management, and to promote an understanding by suppression agencies and land management of electric utility system operations.

5. Together, electric utilities and DNR should convene annual one-day forums that include case studies of previous wildfire incidents, investigations, maintenance projects, or other activities as a means to transfer knowledge between organizations.

3. Developing investigation protocols, including thresholds, for implementing the relevant provisions of RCW 76.04.015 when the department's investigation involves electric utility infrastructure or potential electric utility liability.

Background

RCW 76.04.015(3)(c)(i) specifically addresses wildfire investigations related to utility infrastructure or liability. It empowers DNR to investigate the cause and origin of wildfires generally, but the relevant provision of the section as it relates to utilities appears to be narrower. The section states that when investigating the cause and origin of fires, *“the department shall work cooperatively, to the extent possible, with utilities, property owners, and other interested parties to identify and preserve evidence...”* The relevant provision of the statute, with respect to investigations, appears limited to describing how DNR and utilities cooperate to identify and preserve evidence.

An example of this type of cooperation is prescribed by statute for those instances where DNR intends to take possession of evidence generally, and states, *“to the extent possible, the department shall notify the person, firm, or corporation of its intent to take possession or control of the evidence. The person, firm, or corporation shall be afforded reasonable opportunity to view the evidence and, before the department takes possession or control of the evidence, also shall be afforded reasonable opportunity to examine, document, and photograph it.”* During deliberations, it was decided task force members could advise DNR on reasonable standards or protocols for when DNR plans to take possession of evidence belonging to a utility.

Subsection (3)(c)(iii) of the statute addresses those instances where DNR intends to take possession of evidence that has damaged utility property. Again, it was decided the task force could provide advice on the preservation of evidence not owned by utility, but related to the cause of a wildfire associated with a utility. An example of this scenario might include instances where a tree belonging to a third party fell on utility lines.

The statute also authorizes utilities to object to DNR taking possession of evidence. Here the task force would provide advice on how objections would be made to and processed by DNR.

Because RCW 76.04.015(3)(c)(i) also addresses preservation of evidence, it was decided that it would be appropriate for the task force to provide advice on how such evidence should be preserved once DNR takes possession of it.

The task force focused its deliberations on these specific areas related to the implementation of the relevant provisions of the statute.

Deliberations

The task force believed early notification of utilities by DNR once a wildfire starts and the initial wildfire origin and cause investigation begins is foundational to implementing relevant portions of the statute. Members expressed that early notification by DNR creates *the very opportunity* envisioned in the statute

to cooperate with wildfire investigators in the accurate identification and preservation of evidence based on a utility's knowledge and expertise of its systems and infrastructure.

The notion of early notification to utilities also extended to DNR taking the initiative to communicate early in its suppression operations when electric utility infrastructure is threatened, regardless of cause and origin of the fire. It is believed that this type of cooperation can provide an opportunity for a utility to respond to a wildfire incident and assist firefighters with assessing the threat to electric utility infrastructure and offer their expertise in mitigating that threat.

The task force considered effective communication between utilities and DNR before, during, and after a wildfire to be an important factor in reducing the potential for future losses and costs both to the state of Washington and utilities from wildfire. The task force believes frequent, proactive communication between utilities and DNR provides for shared learning that supports DNR as it carries out its duties pertaining to the forestland fire service of the state, particularly related to wildfire prevention, and supports utilities in their efforts to reduce exposure from wildfires.

Recommendations

Prior to the 2021 wildfire season, the task force recommends DNR:

1. Develop an agency procedure that outlines a process for notifying electric utilities immediately, or as soon as practical, when DNR determines the cause and origin is related to an electric utility's infrastructure, or when a wildfire poses an imminent threat to the infrastructure of an electric utility.
2. Develop a process to encourage direct communication by DNR with the affected electric utility to solicit input in the department's initial investigation and any follow-up investigations. This would promote accurate identification and proper preservation of evidence in real time, and allow for an understanding by the utility of the circumstances surrounding the fire's ignition and its subsequent behavior, and to help to prevent other similar fires.
3. Establish written procedures to guide wildfire investigators when DNR intends to take possession or control of evidence belonging to an electric utility or evidence that has caused damage to property owned by the utility. At a minimum, procedures should include:
 - a. A protocol to notify an affected utility of DNR's intention to take possession of utility property when it is authorized without a court order;
 - b. Protocols to establish a reasonable opportunity for an affected utility to view the evidence, and examine, document, and photograph it, before DNR takes possession or control of it, including steps to cooperatively maintain the on-site integrity of evidence and to establish its chain of custody;
 - c. The process for addressing the identification and preservation of utility-owned evidence in circumstances where the utility retains possession of the evidence because DNR's possession of the evidence would substantially and materially interfere with the operation of the utility's business or the provision of electric utility service;

- d. Circumstances under which DNR may agree to alternative custody arrangements between the parties prior to it seeking a court order authorizing its continued possession or control of evidence;
 - e. Establishing a time when, and by what means, a utility can object to DNR taking possession or control of evidence in the course of an investigation;
 - f. Establishing a protocol for returning evidence to the affected utility previously in the possession or control of DNR; and,
 - g. Though not expressed in statute, a process for the department to notify the utility 60 days in advance of when the department plans to dispose of such evidence.
4. Any written procedure established by DNR should include a provision for furnishing the affected utility with copies of documentation that confirms the steps DNR has taken to preserve the evidence collected by the department, when an affected utility does not have a reasonable opportunity to document evidence at the collection site.
 5. Cooperate with utilities to establish qualifications of personnel that could be qualified to take possession or control of utility owned or controlled evidence, and the protocols for use of such personnel.
 6. Periodically review and update procedures as necessary in cooperation with the workgroup, if established, identified in *Section III. Recommendations for developing communication protocols and educational exchanges between the department and electric utilities.*

Implementation Recommendations

1. Protocols and thresholds should become part of a formal agreement between the department and the affected utilities. Agreements should be reviewed and updated every two years.
2. Written protocols should be readily available on DNR's external website, with written notification to utilities when published and updated. Older protocols should be archived, but remain available online.

4. Creating rosters of certified wildland fire investigation firms or persons and third-party qualified utility operations personnel who may be called upon by the parties as appropriate.

Background

RCW 76.04.015 provides that DNR is empowered to investigate the origin and cause of all forest fires to determine whether either a criminal act or negligence by any person, firm, or corporation that caused the starting, spreading, or existence of the fire.

Deliberations

Members agreed that the purpose of providing recommendations for creating rosters of certified wildland fire investigation firms or persons, and third-party qualified utility operations personnel, and DNR issuing those rosters, was to assist the department or utility in understanding and reducing risks and liabilities from wildland fire as each party thought appropriate, and not to act as an arbiter between the parties during an investigation. Members, however, did express the need to ensure DNR can carry out accurate and unbiased wildland fire investigations when those investigations involve electric utility systems and infrastructure.

Some members identified as potential issues the limited training DNR's wildland fire investigators receive related to the infrastructure and operation of electric utility systems and questioned the extent to which DNR uses subject matter experts familiar with these systems in the course of its investigations. Some members also expressed concern that a form of anchoring bias² may occur with investigators if a fire is proximate to utility infrastructure. These members were not able to provide specific examples of when this has occurred, but felt that it was an important consideration for the task force.

DNR's Chief Wildland Investigator established that DNR's wildland fire investigators are not trained beyond a rudimentary level in the knowledge of electric utility infrastructure and systems, but DNR has historically utilized third-party subject matter experts to provide the knowledge of electric utility systems and operations as needed as it conducts investigations.

Some members shared concerns that DNR's wildfire investigation process may be biased toward identifying a responsible person or entity and quickly initiating suppression cost recovery either through demands of payment for suppression costs, or eventually through litigation. These members felt this approach provides limited opportunity to discuss with DNR the conclusions of its investigation, or to capture "lessons learned" before meeting in a courtroom.

In the case where conclusions of DNR's investigation of utility-caused fires may be in dispute, or at least questioned, some members believe there could be an opportunity for a third-party expert, acting in a

² Anchoring bias is a cognitive bias where an individual depends too heavily on an initial piece of information to make subsequent judgements during decision-making.

neutral capacity, to review the conclusions prior to DNR's demand for payment, or initiating litigation, in an effort to either avoid litigation, or as a means to prevent future fires through lessons learning.

Unresolved issues in these specific deliberations include: For whom would the experts work, and which party would compensate them for their services? Would a party be obligated to accept the conclusion of a third-party report, regardless of the conclusion? Or, would additional evidence found by a third party be incorporated in the department's investigation?

Recommendations

1. The task force recommended DNR, in compliance with statutory procurement requirements, create a rosters of certified wildland fire investigation firms or persons, and third-party qualified utility operations personnel, and use the following criteria for establishing the qualifications of persons and firms:
 - Recommended wildland fire investigator firm or individual qualifications:
 - Qualification as a Wildland Fire Investigation Team Member (INTM) under the National Wildfire Coordinating Group *Standards for Wildland Fire Position Qualifications*, or equivalent; and,
 - Documented five years' experience as lead investigator in investigating electric utility caused wildfires.
 - Recommended utility operations personnel qualifications:
 - Documented 10 years' experience in:
 - a. Power line system analysis, including transmission and distribution protection systems;
 - b. Transmission and distribution line design; and,
 - c. The forensic analysis of utility infrastructure.
 - Recommended Arborist qualifications:
 - Certification as an arborist from the International Society of Arboriculture;
 - Certification as a Utility Specialist from the International Society of Arboriculture; and,
 - Documented three years' experience overseeing a utility vegetation management program or an equivalent vegetation management program.
2. DNR should request a utility representative review of the qualifications of third-party qualified utility operations personnel to advise on acceptable expertise as part of the of the selection process. As an alternative, DNR could utilize the work group established under recommendations related to education exchanges and communications protocols for this purpose. The roster of qualified personnel and firms should be updated every four years from the date of initial publication by DNR.
3. When the department has reason to believe that a wildfire is caused by an electric utility and its probable expenses are over \$100,000, or an injury or a death has occurred, DNR staff should call upon a party from the roster of wildland fire investigators and/or qualified utility operations personnel to assist in the investigation. The intent of the third-party report would be to inform

the department only, and the department would not be required to accept the conclusions of the third-party investigator.

4. Any report produced by a third-party investigator and/or qualified utility personnel should require answers to the following questions:
 - What was the root cause of the fire?
 - What management practices could be deployed to avoid similar wildfires?
5. Even in the event DNR decides to use the roster for other than utility related investigations, the request for qualifications (RFQ) developed by DNR should explicitly request utility expertise and experience, and the roster should clearly indicate types of expertise.

Implementation Recommendations

DNR should create on its external website under its Wildfire Program information page a section that is specific to the work group created under recommendations for the task *“Developing communication protocols and educational exchanges between the department and electric utilities”* and post the rosters there. The roster would be updated every four years.