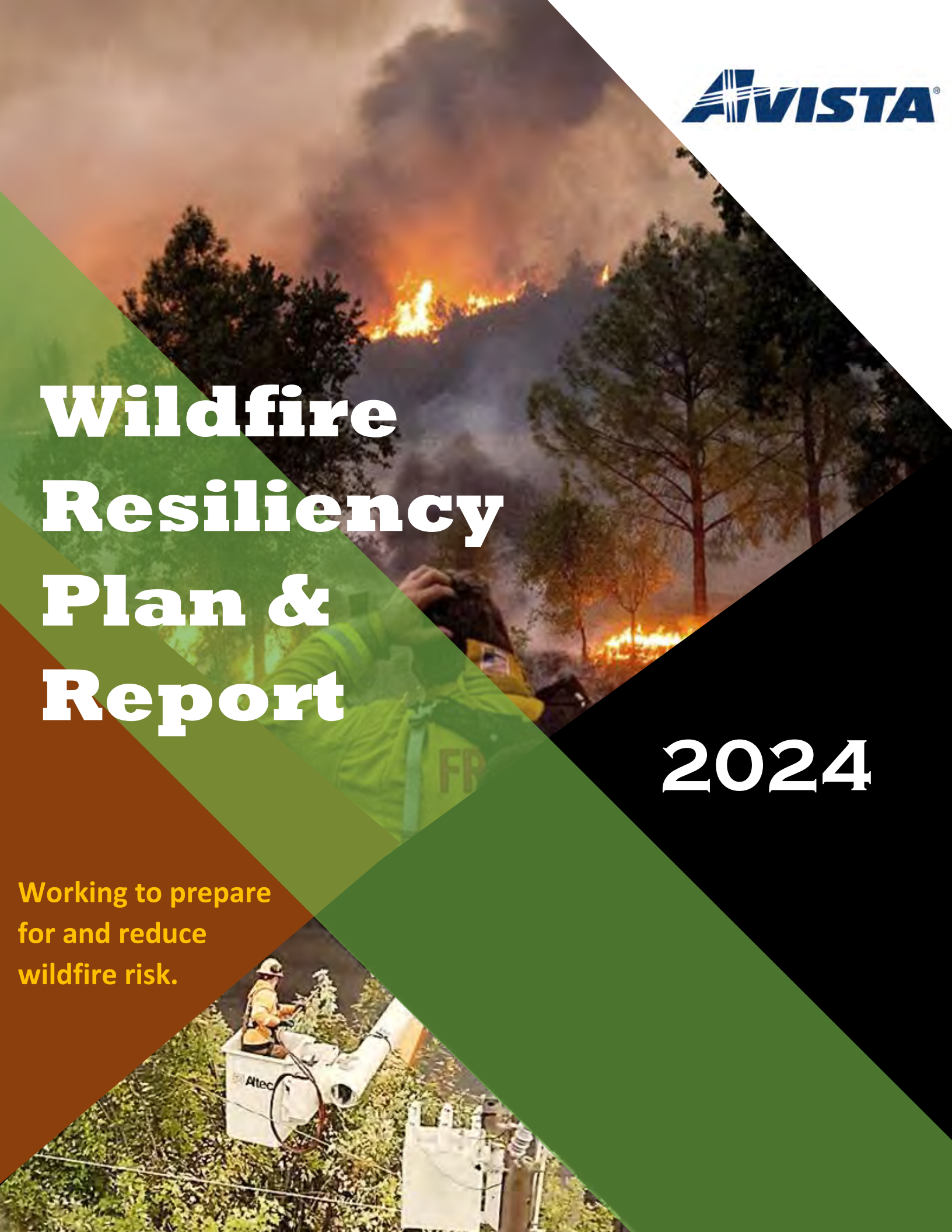
Wildfire Resiliency Plan & Report

2024

Working to prepare for and reduce wildfire risk.



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Statement from Avista Executive Management

2024 represents Avista's 4th year of implementing the Wildfire Resiliency Plan. Avista's wildfire strategies are firmly rooted in our 135-year operating history and represent the collective knowledge of Avista employees and fire agency professionals together with assistance from peer utilities, and other experts and, most importantly, engagement with customers. This Wildfire Plan builds upon strategies originally developed in 2020 and aligns with the Company's mission to provide safe, reliable, and affordable energy. Avista's Wildfire Plan is designed to reduce fire risk associated with the operation of electric transmission and distribution facilities and reflects our commitment to partner with customers, communities, and those who manage forest landscapes and fight fires, as we all have a role to play in minimizing the risk of wildfire.

Heather Rosentrater, Chief Operating Officer (COO)

_____ Date: August 31, 2024

Josh DiLuciano, Vice President Energy Delivery

_____ Date: August 31, 2024

Vern Malensky, Director Electrical Engineering

_____ Date: August 31, 2024

Executive Summary

Avista published its first Wildfire Resiliency Plan in June of 2020 and began to implement elements of the Plan in 2021. That work introduced the risks, costs, and benefits of implementing a holistic set of measures to reduce utility wildfire risk. The original Plan built upon Avista's operating history responding to and mitigating wildfire activity, and we continue to do so four years later. Our 2024 Report details the performance and investments made since 2020 and serves to reaffirm Avista's commitment to reducing fire risk to communities and customers, as well as the Company infrastructure that serves our customers.

Avista is making wildfire-related investments in four key areas:

- **Grid Hardening** – Investing in electric infrastructure to reduce spark-ignition outage events and to protect critical assets from the impact of wildfires.

- **Enhanced Vegetation Management** – Reducing the number of vegetation-related issues that can lead to outages and/or spark events by inspecting 100% of our powerline assets annually to identify and mitigate risk trees. Adding remote sensing technologies such as LiDAR and satellite imagery to enhance overall vegetation management information and decision-making.

- **Situational Awareness** – Providing both static and dynamic tools needed to identify, manage, and react to wildfire risk.

- **Operations & Emergency Response** – Preparing for and effectively reacting to wildfire situations, including remote automation and control of critical equipment, along with collaborating with critical partners in reacting to wildfire events in a holistic and unified way.

Avista's Wildfire Resiliency Plan is intended to accelerate and/or focus existing programs as well as initiate new programs that reduce fire ignition risk related to Avista's electric equipment and make our system more resilient to the impact of fires. Avista's Wildland Urban Interface (WUI) map indicates that approximately 2,745 miles of our electric distribution lines (36% of our system) are located in high fire consequence areas. These zones mark the intersection between forest land and human development and are the focal point of Avista's risk mitigation strategies, as they are the areas most likely to be impacted by wildfire.

From 2020 when the initial Wildfire Plan work began through the end of 2023, Avista completed upgrades on over 600 miles of distribution lines and installed nearly 4,200 steel transmission poles (389 of these specific to Wildfire). Avista also made tremendous progress towards automating its distribution protection system with upgrades to 208 devices. As of the end of 2023, Wildfire's

Enhanced Vegetation Management program removed over 64,000 risk trees. We also performed other resiliency work that will be discussed in more detail in the following pages. These investments will reduce wildfire risk and improve system resiliency and customer reliability by reducing the number of both outages and fire ignition events.

It is important to remember that most of the benefits of the Wildfire programs will not show up immediately. Wildfire metrics are intended to reflect long-term trends on our system. Only long-term trends are truly meaningful here; it is not practical or reasonable to look merely to end-of-year results due to the variability of a variety of factors, most specifically weather conditions. In addition, a marked change in these statistics will take the time it requires to replace thousands of crossarms across the system[1] and mitigate vegetation issues across the 30,000 square miles of our service territory, for example. None of these programs will be completed within a year but will be ongoing and offering continual improvement.

Avista's Commitment to Wildfire Resiliency

The risk of wildfire is ever present in the western United States. Research indicates that the frequency of wildfires has quadrupled in some areas since the 2000s.[2] In fact, the National Interagency Fire Center has documented almost 70,000 wildfires per year since 1983.[3] Multiple studies have found that there is a significant increase in wildfire season length, wildfire frequency, and amount of burned area. The wildfire season has been extended in many areas due to factors including warmer springs, longer summer dry seasons, and the resulting drier soils and vegetation. Similarly, climate change threatens to increase the frequency, extent, and severity of fires through increased temperatures and expanded drought.[4] Though we have always faced the threat of wildfires, that threat is also increasing both as a function of population growth and population location. It has been estimated that 1 in 6 Americans now live in areas of significant wildfire risk.[5] [6]

Avista developed a wildfire plan to help mitigate this risk. Some examples in the Plan include modifying operations to reduce the risk of fire ignition such as Avista's Fire Safety Mode operations, strengthening our infrastructure by migrating from wooden to fiberglass crossarms on distribution poles, and installing steel rather than wood transmission poles to fire-harden the high voltage system.

As part of the Wildfire Resiliency Plan, Avista tracks metrics that help us determine the success of our strategies and programs. Overhead equipment failures, pole fires, and spark-ignition events are among

[1] Note that the Company has over 265,000 poles in the field. It will take several years to replace all of our wood crossarms.
[2] "U.S. Fires Four Times Larger, Three Times More Frequent Since 2000," University of Colorado at Boulder, March 16, 2022, U.S. fires four times larger, three times more frequent since 2000 | ScienceDaily
[3] NIFC (National Interagency Fire Center). Total wildland fires and acres (1983–2023). Accessed July 2024. Wildfires and Acres | National Interagency Fire Center (nifc.gov)
[4] "Climate Change Indicators: Wildfire," United States Environmental Protection Agency, July 2022, Climate Change Indicators: Wildfires | US EPA
[5] John Muyskens, Andrew Ba Tran, et al, "1 in 6 Americans Live in Areas with Significant Wildfire Risk," The Washington Post, May 17, 2022, Map: See where Americans are most at risk for wildfires - Washington Post
[6] Wildfire Risk Map courtesy of FEMA, Wildfire | National Risk Index (fema.gov)

our key performance indicators. We also track the number of trees that fall or grow into powerlines. Each of these measures represents a situation that may lead to a wildfire. Recent values are summarized in Table 1. These values represent a subset of unplanned outages that can be managed in part by upgrading powerlines and equipment as well as removing risk trees, which are primary objectives of Avista's Wildfire Plan.

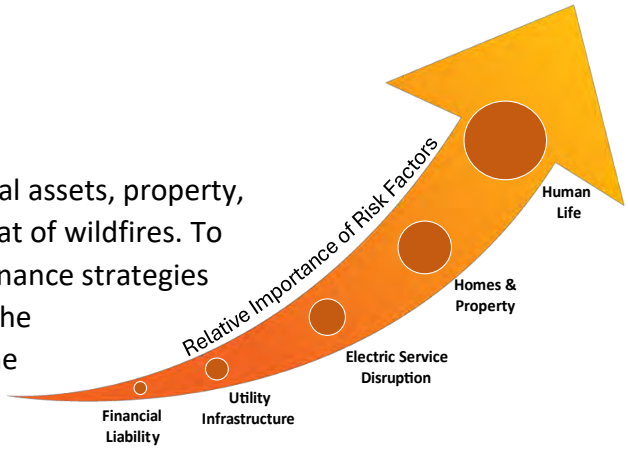
Outage Issue	2019	2020	2021	2022	2023	5 Yr. Average
Pole Fires	68	66	154	56	67	82.2
Tree Fall-In	411	420	363	376	224	358.8
Tree Grow-In	96	72	83	59	53	72.6
Overhead Equipment	655	608	622	750	641	655.2
Bird/Animal Outages	538	525	565	514	573	543
Spark Events	99	164	115	109	65	110.4

Table 1. Historic Outages

Though reducing spark-ignition events is a core tenant of Avista's Plan, we acknowledge that fire risk cannot be completely eliminated, and that actions and investments must be balanced against affordability, reliability, safety, and security, as well as other utility operating risks. Avista is committed to a multi-year Wildfire Plan to reduce the number of fire ignition events and to make our system more resilient to the impacts of wildfire while accounting for those considerations. This Plan describes that commitment and the specific actions we are taking to achieve these goals.

Wildfire Plan Goals

The stated goals of Avista's Wildfire Plan include:



1. **Protecting Life and Property** – To protect physical assets, property, and most importantly, human lives, against the threat of wildfires. To recognize fire potential in our operating and maintenance strategies and take actions to reduce the risk of wildfire from the interaction of Avista's energy delivery system and the environment, as well as the impacts of wildfire to Avista's system.

2. **Emergency Preparedness** – To recognize and react to wildfire as a recurring threat to infrastructure, communities, and utility customers. To prepare and train for episodic wildfire events and align operating practices with fire threat conditions to help mitigate wildfire risk.

3. **Financial** – To mitigate the probability and consequence of direct financial costs and liability associated with large scale fire events.

This 2024 Wildfire Report highlights the progress and milestones achieved since 2020 and discusses our wildfire mitigation strategies going forward. Avista started work on this plan in the second half of 2020. The combination of 2021 and 2022 served as the test bed for gathering direct feedback from employees, fire agency professionals, customers, and others to help further shape and refine the Plan. All of our programs have now come up to speed and are being fully implemented. Even so, we continue to apply our goal of constant improvement and have experienced some significant

achievements in service to that goal. For example, our Fire Weather Dashboard has been enhanced and refined with more data and improved analytics, and our WUI map has been updated to include community impact information. While many of the elements of the 2020 Plan remain relevant, this updated report enjoys the benefit of hindsight and provides focus for Avista's approach to mitigating fire risk going forward. In the following pages we will discuss the elements of our Plan, what has been achieved, and how it has evolved over time.

Wildfire Plan Updates

Avista is continually reflecting on our Plan and updating and revising its strategies to incorporate lessons learned, new information related to fire risk, utility best practices, and in response to feedback from customers, agency partners, regulators, and others including fellow utilities. Avista uses a Plan-Do-Check-Adjust framework to adapt business strategies, plans, and processes to align with changing business and physical climates. In fact, initial core elements of the Wildfire Plan were derived from a series of business process improvement workshops held to identify opportunities to build upon Avista's operating history and existing Company programs.

As more focus is being placed on wildfire resiliency and protection measures across the western U.S., opportunities arise for new and improved data to incorporate into our modeling. In one important example, the U.S. Dept. of Agriculture together with the U.S. Forest Service provides free analytics and mapping related to fire risk, including their Wildfire Hazard Potential Map (WHP)[7] that defines wildfire hazards and the associated prioritization of fuels management needs across the entire United States. It is basically a fire-fuel model that shows the burnability of an area. They have also developed the Housing Unit Impact (HUI) dataset[8] which contains a nationwide raster of housing unit density measured in persons per square kilometer. This information incorporates the general consequences of fire on people and the potential economic impact of wildfire on communities and infrastructure. These two relatively new detailed modeling tools, used together, provide a solid understanding of wildfire risk. Avista's WUI map built on this foundation and incorporated our own internal-use data for actual outage rates

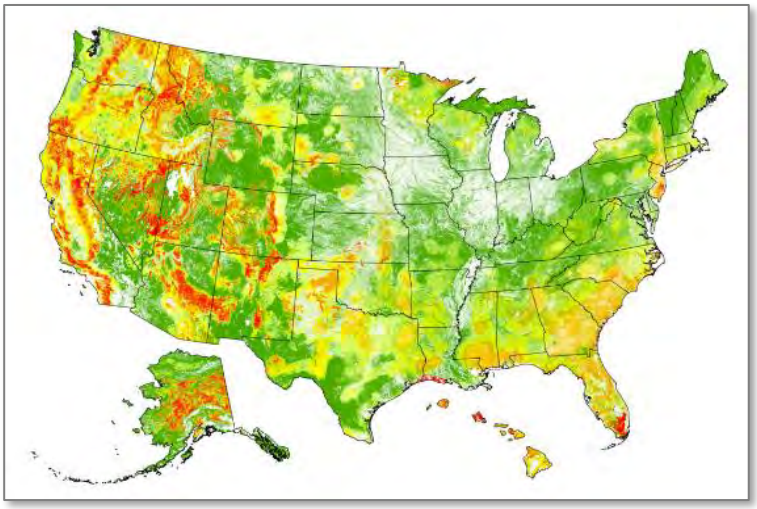


Figure 1. USDA-US Forest Service Wildfire Hazard Potential Map

[7] "USDA USFS Wildfire Risk to Communities," Download - Wildfire Risk to Communities Data is available as raster GIS data or as spreadsheets from the USDA Forest Service Fire Modeling Institute.

[8] "Wildfire Risk to Communities: Spatial Datasets of Wildfire Risk for Populated Areas in the United States," fs.usda.gov/rds/archive/products/RDS-2020-0060/_metadata_RDS-2020-0060.html

and vegetation risk including historic feeder outages, vegetation conditions on each feeder, and feeder health data to create a customized, detailed means of identifying risk areas across our service territory. We have also honed and refined our Fire Weather Dashboard, which is the heart of our situational awareness (and reaction) efforts. Since it was initially developed, it has been continually improved, including model calibrations to best fit data to observed outcomes in real time, back-casting against actual situations and conditions in order to test concepts and accuracy, and incorporation of the updated WUI information described above. It is critical to continue to search for ways to improve our ability to predict and react to wildfire risk, as this risk is only increasing with time.

Another example of our striving for continuous improvement is the incorporation of LiDAR and satellite data acquisition into our vegetation management practices. Because these images are taken on a regular basis, they show us where vegetation risk exceeds both reliability and fire mitigation thresholds and give us valuable information regarding the location of problem (or potential problem) vegetation issues over time. The analysis provided is invaluable in directing planners and line clearing crews to specific locations on the system to perform maintenance and mitigate risk trees based on *identified location of risk* rather than the traditional method of working on an entire circuit or polygon. This data gives us the ability to send crews to the areas of greatest need with accuracy. Both of these tools and the detailed, over-time analysis they provide will essentially learn Avista's system and the vegetation around our lines, and both allow planning work in a more precise and predictable way, streamlining our vegetation management programs and helping to maximize their value.

Governance

The Wildfire Implementation Team is composed of individuals who oversee and track the programs described here, who do the day-to-day work of managing the programs and who track and report on the results as well as the Wildfire Resiliency Manager.

Figure 2. Avista Wildfire Governance

Overall Plan implementation and guidance is governed by the Wildfire Steering Committee whose membership reflects a broad cross section of Avista departments. The Steering Committee is responsible for on-going oversight of wildfire season preparedness and providing support to the Wildfire Resiliency Manager, focused primarily on tactical issues. The Committee consists of internal Avista stakeholders with responsibility for the outcome of wildfire preparedness and response activities. This includes Risk, Legal, Regulatory, Asset Maintenance, Customer Service, Communications, and the Director of Electrical Engineering, who oversees the Wildfire program.

As Wildfire is an enterprise level risk, executive level oversight is essential for producing prudent and cost effective outcomes for customers. The Wildfire Executive Committee oversees activities related to operational response to weather conditions as well as broad Plan implementation, budget, and strategies. This executive-level committee consists of officers and senior officers of Avista.

The Board of Directors are regularly kept apprised of the general Plan, program progress, new strategies, and status. They provide an executive level of oversight that includes external expertise and objective perspective to guide both implementation and plan related expenditures.

In the case of a wildfire or PSPS event, decision making is escalated through appropriate channels. This typically begins with an Emergency Operations Process (EOP), a team comprised of cross-functional Company specialists. These people represent the impacted areas of the utility and provide a high level of experience and expertise. The EOP defines key roles and responsibilities for personnel, identifies communications channels, and outlines strategies for engaging with fire protection professional and emergency operating agency staff during expected or actual wildfire events, creating a consistent and efficient approach. This group is responsible to prepare crews and employees, notify customers, and manage the situation from initiation to full restoration.

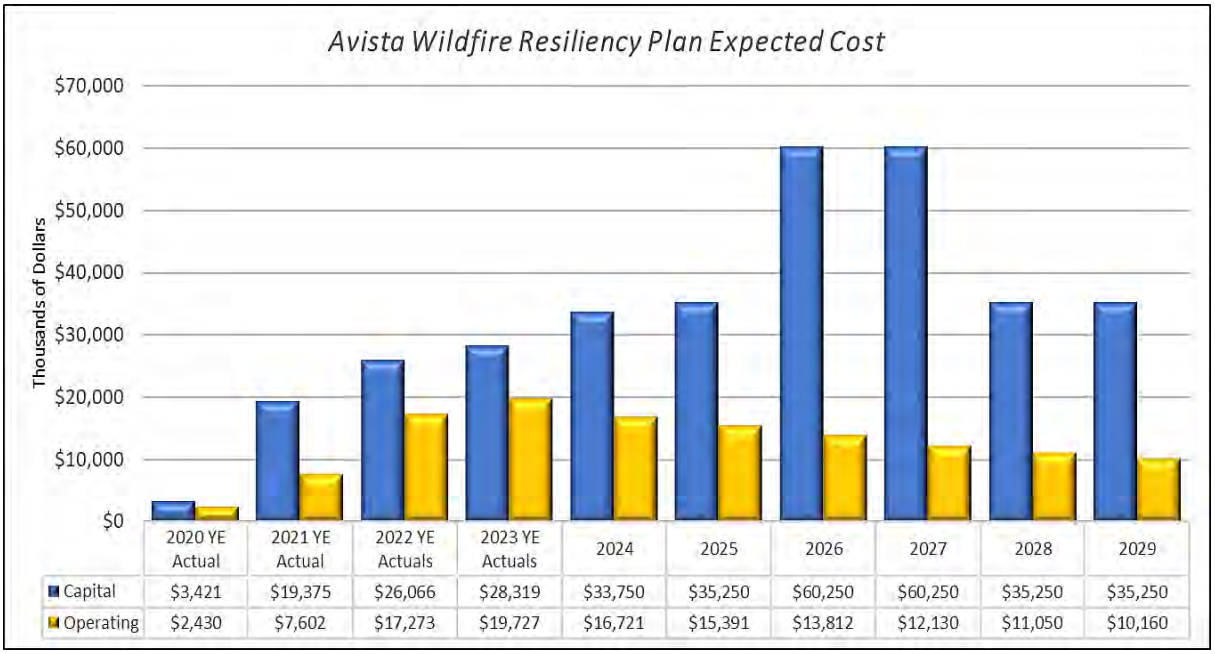
Another aspect of governance and accountability includes gathering customer and first responder feedback via our communications outreach efforts. This includes engaging continuously with partners outside the Company such as the Washington Dept. of Natural Resources, the National Weather Service, our Commissions, and many others. External engagement helps ensure that the Plan is meeting all stakeholder objectives and hopes for the Program and that we continue to improve over time.

Wildfire Resiliency Program Elements

Avista's Wildfire Resiliency Plan groups our efforts into four major program areas: (1) Grid Hardening, (2) Enhanced Vegetation Management, (3) Situational Awareness, and (4) Emergency Operations and Response. Each of these areas will be described in further detail below.

Avista's Wildfire Plan leverages several existing asset programs and operating practices, building upon them whenever possible. Many of these programs already have demonstrated benefits related to reducing the risk of fire or in making the electric system more resilient, such as vegetation management and steel pole replacements. The Wildfire Resiliency Plan adds additional funding and creates a focus for these programs specifically related to high fire threat areas. Other programs suggested by the Plan are new to Avista, including LiDAR and satellite imaging, cross-training with external fire professionals, and the creation of a fire-weather risk monitoring system (our Dashboard). All of the Wildfire programs, new or re-tooled, work in concert to provide a well-rounded and thorough approach.

Approved capital and Operating Expenses for Avista's Wildfire Resiliency Plan through 2029 are shown below, after which we will discuss each of the program areas and their related metrics and expenditures. Note that the budget has only been approved through 2026.



	2020 YE Actual	2021 YE Actual	2022 YE Actuals	2023 YE Actuals	2024	2025	2026	2027	2028	2029
Capital	$3,421	$19,375	$26,066	$28,319	$33,750	$35,250	$60,250	$60,250	$35,250	$35,250
Operating	$2,430	$7,602	$17,273	$19,727	$16,721	$15,391	$13,812	$12,130	$11,050	$10,160

Figure 3. Avista's Wildfire Resiliency Plan Actual and Projected Expenditures

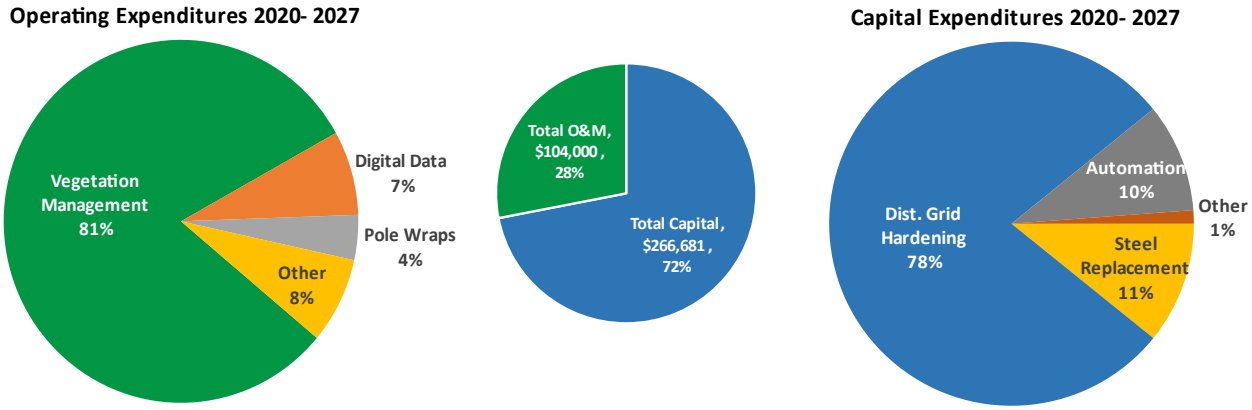


Figure 4. Wildfire Plan Cost Breakout

Note that the additional $25 million in capital shown for 2026 and 2027 indicates the implementation of an Enhanced Grid Hardening Program the Company is currently evaluating. Elements of this program are described below. We anticipate this program increasing our capital budgets from that point forward by an amount that will be determined after our first years of experience with this new approach. The budget will be updated as we gain information and can more accurately measure these costs.

Operating expenses, primarily related to Enhanced Vegetation Management, are expected to peak in 2023 and then gradually decline as subsequent year vegetation inspections hopefully reveal fewer risk/hazard trees due to our vigorous efforts to mitigate them.

Grid Hardening

Pole fire from a wood crossarm that burned the pole and crossarm then traveled to the ground.

Many sources of powerline outages are difficult to control, including winter storms, strong wind events, lightning, and public-caused outages including vehicular accidents and trees that are felled through powerlines. However, by upgrading powerline conductor and equipment, many types of failures are more manageable and represent a cost effective means to reduce the overall number of outages and the resulting potential for spark-ignition events.

Though Avista has well-established programs to replace poles, conductor, and equipment, existing programs are condition-based and aligned with reliability objectives. Wildfire grid hardening objectives are risk-based and focused on reducing the number of (and potential for) spark ignition events. Hardening powerlines, poles, and other equipment through updated designs and material selections also helps the power system withstand higher wind speeds and other environmental factors such a wildfire near or beneath our facilities. Thus, Wildfire system hardening focuses on the prevention of equipment spark events as well as promoting equipment resilience during fire (and other reliability risk) exposure. Grid hardening programs are a key component in protecting customer reliability and safety as well as safeguarding our electric transmission and distribution systems from wildfire risk – systems that our customers have paid for and depend upon.

We believe that our grid hardening Wildfire programs are already showing benefit. For example, in 2023, Avista recorded 65 spark ignition events as compared to the previous year which recorded 109 events, with the most significant reductions coming from fewer overhead equipment outages. This reduction can at least in part be credited to the work being done to install wildlife guards and replace aged overhead equipment as part of our grid hardening efforts. While the vast majority of spark-ignition events do not result in fires or wildfires, it is an important measure of fire risk performance and the benefits offered by Avista's Wildfire programs.

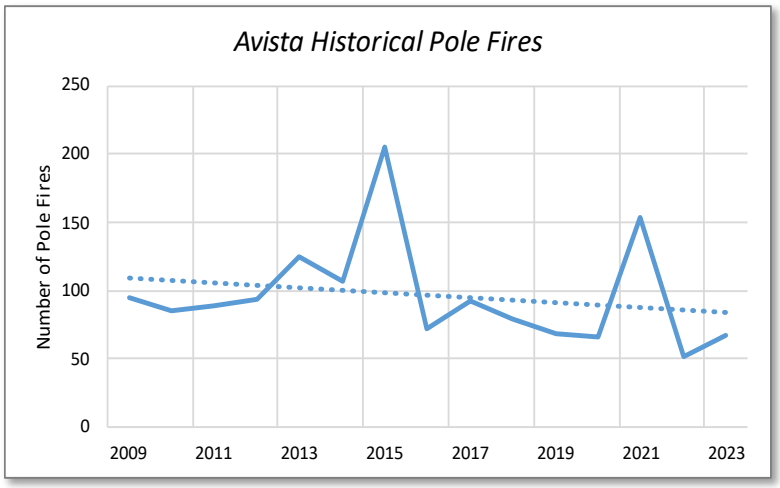


Figure 5. Avista Historic Pole Fires

We recorded 67 pole fires in 2023 versus the 5-year average of 81.[9] The mechanism that causes pole fires is well-known and is highly weather dependent. This issue is related to periods of hot, dry

[9] Note that there were 205 pole fires in 2015 and 154 poles fires in 2021 due to hot dry conditions followed by light rains, ideal conditions for electrical tracking between poles and wood crossarms that can lead to pole fires. This compares to 92, 79, 68, and 66 poles fire per year in 2017 through 2020 and 51 pole fires in 2022.

weather when insulators become covered with dust and other contaminants, creating a path for leakage current, which happens as insulating properties of overhead equipment naturally break down over time. Leakage current is usually invisible and does not cause a heat signature, making it almost impossible to detect. A light rain after the dry spell increases this leakage current and creates the right conditions for pole fires, especially when the leakage current is concentrated between wood-to-wood or wood-to-metal contacts such as the contact point between wood crossarms and wood poles. Wood shrinkage and cracking around metal bolts holding wood crossarms to poles form a combustive-friendly cavity for arcing and burning, and the burning process accelerates when the moisture of wood increases. Fiberglass crossarms, which are naturally fire resistant due to their smooth surfaces and composition, virtually eliminate pole fires.[10]

In the early 2000s, Avista began using fiberglass crossarms and, according to our field crews, this has virtually eliminated fires on poles with these crossarms. As part of Wildfire Resiliency, the plan is for all wood crossarms on structures located in elevated fire areas to be replaced with fiberglass units. The number of pole fires should be significantly reduced over time with this work. Other Grid Hardening efforts, described below, should significantly reduce outages that could lead to sparks over time as equipment identified as related to wildfire risk is methodically replaced, starting in the highest fire threat zones. Avista supports four primary projects within Grid Hardening:

- Distribution Grid Hardening
- Transmission Steel Pole Conversion
- Fire Resistant Wraps on Wood Transmission Poles
- Annual Fire Inspections on Transmission Lines

Avista crews install a fiberglass distribution crossarm.

Table 2 indicates the Grid Hardening Program metrics, and Figure 6 depicts the associated program key performance outage metrics. Over the life of the Plan, we anticipate replacing 1,000 wood transmission poles with steel in high fire threat areas under the Wildfire budget, maintaining a rate of 211 miles per year of distribution grid hardening, and wrapping 2,500 wood transmission poles per year from 2024 to 2029.

Infrastructure Program Metrics	2020	2021	2022	2023
Distribution Grid Hardening (miles)	61.2	150.5	180	214
Wildfire Transmission Steel Pole Conversion (units)	n/a	169	118	102
Other Transmission Steel Pole Conversion (units)	1,821	847	514	622
Transmission Wood Pole Wrap (units)	1,235	1,938	1,454	1,533

Table 2. Grid Hardening Program Primary Metrics

[10] Each year in the U.S. there are over 3,000 pole fires. Pole fires are caused by periods of very dry conditions followed by moisture, when leakage current, which is normally present, heats and creates combustion in gaps where metal bolts connect wood crossarms to wood poles. This does not happen with fiberglass crossarms. For more information, see: John Lauletta, "The Mystery of Dry Band Arcing & Pole Fire Causation," The Mystery of Dry Band Arcing & Pole Fire Causation | T&D World (tdworld.com)

Bird contact with a regulator which started a fire.

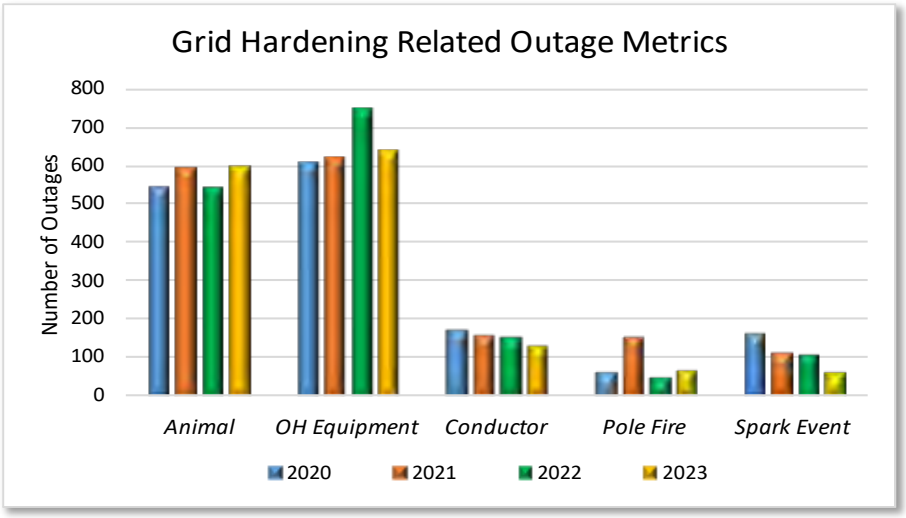


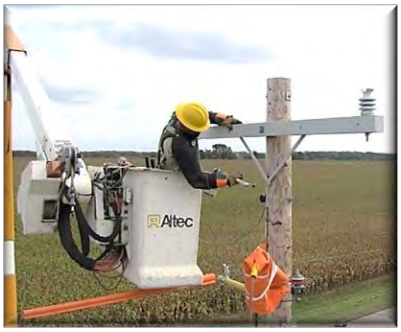
Figure 6. Grid Hardening Related Outage Metrics

Distribution Grid Hardening

The single largest capital program in the Wildfire Plan is Distribution Grid Hardening. As mentioned earlier, though Avista has asset maintenance programs to replace poles and equipment, existing programs are condition-based and aimed at reliability objectives. Wildfire Distribution Grid Hardening focuses on upgrades most likely to reduce spark ignition events, directed in the highest fire threat areas of our service territory. The scope of this work includes:

- Replace wood crossarms with fiberglass to mitigate pole fires.
- Replace copper and other small wire with modern steel-reinforced wire to reduce conductor failures.
- Install wedge-bail clamps at hot tap connector locations to prevent thermal failures.
- Add or replace wildlife guards to mitigate electrical contacts with birds and animals.
- Replace wood distribution poles with metal poles at critical span locations such as highway and river crossings for additional strength and resiliency.

Avista's Grid Hardening Work



Year	Mileage	Cost / Estimate
2020	63	$3,115,000
2021	146	$11,848,000
2022	180	$15,095,000
2023	210	$17,650,000
2024	264	$22,900,000
2025	255	$22,900,000
2026	246	$22,900,000
2027	238	$22,900,000
2028	230	$22,900,000
2029	222	$22,900,000
Totals	**2,053**	**$185,108,000**

Table 3. Distribution Grid Hardening Financial Plan

Distribution Grid Hardening Program Metrics	2020	2021	2022	2023
Percent of Distribution Grid Hardening Projects Planned vs Completed	92%	74%	90%	101%
Miles of Overhead Distribution Grid Hardening Planned	66.5	204	201	211
Miles of Distribution Grid Hardening Completed	61.2	150.5	180	214
Circuit Miles of Overhead Conductor Installed/Replaced	61	149	179	209
Underground Miles Constructed	0	1	1	5
Number of Wildlife Guards Installed	588	1363	2555	2299
Number of Crossarms Installed	666	977	1636	1448
Number of Distribution Steel Poles Installed	0	16	31	2
Number of Distribution Wood Poles Installed	32	115	323	375
Number of Open Wire Secondary Districts Removed (by Polygon)	0	3	4	7
Number of Wedge/Bail Clamps at Hot Tap Connection Points Installed	200	2550	4785	4738
Number of Lightning Arrestors Installed	191	599	467	851
Number of Cutouts Installed	208	550	949	914
Number of Insulators Installed	3023	4615	9563	7888
Number Distribution Fire Resistant Mesh Installed	6	201	100	49

Table 4. Distribution Grid Hardening Program Results

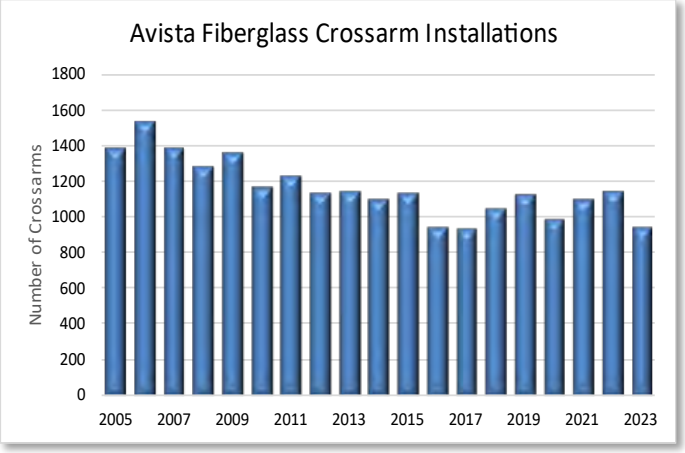


Figure 7. Number of Avista Fiberglass Crossarm Installations

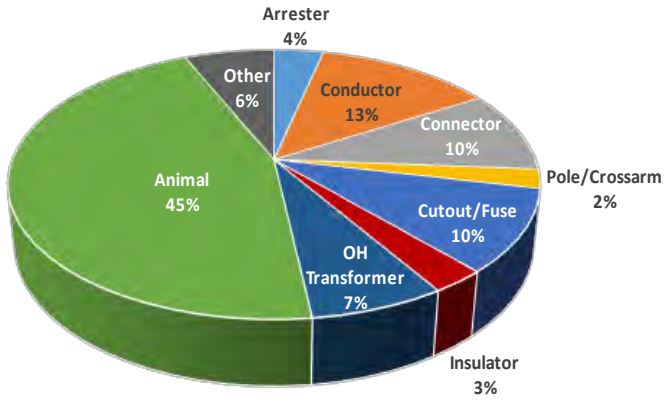


Figure 8. Overhead Equipment Related Outages 2009 - 2023

On average, Avista experiences about 80 pole fires per year, mostly related to wood crossarms and specific weather conditions as described earlier. By replacing wood crossarms with fiberglass units, leakage current is substantially reduced and pole fire risk is much lower. Old and obsolete wire types, such as copper, fail at higher rates than do modern aluminum conductors, so replacing this wire reduces line failure. Animals cause about 8% of Avista's overall outages (45% of overhead equipment outages) but animal guards at transformers and other connection points are an effective means of reducing these electrical contacts that can lead to sparks. Though hot taps fail at a low rate, a majority of our peer utilities use a bail type connector in conjunction with hot taps to prevent burn downs, thus Avista crews are adding these connectors. At critical spans such as highways or river crossings, line personnel are replacing wood poles with metal units to strengthen those spans.

All of these measures strengthen and reinforce our distribution system, making it more resilient to outages which could lead to a spark. They should also aid in protecting general customer service and

reliability. Our accomplishments in this area through 2023 are shown in Table 4 above. Table 3 indicates the predicted level of expenditures for Grid Hardening through the period. It should be noted that the mileage achieved varies each year based on the areas selected for hardening, as each situation or segment presents unique challenges and requirements.

Enhanced Grid Hardening

In addition to existing undergrounding practices, the Company is developing a new program that we call Enhanced Grid Hardening.

Converting overhead distribution line sections to underground cables has not historically been listed as a specific component of our distribution grid hardening. In the past, Avista has conducted underground conversion of overhead lines on a case-by-case basis, but in most existing situations the physical challenges create an undue economic burden,[11] making conversion unfeasible. According to the California Public Utilities Commission, undergrounding costs about $400 to $600 per trenched foot of distribution line, about $2.1 to $3.2 million per mile.[12] For comparison, the typical replacement costs for existing overhead distribution lines range from about $86,700 to $126,900/mile.[13] However, for new applications, such as a new subdivision or business developments, costs can be more manageable. In fact, over the last five years Avista crews have installed over 500 miles of underground cable and have removed over 100 miles of overhead lines in these types of areas. Still to date Avista has converted less than 2% of our overhead lines to underground cable under the Grid Hardening Program. However, going forward, Avista has made a commitment that new distribution facilities located in specific areas with high fire risk will be undergrounded to mitigate future risk.

Enhanced Grid Hardening Concept

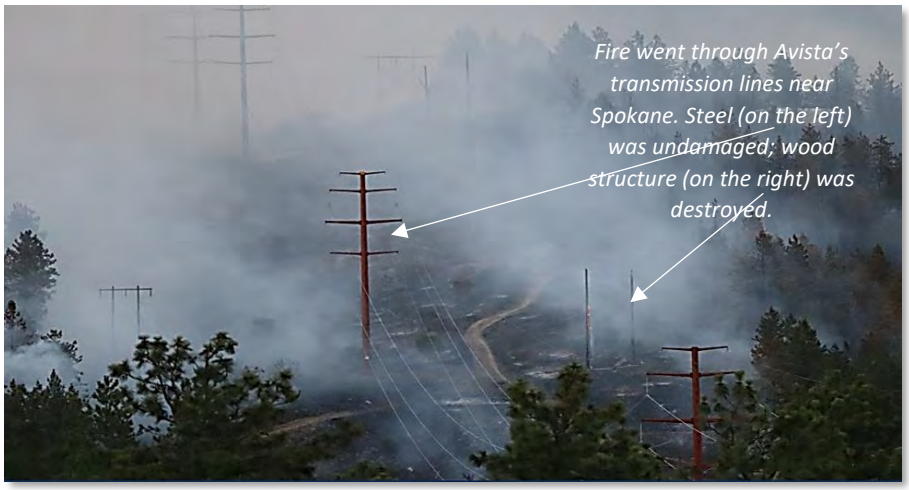
Overhead distribution lines have the narrowest rights-of-way and lowest ground proximity of Avista's above-ground conductor. This creates potential conflicts with a multitude of foreign objects entering the space of impact around our facilities. A large portion of these objects are trees/branches that are propagated into the lines from weather events with strong sustained winds. By undergrounding sections of conductor, we essentially eliminate the possibility of trees/branches impacting the conductor during these weather events. This ultimately reduces outages, decreases safety and fire risk, and increases reliability. It eliminates the risk of a powerline falling to the ground and starting a fire.

[11] Underground cables are twice as expensive (or more) than overhead lines, in part due to restoration costs (sidewalks, roadways, landscaping) and environmental impacts. Maintenances costs for underground are also significantly higher due to the limited access. For more information: David Baker, "Despite Being Safer, Underground Power Lines Are Very Expensive," San Francisco Chronicle, October 23, 2017, https://www.govtech.com/fs/infrastructure/despite-being-safer-underground-power-lines-are-very-xpensive.html..

[12] California Public Utilities Commission, "Overhead to Underground Conversion Programs," Slide 1 (pdi2.org)

[13] "Cost Estimation O/H Lines," ENG-TIPS.com, Cost Estimation O/H lines (4kV and 13.8kV) - Electric power & transmission & distribution - Eng-Tips

There are many cases where sections of distribution conductors do not pose highly probable threats to nearby communities, including urban areas that are largely unburnable or with available firefighting resources, or long sections of line with many miles between one customer and the next. But in some areas of our service territory, large fire growth risk potential is in proximity to communities which are vulnerable to total loss in the event of a wildfire. Thus, we are evaluating the concept of risk-ranking these areas and prioritizing sectional undergrounding of existing overhead conductor in areas identified at being most at risk, primarily the outskirts of these communities.



Wildfire near Beacon Hill, Spokane WA, indicating the resiliency of steel poles (on the left) versus traditional wood structures (on the right)

Avista is currently assessing the concept of undergrounding high risk sections of the distribution system using a multitude of factors to determine the specific locations of highest wildfire risk surrounding the overhead distribution facilities. We believe that the risk can be separated into three parts: Outage Potential, Ignition Potential, and Community Impact from Wildfire. For Outage Potential, Avista is consolidating historic outage data and percent treed areas in strike zones to estimate risk of an outage occurring during a wind event during fire season on the overhead distribution system. In the Ignition Potential category, Avista is utilizing the Wildfire Hazard Potential data,[14] which is a summary of fuel type, slope, and exposure used to assess the burnability and ignitability of a location. Lastly, Avista is using the Housing Unit/Community Impact data from the U.S. Forest Service[15] to estimate the impacts of fires moving from Avista's distribution lines to nearby communities, showing potential impacts and losses if a fire were to occur. These datasets are currently being combined into one risk score that will allow for a 250 meter resolution risk heat map, showcasing the areas of highest risk. By focusing on areas where the wildfire growth modeling suggests large scale loss and high impacts to homes, people, and communities, we will be able to identify areas where we can create direct risk reduction. By concentrating on very specific areas and the conductor segments most at risk, we may be able to provide this reduction without using a far more expensive "blanket" undergrounding policy applied territory wide – a "surgical" approach versus a broadscale application.

We are in the process of evaluating this strategy, including application of the analytics to define and

[14] This is the USDA Wildfire Hazard Potential map that quantifies the relative potential for wildfire that could be difficult to control. Wildfire Hazard Potential | Missoula Fire Sciences Laboratory (firelab.org)

[15] This data represents the impact of fire on housing units across the U.S. Wildfire Risk to Communities Housing Unit Impact (Image Service) | Wildfire Risk to Communities Housing Unit Impact (Image Service) | ArcGIS Hub

prioritize risk areas across our service territory as well as identifying the best approach to defining and quantifying risk. This program is still in the feasibility stage. In 2026 and 2027 we added $25 million to the Grid Hardening capital budget primarily in service to this goal. This work will solidify our understanding of what it will take to implement this new strategy and the actual costs and logistics involved. We anticipate that this will increase our capital budgets from that point forward by an amount that will be determined after our first years of experience with this program, at which time the budget will be updated accordingly.

Transmission Steel Pole Conversion

Above is a high canopy fire, below is a fire in low-level vegetation.

Transmission lines are particularly vulnerable to wildland fires. Repairs to them can cost millions of dollars in addition to the potential for significant impact to customers[16] and the effect of their loss on the stability of the Western Interconnected Grid (that is, our neighboring utilities.) Avista began installing tubular steel transmission poles in the late 1980s for added resiliency and has systematically replaced wood transmission poles and structures with steel since 2006, typically for poles which were damaged or failed, or in the course of routine transmission line build projects. Since then, reconstruction projects have converted a number of circuits from wood to steel, and that trend will continue. Currently about 40% of Avista's transmission poles are steel, which makes them more resilient to wildfire and other weather events. Though Avista is committed to steel conversion, one of the objectives of the Wildfire Resiliency Plan is to accelerate that process in fire prone areas.

In service to that goal, the Company has created a prioritized list of wood structures to be replaced with steel based upon WUI zone location, historical fire patterns, and type of vegetation. This segregation is significant from a cost perspective, as it allows us to separate our mitigation efforts into poles in high canopy/forested areas which are candidates for steel replacement, and those in low vegetation areas, which may be adequately protected with fire resistant mesh. The cost for replacement of a wood pole with steel is several thousand dollars per pole versus a few hundred dollars for installing mesh wrap on a pole. Thus, knowing where the poles are physically located and the geography of the area has a significant budget impact.

In 2021, Avista conducted analysis using 50 years of fire history to determine which transmission lines were experiencing recurring impacts from wildfires. This analysis indicated that several of our transmission lines are particularly vulnerable to recurring wildfires. We are targeting our resiliency efforts in these areas. Lines most at risk from fire, such as the Addy-Gifford and the Devil's Gap lines,

[16] Avista Outage Data from 2009 to 2023 indicates that the average number of customers impacted by a distribution outage is 50 versus a transmission outage average of 615 customers affected.

are slated for wood to steel conversion. In 2021 and 2022, transmission upgrades were focused on the 21-mile of the Addy-Gifford 115 kV line which serves areas near the Columbia River including the towns of Wellpinit and Inchelium, Washington, both of which are Named Communities. In 2023, wildfire budgeted wood-to-steel conversion was undertaken for transmission lines near the Devil's Gap Substation which connects the hydroelectric dams of the lower Spokane River (Nine Mile, Long Lake, and Little Falls) with areas west of Spokane and communities including Reardan, Davenport, Odessa, and Othello. In 2024 our wildfire related steel replacement work will continue to be focused on the Devil's Gap lines.

Transmission steel replacement work.

Transmission Steel Replacement Poles Installed	2020	2021	2022	2023
Transmission Steel Replacement Poles Installed: Wildfire Only	n/a	169	118	102
Asset Condition/New Projects Poles Installed	n/a	812	476	526
Failed/Damaged Replacement Poles Installed	n/a	35	38	4
Planned/Ad Hoc Transmission Poles Installed	n/a	0	0	92
Total Non-Wildfire Transmission Poles Installed	1,821	847	514	622
Number of Transmission Wood Pole Fire Resistant Wraps Installed	1235	1938	1454	1533

Table 5. Transmission Grid Hardening Results

Most transmission lines are part of a networked grid, and this redundancy helps reduce or negate customer impact during outages. However, some lines, like Addy-Gifford, operate in a radial one-way fashion. This makes the work very challenging since the line must remain energized during construction. This kind of complexity can impact the number of poles that can be replaced under the allocated budget, as the costs are much higher in this type of circumstance. Thus, as in this example, the number of transmission poles replaced will vary from year to year depending upon the complexity of each project, as reflected in Table 5, which indicates the number of wildfire-budgeted steel poles installed since the Wildfire Plan was implemented, in addition to traditional condition-based replacement and construction of new facilities. The table also includes the number of wood poles that were protected using the fire resistant mesh wrap product described below. The Wildfire Plan has budgeted approximately 1,000 steel pole replacements on the transmission system through 2029, with approximately 10,000 wood transmission poles receiving fire mesh wrap. Our work in this area through 2023 is shown in Table 5.

Fire resistant paint chips, peels and falls off the poles over time unless repainted.

Fire Resistant Wraps on Wood Transmission Poles

Avista began using fire-resistant paint to protect transmission poles as early as 2005. Though the paint has proven effective in protecting poles from fires, it has a limited expected life and requires maintenance or replacement every 3 to 5 years. Avista worked with Southern California Edison to adopt a more resilient product for protecting transmission poles at risk from grassland fires. Fire resistant mesh wrap incorporates a heat activated chemical on a steel mesh substrate. When activated, the chemical expands to seal the pole and protect it from fire. This

product works well in protecting wood poles that reside in low vegetation areas where fires move quickly but tend to stay low to the ground. Protecting wood poles from the impacts of wildfire also supports reliable operations for customers.

Avista initially expected to wrap approximately 1,000 wood transmission poles per year, but the wrapping crews grew so proficient at this work that we have increased our prediction to wrapping 2,500 per year starting in 2024.

Fire-resistant mesh wrap effectiveness demonstration.

Annual Wildfire-Specific Inspections on Transmission Lines

Avista conducts annual inspections of transmission lines prior to the summer operating season as required by federal regulations.[17] Generally inspections are conducted via helicopter, vehicle, or on foot, with maintenance personnel looking for failed equipment, bird nests, broken insulators, and other structural defects. The Wildfire Plan adds LiDAR inspections to the existing transmission inspection methods, which is able to specifically identify vegetation-related risk. In addition, Wildfire provides funding to help Transmission Design mitigate issues identified in inspections that could potentially increase wildfire risk.

Transmission ground patrol inspection

Grid Hardening Financials

Distribution grid hardening represents the single largest capital investment in the Wildfire Plan, comprising about 77% of total capital expenditures over the ten-year period (2020-2029), followed by transmission steel replacement at about 11%. Table 6 indicates the costs for all grid hardening programs including transmission inspections.

Note that "Transmission Inspection/Construction" is listed both in the Capital and O&M portions of the table. Inspection is an expense activity (O&M) while the follow-up capital maintenance is an investment in plant.

[17] FERC Reliability Standard FAC-003, Template - Standard (Results Based) (nerc.com) requires inspection of 100% of the interconnected transmission grid annually.

Grid Hardening											
Budget (in thousands)	2020 Actual	2021 Actual	2022 Actual	2023 Actual	2024	2025	2026	2027	2028	2029	Total
Transmission Inspections	$1	$1	$84	$0	$200	$200	$200	$200	$200	$200	$1,286
Transmission Steel	$74	$5,455	$4,021	$3,623	$3,788	$3,960	$3,960	$3,960	$3,960	$3,960	$36,759
WA Grid Hardening	$1,513	$7,134	$9,985	$11,594	$13,528	$13,740	$28,740	$28,740	$13,740	$13,740	$142,455
ID Grid Hardening	$1,602	$4,714	$5,945	$7,452	$8,948	$9,160	$19,160	$19,160	$9,160	$9,160	$94,460
WPM & Make Ready GH	$0	$16	$3,626	$2,375	$2,788	$3,000	$3,000	$3,000	$3,000	$3,000	$23,805
Total Grid Hardening (Cap)	$3,190	$17,319	$23,661	$25,044	$29,252	$30,060	$55,060	$55,060	$30,060	$30,060	$298,766
Total Wildfire Capital Budget	$3,421	$19,375	$26,066	$28,319	$33,750	$35,250	$60,250	$60,250	$35,250	$35,250	$337,181
GH % of Capital Budget	93%	89%	91%	88%	87%	85%	91%	91%	85%	85%	89%
Transmission Inspections	$137	$172	$251	$74	$150	$150	$150	$150	$150	$150	$1,534
Transmission Pole Wraps	$178	$421	$720	$655	$550	$550	$550	$550	$550	$550	$5,274
Total Grid Hardening (O&M)	$316	$593	$971	$729	$700	$700	$700	$700	$700	$700	$6,809
Total Wildfire O&M Budget	$2,430	$7,602	$17,273	$19,727	$16,721	$15,391	$13,812	$12,130	$11,050	$10,160	$126,296
GH % of O&M Budget	13%	8%	6%	4%	4%	5%	5%	6%	6%	7%	5%

Table 6. Grid Hardening Actual and Budget Expenditures

Enhanced Vegetation Management

Vegetation management is an integral part of maintaining overhead electric distribution and transmission lines as well as reducing outage and fire risk. Historically, utilities have trimmed and removed trees with a focus on service reliability and grid security. Avista has a long history of deploying industry best practices related to our vegetation management work, including the use of tree growth inhibitors and herbicides to retard shrub growth, together with cycle-based tree trimming and hazard tree removals. Avista's Wildfire Plan enhanced this work by splitting it into two programs: routine inspections (which continue the existing vegetation practices) and Enhanced Vegetation Management in which inspections specifically concentrate on identifying and mitigating risk trees.

A dead tree falls into an Avista distribution line.

Tree fall-in rates tend to be closely linked with wind and weather events. When vegetation comes into direct contact with electric lines and conditions are right, there is potential for fire ignition. As part of the Wildfire Program, distribution routine cycle trimming has been decoupled from hazard tree inspection, with each becoming its own standalone program. The routine program will continue with cycle-based trimming

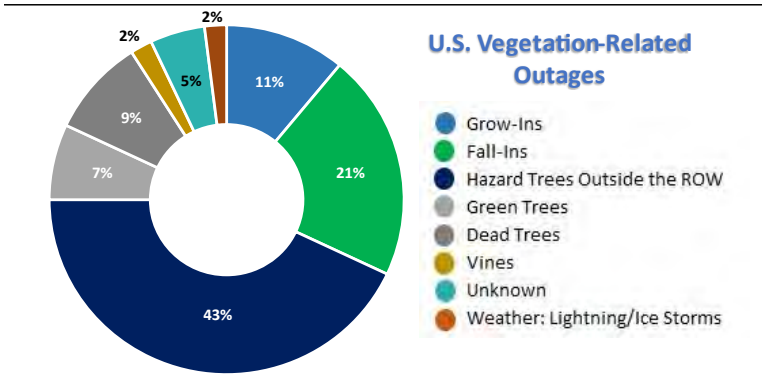


Figure 9. Interesting graphic from a survey of U.S. vegetation managers regarding vegetation related outages in 2023. Courtesy of AiDash.[18]

[18] "2023 State of Vegetation Management, Survey Findings," AiDash, 2023, SOVM-2023-Survey-eBook-Final.pdf (aidash.com)

Tree Incidents	2019	2020	2021	2022	2023	5-Year Average
Distribution						
Tree Grow-In	96	72	83	59	53	73
Tree Fall-In	411	420	363	376	224	359
Transmission						
Tree Grow-In	0	3	0	0	0	1
Tree Fall-In	0	9	1	3	3	3

Table 7. Tree Incident Rates
Note that the risk tree program became fully operational in 2022.

focused on about 20% (about 1,500 miles) of the system each year on about a five year cycle. In contrast, Avista's Wildfire Enhanced Vegetation Management goal is to perform risk tree inspections across 100% of the transmission and non-urban distribution systems every year.[19] Our goal for wildfire risk reduction is to identify every dead, dying, diseased, or defective tree within strike distance of a powerline and remove that tree as quickly as possible. In fact, the Vegetation Team has the goal of removing risk trees within six months of identification if at all practicable.

A key performance measure of the Wildfire Plan is a reduction in the number of tree incidents that lead to outages (and therefore potential spark events). Tree contacts with powerlines are categorized as either grow-in risk (encroachment into lines) or fall-in risk. All risk trees with the potential of imminent fall-in or contact hazard to the energized facilities are trimmed or removed to eliminate potential for fire ignitions and outages. A risk tree is a visibly dead, diseased, or dying tree, or one which possesses obvious structural defects that could fall into the conductor.[20] Our historical outage data indicates that trees fall into electric distribution lines about five times more often than they grow into them. Table 7 indicates the tree incident rates for both distribution and transmission lines, and Figure 10 shows Avista-related tree incidents over time. There are far fewer tree incidents with transmission lines than distribution lines due to the well defined wide rights-of-way around transmission lines versus the distribution system, which lacks clearly defined corridors.

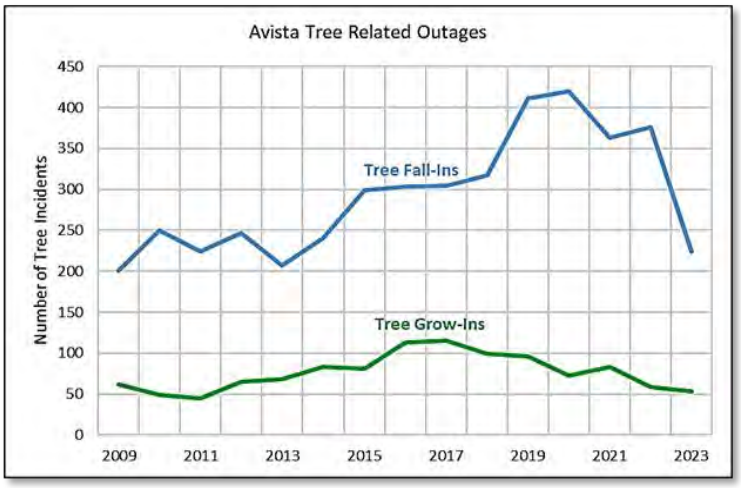


Figure 10. Avista's Tree-Related Outages

As evident in Table 7, tree incidents on the distribution system far exceed those on the transmission grid. In most situations, transmission lines occupy dedicated corridor rights-of-way which afford the utility greater authority to manage vegetation. Also, transmission systems are regulated by federal agencies such as FERC and NERC with prescriptive mandates for vegetation management.[21] A

[19] This does not include WUI 0 or WUI 1 areas or inside city limits with populations over 10,000.
[20] Tree assessments are in part regulated by ANSI A300 (Part 9)-2017 Tree Risk Assessment - a. Tree Failure. Part 9 - Tree Risk Assessment - Tree Care Industry Association, LLC. Assessments conform to level 1 standards as performed from the center of the corridor using ground-based patrols (or from a vehicle) and/or by analyzing high-resolution images captured via satellite.
[21] FAC-003-4 Transmission Vegetation Management Regulations, Template - Standard (Results Based) (nerc.com)

premium is placed on the reliability and security of the nation's high voltage transmission grid, and that focus is reflected in overall reliability performance and maintaining the integrity of the interconnected grid, including robust transmission vegetation management regulations and requirements.

The transmission system has wide well defined rights-of-way. (This is the Benewah-Pine Creek 230 kV line.)

The distribution system is often located in areas such as on private property, lacking in defined corridors that make it more difficult to access for vegetation management.

Avista's Wildfire Plan did not alter the thorough vegetation maintenance practices on the transmission system but did add LiDAR surveys to aid with inspections. LiDAR inspections are able to specifically identify and measure vegetation type and precise distance from powerlines to identify fall in potential to conductor. It can identify clearance issues that may be undetectable by other methodologies such as ground inspections and provides a precise location of the issues found. LiDAR works very well for the wide corridors of the transmission system.

We also added satellite digital data collection for the distribution system, which provides a huge volume of geospatial information, enabling deeper and more regular vegetation management intelligence, including change detection. Satellite based vegetation inspection works well for the distribution system, as it can cover large areas quickly and accurately, providing detailed data on vegetation, growth patterns, and risk to power infrastructure. It can easily differentiate between grassland, agricultural, or urban areas and detect the species and health of vegetation, thus can identify vegetation that is likely to grow into or fall into powerlines.

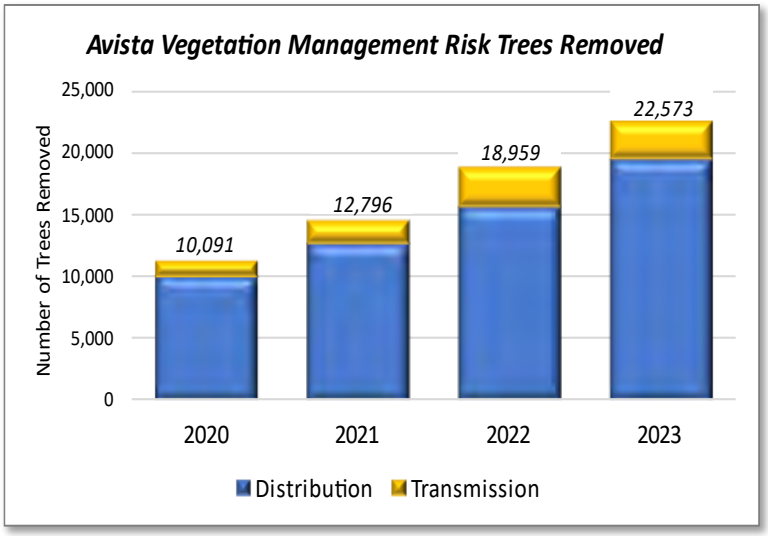


Figure 11. Wildfire Risk Tree Program Work

In 2023, a record setting 22,573 trees were removed near powerlines. These trees were weakened by drought, disease, and insects. Insects such as the pine bark beetle and spruce moth have emerged as significant contributors to tree mortality. Forest health and insect infestation issues continue to

increase the number of risk trees in our service territory. In 2022 and 2023 we found that the actual number of risk trees was nearly double earlier estimates. Forest health was made more dire by the historic drought of 2021, but also reflects increased levels of insect damage combined with human activity, all leading to higher levels of tree mortality than expected. In fact, the USDA anticipates "substantial tree mortality from insects and diseases through 2027" in our region.[22] As shown in Table 8, the number of tree removals have significantly increased each year of the program. At the same time, we are seeing a decline in tree-related outages. In 2022, 438 trees fell into electric lines. In 2023 this number was reduced to 280, at least partially as a result of Avista's dedicated vegetation efforts.

These photos, taken 4 months apart, show the rapid impact of an insect infestation.

Reducing the number of tree falls is an important component of Avista's Wildfire Resiliency Plan and positively impacts both wildfire risk reduction and customer service and reliability. Enhanced vegetation management under the Wildfire Plan represents new activities such as digital data collection (LiDAR and satellite) as well as incremental activities beyond what was historically undertaken by Avista vegetation managers.

Enhanced Vegetation Management Program	2020	2021	2022	2023
Total Number of Trees Trimmed	3,129	4,313	13,036	9,989
Total Number of Hazard Trees Removed	10,091	12,796	18,959	22,573
Distribution Enhanced Vegetation Management Program	**2020**	**2021**	**2022**	**2023**
Miles of Distribution Risk Tree Inspections	2,811	5,245	6,466	6,546
Percent of Distribution Risk Tree Inspections Performed on Time	100%	100%	100%	100%
Percent of Distribution Risk Tree Inspections Remediated	n/a	n/a	90%	58% *
Number of Distribution Risk Trees Removed	10,091	12,796	15,678	19,511
Number of Distribution Risk Trees Trimmed	3,129	4,313	10,780	9,142
Miles of Distribution Satellite - AiDash Completed	85	7,675	7,675	7,675
Transmission Enhanced Vegetation Management Program	**2020**	**2021**	**2022**	**2023**
Total Miles of Transmission Risk Tree Inspections	1,355	2,270	2,270	2,270
Percent of Transmission Risk Tree Inspections Performed on Time	100%	100%	100%	100%
Percent of Transmission Risk Tree Inspections Remediated	n/a	n/a	100%	96% *
Number of Transmission Risk Trees Removed	1,288	1,910	3,281	3,062
Number of Transmission Risk Trees Trimmed	n/a	232	2,256	847
Acres of Transmission Corridor Clearing Completed	1,270	1,848	736	782
Miles of Transmission LiDAR Completed	540	1,143	2,270	1,679
Enhanced Vegetation Management Program	**2020**	**2021**	**2022**	**2023**
Miles of Distribution Risk Tree Inspections	2,811	5,245	6,466	6,546
Number of Distribution Risk Trees Removed	10,091	12,796	15,678	19,511
Miles of Distribution Satellite - AiDash Completed	85	7,675	7,675	7,675
Total Miles of Transmission Risk Tree Inspections	1,355	2,270	2,270	2,270
Number of Transmission Risk Trees Removed	1,288	1,910	3,281	3,062
Miles of Transmission LiDAR Completed	540	1,143	2,270	1,679
Other Vegetation Management Programs	**2020**	**2021**	**2022**	**2023**
Number of Trees Replaced Through the Customer Safe Tree Program	n/a	n/a	870	477
Number of Trees Removed Through Customer Requests	n/a	n/a	63	1,365
Fuel Reduction Partnership Acres of Trees and Brush Removed/Trimmed	n/a	n/a	211	179

*Table 8. Enhanced Vegetation Management Program Results **

[22] "Forest Health Summary for the Pacific Northwest Region 2022: USDA Forest Service: Forest Health Protection, Oregon Department of Forestry, and Washington Department of Natural Resources, July 11, 2022, Forest Health Summary for the Pacific Northwest Region 2022 (arcgis.com)

**Note: The percent of risk trees remediated can be misleading. The program goal is to mitigate risk trees within 6 months of identification. In 2022 90% of the risk trees remaining at year end were less than 6 months old. In 2023 only 58% of the risk trees remaining at year end were less than 6 months old. This is due in part to the timing of the respective inspections, with the 2023 inspection being completed earlier in the year than in 2022. However, 100% of risk trees identified in 2023 were mitigated prior to fire season 2024. We did not track the % of remediations until 2022.*

Enhanced Vegetation Management activities include:

- 100% Distribution Risk Tree Inspections
- Transmission LiDAR
- Distribution Satellite Imaging
- Safe Tree Program
- Fuel Reduction Partnerships

Each of these activities will be discussed in more detail below.

Fuel Reduction Work

100% Distribution Risk Tree

As noted above, Avista increased the annual risk tree inspection of the electric distribution system from 20% of the system each year to 100% of non-urban areas as part of the 2020 Wildfire Plan. The Company began ramping up activities starting in 2020 and achieved 100% inspection starting in 2022. Table 8 above indicates the program results by year. Avista is committed to removing risk/hazard trees within six months of identification, and the Company continues to work with line clearance contractors to build a local workforce in support of that goal.

Avista believes that the risk-based inspections provided by LiDAR and satellite imagery as well as expansion of our existing risk tree inspection program to viewing nearly 100% of the system each year will aid in identifying and mitigating risk tree issues going forward, though there will likely be some time catching up on current risk tree inventory as the backlog of risk trees are removed, leading to higher costs in the first few years of the program.

In June of 2023, Avista agreed to the following terms with the Idaho Public Utilities Commission (IPUC): "For the Distribution Risk Tree Program, Avista will have a third party conduct a study, within a year of Commission Order, to see what the most efficient vegetation management cycle should be in their service area (i.e., 2 or 3 year cycles)." Avista chose an industry leader specializing in utility vegetation management and risk mitigation solutions and who had no other dealings with Avista to provide a neutral third party evaluation. After several months of work, this provider, Iapetus, sent their report and findings to Avista. The key observation from Iapetus was that Avista has a reasonable and responsible approach which is aligned with "best-in-class" vegetation programs of other major utilities. They commented that Avista has developed a Risk Tree Program by leveraging their internal experience and history of tree outages and program performance and via collaboration with leading

wildfire mitigation programs at electric utilities with more mature and robust programs.

Iapetus Third Party Evaluation Findings	
Observation	**Comments**
Risk Tree Cycle	Considering the impact that drought and tree mortality has had on forests in the Western United States, Avista has implemented an effective strategy to reduce the potential for utility-caused wildfires. As the Risk Tree Program matures, the inventory of risk trees identified and removed should continue to reduce in numbers as long as the goals and objectives remain in line with current standards. An annual cycle is consistent with best-in-class programs at other major utilities in the West.
Risk Tree Strategy	Avista has taken a comprehensive approach to identify and mitigate risk trees that pose a hazard to the overhead distribution system. This approach has a two-fold benefit of reducing the volume of trees that can potentially result in a utility-caused wildfire, as well as reduce the types of tree-related events that cause interruption of electrical service.
Identifying Risk Trees	By leveraging the industry-accepted UAA/ISA guide, *Best Management Practices - Utility Risk Tree Assessment* , Avista is utilizing the most current protocols in use today by North American Utilities to identify off-ROW risk trees that pose a hazard to the electrical grid and potentially pose a wildfire risk.
Outage Investigations	Avista should commit to studying the root causes of tree-related outages through accurate reporting and thorough post-outage investigations. A commitment to post-incident investigations does not mean every outage needs to be investigated; however, the more data, the better the analysis.

Iapetus Third Party Distribution Vegetation Program Evaluation

Based upon their review, Iapetus found that Avista's approach to managing the risk associated with utility-caused wildfires as an annual cycle is an effective strategy and pointed to the evidence shown by the reduction in actual tree fall-ins, which have seen a 62% reduction since the Wildfire program began in 2020. They stated that by leveraging the industry-accepted UAA/ISA guide, Best Management Practices – Utility Risk Tree Assessment,[23] Avista is utilizing the most current protocol in use today by North American utilities. They further noted that Avista's WUI risk tiers are aligned with the California approach to delineate high fire threat districts, which is considered best practice. Their primary recommendation for improvement was collecting more data about the root cause of tree-related outages, a suggestion that Avista's Vegetation Management team is pursuing.

Transmission LiDAR

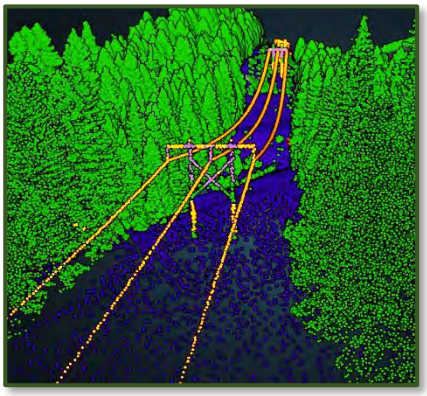
Avista transmission corridor

Beginning in 2020, Avista has used LiDAR[24] surveys to assess vegetation encroachment and fall-in risks on the transmission system. It is a laser survey technique that is highly accurate and able to identify tree health as well as tree height and distance from powerlines. LiDAR data is generally collected via a fixed wing aircraft or helicopter, so it is a natural fit for wide and well-defined transmission corridors. The resulting survey-grade data yields sub-centimeter accuracy, and when combined with high resolution photography, it provides vegetation planners with a robust assessment of both encroachment and risk tree hazards. It can clearly identify dead, dying, diseased or structurally defective trees both inside and outside our corridor rights-of-way and is very accurate in calculating fall-in risk. LiDAR also provides computer-aided precise location and identification of vegetation-based issues as they arise over time. LiDAR works well for transmission inspections because it provides a high level of detail and accuracy, including the placement of the conductor in the corridor, so areas where vegetation might impact the lines are identifiable. Wide transmission corridors (versus the narrow corridors around most distribution lines) make it easy for a helicopter or airplane to fly over them to collect LiDAR data.

[23] International Society of Arboriculture (isa-arbor.com)

[24] LiDAR stands for Light Detection and Ranging.

The digital data provided by LiDAR supplements traditional visual inspections and helps vegetation planners prioritize and prescribe treatments including herbicide applications, tree trimming, and tree removal with great accuracy. The data from the LiDAR scans, in conjunction with existing aerial and ground inspections, is incredibly accurate. When combined with high resolution photography, it provides vegetation planners with a robust assessment of both slash and risk tree hazards. It also shows the topography of our service territory. The associated analytics track vegetation growth over time and are very accurate in calculating fall-in risk. Historically, transmission lines were trimmed on a calendar cycle, but LiDAR is changing that practice. Digital data combined with machine learning computer algorithms allow our System Forester to use a risk-based approach to treatments rather than routine maintenance cycles alone. While Avista is still calibrating LiDAR information based on human observations, digital inspections are quickly becoming the industry standard practice and allow for a complete vegetation record, including the efficacy of field work along with the information necessary to create future work plans.



LiDAR Image of transmission line

Distribution Satellite Imaging

Similar to the LiDAR project for transmission, Avista is incorporating satellite digital data to aid vegetation planners with the risk tree inspection and planning process on the distribution system. This methodology allows for a system-wide approach rather than conventional corridor collection (LiDAR), which aligns well with distribution topologies, as it works very efficiently for the trunk-and-lateral, non-linear configuration of the distribution system, which lacks consistent defined flyable corridors. Satellite acquisition allows collection over a broad area both in urban and rural areas. Satellite-based data, however, is not as sophisticated as LiDAR, requiring several passes over the system to collect the data needed. In addition, satellite images are not detailed enough to include conductor placement. However, with satellite imaging, successive overpasses are paired with artificial intelligence to effectively assess the risk of both tree encroachment (grow-in) and strike potential (fall-in), thereby providing a data-driven approach to identifying and managing the risk of vegetation encroachment on our distribution system.

AiDash satellite image of an Avista distribution line showing tree proximity.

Satellite systems are quickly evolving. These technologies apply machine learning computer algorithms to large data sets and help vegetation planners create risk-based work plans rather than relying solely on cycle trimming. For many years, Avista has used cycle trimming to maintain vegetation near distribution lines on a rotating 5-year cycle. However, some areas have higher growth rates and may require shorter trim cycles, while other areas with slow-growing trees may accommodate longer cycle times. Beginning in 2020, Avista partnered with AiDash to provide satellite data along with their

Intelligent Vegetation Management System (IVMS).[25] Like the LiDAR project, vegetation planners are working with AiDash to calibrate the system and align computer-derived assessment with field observations. Starting in 2023, Avista vegetation planners transitioned their work plans to the IVMS system. This allows them to customize the cycle trim times and incorporate a risk-based approach to work planning. In short, they will focus attention in areas with higher levels of tree encroachment risk and outage rates as well as increased fire risk rather than solely relying on cycle trimming.

Satellite-derived vegetation information

Safe Tree Program

In 2022 Avista started a new program we initially called "Customer Driven Right Tree Right Place," renamed the "Safe Tree Program." This program is designed to work proactively with customers in elevated fire threat areas who have tall-growing trees under or adjacent to our powerlines and located on their private property. The Safe Tree Program removes non-compatible vegetation (i.e., likely to grow into powerlines), cleans up the debris, and replaces the previous tree with a low-growing species of the customer's choice if the customer wishes to do so, all at no direct cost to the customer. Low growing replacement species mature to a height that will not interfere with overhead powerlines and should not require ongoing trimming to keep them from becoming hazards to powerlines. Interestingly, most of our customers are happy to have trees they are concerned about removed without requesting a replacement. For example, in 2022 we worked with 52 landowners to remove 870 trees but they only requested 63 replacement trees. In 2023 we removed 1,365 trees and replaced 477 trees as shown in Table 8 (page 23). We also implemented the "Safe Tree Customer Service Portal" for this service on the MyAvista website,[26] allowing customers to communicate directly with our arborists and schedule this work when it is convenient for them.

Safe Tree Program Work

Fuel Reduction Partnerships

We believe that partnerships with non-Company entities are critical, as many agencies and groups are also focused on wildfire risk reduction and there are many parts to play. Avista is working with a variety of agencies who share a vested interest in wildfire mitigation. One of the ways we do this is by

[25] AiDash Intelligent Vegetation Management System Intelligent Vegetation Management System (IVMS) - AiDash
[26] Tree Pruning (myavista.com)

providing funding to state and tribal agencies to support their efforts in reducing dead trees and brush. For example, the Washington Department of Natural Resources (DNR) has embarked on a 20-year plan to improve forest health on 2.7 million acres of forest land in central and eastern Washington.[27] They state that unhealthy forests are driving catastrophic wildfire, in great part due to large expanses of beetle kills in Washington forests.[28] As Hilary Franz, Washington Commissioner of Public Lands, states: ***"****We have a forest health crisis in our state……. Hot, dry conditions coupled with diseased and dying forests are leading to explosive wildfires."*[29] Avista partners directly with fire protection agencies including the Washington Department of Natural Resources and the Idaho Department of Lands, the Nez Perce Tribe, local and regional fire agencies, and others to help them reduce this risk. Through our Fuel Reduction Partnerships, Avista financially assists these external agencies with fuel reduction on their properties near our facilities, helping the agencies cover some of the funding gaps they face. Their work helps create defensible space that can make the difference between a structure surviving a wildfire or becoming a total loss.

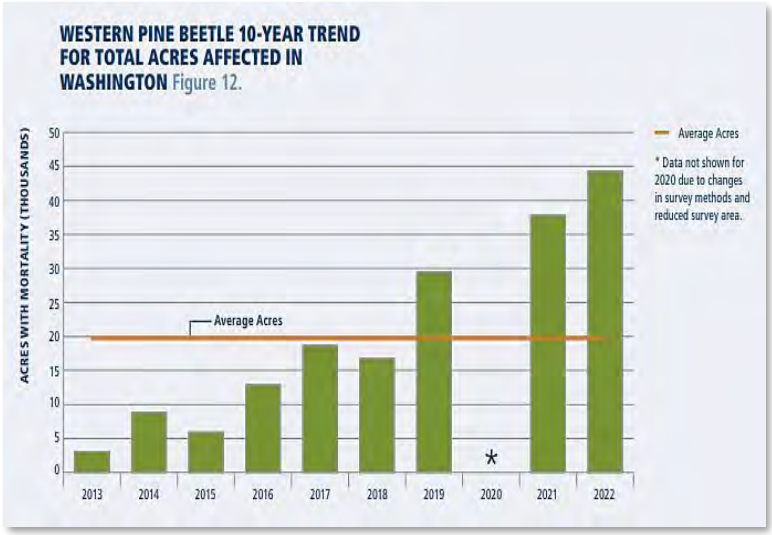


Figure 12. Washington DNR chart indicating forest health issues due to beetle kill.

In another example, the State of Idaho identified several communities that Avista serves with overhead electrical service that they classify as communities at risk of wildfire.[30] Avista works with the State to help pay for fuels reduction in these at-risk areas. Note that the work in Idaho costs more per acre to complete than in

Fuel Reduction Work Before & After

[27] Western Pine Beetle graphic from "Forest Health Highlights in Washington 2022," Washington Dept. of Natural Resources, https://www.dnr.wa.gov/publications/rp_fh_2022_forest_health_highlights.pdf, page 23.

[28] Washington Policy Center, "What is Causing the Increase in Catastrophic Wildfire," Oct. 6, 2022, What is causing the increase in catastrophic wildfire: a short explainer » Publications » Washington Policy Center

[29] Washington Dept. of Natural Resources "20 year Forest Health Strategic Plan: Central & Eastern Washington," https://www.dnr.wa.gov/ForestHealthPlan

[30] Idaho Dept. of Lands "Good Neighbor Authority" is an agreement Idaho has with federal agencies to carry out forest, rangeland, and watershed activities on federal lands within Idaho. Part of this is joint fuel reduction efforts. More information available in their brochure: \\c01m677\Fuel Reduction Partnerships\GNA-report-Dec-2020.pdf and Fuel Reduction Partnerships\GNA-Update-January-2020.pdf

Washington because the density of fuels is much higher and requires more mechanical treatment than most areas in our Washington service territory. We have also been able to help fund Bonner County Department of Emergency Management's BonFire Program.[31] BonFire is a county-wide resource whose goal is to provide technical expertise to landowners who wish to reduce fuels in and around their homes. In addition to expertise, BonFire also provides labor resources to complete the fuel reduction work prescribed. While this type of work benefits the people in that area directly, it also has a positive impact in developing additional partnerships in Idaho counties, which will ideally lead to additional partnerships with fire agencies.

Our Fuel Reduction program not only helps reduce fire risk for customers but has also done a great deal to continue to bolster our relationships with great partners across Washington and Idaho. It is another way Avista contributes in a very real way to reducing wildfire risk for the communities we serve.

Enhanced Vegetation Management Financials

Table 9 indicates actual and projected costs for Enhanced Vegetation Management program from 2020 through 2029.

Enhanced Vegetation Management											
Budget (in thousands)	2020 Actual	2021 Actual	2022 Actual	2023 Actual	2024	2025	2026	2027	2028	2029	Total
Idaho Risk Tree	$1,239	$3,152	$6,023	$5,404	$5,720	$4,901	$4,410	$3,969	$3,572	$3,215	*$41,605*
Washington Risk Tree	$0	$2,624	$7,948	$10,600	$7,223	$6,209	$5,588	$5,029	$4,526	$4,073	*$53,819*
Safe Tree Program	$0	$0	$260	$741	$1,200	$1,200	$1,200	$500	$300	$200	*$5,601*
Fuel Reduction Partnership	$0	$0	$159	$225	$300	$300	$300	$300	$300	$300	*$2,183*
Distribution Satellite	$59	$327	$494	$511	$107	$107	$107	$107	$107	$107	*$2,033*
Transmission LiDAR	$491	$450	$680	$783	$900	$900	$900	$900	$900	$900	*$7,805*
Total Vegetation (O&M)	$1,790	$6,553	$15,563	$18,263	$15,450	$13,616	$12,505	$10,805	$9,706	$8,796	*$113,047*
Total Wildfire O&M Budget	$2,430	$7,602	$17,273	$19,727	$16,721	$15,391	$13,812	$12,130	$11,050	$10,160	*$126,296*
Veg. % of O&M Budget	74%	86%	90%	93%	92%	88%	91%	89%	88%	87%	*90%*

Table 9. Enhanced Vegetation Actual and Budget Expenditures

Situational Awareness

Avista developed tools under the Situational Awareness part of the Plan that are designed to identify and manage risk, primarily the Fire Weather Dashboard and Avista's WUI Map. Using the dynamic risk model offered by the Fire Weather Dashboard and the information on areas of impact provided by our customized WUI map, Avista can align system protection with fire threat conditions across the full spectrum from nominal operations (non-fire season) to a base-level setting used during fire season through elevating protection settings during critical fire weather conditions. This approach allows for an almost hour-by-hour balance of fire safety and reliability. The Dashboard helps us minimize customer impacts by elevating protection settings (and therefore increasing the risk of an outage) only

[31] For more information: BonFire Program Bonner County - BonFire (bonnercountyid.gov)

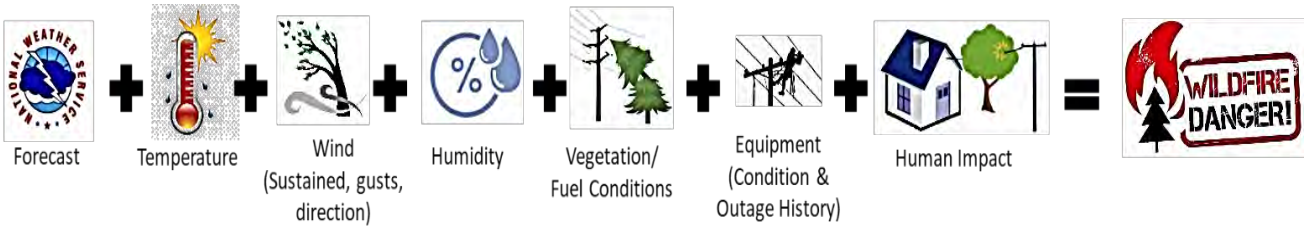
in areas most at risk, while at the same time continually tracking risk levels to allow us to move back into normal settings quickly once an event has passed. A new facet in the Situational Awareness category is the addition of monitoring technology. We are currently working on adding wildfire identification cameras and weather stations across our service territory to provide additional insights and real-time information about conditions to help predict and/or identify fire situations.

Note that the budget for automation devices (both distribution and substation), initially in the Situational Awareness category, were moved into Operations and Response to more closely align with their purpose.

More details about our Situational Awareness programs are provided below.

Fire Weather Dashboard

A key part of Avista's wildfire strategy is the ability to identify when risk is increasing. Avista developed a computer algorithm to monitor, forecast, and allow us to adapt to elevated risk and fire-weather events. This tool that we call the Fire Weather Dashboard was designed to indicate the moments where utility-sourced fire potential is at its highest and when fire spread rates pose significant risk to neighboring communities. It provides daily quantitative fire risk potential metrics for every feeder on our distribution system and each transmission circuit. Knowing this risk helps the Company make better operational decisions as to when electric facilities should be placed in any kind of elevated fire mode (FSM) in order to protect customers. The Dashboard allows system operators to align circuit protection settings with fire-weather conditions and minimize the potential for spark-ignition on a circuit-by-circuit basis. It quantifies the daily fire risk for the upcoming week on all of Avista's 350 distribution circuits and 72 transmission lines.



This monitoring system is similar to those used in California. In fact, Avista worked closely with San Diego Gas & Electric to calibrate the system to achieve a balance between electric service reliability and fire ignition potential. The Dashboard is the key to Avista's fire season circuit protection program known internally as Fire Safety Mode, described in more detail below.

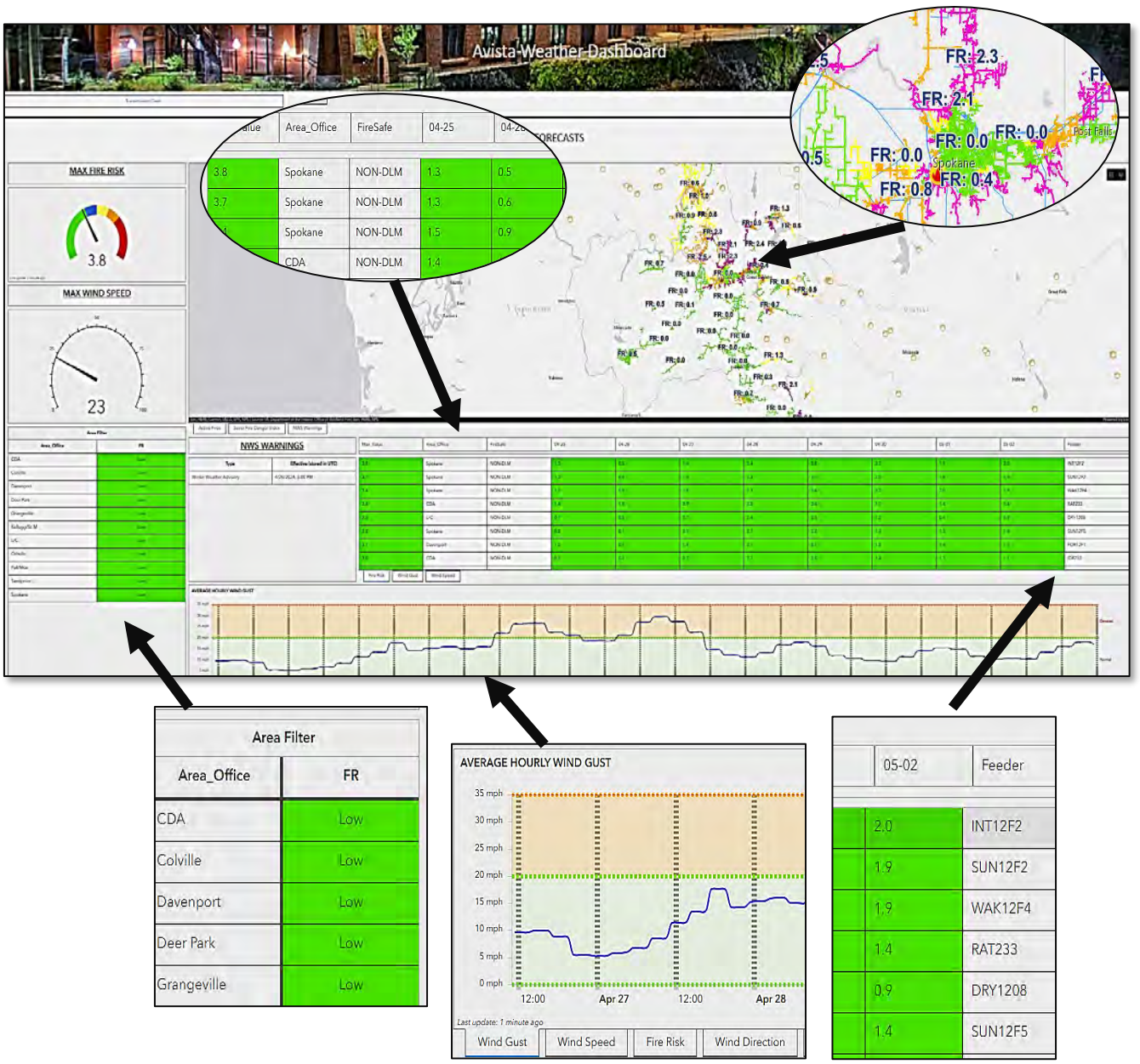


Figure 13. Screenshot of the Distribution Fire Weather Dashboard

The Dashboard is a sophisticated risk-based model developed within Avista and directly customized to our system. It uses historical data based on our service territory that combines elements of the 7-day National Weather Service forecast with infrastructure performance and underlying fire risk metrics. This tool provides insights into each individual feeder in Avista's distribution system, delivering a risk level based on a comprehensive spectrum of information including wind speed and direction, sustained wind levels, humidity and dryness levels, type of vegetation on each feeder, temperature, condition of equipment, mode of operation, historic outage data, and more. It provides a dynamic look at Avista's daily fire risk and weather conditions across our system, identifying areas and times where

problems may arise and when the risk is increasing beyond a desirable point. It provides notice to take actions to mitigate potential risk on individual facilities throughout our system. It also has the ability to track current fire paths and estimate potential risk to Avista's infrastructure. When combined with the dynamic operating capability provided by automated protection equipment, it guides the decision to enable various levels of operations and protection systems (Fire Safety Mode operations) to mitigate risk.

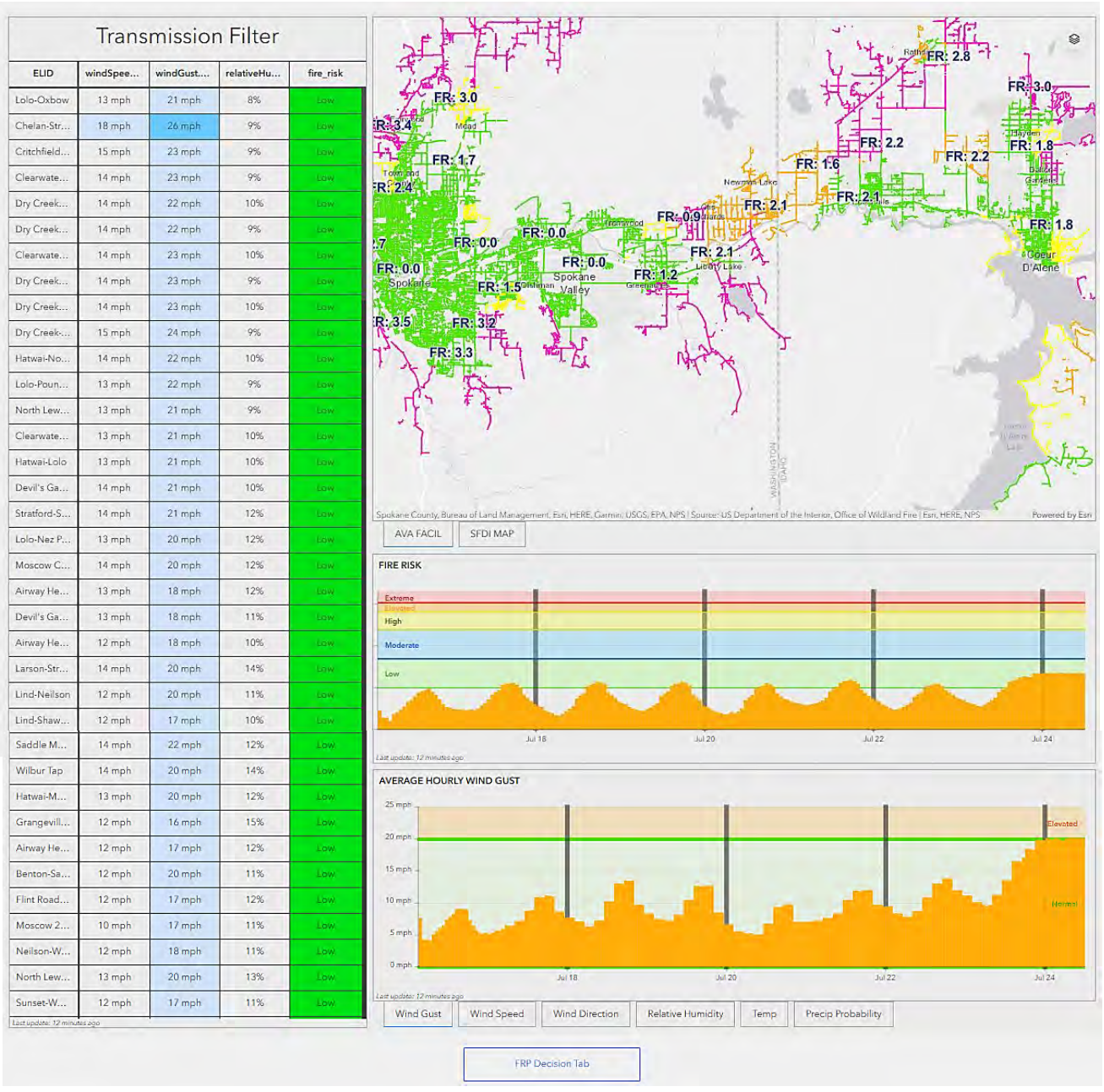


Figure 14. Screenshot of the Transmission Fire Weather Dashboard

WUI Map

The interface area between forest lands and human development is referred to as Wildland Urban Interface, commonly known as "WUI Zones," which are the transition zones between wilderness and populated areas - basically where the built environment meets the natural environment. Today, more than one-third of the U.S. population lives in the wildland urban interface.[32] The attraction of living in wooded areas and closeness to nature is accelerating growth in the WUI. However, when wildfires strike, the WUI's mix of buildings with forests and grasslands can set the stage for disaster. Homes and businesses located in WUI zones are most at-risk from the impact of wildfires and are often located in rural areas lacking adequate fire suppression resources. Approximately 126,200 Avista customers[33] (about 30%) reside in elevated risk fire zones.

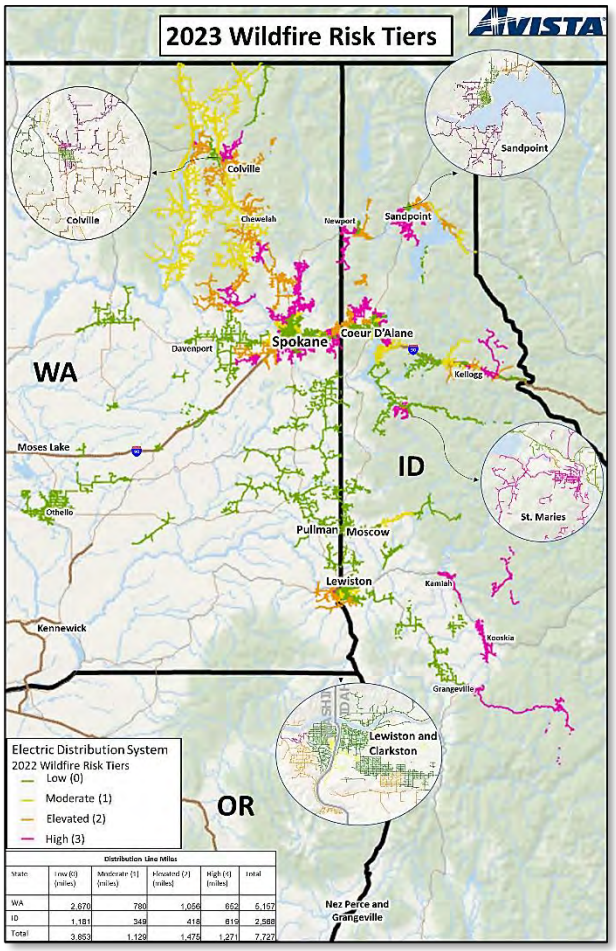


Figure 15. Avista's WUI Map

In contrast, incorporated urban areas exceeding 10,000 in population are typically identified as "developed areas" for wildfire hazard potential and are considered non-WUI, as they have well established fire response facilities and non-burnable hardscape areas such as roads and parking lots to help serve as fire containment zones. These areas tend to have firefighting and fire identification and response capability. Thus, fire spread potential is constrained in these areas.

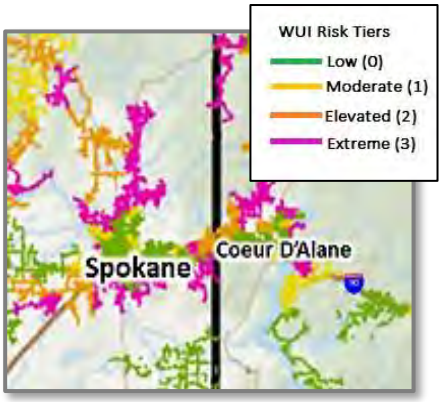


Figure 16. Close-up of Avista's Distribution WUI Map

Avista believes that employing a WUI map helps identify and prioritize areas of greatest risk and serves to inform recommendations and operational decisions related to wildfire resiliency and applying the Wildfire programs within our service territory. In utilizing a WUI map specific to our service territory and customer base, we can target our programs where they have the potential to reduce the most risk and have the greatest positive impact in the safety and protection of our customers and our infrastructure. Avista's WUI map is based upon characteristics of our system such as:

[32] USDA USFS "Wildland-Urban Interface Growth in the U.S.," Wildland-Urban Interface Growth in the U.S. | US Forest Service Research and Development (usda.gov)

[33] As of 2023 based on customer meter count and the current Avista WUI map.

- Fuel concentration and vegetation density - areas with high volumes of trees based on data from both the U.S. Department of Agriculture's Wildfire Hazard Potential map[34] and Avista's specific system characteristics based on our distribution satellite imaging data.

- Impacts to communities - areas identified by their probability for total loss if a wildfire were to occur at that location. This information is obtained from the U.S. Department of Agriculture's Wildfire Housing Unit Impact dataset.[35]

- Our own historic outage data, focused on areas with higher levels of historic outages during fire season as obtained from Avista's Outage Management System.

Distribution Line Miles												
State	Low (0)		Moderate (1) Miles		Elevated (2)		Extreme (3)		WUI 2 & 3		Total Miles	
	Miles	%	Miles	%	Miles	%	Miles	%	Miles	%	Miles	%
WA	2,670	35%	780	10%	1,056	14%	652	8%	1,708	22%	5,158	67%
ID	1,181	15%	349	5%	418	5%	619	8%	1,037	13%	2,567	33%
Total	3,851	50%	1,129	15%	1,474	19%	1,271	16%	2,745	36%	7,725	100%

Table 10. Avista's WUI Miles

Using this information, Avista "WUI Risk Levels" were established:

- WUI Tier 0 - None to low levels of fuel and outage potential, and low to moderate housing impact (lowest). Statistically, this represents fire risk of less than the system average minus ½ of the dataset's standard deviation (low).

- WUI Tier 1 – Low to moderate levels of fuel and outage potential and low to moderate housing impact (low). Fire risk is greater than WUI 0 but less than the system average (moderate).

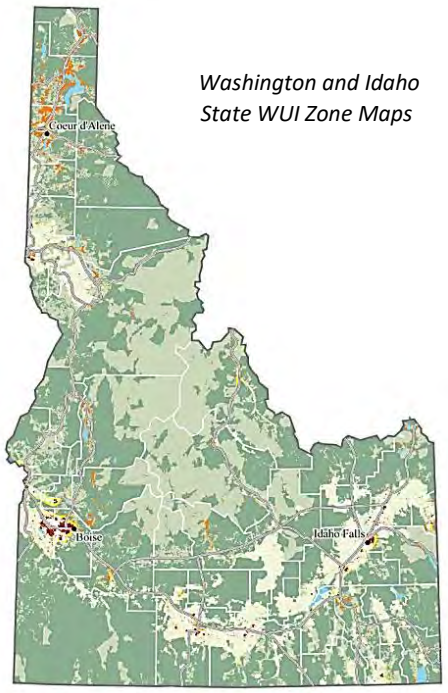
- WUI Tier 2 – Moderate to high levels of fuel and outage potential and moderate housing impact (medium). Fire risk is above the system average but less than the system average plus ½ the standard deviation (elevated).

- WUI Tier 3 – High levels of fuel, outage potential, and housing impact (high). Fire risk is above WUI 2 levels (extreme).

The combination of WUI 2 and 3 represents approximately 36% of Avista's distribution system where fire risk exceeds the overall system average (high). As of 2023, Avista had over 126,000 customers located in high fire risk areas.

[34] "Wildfire Hazard Potential for the United States," fs.usda.gov/rds/archive/products/RDS-2015-0047-4/_metadata_RDS-2015-0047-4.html
[35] "Wildfire Risk to Communities: Spatial Datasets of Wildfire Risk for Populated Areas in the United States," fs.usda.gov/rds/archive/products/RDS-2020-0060/_metadata_RDS-2020-0060.html

Having a WUI map helps Avista apply grid hardening programs most effectively to reduce equipment failures, reduce the chance for sparks, and make the grid more resilient to the impact of fire where the risk is highest. It informs vegetation planners on how best to prioritize their tree trimming and removal work plans and allows us to maximize the value of the Wildfire Plan dollars spent. We are also looking into addition tools to help us evaluate risk and further quantify how our programs are reducing risk in our elevated WUI areas.[36]



Washington and Idaho State WUI Zone Maps

Wildfire Cameras

Wildfire identification cameras are invaluable in quickly identifying a fire start as well as pinpointing its precise location. Early detection of ignition increases the likelihood of timely containment and suppression of wildfires, saving lives and reducing property losses. Camera technology can also assist first responders with evacuation planning and routes if required, thereby protecting a community if it needs to evacuate. Interestingly, a recent study states that only 5% of 911 fire calls are actually a fire,[37] but that must be verified by dispatching a truck to the scene, which is costly and time consuming. With the AI technology offered by ultra-high-definition wildfire cameras such as those offered by Pano AI, confirmation of an actual fire and its location can be made. This technology allows dispatching resources directly to the latitude and longitude of the smoke so firefighters do not have to search for the fire, saving invaluable time. Their system also provides information on the nearest water sources as well as wind direction to further aid first responders.

In 2023 the UMS Consulting Group applied for a federal grant under the DOE Grid Resiliency and

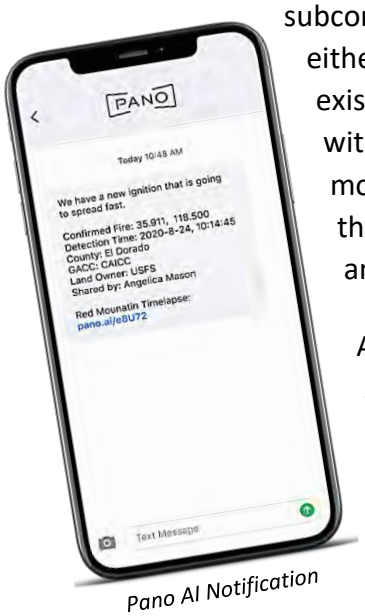
[36] Washington State WUI Map courtesy of Ashely Blazina and Kirk Davis, Washington Dept. of Natural Resources, February 25, 2022, https://storymaps.arcgis.com/stories/7016c437623a445997c072a05e26afbb and Idaho WUI zone map courtesy of the USDA Map of the Wildland-Urban Interface of the Conterminous United States, page 24, The 2010 wildland-urban interface of the conterminous United States (usda.gov)

[37] Haje Jan Kamps, "Wildfire detection startup Pano AI extends its $20M Series A with another $17M," TechCrunch Magazine, July 10, 2023, Wildfire detection startup Pano AI extends its $20M Series A with another $17M | TechCrunch

Innovation Project (GRIP)[38] to help utilities mitigate fire risk exposure, specifically to increase situational awareness including the application of surveillance cameras to identify fire ignition. Avista joined with UMS and several other utilities including Inland Power & Light, Portland General Electric, and BPA, as well as vendors including AiDash (Avista's satellite vendor) and Pano AI (wildfire camera vendor) to file a joint application for funds from this grant. This application was approved in October of 2023, including funding of $38 million to install wildfire cameras across Washington, Idaho, Oregon, and California with another $38 million in cost sharing by the participants. Avista's portion of this was about $2 million. A match in funding from each participant is required. For Avista, this level of funding and our associated match would have provided funding for 10 camera installation sites plus a requirement of about $10,000 per location in annual O&M costs.

Wildfire detection cameras and associated AI can pinpoint and precisely locate fires when they first start.

However, as this process proceeded Avista found that UMS did not involve participants in any of the planning, scoping, or budgeting for this grant. In fact, they submitted numerous materials to the Dept. of Energy on Avista's behalf of which we were completely unaware, including documents that reflected a budget that did not adequately cover Avista's costs with no ability to increase the proposed allocations. In addition, the Company learned that we would be required to engage with subcontractors of UMS's choosing and adhere to reporting requirements that were either redundant with or would require us to divert resources away from our existing wildfire mitigation efforts. It was determined that Avista would proceed with the wildfire camera installation on our own, as wildfire cameras can monitor vast areas susceptible to fire and early detection of ignition increases the likelihood of timely containment and suppression of wildfires, saving lives and reducing property losses.



Pano AI Notification

Avista partnered with Pano AI, a company that provides cameras, surveillance, 24 hour monitoring, and computer machine learning to identify fire starts. With this system, a full 360° view is captured every two minutes. If the system detects a smoke plume, Pano staff are alerted. If the smoke plume is verified as a fire start, first responders and utilities are alerted and sent directly to the site. The Washington Dept. of Natural Resources (DNR)

[38] The Infrastructure Investment and Jobs Act (IIJA), aka Bipartisan Infrastructure Law (BIL), was signed into law by President Biden on November 15, 2021. The law authorizes $1.2 trillion for transportation and infrastructure spending, with $550 billion of that going toward new investments and programs. In early 2023, as part of this Act, the U.S. Dept. of Energy (DOE) offered $918 million in grants to utilities across America to inspire grid resilience efforts. This grant is called "DOE Grid Resiliency and Innovation Project (GRIP). Grid Resilience and Innovation Partnerships (GRIP) Program | Department of Energy

recently selected Pano AI to install 20 cameras in the state of Washington, which presents a great partnering opportunity for Avista. We are also partnering with the Idaho Dept. of Lands for key sites in our Northern Idaho service territory. We joined with these state agencies to fund 10 camera installations. Washington Commissioner of Public Lands Hilary Franz is working with legislators in Washington D.C. to get more funding for these cameras for the Dept. of Natural Resources and their partners in this endeavor, including Avista.[39]

By August of 2024, five of the ten cameras were in place, with the remaining cameras scheduled for completion by the end of September. These cameras almost immediately proved their value. On Thursday, August 8th, 2024, our Eastern Lincoln County camera detected a fire and promptly notified the Washington DNR. This notification triggered an immediate response from DNR aircraft and ground resources. Due to the early detection and situational awareness provided, the forward progress of the fire was quickly halted. While the total acreage of the incident was estimated to be 20-30 acres, the DNR indicated that the fire would have been significantly larger if more time had elapsed before they received accurate information on the fire's location and behavior to appropriately scale their response.

Avista has access to the camera systems and fire start reporting from Pano AI. While Avista fully defers fire response to state and local fire agencies, knowing the proximity of fires to critical infrastructure will help System Operators protect equipment and customers with real-time access to fire activity.

Pano AI Functionality

Weather Stations

Weather stations enhance a utility's knowledge of an area's weather situation, including dangerous weather conditions approaching and on-the-ground observations. Weather conditions directly affect the potential for a fire to occur and spread. Weather stations can monitor relative humidity,

[39] Courtney Flatt, "How AI is helping detect wildfires in Washington," Sept. 11, 2023, How AI is helping detect wildfires in Washington - OPB

temperatures, wind speeds and gusts, all key factors in fire prediction. Regional weather stations better inform decision makers related to issues such as potential fire risk and elevating protection settings, which is especially helpful given the size of our service territory. These stations supplement the information from the National Weather Service and improve our information when making operational decisions, which is particularly important as we consider Public Safety Power Shutoffs.

PG&E installs a weather station.

In 2024 Avista joined with a consortium of utilities across the Northwest in applying for a federal grant that will, if accepted by the Dept. of Energy, help provide funding for weather stations across the Northwest, though we will be pursuing these stations regardless. Due to this project being in preliminary stages, at this point we have not yet assigned budget dollars to cameras or weather stations.

Situational Awareness Financials

Table 11 indicates actual and projected costs associated with our Situational Awareness programs to date. Note that we have included placeholders for wildfire cameras and weather stations, as we do not yet have a solid estimate of the costs around these elements, but these expenditures will be broken out of what is currently being shown in the Fire Weather Dashboard, thus the total Situational Awareness budget should not be changed.

Situational Awareness											
Budget (in thousands)	2020 Actual	2021 Actual	2022 Actual	2023 Actual	2024	2025	2026	2027	2028	2029	Total
Fire Weather Dashboard	$198	$189	$64	$447	$1,272	$40	$40	$40	$40	$40	*$2,370*
Wildfire Cameras	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	*$0*
Weather Stations	0	0	0	0	0	0	0	0	0	0	*$0*
Total Situational Awareness (Cap)	$198	$189	$64	$447	$1,272	$40	$40	$40	$40	$40	*$2,370*
Total Wildfire Capital Budget	$3,421	$19,375	$26,066	$28,319	$33,750	$35,250	$60,250	$60,250	$35,250	$35,250	*$337,181*
SA % of Capital Budget	6%	1%	0%	2%	4%	0%	0%	0%	0%	0%	*1%*
Fire Weather Dashboard	$0	$0	$41	$70	$75	$75	$75	$75	$75	$75	*$561*
Total Situationall Awareness (O&M)	$0	$0	$41	$70	$75	$75	$75	$75	$75	$75	*$561*
Total Wildfire O&M Budget	$2,430	$7,602	$17,273	$19,727	$16,721	$15,391	$13,812	$12,130	$11,050	$10,160	*$126,296*
SA % of O&M Budget	0%	0%	0%	0%	0%	0%	1%	1%	1%	1%	*0%*

Table 11. Situational Awareness Actual and Budget Expenditures

Operations & Response

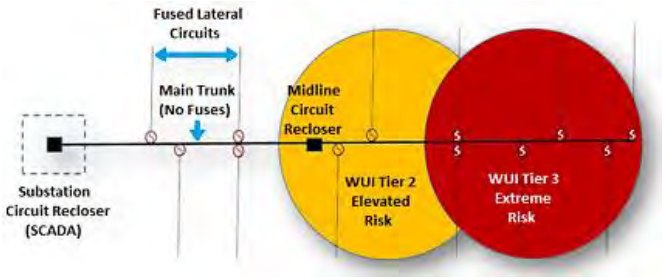
Avista developed a two-pronged Operations and Response strategy designed to react to wildfire risk both operationally and through critical partnerships. First, it is important to be able to manage the system with rapid identification of increasing risk and have the ability to react accordingly. A key way of doing this is through protection settings changes and remote monitoring and control of equipment, specifically substation SCADA installations and Fire Safety Mode automation devices. Automation strategies and systems enable remote monitoring and control of transmission and distribution equipment, providing not only direct

control of this critical equipment, but also allowing system operators and planners to fully see and react to short term operating risks. In this area of the Plan, investment expenditures are primarily related to upgrading, replacing, or installing equipment to help us monitor and control protection equipment out in the field, on distribution lines, or in substations to allow quick response to fire weather and associated risk.

Another aspect of this element of the Plan has little or no budget, as it is focused primarily on relationships. Though planned investments in utility infrastructure and vegetation maintenance represent the bulk of our Wildfire Plan costs, human investments in training, partnerships, and engagement with customers are also an important feature of Wildfire Resiliency. This aspect of the Operations and Response part of the Plan encompasses both internal and external resources with a goal of reacting to wildfire threat in a thoughtful, proactive, and coordinated manner, along with the ability to rapidly respond as needed. Its purpose includes building solid working relationships with outside entities and first responders, developing both internal and external joint response strategies, and tracking the progress and benefits of the Wildfire Plan programs to allow continuous improvement. Avista has a tradition of 'doing the right thing' for customers and the communities we serve. Working together to promote safety and manage the risk of wildfire is not a new concept, but simply one that commands a unified and holistic response. Elements of our Operations and Emergency Response efforts are designed to accomplish this, as described below.

Automation

Automation equipment provides "eyes" on some of our most critical infrastructure in high fire threat areas. For example, midline circuit reclosers are often deployed on long distribution lines where substation-based equipment cannot adequately protect the entire length of the circuit. Urban distribution lines are typically 5 to 10 miles in length, while rural counterparts can extend hundreds of miles. Many of Avista's circuit breakers do not support monitoring or control, which means they cannot be remotely operated, requiring manual intervention to make changes to settings or to identify an issue. This may take several hours depending on location and crew availability. Part of the Wildfire Resiliency Plan is installing modern circuit reclosers on circuits deemed potentially at risk. These new reclosers are capable of remote observation and operation so do not require manual intervention. We are also updating some "dark" substations located in high fire threat areas, meaning those currently lacking automation and communications equipment, so they can be monitored and controlled remotely as well.



Example of Avista's use of a recloser

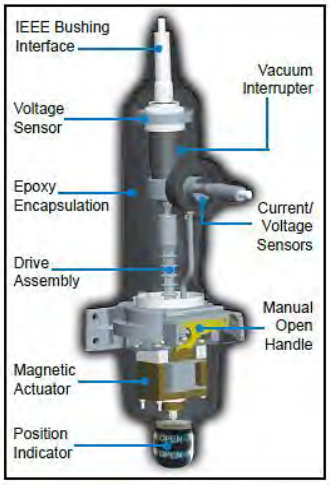


Diagram of a distribution recloser

Substation circuit breaker

Avista operates about 330 midline reclosers outside of the substation. Of these, 240 distribution reclosers (both midline and substation) require protection setting upgrades in order to be Fire Safety Mode capable and able to aid in implementing wildfire protection measures.[40] The vast majority of these devices are located on circuits that serve rural areas in high fire threat (typically WUI 2 and 3) regions. Many of these devices lack communication controls and must be switched or altered manually by physically accessing the device. Other circuit reclosers are modern units and will support automated Fire Safety Mode but require software upgrades.

Avista substation upgrade work.

In addition to updating or installing automated reclosers on the distribution system midlines, fifteen Avista substations are located in high threat fire areas and lack communications equipment. Another thirty substations require hardware upgrades to support a fully automated Fire Safety Mode system. This work includes 129 substation breakers that serve downstream WUI 2 or 3 zones. Additional units both on the distribution grid (midline devices) and those located in substations require some level of hardware upgrades such as recloser replacement and/or upgrades to electronics. Others need major installations, such as SCADA monitoring systems. Upgrading these units is a significant project and is expected to run the through 2029.

Operations & Response Programs	2020	2021	2022	2023
"Fire Mode Ready" Reclosers Commissioned / Settings Only	n/a	65	100	1
Fire Safety Mode Distribution Midline Reclosers Installed	n/a	7	17	7
Substation Breakers Installed	n/a	2	0	9

Table 12. Operations & Response Program Status
Note: This program did not begin until 2021.

Avista plans to modernize 4-5 substations per year, with the goal of forty-five stations capable of remote monitoring and control by 2029.[41] It is important to realize that the cost of updating one substation does not accurately reflect the cost of updating another substation. Each one is its own individual project with unique equipment and material requirements. For example, one existing station may already have integrated fiber, while a different rural station would require $500k+ to install new fiber/T1 for providing a communications connection. Another example could be that an existing station may already have a panel house to integrate protection and communications equipment, while another substation may require us to construct a new panel house. Some substations may have one or two transmission and/or distribution lines associated with them while others may have many lines connected with them, adding complexity and cost to the equipment required. Some may require

[40] These 240 devices were selected based on the downstream WUI tier zones that are served (Tiers 2 and 3 were mandated by the Program, while some Tier 1 were also included based on historical events).
[41] Note that this number is based upon allocated budgets.

complete replacement of equipment while others may only need upgrades. All substation sites have different requirements; thus, it is not prudent to assume that each site will cost the same to upgrade.

Wildfire Emergency Operating Procedure (EOP)

Avista restores power in Medical Lake in 2023

The Emergency Operating Plan (or EOP) is an incident command structure that defines workflow processes and unified command configurations deployed during emergency events. It includes defining key roles and responsibilities, identifying communications channels, and operating procedures to be used during emergency events such as storms or wildfire. In accordance with the Wildfire Resiliency Plan, a specific EOP and associated procedures were developed for wildfire situations. These events differ from "traditional" weather events such as high winds and ice storms in that those situations are caused by situations outside of the Company's control. A wildfire event may, on the other hand, be a result of Company operations, so has an additional level of focus and action.

In 2023 we finalized Emergency Operating Procedures specific to wildfire response and set up a tabletop exercise to test the design against a simulated fire situation. We invited emergency and land management agencies across our service territory including the Red Cross, the Idaho Department of Lands, and the Washington Department of Natural Resources to be observers in this wildfire exercise scenario. Avista's incident management teams went through this situation as if it were occurring. They developed strategies including customer outreach, crew placement, damage assessment, mutual assistance requests, and planned restoration efforts from the beginning of the scenario event until final restoration and return to normal operations. The involvement of state and local agencies allowed the teams to practice coordination efforts. This practice paid off shortly after the exercise when Avista crews successfully joined the Incident Command Structure (ICS) for the Gray Fire in Medical Lake in 2023.

EOP exercise at Avista in 2023

Avista's strong relationships with fire professionals, strengthened by our work with them on the Plan and bringing them into our internal discussions and EOP processes, is also helping Avista successfully engage with them in actual wildfire situations. This teamwork approach helps our personnel understand what is expected of them and how they can assist and support fire command.

Cross Training with First Responders

Avista employs approximately 290 electric line operating personnel across 12 operating districts. These employees respond to a variety of electric trouble calls including those that involve structure fires as

well as wildland fires. Divisional managers are responsible for conducting basic fire training at their monthly safety meetings. A prominent theme in that training is direct contact and coordination with fire authorities prior to conducting any line inspections or attempting to re-energize portions of electric circuits. We recognize that in a wildfire event safety comes first, and that police and fire authorities command the scene, but as part of the Plan, Avista partners directly with fire protection agencies to cross-train personnel so that Avista first responders understand fire incident command structures, their role during an active event, and fire safety. In turn, fire professionals are educated about the hazards associated with electric operations to help keep them safe when working near our equipment. Though Avista crews routinely respond to pole fire events and have basic firefighting training and equipment, they are not professional firefighters, and we defer fully to those professionals. Cross training helps keep everyone safe.

Cross-training to keep first responders safe.

Expedited Response Agreements

During development of the 2020 Wildfire Plan, Avista met with several fire agencies including those in Spokane County. These discussions led to an agreement in 2022 with Spokane County whereby Avista transmission operators notify fire officials of transmission line faults during fire season. Fire crews are then dispatched directly to the scene to determine whether the incident resulted in fire activity. This initial agreement, known internally as Expedited Response, was so successful that by 2023 Avista had signed agreements that fire professionals, including the Idaho Dept. of Lands (IDL), the U.S. Forest Service, and the Washington Dept. of Natural Resources (DNR) will respond to transmission level outages in both Idaho and Washington. In Washington, the DNR has agreed to manage all fire response even outside of their jurisdiction.

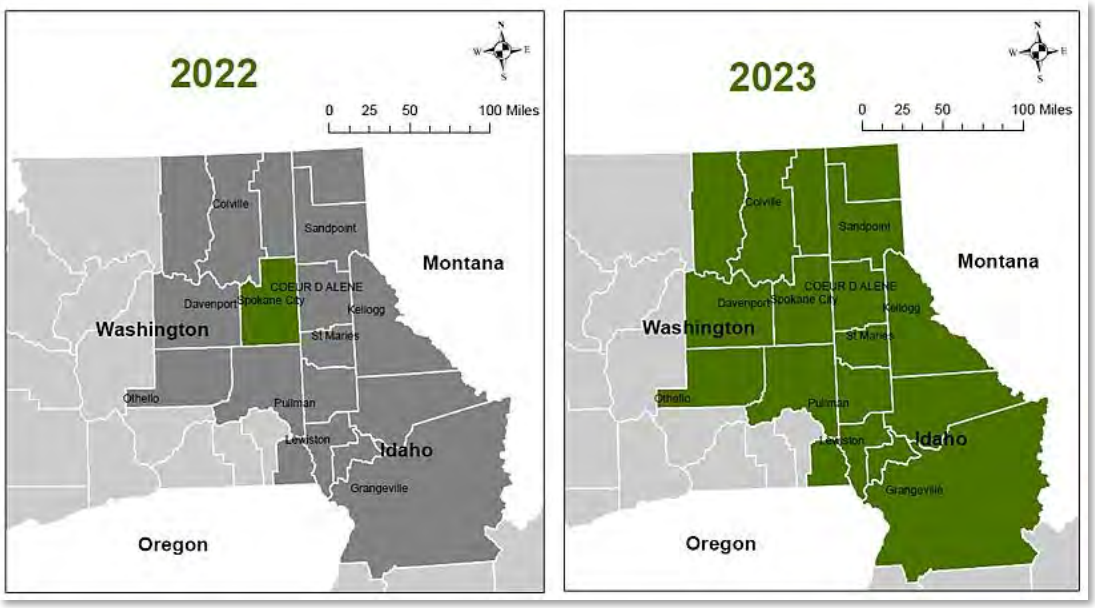


Figure 17. Avista's Expedited Response Agreements started in Spokane County in 2022 and now cover nearly our entire service territory.

The goal of these agreements is to get a rapid response to the site of the fault. If the fault causes a spark event and a fire

results, trained firefighters and apparatus are onsite and able to engage the fire quickly. A quick response is key to keeping fires smaller. Nearly 100% of our service territory is covered by these agreements, which have no expiration date and no cost associated with the responses. In 2023 we used our expedited response agreements 4 times in Washington State and 2 times in Idaho. To date, there have been no fires found while using these expedited response agreements, but the increased level of safety and peace of mind these partnerships provide is invaluable.

Wildfire Partnerships

As evidenced in the discussions above, Avista has always had good relationships with the firefighting agencies that have jurisdiction on the lands that our facilities occupy. These experts were helpful in formulating Avista's initial Wildfire Resiliency Plan and have continued to be crucial partners in this effort.

These long term partnerships have been created in part due to Avista's willingness to quickly respond to fires at the request of fire officials. For example, we respond to fire incidents on our distribution facilities by opening fuses to protect firefighters, and we also de-energize transmission lines at the request of fire commanders. Avista regularly works with fire officials in both Washington and Idaho to share information about our operations and what we are doing to decrease accidental fire starts from our facilities. During these meetings we also solicit information about agency priorities and high-risk areas to better coordinate our fire mitigation activities. Avista is recognized as a partner with the major fire agencies and is invited to participate with them in pre-fire season planning meetings and post-fire season reviews as well as coordination during fire events.

Avista has partnered with firefighters throughout our history.

Since 2022, Avista has been building relationships and partnering with local emergency managers, first responders, fire districts and elected officials across our Washington and Idaho service territory in support of Avista's Wildfire Resiliency Plan. This includes county and city emergency managers, local emergency planning committees, local public health jurisdictions, fire chiefs, critical infrastructure providers, public safety leaders, and a variety of elected officials, especially in our highest fire threat regions. Interactions with these key public safety partners include attending meetings to present and discuss the Wildfire Resiliency Plan (including PSPS), working with municipalities and agencies to identify critical infrastructure, updating the notification process (who, how and when) for Extreme Fire Safety Mode (FSM) and PSPS, and working with some of these partners to identify locations for Community Resource Centers (CRCs) in the event of a PSPS. We also invite these partners to participate in tabletop exercises to continue to build readiness, awareness, and relationships around PSPS, and to participate as guest experts in Avista's

series of annual Wildfire Telephone Town Hall meetings.

Some of Avista's Partners

Avista is also an active participant in the Inland Empire Fire Chiefs Association. We were asked to join in their meetings to add input on critical infrastructure capabilities and needs during wildfire and other emergency responses. This group includes the Fire Chief of the City of Spokane and the Chiefs of Spokane County as well as the Spokane County Department of Emergency Management and the Spokane County Sheriff's Department. Along with information sharing, this relationship has brought a heightened awareness of how fire and emergency response is coordinated and how the utility can integrate into emergency response efforts.

Avista has also taken a lead role in information sharing and learning regarding wildfire with other utilities in the Pacific Northwest. Starting in 2019, Avista began organizing and hosting the Pacific Northwest Wildfire Working Group meetings. This group shares information on planning, mitigation strategies, and logistical constraints on a regular basis. Attendees in this meeting typically include Idaho Power, Portland General Electric, Puget Sound Energy, Northwestern Energy, PacifiCorp, and Chelan County Public Utility District among others. These meetings have been helpful for all participants in understanding the components of neighboring utilities wildfire plans and the challenges in implementing them as well as discussions around best practices in the industry.

As Avista's Wildfire Plan was being developed, we reached out to our California contemporaries, specifically Southern Cal Edison and San Diego Gas & Electric.[42] These utilities were very open in sharing their experiences, their plans, and their strategies. They became mentors as we went through the process of developing our own wildfire plan, and they helped guide us in creating our focus areas and tactics, openly sharing the benefit of their more than ten years of experience (at that time) in this area. In return, Avista has been very open in sharing our Wildfire Plan and strategies with fellow utilities, most frequently in the Northwest. In fact, both Idaho Power and Northwestern based their initial wildfire plans on Avista's plan and have adopted our strategies and program philosophies as well. Avista is considered a leader in the Northwest in this endeavor. Our Wildfire Resiliency Plan creator and manager, David James, became recognized as a national leader in Wildfire.

[42] We contacted Pacific Gas & Electric (PG&E) but due to their involvement in litigation, they were reluctant to participate or provide guidance.

Avista is also involved with the Western Energy Institute and other utility-based organizations to gain learning and information-sharing related to emerging issues pertinent to utilities. The risk that wildfire poses to utilities throughout the West is always a central topic. Along with regular attendance, Avista has shared what we are doing in response to the wildfire threat and have gained a better understanding of what other utilities are doing to address the same issues. This is another forum in which we can share and learn about industry standards, best practices, methodologies, lessons learned, and successes that we can apply to our own plan and strategies.

The benefits of these relationships are too numerous to list. Our external partners have helped design, create, and shape our Wildfire Resiliency Plan since the beginning. They have collaborated with us in actual fire situations, advised and guided policy and strategy, and shared ideas and best practices to help us make the best possible choices. Synergy is a very powerful force when bringing diverse groups of people together to address an issue that is of concern to them all.

Fire Safety Mode Operations

Electric utilities use automatic reclosing to improve system reliability through managing momentary faults on overhead conductor that may result in extended outages and impacts to customers. Electric faults occur when equipment fails or when weather and wind cause branches or trees to fall into powerlines, for example. Equipment failures, vegetation contacts, wind, snow, and lightning are significant contributors to line faults, and each line fault represents interruptions to electric service as well as the potential for a spark to occur, as all electrical faults involve a release of energy before the fault is interrupted by the utility's protective equipment, which isolates the fault location and attempts to reclose the line to restore customer service. For circuits that pass through high fire risk areas, automatic reclosing may not be desirable due to the increased risk of ignition from repeated arcing as the line tests to try to reclose and restore service. In response, the Company developed a methodology for using the distribution protection system to reduce the chance of a spark event.

Figure 18. Fire Safety Mode Operation Steps and Fire Risk Index Levels

Fire Safety Mode has five levels of risk as shown in Figure 18. The Fire Risk Index (FRI) is based on a number of elements including weather (wind speed and gusts), fuels in the area (grasses, shrubs,

trees), topography (fires on flat lands are easier to fight than those on steep slopes), community risk, historic outages on the identified equipment during fire season, humidity, soil conditions, etc. The five Fire Risk Index levels are:

1) Green (Low)—Risk of fire spread is low to near zero e.g., typical winter conditions: FRI score of 0 – 4.0.

2) Blue (Moderate) – Risk of outage is high, while fire spread is low, **or** Risk of outage is low, while fire spread is high, **or** Risk of outage is moderate and fire spread is moderate: FRI score of 4.1 - 5.4.

3) Yellow (High) (Extreme FSM) – Risk of outage is high, while fire spread is moderate, **or** Risk of outage is moderate, while fire spread is high, **or** Risk of outage is high and fire spread is high: FRI score of 5.5 - 6.4.

4) Orange (Very High) (Extreme FSM) – Risk of outage is extreme, while fire spread is high, **or** Risk of outage is high, while fire spread is extreme, **or** Risk of outage is very high and fire spread is very high: FRI score of 6.5 to 6.9.

5) Red (Extreme)– Risk of outage is extreme, and risk of fire spread is extreme FRI: >7.0

The FRI supports operational decision-making to reduce potential wildfire risk. Base Fire Safety Mode protection settings are typically considered beginning at an FRI of about 3.5 and moved to extreme settings at about 5.5. The Company will consider the possibility of initiating a PSPS when the FRI forecast is at 7.0 or greater, or where other factors applicable to the situation warrant such consideration. Factors to be considered may include, without limitation, fire risk potential, relative humidity, field observations and measurements, anticipated duration of events, geographic characteristics, critical infrastructure, wind direction and speeds, medically vulnerable populations, proximity to aid, utility resources available, etc. This list

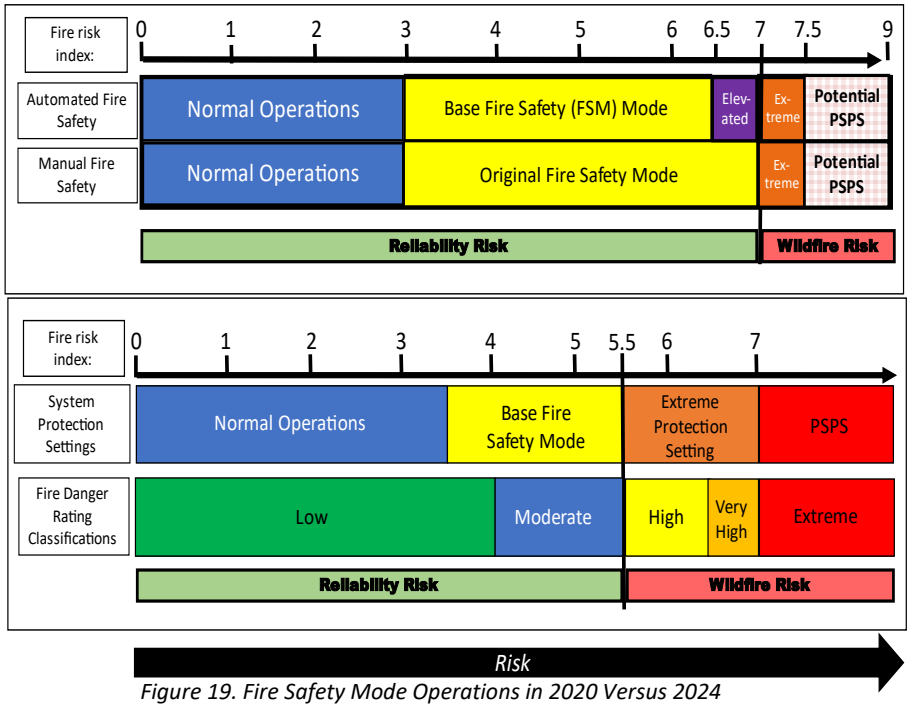


Figure 19. Fire Safety Mode Operations in 2020 Versus 2024

of considerations is non-exhaustive, as each weather situation is unique and involves unique characteristics, risks, and considerations.

Avista already makes a great effort to reduce the number of faulted circuits with existing programs such as Wood Pole Management, Vegetation Management, and adding sectionalizing devices such as reclosers. Since the early 2000s, during fire season Avista has transitioned into the mode of limiting the number of circuit recloses on circuits deemed potentially at risk during fire season. This operational methodology is an important defensive strategy against wildfire ignition. Previously known as "Dry Land Mode," this operating mode, which we now call Fire Safety Mode (FSM), involves both identifying electric circuits that operate in elevated fire threat areas and the reconfiguration of their associated protection systems to allow these protection devices to be remotely and automatically adjusted for wildfire threat based on the operating location and threat level.

Historically, this has been a manual process of turning on the system at the beginning of fire season (typically early July) and then returning to normal operation at the end of fire season (usually early October). Through the Company's Wildfire program, we have added additional safety measures including modernizing this system so that reclosers can support higher modes of protection and can be remotely monitored and operated, and by adding Fire Safety Mode operations. FSM can significantly reduce spark ignition potential by adjusting the sensitivity of the protection system for electric circuits that operate in elevated fire threat areas when there are forecasted significant weather events during wildfire season. It allows reconfiguring protection systems so protection devices can be remotely and automatically adjusted for wildfire threat based on the operating location and the estimated risk at that location.

Avista's Fire Safety Mode has gone through three iterations since its inception in the 2000s, starting with the initial on/off methodology. In 2020, with the implementation of Avista's Wildfire Resiliency Plan, the Company began moving to a modified protection setting scheme that was aligned with fire risk, including automated operations and remote monitoring capability. This new approach had five modes of operation: normal operations, base fire safety mode (described below), elevated mode (removed in 2024 but which allowed a circuit to close back in for temporary faults), extreme (described below), and de-energizing or Public Safety Power Shutoffs (officially adopted in 2024.) The diagram above, Figure 19, depicts the 2020 Fire Safety Mode strategy as it compares to 2024.

Extreme/Elevated Fire Safety Mode Activities	2023
Fire Safety Mode # of Elevated Operation Days	4
Fire Safety Mode # of Circuits Elevated	20
Fire Safety Mode # of Circuits Elevated That Tripped Off	2
Number of Faults Without Ignition Events	2
Number of Customers Impacted From Elevated Tripped Circuits	961
Expedited Response Requests	6

Table 13. Fire Safety Mode Operations
Note: We implemented this program in 2023.

An additional upgrade to the Fire Safety Mode methodology is our use of the Severe Fire Danger Index (SFDI) developed by the U.S. Forest Service.[43] This is a

[43] "Severe Fire Danger Index: A Forecastable Metric to Inform Firefighter and Community Wildfire Risk Management," US Forest Service, Severe Fire Danger Index: A forecastable metric to inform firefighter and community wildfire risk management | US Forest Service Research and Development (usda.gov)

forecastable metric that can help predict extreme fire conditions based on historical data related to fire intensity and spread potential. When this data is combined with current wildfire situations it helps predict fire intensity, the likelihood of resulting damage, and the potential for loss of life. This metric helps firefighters and communities by providing critical information to help improve early warnings and situational awareness. Avista overlays the SFDI information over our service territory within the Fire Weather Dashboard, and when the resulting analytics indicate a risk level of about 3.5, we typically enter Fire Safety Mode.

The current version of Fire Safety Mode has the levels of reclosing operations (system protection settings) described below:

1) **Normal Operations** – (blue) During non-fire season, circuit breakers automatically reclose multiple times before locking out, with a focus on reliability and maintaining customer service.

2) **Base Level Fire Safety Mode** – (yellow) If a circuit is set to this protection level, when it trips it waits a predetermined length of time then recloses to test the circuit. If the circuit tests bad the second time it will stay off until manually inspected before being placed back in service. This level is used on specifically identified circuits during the bulk of fire season to limit automatic reclosing of faulted circuits, reducing spark ignition energy levels and associated potential for fire ignition.

3) **Extreme Fire Safety Mode** – (orange) Circuits considered in extreme danger are configured for instantaneous tripping and non-reclosing so if the circuit trips, it does not test or try to reclose. It stays off until it is inspected and released back into service. This level of protection operates at significantly reduced energy levels, and once the feeder trips due to a fault condition, mitigates the impact of future system faults due to the feeder being in an off status until conditions are safe and the feeder is patrolled and re-energized. This level can impact customer reliability, as it may take several hours to patrol the entire line and mitigate any issues found. Thus, this extreme protection level will only be used for high fire risk weather conditions due to its potential to have a significant impact on customer outage times. At this risk level, spark ignition danger takes priority over service reliability.

4) **Public Safety Power Shutoff (PSPS)/De-Energizing** – (red) For extreme weather events exceeding Extreme Fire Safety Mode conditions, the Company will selectively implement de-energization on feeders or sections of feeders as a measure of last resort in coordination with our partners and first responders. Note that we have implemented de-energization at the request of first responders as a course of business throughout our history primarily to keep firefighters safe when working near our equipment. However, with the implementation of our PSPS Plan, when it is clear that the safety benefits exceed the costs and risks of shutting off power to customers, the Company may selectively implement proactive de-energization of circuits deemed at exceedingly high risk. This is likely to be based upon the Dashboard predicting a risk level of 7 and above on the circuit as well as projected wind speed and gusts, humidity,

vegetation dryness levels, etc. The Company recognizes that this action can have a significant impact on customers. When a circuit is de-energized for a PSPS event, the entire length of the circuit must be inspected to ensure conditions are safe before reenergizing. Therefore such a decision will be made with great care. More information on PSPS can be found below.

Note: The major difference between Fire Safety Mode (FSM) Operations and PSPS is that FSM circuits are only removed from service when an actual fault is experienced on the line, while PSPS circuits are proactively disconnected based on an assessment of risk.

Although many elements of Wildfire Resiliency are aimed at reducing outage events and possible fire starts, we realize that it is impractical to expect perfect reliability, especially during fire season wind events. By altering protection schemes on select circuits, Avista can achieve a better balance between reliability and fire safety objectives. This means that at times of extreme risk, customer reliability may be sacrificed in order to focus on customer safety. We believe that if this balance is carefully considered and decisions are made with the sophisticated analysis and guidance provided by the Fire Weather Dashboard, we can help make our system safer in times of fire threat while minimizing customer impact.

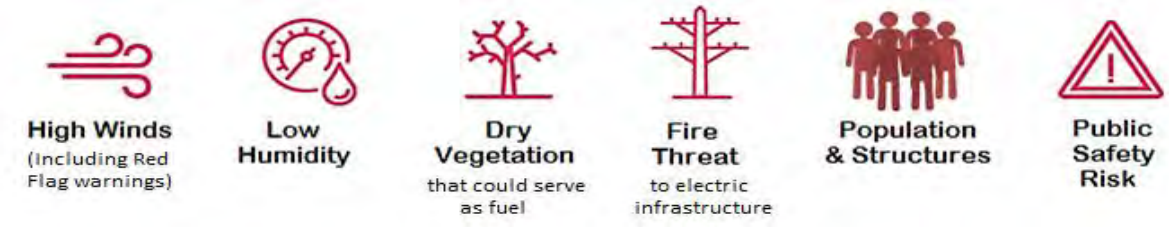
> Avista may initiate a PSPS if the Company determines that a combination of critical conditions at certain locations creates the potential for consequential risk of wildfire ignition, spread, and severe resulting harm, and that those risks outweigh the corresponding risks associated with initiating the PSPS.

Public Safety Power Shutoffs

Public Safety Power Shutoffs (PSPS) happen when electric companies preemptively turn off the power to specific areas in order to reduce the risk of wildfires and to help keep customers and communities safe. It is an effort to prevent electrical equipment from starting a severe, fast spreading wildfire in high fire threat areas by turning off powerlines during extreme weather based upon a calculation of risk, typically when high winds and other adverse weather conditions combine to increase the risk of wildfire. It is considered a top tier mitigation tool to help prevent utility involved wildfires in extreme fire threat situations.

As part of its operational mitigation strategies related to Fire Safety Mode operations, Avista developed a Public Safety Power Shutoff Plan for proactively de-energizing facilities located in high risk areas during extreme weather conditions that have the potential to propagate large destructive wildfires. Our PSPS Plan, to be implemented for the first time (if needed) during the 2024 fire season, is essentially the last step in our Fire Safety Mode operations, though the major difference between Fire Safety Mode Operations and PSPS is that Fire Safety circuits are only removed from service when an actual fault is experienced on the line, while PSPS circuits are proactively disconnected based on an assessment of risk.

Many factors go into considering whether it would be prudent to initiate a PSPS and the assessment of risk, including environmental factors such as wind speed and direction, relative humidity levels, outage data (that is, feeder health and likelihood it might trip off), and fuel conditions (includes moisture content, type of vegetation, topography, and tree mortality rates in the area). Community factors are also a major consideration, including impacted population and number of structures, firefighting capabilities in the area, and the potential impact to customers including expected outage duration and potential restoration timelines.[44] Infrastructure elements are also considered including the type of conductor, poles, and crossarms, the design and strength of overhead facilities, as well as vegetation types and amounts near infrastructure.



The Company believes that the use of proactive de-energization must be carefully considered, as this can have a significant impact on our customers in the number of outages they may experience, in the length of those outages, and in the associated risks and costs involved. To assist customers during these extreme events, the Company has an extensive plan to coordinate with public safety partners, municipalities, and tribal authorities as well as providing an outage map on our website, a specialized customer CARES team[45] to assist special needs customers, proactive customer education and outreach, and Community Resource Centers. Special consideration is also given to critical service providers who are integral to the processes and functionality of society (such as hospitals, airports, traffic systems, communications systems) as well as customers who are medically vulnerable (such as those dependent upon medical equipment), proximity to aid for customers in remote locations, and other factors. Avista recognizes that losing power can have a significant impact on our customers, thus will evaluate the use of protection settings, including PSPS, with great sensitivity and consideration.

In 2024 Avista put together a robust notification plan for PSPS events including email, IVR (Interactive Voice Response) callouts, press releases, web banners, outage map updates, social media, text alerts (during outage), as well as engagement with community-based organizations and public safety partners. Restoration timeframes are especially important to customers; estimates for outage duration and time for customer restoration depend on the magnitude of the event and can be highly variable. In response, communications around these estimates are updated frequently as new information becomes available.

[44] Note that in the case of a PSPS event, duration times may be extended due to the requirement to manually inspect each de-energized circuit from beginning to end to ensure that it is safe to place it back into service. This is also the case for circuits that trip off while placed in Extreme Fire Safety Mode.

[45] CARES (Customer Assistance Referral and Evaluation Services) is a specialized team within Avista's customer contact center that supports our most vulnerable customers, assisting with resources such as food, housing, and medical care.

Prior to an event Avista will utilize multiple communication channels to reach customers and inform them about a potential PSPS event in their area, including available customer services. This information will also be published to our social media pages and provided to emergency management partners to disseminate. We will also connect customers with Washington and Idaho 211 services for additional assistance that Avista cannot provide. In addition, we have a robust partnership with access and functional needs population support agencies who will be notified of potential PSPS events in an effort to further support customers.

This year Avista will be standing up community resource centers (CRCs) in areas impacted by PSPS events. We have partnered with a third party contractor to help assist with CRC setup and operation. CRCs generally include air conditioning, electronic and medical device charging, snacks/water/ice, and information regarding the outage. Avista is also offering a battery backup program to qualified life support customers who have been verified through a medical provider (at no cost to the customer). The batteries will be shipped directly to the customer's residence. A specialized customer support team will assist with the battery order and answer questions about the program.

Avista also updated our existing Outage Map to provide additional communications related to a PSPS event. Customers can go to the outage map to see if they are in an area which could potentially be experiencing a PSPS in the coming days or if they are in an area where one is occurring. Up to 7 days out customers would be able to see if they are in a PSPS Watch, at approximately 2 days they would be able to see if they are in a PSPS Warning and they would be able to see if their outage is related to a PSPS event as well.

All of our Operations and Response programs are designed to protect our customers by reducing the chance for spark events, rapidly reacting to increasing wildfire threat, and working with customers and external partners to prepare for and react to wildfire. As described earlier, expenditures in this area primarily related to the cost of automating equipment to enable remote control and operation.

Operations & Response											
Budget (in thousands)	2020 Actual	2021 Actual	2022 Actual	2023 Actual	2024	2025	2026	2027	2028	2029	Total
Distribution Automation	$31	$1,355	$1,599	$1,273	$438	$650	$650	$650	$650	$650	*$7,946*
Substation Automation	$0	$515	$741	$1,555	$2,788	$4,500	$4,500	$4,500	$4,500	$4,500	*$28,099*
Fire Ignition Tracking	$3	-$3	$0	$0	$0	$0	$0	$0	$0	$0	*$0*
Total Ops & Response (Cap)	$33	$1,868	$2,340	$2,828	$3,226	$5,150	$5,150	$5,150	$5,150	$5,150	*$36,045*
Total Wildfire Capital Budget	$3,421	$19,375	$26,066	$28,319	$33,750	$35,250	$60,250	$60,250	$35,250	$35,250	*$337,181*
% of Capital Budget	1%	10%	9%	10%	10%	15%	9%	9%	15%	15%	*11%*

Table 14. Operations & Response Actual and Budget Expenditures

Community Outreach

A key element of the Company's Wildfire Resiliency Plan is ensuring that all interested persons know that the plan is in place and that the Company is taking the right precautionary steps to reduce the potential for and impact of a wildfire. A strong and effective strategic communications campaign is critical in ensuring broad awareness and in demonstrating Avista's commitment to reducing the impact of wildfires.

Avista's Wildfire communications plans are directed at all of Avista's key participants including customers, employees, state and local government officials and regulators, law enforcement, fire departments, emergency management agencies, local media, and shareholders. Our wildfire communications goals are to create awareness of Avista's work to prevent or mitigate the risk of wildfires, promote the safety and well-being of all customers, to engage customers in programs that impact them and their communities, and to help our customers and employees stay safe.

The Company's overarching Wildfire Resiliency Communication Plan objectives include:

- Build awareness among all key participants of the significant actions and investments Avista is making to prevent or mitigate the risk of wildfires.
- Instill confidence in Avista as a proactive and responsible corporate citizen.
- Demonstrate Avista's focus on prioritizing the safety and well-being of its customers and the communities it serves.
- Provide examples of the Wildfire Resiliency Plan in action and show progress as it is implemented.
- Engage customers in programs that impact them and their communities.

Avista Communications

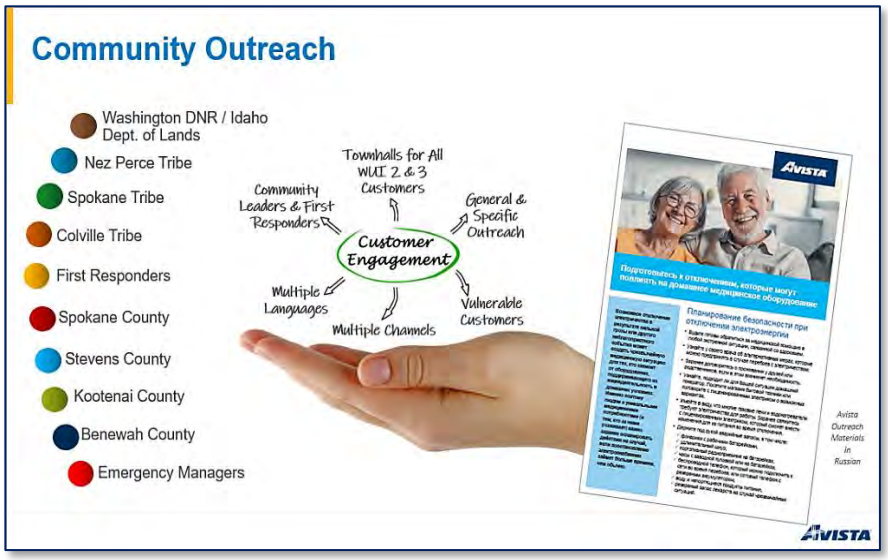
- *Avista Connections Newsletters*
- *Customer Emails*
- *Fire Safety Mode Specific Outreach*
- *Telephone Town Halls*
- *Print Ads*
- *Avista Website*
- *Community Meetings*

We have a variety of ways we communicate with customers about wildfire-related work on the system that may impact their service. We

utilize newsletters, customer emails, phone calls, social media, Avista's website, and local media outlets. When projects directly impact customers, they are directly notified of work happening in their area and its purpose.

One of our most effective means of reaching customers specifically related to wildfire and our Fire Safety Mode operations (including PSPS) are Avista's annual Telephone Town Hall Meetings. Avista uses this platform to communicate broadly with all electric customers, including especially vulnerable customers, about overall wildfire risk and preparations for fire season. We request that customers ensure that their contact information is up to date so we can reach them. In addition to providing information and answering customer questions, this platform also yields helpful information about how our customers are preparing and what is most concerning to them. We also share updates on our current and future wildfire plan progress and plans. Emergency management professionals, public safety partners, and key community leaders from each region are invited for their associated town hall.

In 2022 we reached out to nearly 36,000 customers in 8 counties and 3 tribal governments. In 2023 our customer engagement extended to 16 counties including outreach to over 90,000 electric residential customers and 640 public safety partners, tribal, and key community leaders. This engagement was in coordination with associated emergency response agencies who participated in the discussions. Each year we learn more from these meetings about how to improve communications with customers. For example, Telephone Town Hall Meetings are now offered in both English and Spanish. Also, in 2024 we started our communications earlier to create the opportunity to reach more impacted people including city councils and county commissions, key stakeholder interest groups, medically vulnerable customers, medical service providers, as well as including more media and language options. These platforms are an excellent way to gather feedback and input used to continually improve our outreach.



The Company also sends mailed and emailed newsletters in advance of fire season to educate all electric customers about Avista's Wildfire Resiliency Plan and inviting participation in our Town Hall events. Wildfire related updates are provided throughout fire season. We also run a series of print ads in more rural communities related to the Wildfire Plan and PSPS. More than 130 ads run in 33 different publications, including several in Spanish, reaching a circulation of about 250,000. We also host community meetings with emergency management organizations led by our regional business manager team. This team also works with account executives to identify and

engage with critical infrastructure in their areas (such as water, wastewater/sewer, healthcare facilities, emergency responders) for education and support. In all of these platforms we ask customers to make sure their contact information is up to date with Avista so we can reach them as needed about changes to operations in their area.

Specialized Outreach

- **CARES Network**. In 2022 we began an effort to better support our medically vulnerable customers. We developed an outreach framework for proactively notifying life support customers on elevated Fire Safety Mode (FSM) feeders. The process is very similar to what we do for planned outage notifications, utilizing Avista's CARES outreach teams. The CARES (Customer Assistance Referral and Evaluation Services) Team is a specialized team within Avista's customer contact center that supports our most vulnerable customers by helping them with their Avista account and acting as a liaison between the customer and community partner support networks. They are specially trained to help people who need assistance with their energy bills or other resources such as food, housing, and medical care. Customers with medical equipment in the home are also handled with special consideration by this team. This team works to specifically identify and reach out to our most vulnerable customers related to wildfire preparation and notification. 2022 was spent primarily in designing and preparing this outreach, which was then used in 2023 with great success. One of the things they accomplished was adding a life support customer flag to all the feeder lists, making it possible for Avista to quickly identify special needs customers who may be impacted by an event and proactively call them to make sure they are aware of potential outages in their area due to the weather along with potential wildfire threat and available support.

- **Community Response Ambassadors.** In 2023 Avista launched an employee team of volunteer Community Response Ambassadors who train with the Red Cross to provide help and support to our most vulnerable customers during outage events.

- **Beyond English Communication.** We have identified that five percent of Avista customers speak a primary language other than English and of those, 95 percent speak Spanish as their primary language. Avista developed a variety of materials in Spanish which are distributed through our outreach channels and community events. We launched a Spanish version of our website in April of 2024. We include a Spanish option for all of our telephone townhalls. Our ad campaign was created in Spanish and is running in Spanish publications across our service territory. Avista's website and outage map are now available in English and Spanish. All wildfire-related print materials are also available in English and Spanish. In 2024 Avista hosted a booth at the Latinos en Spokane's El Mercadito event to share various programs with the Latino population in Spokane, including wildfire and PSPS. We are also working on including additional language options. This year for the Telephone Town Hall Events we provided either Russian or Spanish for the 6 events. There were 79 customers that identified as Russian, and for Spanish, 1,192 customers, providing a total of 1,271 non-English speaking customers. We also have a language line option for customer service so that customers can talk to someone in their own language.

- **Other Specialized Communication.** Another specialized focus is for those with hearing impairment. Avista's notification process for active events involves email, social media posts, web banners, text, and phone callouts. Our videos are also subtitled. We are working with the Washington State Dept. of Social and Health Services (DSHS) and the Office of Deaf and Hard of Hearing to further our outreach to this audience, including how to best translate our messages into American Sign Language. Avista presented its Wildfire Resiliency Plan to approximately 80 staff from DSHS and then collected feedback and answered questions specifically related to customer support around potential outage or PSPS events. Avista is remaining in contact with DSHS to continue to refine and improve our communications in this area.

Avista outreach materials in Russian

- **Critical Infrastructure Customer Identification.** The Company completed identification of critical commercial/industrial customers for notification during elevated Fire Safety Mode protection settings or in the event of a PSPS. These are customers who provide critical support services to society such as police and fire stations, large airports, traffic control, communication towers, etc. Recognizing who these customers are, the critical services they provide, and where they are located makes it possible to do as much as possible to protect their energy supply and/or restore their service as quickly as possible for public safety.

- **Tribal Outreach.** Discussion topics in our community outreach efforts with the tribes include concern for tribal elders and medically vulnerable tribal members. The tribes are partnering with Avista to further identify these vulnerable populations (some tribes already have partial lists) and see what can be done to help and support them in the case of an extended power outage.

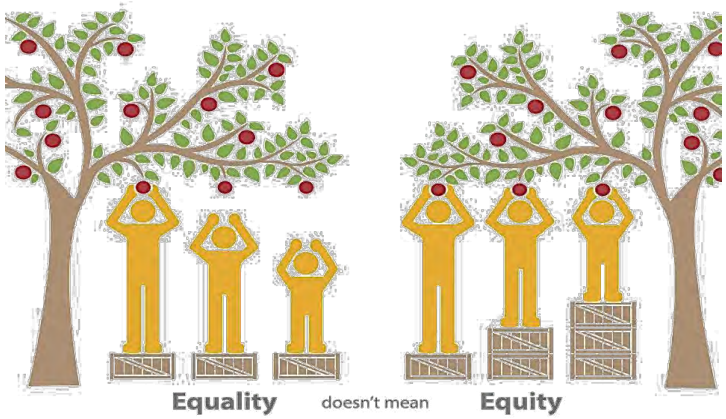
- **PSPS Outreach.** In 2024 the Company reached out to over 14,000 first responders, emergency managers, critical customer groups, service providers, health organizations, city and county leaders, state agencies, and others to provide education around our PSPS Plan and to strategize about protecting and supporting customers through potential outages.[46]

2024 PSPS Meeting Participation	
Agency Partners	94
City/County	418
Emergency Management	201
First Responders	60
Medical	117
Service Provider	20
Town Hall	13,262
TOTAL	***14,172***

[46] More details about the 2024 PSPS Outreach can be found in Appendix A.

- **Equity Advisory Group.** Avista is also working closely with its Equity Advisory Group to fully develop and identify Highly Impacted Communities and Vulnerable Populations ("Named Communities") unique to the Company's service territory. The identification of customer barriers, development of workable solutions, and implementation of an effective multilingual communication strategy is an ongoing process, but one that Avista believes to be integral to the success of the Wildfire Plan as well as FSM and/or PSPS planning and implementation. Avista is steadfast in ensuring that all customers have access to programs and utility-related information. These efforts will be reflected in our wildfire outreach efforts going forward, especially in the areas of public safety and notification, but also in relation to providing information about our Wildfire Plan and its associated programs.

- **Named Communities/Medically Vulnerable.** Avista attends community events throughout our service territory with a particular focus on Named Communities. Many of these communities are rural or represent limited-income populations. In addition to information on bill assistance options, we also distribute materials on wildfire resiliency and PSPS. We begin communicating with customers in February with a bill insert, in both English and Spanish, asking customers with medical needs to contact us so we can reach out to them to ensure that we are reaching all customers with medical needs when there are risk events. This goes beyond our life support customers to include all customers with medical equipment that requires electricity. We ask customers to report themselves or family members if they need specialized assistance. In conjunction with this effort, Avista developed a Community Response for Vulnerable Populations During Outages (CRVP) Stakeholder Group which includes nearly 40 representatives from organizations and agencies that serve vulnerable populations, as well as municipal departments and emergency managers. The vulnerable populations represented by the membership in this group include refugees and immigrants, seniors and aging populations, folks with disabilities, limited-income communities, and those with high health risks. In 2024 Avista invited the CRVP group to attend a 2-hour workshop at our headquarters focused solely on wildfire at which we shared Avista's Wildfire Resiliency Plan, provided handouts on the Public Safety Power Shutoff, and gathered information/feedback on how best to reach our vulnerable communities with this information. Avista also offers a battery backup program to qualified Life Support customers.



Equity

The Washington State Legislature enacted clean energy transformation standards legislation that applies to all electric utilities,[47] and as part of this regulation, utilities must file a Clean Energy Implementation Plan (CEIP)

[47] Clean Energy Transformation Act - Washington State Department of Commerce

every four years. As part of the CEIP, Avista must ensure equity (fair treatment) for all customers, especially vulnerable customers, which are designated as "Named Communities" which are defined as one or a combination of the following populations:

- Highly Impacted Community means a community designated as such by the Washington Department of Health based on being within the limits of an Indian reservation and/or suffering environmental health disparities such as pollution, hazardous waste, poverty, or cardiovascular disease.[48]
- Vulnerable Populations mean communities that experience a disproportionate cumulative risk from environmental burdens due to adverse socioeconomic factors, including high unemployment, high housing and transportation costs relative to income, limited access to food and health care, and linguistic isolation, as well as sensitivity factors such as low birth weight and higher rates of hospitalization.[49]

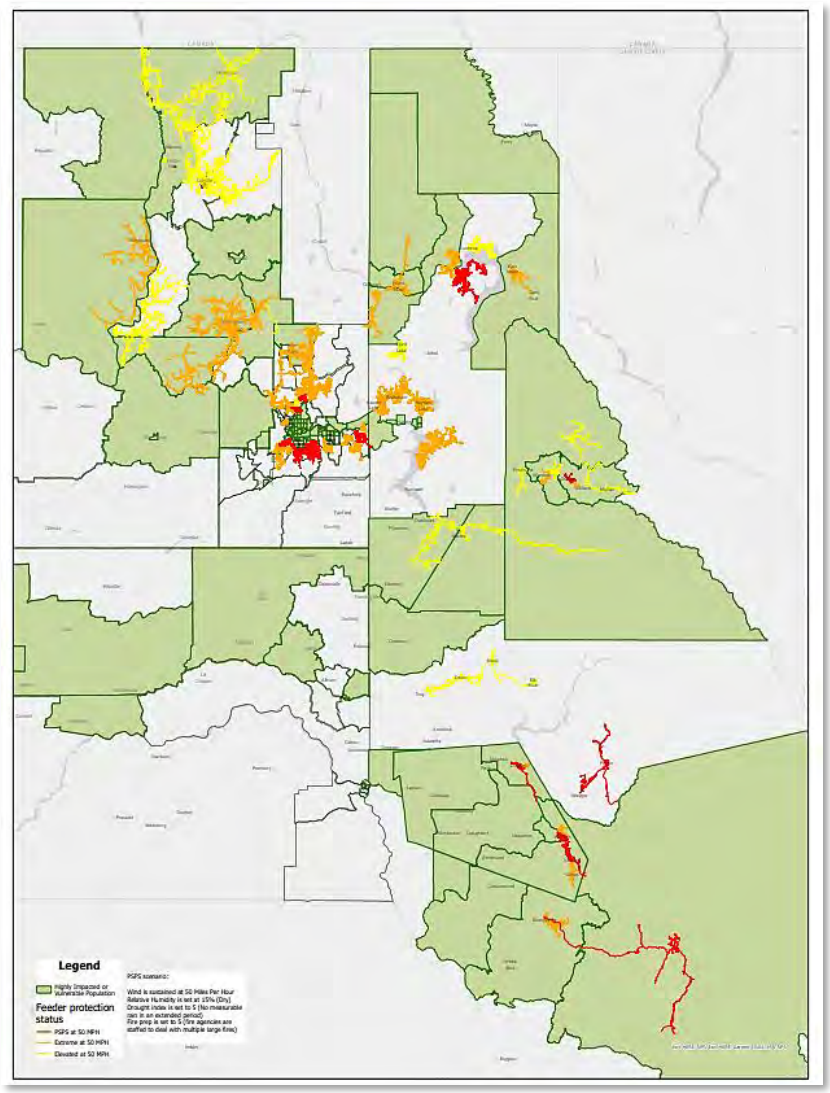


Figure 20. Vulnerable Population Areas in Avista's Washington Service Territory

In Avista's Washington service territory, 34% of the areas Avista serves have populations designated as Highly Impacted Communities or Vulnerable Populations as defined by the Washington State Department of Health. More than 65% of Avista's high fire threat districts coincide with 2010 census tracts that are "overburdened and underserved" according to the Council on Environmental Quality's (CEQ) Climate and Economic Justice Screening Tool.[50] This includes tribal areas served by Avista.

[48] Washington State Department of Health, "Instructions for Utilities to Identify Highly Impacted Communities," Instructions for Utilities to Identify Highly Impacted Communities | Washington State Department of Health

[49] Ibid.

[50] Climate and Economic Justice Screening Tool, Explore the map - Climate & Economic Justice Screening Tool (geoplatform.gov)

In Washington State, 1,044 of 1,708 miles of powerlines located in high fire risk zones are located in underserved and financially overburdened communities. Avista utilized information from the Washington State Health Disparities Map to identify these populations.[51] In Idaho, 794 of 1,037 miles of distribution line miles are located in underserved areas and high fire risk zones.[52] Avista's WUI map indicates that 1,838 powerline miles are located in underserved communities out of the total mileage of 2,746 (67%) across our service territory.

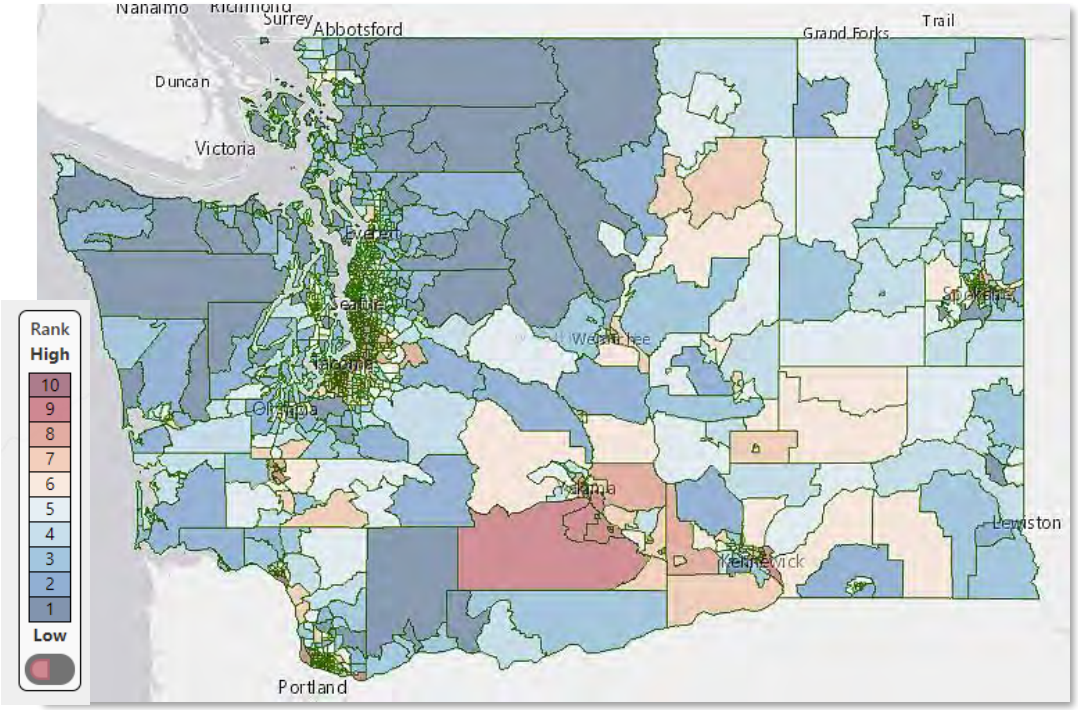


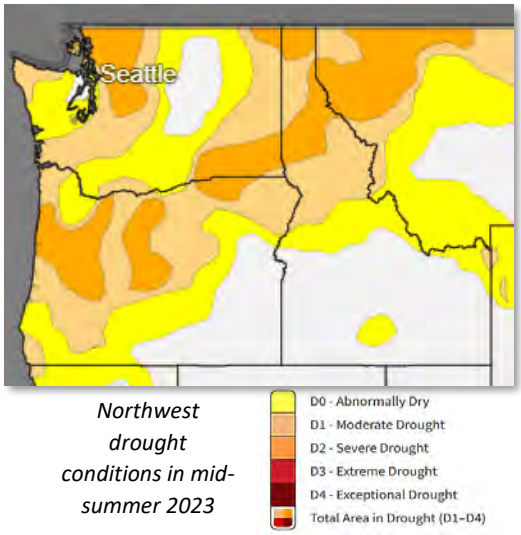
Figure 21. Washington State Disparities Map

Those most at risk from wildfires are typically also the most disadvantaged and economically challenged communities. These communities are often located in rural areas where electric service is threatened by terrain, weather, and human factors. By focusing on areas of highest risk, the bulk of the resources allocated to the Wildfire Plan will flow to these disadvantaged communities. Thus, by definition, Avista's most capital intensive program, electric distribution grid hardening, will have a positive impact on these communities. This work will not only reduce fire risk in some of our most vulnerable communities, but also significantly improve reliability for these customers.

[51] Washington State Dept. of Health "Washington Environmental Health Disparities Map," Washington Environmental Health Disparities Map | Washington State Department of Health

[52] Idaho overburdened and underserved areas can be found on the Climate and Economic Justice Screening Tool: Explore the map - Climate & Economic Justice Screening Tool (geoplatform.gov)

2023 Fire Season Recap



Northwest drought conditions in mid-summer 2023

In our area, spring water supply conditions for 2023 were much better than normal with higher than average precipitation over the prior winter and spring. As a result, no part of Washington or Northern Idaho experienced extreme drought conditions. However, above-normal temperatures in July through September created an opportunity for expansion of drought areas primarily in western Washington. Conditions in eastern Washington and northern Idaho remained stable.[53] Even so, there were about 200 more fires in Washington compared to 2022, though the number of acres burned was down by 15% due to well coordinated response from the Washington Dept. of Natural Resources and their strategic placement of firefighters and equipment across the state. Commissioner of Public Lands Hilary Franz stated, "Statewide, we saw the second-most ignitions in Washington's history this year [2023], including the tragedies that were the Gray and Oregon fires. But we kept 95 percent of DNR protection fires under 10 acres and remained well below the 10-year average for acres burned – a testament to the investments we have made in resources like additional aircraft, more firefighters, better training, and the great work done by firefighters and interagency partners."[54]

According to the Washington State Department of Natural Resources, 1,884 fires were counted in Washington in 2023 with 165,365 acres burned. Of those fires, 41 were considered "large" (over 100 acres of forest land or 300 acres of grassland). The state further estimates that over 400 homes were destroyed in these fires.[55] The number of fires was about 200% of normal with the acres burned at about 88% of normal. Besides fires of unknown cause, 57% of the fires in Washington were caused by human activity.[56]

In Idaho, the number of fires compared to 2022 dropped by nearly 200. The Idaho Dept. of Lands reported 284 wildfires on public lands in Idaho in 2023, in which all but 78 were human caused.[57] The National Interagency Fire Center reported a total of 892 wildfires across the state, but the number of acres burned was at a twelve year low at only 87,801 acres, almost half of what burned in 2022.[58]

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[53] Idaho | Drought.gov and Washington | Drought.gov.

[54] DNR, "Commissioner Franz, DNR Leaders Recap Wildfire Season, Celebrate Partnerships," October 25, 2023, Commissioner Franz, DNR Leaders Recap Wildfire Season, Celebrate Partnerships | WA - DNR

[55] Lauren Gallup, "Washington state endures 'catastrophic' 2023 wildfire season with high ignitions, property loss," OPB, October 18, 2023, Washington state endures 'catastrophic' 2023 wildfire season with high ignitions, property loss - OPB

[56] Washington Dept. of Natural Resources DNR Wildfire Intel Dashboard, Wildfire Intel Dashboard (arcgis.com)

[57] Idaho Reports, "State Reports 284 Wildfires This Season, Most Human-Caused," October 17, 2023, State reports 284 wildfires this season, most human-caused - Idaho Reports (idahoptv.org)

[58] National Interagency Fire Center, "Wildland Fire Summary and Statistics Annual Report 2023," National Interagency Coordination Center Wildland Fire Summary and Statistics Annual Report 2022 (nifc.gov)

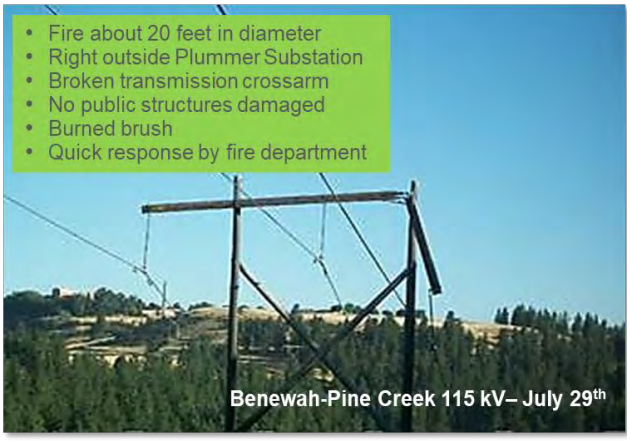
Impacts to Infrastructure

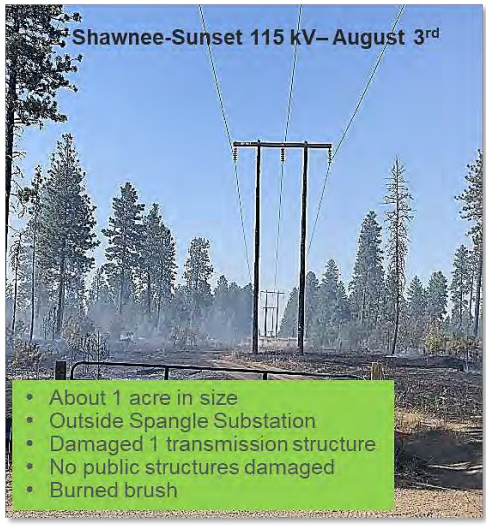
In 2023 Avista lost 266 structures (transmission and distribution) to wildfire.

On July 8, 2023, approximately one acre was burned near Avista's Noxon-Pine Creek 230 kV transmission line near Kingston, Idaho. The suspected cause of the fire is a broken bond wire, which came loose and made contact with a wood crossarm.

On July 17, 2023, about 250 acres burned in Ritzville, Washington. The suspected cause of the fire is a combine in a wheat field. This fire destroyed nine Avista distribution poles as well as two buildings.

On July 29, 2023, close to Avista's Plummer, Idaho substation, it is suspected that a broken crossarm on a transmission structure on the Benewah-Pine Creek 115 kV line caused a small fire. This fire was approximately 20 feet in diameter and was quickly extinguished by the local fire department. This fire burned some brush but no structures.



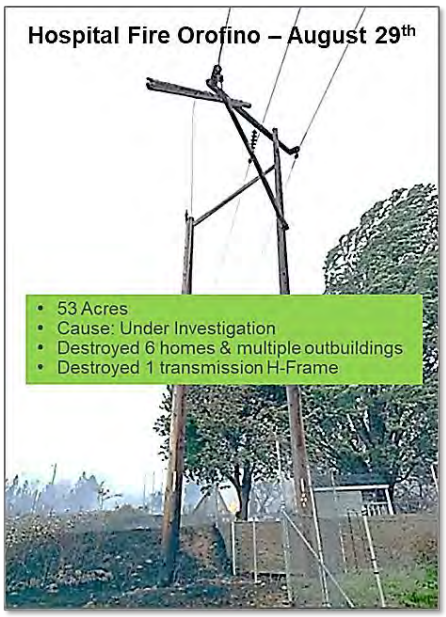


On August 3, 2023, a wildfire burned through the right-of-way under the Shawnee-Sunset 115 kV line near our Spangle, Washington substation, destroying one of our transmission H-frame structures. This fire grew to about an acre in size before it was extinguished. No public structures were damaged. Cause is unknown.

On August 18, 2023, the Gray Fire burned through the communities of Medical Lake and Four Lakes, Washington. This fire started in the early afternoon in a rural area and spread rapidly due to hot, dry conditions and sustained southwesterly winds that gusted to 35 mph. This fire destroyed 259 homes and structures, prompted the mass evacuation of residents, and was linked to the death of a local man. It was not contained until September 1, 2023. Over 1,700 electric and 295 Avista natural gas customers were impacted, and Avista lost 255 distribution poles. Investigators have attributed this fire to sparks from a security light (not owned or operated by Avista) that ignited brush nearby. Avista had 13 crews helping with service restoration work, with crews from Spokane, Coeur d'Alene, Colville, Pullman, and Davenport. Electric service was restored within three days for the people returning to their homes, and gas service was restored in 4-5 days.

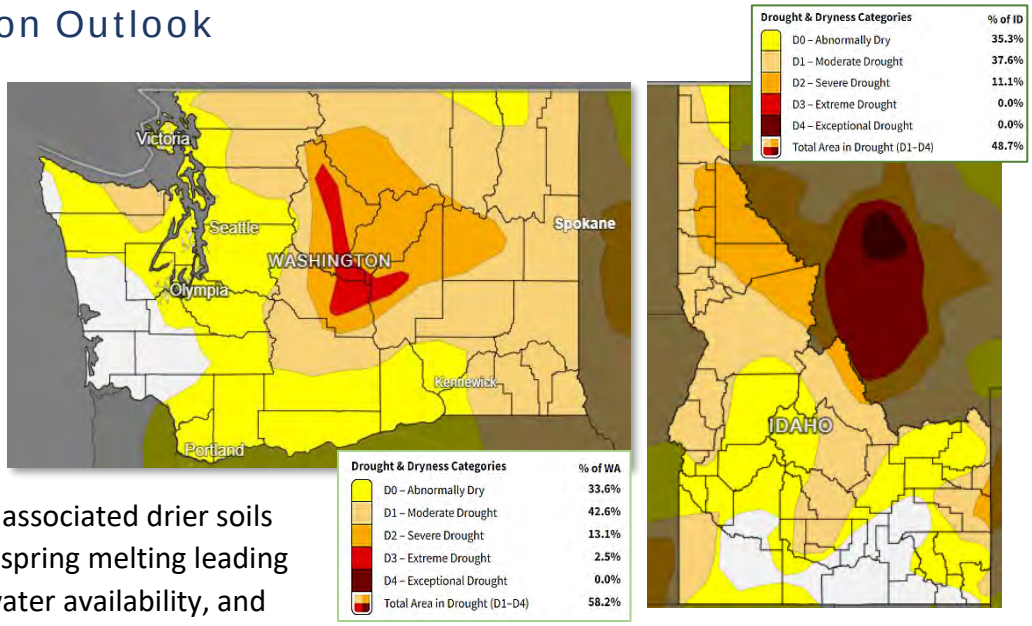
Images from the Gray Fire in Medical Lake

The other large fire in Avista's service territory in 2023 was the Oregon Road Fire, in Elk, Washington, (north of Spokane) which also started on August 18 and tripled in size in one day, growing to nearly 11,000 acres. One hundred twenty six houses and 258 outbuildings were destroyed by this fire. One person was killed. It took almost three weeks to completely contain this fire. Fire officials have stated that the fire was "human-caused, spontaneous combustion" but have not been more specific. Avista did not suffer any damage from this fire and has no facilities located in the fire's boundary.



On August 29, 2023, the last fire of the season impacting our infrastructure occurred near Orofino, Idaho. A 30 mph wind drove the fire across 53 acres, destroying six homes and multiple outbuildings. Avista lost one transmission H-frame structure in this fire. The cause of this fire is under investigation.

2024 Fire Season Outlook



Drought maps courtesy of Drought.gov. Current as of August 2024

Long term in the Northwest, the number, size, and severity of wildfires has increased in recent years, primarily associated with increased temperature and drought, hotter and drier summers (and the associated drier soils and vegetation), earlier spring melting leading to decreased summer water availability, and reduced snowpack. These climate changes lead to additional risk factors such as invasive grasses that provide fuel. Other influences include land use, prior fire suppression practices that led to increased forest density and fuel levels, invasive species that have damaged the health of trees, and the largest factor, human activity, which accounts for 70-90% of wildfires in the Northwest.[59]

As far as the outlook for 2024, scientists are predicting a shift to La Niña for 2024, which can bring dry, hot summer conditions and perhaps a later start to typical fall precipitation, which could mean a stronger and longer wildfire season.[60] Drought.gov predicted stronger areas of drought in Northern Idaho, especially along the Montana border, primarily due to concerns about low snow amounts and possible early snowmelt. They note that warm and dry drought conditions are persisting across both Idaho and Washington with near record low snow water equivalent measurements.[61] The National Weather Service agrees that drought conditions through much of the Northwest will persist. They report that snowpack was below normal across the Northwest, ranging from 56% to 77% of normal, and they also predicted a warm dry summer.[62] In response, the Washington Dept. of Ecology issued a drought emergency for much of Washington state on April 16 (exceptions for Seattle, Tacoma, and Everett). A drought emergency is declared when there is less than 75% of normal water supply and the risk of "undue hardship." They state that there is just not enough water contained in the mountain snow and in area reservoirs to prevent serious impacts on water users and the environment.[63]

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[59] USDA Climate Hub, "Climate Change and Wildfire in Idaho, Oregon, and Washington," Climate Change and Wildfire in Idaho, Oregon, and Washington | USDA Climate Hubs

[60] Kelly Kizer Whitt, "U.S. Wildfire Season Outlook Suggests a Slow Start," EarthSky, April 19, 2024, U.S. wildfire season outlook suggests a slow start (earthsky.org)

[61] NOAA Drought.gov "Snow Drought Current Conditions and Impacts in the West," Snow Drought Current Conditions and Impacts in the West | April 3, 2024 | Drought.gov

[62] National Weather Service National Oceanic and Atmospheric Administration, WA Drought page (weather.gov)

[63] "Statewide Drought Declared Due to Low Snowpack and Dry Forecast," Dept. of Ecology News Release, April 19, 2024, Apr. 16 - Drought Declaration - Washington State Department of Ecology

Challenges & Lessons Learned

Scaling the Vegetation Program to 100%

Scaling the vegetation management risk tree program to complete 100% risk inspection annually continues to be a much bigger and more expensive proposition than originally anticipated. As mentioned earlier, Avista expanded its risk/hazard tree program from a program concurrent with cycle trimming (about 20% of the system annually) to include a 100% risk tree inspection and remediation program upon implementation of the Wildfire Resiliency Plan. Vegetation planners had preliminary forecasts of the volume of dead, dying, and diseased trees that could potentially strike powerlines prior to 2022. However, in 2022 and 2023 we found that the actual number of risk trees was nearly double earlier estimates. Forest health has been made more dire by the historic drought of 2021 but also reflects increased levels of insect activity combined with human activity, all leading to higher levels of tree mortality than expected. Avista removed nearly 19,000 dead, dying, or diseased trees within strike distance of our facilities in 2022 and 22,573 trees in 2023. (Note that this value does not include the over 5,000 trees removed as a result of the Gray Fire.) These are a record levels of tree removals for Avista that we see continuing into the future.

Vegetation Contractor Cost and Availability

This is another area that continues to challenge. In addition to finding more risk trees than anticipated, tree-related labor resources have been an issue. Utilities across the western U.S. are all competing for the same labor resources, leading to large increases in vegetation contract crew costs as shown in the graphic on the right. AiDash, who commissioned this study of utilities across the U.S., notes that 62% of the utility vegetation contractors increased their costs – sometimes substantially – in 2023.[64]

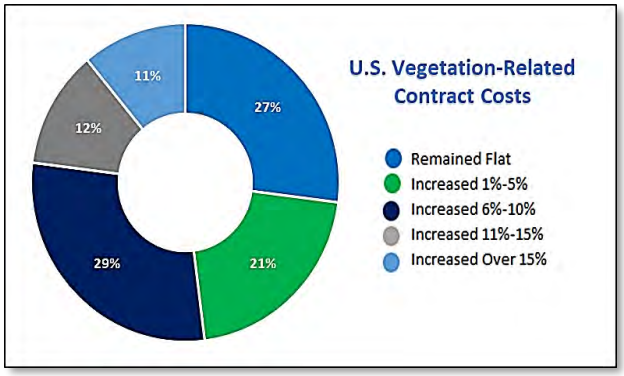


Figure 22. Costs of Vegetation Management Contractors Across the U.S. from 2022 to 2023

Avista's primary vegetation inspection contractor has been repeatedly unable to recruit and retain enough inspectors to complete the work. Given the level of competition for resources, contractors – if we are able to secure them - are able to command 60-hour work weeks, lodging, and per diem allowances, unexpectedly increasing costs for this critical program. As an example of the issues around acquiring an adequate level of crews, the Gray Fire led to Avista contract crews removing over 5,000 risk trees related to this fire over the short span of four weeks. They removed trees that had been damaged by the blaze and were at risk of falling during future weather events. This single event led to approximately 37 crew weeks lost to this extensive risk tree response, creating complications in getting planned vegetation work back on schedule. As mentioned previously, impacts from forest health (drought, insects, disease, weather, and fire) continue to create spikes in risk trees on the system, and

[64] Source of graphic: "2023 State of Vegetation Management, Survey Findings," AiDash, 2023, SOVM-2023-Survey-eBook-Final.pdf (aidash.com)

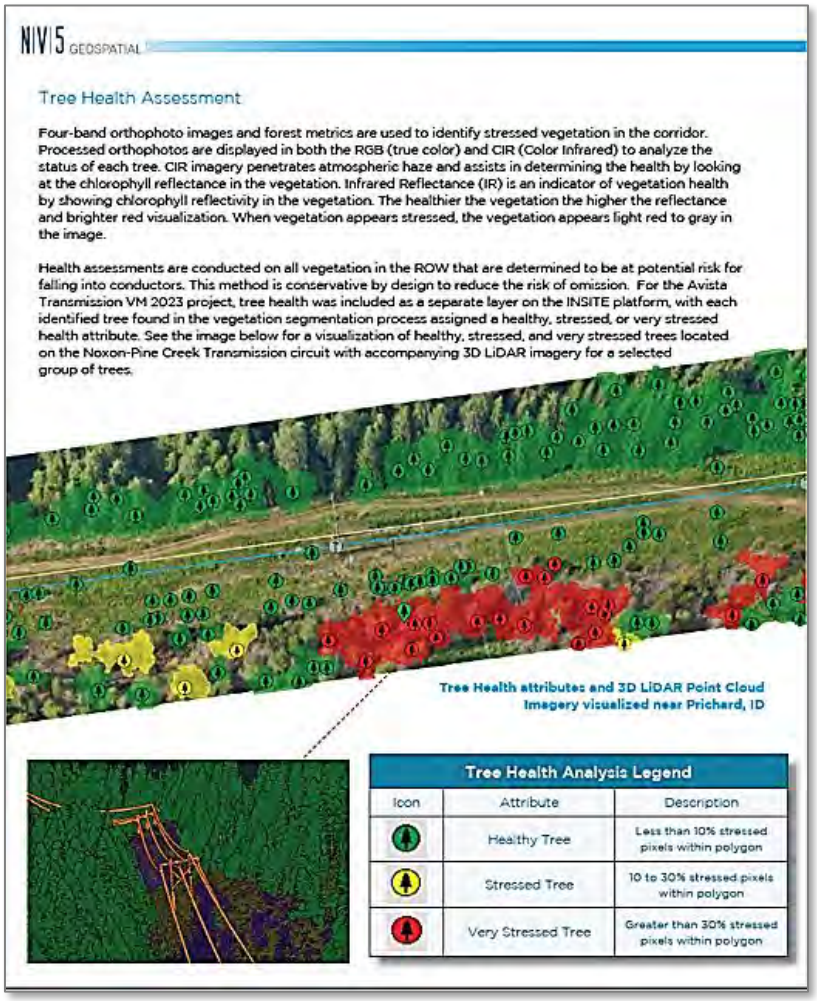
this necessitates the addition of labor accordingly, which will likely continue to elevate costs into the future.

Customer Access for Vegetation Work

Another issue that is cropping up is permitting and acquiring customer permission to access trees for removal. The Vegetation Team is developing strategies to deal with these barriers, focusing on the fact that it is in everyone's best interests to remove danger trees for public safety, protection of customer reliability, and prevention of wildfires, but these types of issues create unanticipated delays and can also increase costs. We have experienced times when it has taken several years to secure permission to remove risk trees. The Vegetation team is continually working on strategies to mitigate this issue.

Digital Data Provider Issues

In 2023 we completed 6,466 miles of satellite inspections on the distribution system. However, the transmission LiDAR inspections did not meet the target of 2,086 miles. We were only able to capture 1,679 miles within budget. Our original vendor's delivery and billing was so late that some of the work they performed for us in 2022 was not billed until 2023, throwing off our 2023 inspection budget and causing us to not meet our objectives. In response, we switched to a new vendor for 2024 and are expecting that this change will provide us with more reliability.



Sample of an Avista Digital Data Report

Learning and Incorporating Digital Inspection Data

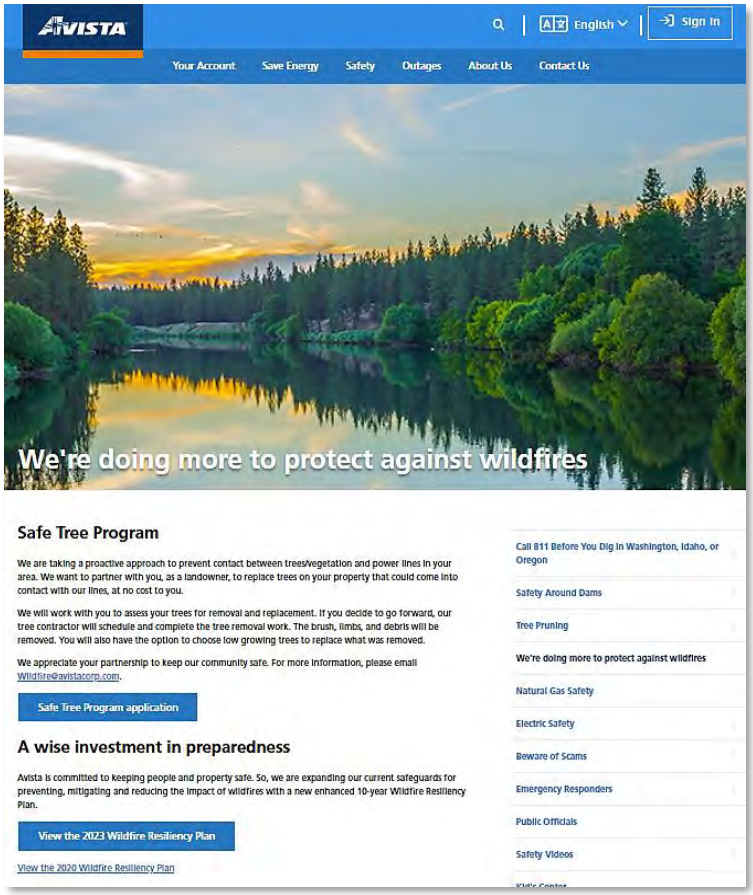
As mentioned earlier, Avista is also beginning to incorporate remotely sensed LiDAR and satellite imagery data into the vegetation management programs. These are new technologies to the Company and will need more experience and refinement before they truly begin replacing boots-on-the-ground labor resources. However, after our initial experience in 100% inspection and subsequent mitigation, this should become more of a known quantity, making it easier to right size the labor required to complete this work on an annual basis.

Continuous Improvement

Avista's Wildfire Resiliency Plan is built upon the concept of Plan-Do-Check-Adjust. We are continually evaluating the efficacy of our programs and adjusting them as we see opportunities for improvement. We have made some significant improvements since the Plan began. Some of these improvements are summarized below.

Communications

As described previously, we have significantly increased, expanded, and enhanced our wildfire-related customer communications over the years of our Plan implementation, specifically with customer engagement activities such as the town hall meetings and through additional communication materials and strategies (including expanding beyond English-alone materials). We are now conducting direct outreach in all 16 counties within our service territory, including outreach to hundreds of community leaders, emergency management professionals, and first responders. We continue to search for meaningful ways to engage with customers across our service territory to improve their safety. As an example, having a survey done of the languages spoken across the service territory in order to provide materials they can read and understand. We are reaching out to more interested parties as we identify them, including city and town councils, county commissioners, tribal leaders, and medical service providers for example, as well as employing more media outreach. Each year of engagement with our customers and partners through all of our various channels provides additional insights into who our stakeholders are and their needs and interests so we can more effectively reach them. As mentioned previously, we have significantly expanded our outreach, including non-English and for those who are hearing impaired.



Avista's Wildfire Website for Customers

Outreach to Vulnerable Customers

We have developed an additional focus on identifying and reaching our most vulnerable customers, including the ability to quickly identify and contact critical and life support customers to warn them of the potential for elevated protection settings or a Public Safety Power Shutoff. In 2023 we added a life support customer flag to all the

feeder lists, making it possible for Avista to quickly identify these special needs customers and proactively call them to make sure they are aware of potential outages due to the weather as well as potential wildfire threat and options for support. Also, in 2023 Avista launched an employee team of volunteer Community Response Ambassadors who trained with the Red Cross to provide help and support to our most vulnerable customers, especially during outage events. This year Avista also developed a Community Response for Vulnerable Populations During Outages (CRVP) Stakeholder Group which includes nearly 40 representatives from organizations and agencies that serve vulnerable populations (as well as municipal departments and emergency managers) to inform them of our Wildfire and PSPS plans and strategies and to gather information/feedback on how best to reach our vulnerable customers with this information. We are also in the process of providing some medical equipment-dependent customers with battery backup power systems to protect them in case of outages, specifically in relation to Public Safety Power Shutoffs, which can entail extended outage duration. In all of our outreach efforts we encourage customers to update their contact information with Avista (and medical status if applicable) to ensure that we can reach them.

Identifying Critical Service Providers

As mentioned above, the Company has made a significant effort to identify and work with customers who provide services critical to societal well-being including hospitals, specialty care centers, dispatch centers, police and fire departments, communications providers, water systems, and more to help prioritize re-energizing their service. Some of these entities are key to responding to and mitigating outages, for example communications required to work with Avista crews in the field performing the work, the power required to open the bay doors at a fire station, or energy needed to operate water pumps to fight fires. Knowing the location and needs of these providers will reduce the impacts of an outage event and increase levels of public safety.

WUI Map Refinement

Over the past two years we have significantly improved the inputs to our WUI map to define risk areas more clearly and to specifically include structural and human impact. This includes incorporating data from the USDA with the Housing Unit Impact (Wildfire Risk to Communities) dataset that integrates wildfire likelihood and intensity with generalized consequences to homes. This data includes the exposure of each home based on adjacent vegetation, the probability of a wildfire burning at a specific location, and the potential consequences of a wildfire at a given location. This very detailed data helps Avista identify very specific risk areas related to our customers and their location within the service

territory. We have also incorporated and updated the USDA Wildfire Hazard Potential map that quantifies the relative potential for wildfire that could be difficult to control. This data helps prioritize where fuel treatments might be beneficial.[65] These datasets are updated in Avista's WUI map as new information becomes available. The information is free and publicly available.

We are also working with other utilities to create a fire risk map for all western states, perhaps incorporating the static fire risk data as a layer in Esri's Living Atlas of the World. Avista is the leader in this effort, which may enable all of the participating utilities to better define and mitigate wildfire risk.

Fire Weather Dashboard Upgrades

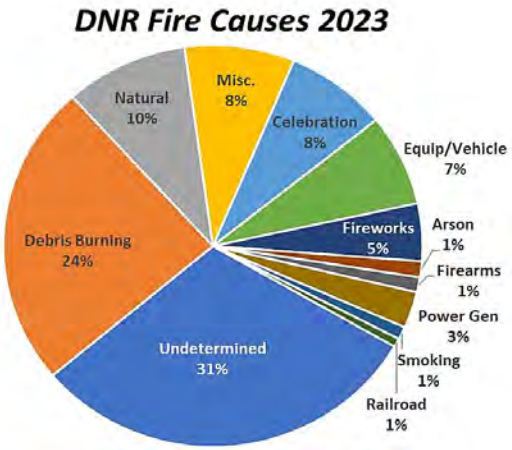


Figure 23. Washington Dept. of Natural Resources Fire Causes 2023

Fires ignitions from all sources including natural, human-caused, and utility-caused fires seem to randomly occur within Avista's service territory. This appears to be confirmed by the Washington Dept. of Natural Resources list of fire causes in Washington State in 2023, as shown in pie chart. However, fires of severe consequence and size have regularly occurred in areas that Avista has modeled as being at high risk, indicating the accuracy of our Dashboard. For example, both of the large fires of consequence in 2023 within Avista's service territory, in Medical Lake and Elk, Washington, occurred in areas that Avista's Fire Weather Dashboard modeled as high risk at the time of the fires, and the Dashboard also predicted fires of 10,000 acres, which is what occurred. These trends indicate that focusing mitigations in areas we have identified as high fire risk areas should be effective in decreasing utility-related fires of severe consequence. By directing our actions in high-risk areas, we are more efficiently dealing with causal factors that could result in severe impacts to our customers and communities.

We are still working on a comprehensive comparison of actual fire events, but preliminary findings suggest good correlation between the dynamic forecasted risk and the actual events that took place. We have done some initial work to assess the risk forecast versus the outcomes of certain events and see strong correlation with the areas where we acted based on our forecasted risk modeling and actual large impact fires. The data we are seeing is well within the normal forecast error for estimating the average worst case fire sizes. The two large fires in 2023 mentioned above were started miles from any Avista facility but were helpful data points in ensuring that where we acted (initiated Fire Safety Mode operation) and actual fire size show good correlation with actual outcomes.

Avista continues to enhance its fire risk models as we gain experience and incorporate feedback from peers including fire agencies and weather forecasting professionals. We have added additional

[65] These datasets are available as raster GIS data, tabular summaries by state, county, and community, or in a white paper. Located here: Download - Wildfire Risk to Communities

modeling inputs, capability, and refinement to our Fire Weather Dashboard to advance our ability to forecast and identify risk. This is an ongoing process as we learn from each fire season through analysis of actual events and back-casting.

Wildfire Emergency Operating Procedures

In 2022 we developed a robust Emergency Operating Procedure related to Wildfire response as described previously. In 2023 and 2024 we tested it in realistic tabletop exercises that included external partners such as the Red Cross, Washington Dept. of Natural Resources, and Idaho Dept. of Lands. We plan to host exercises with external partners and internal stakeholders each year prior to fire season to hone skillsets, develop comfort with each others practices and "language," as well as develop and refine strategies for customer outreach, crew placement, damage assessment, mutual assistance requests, and planned restoration efforts. This work will evolve and improve with experience. For example, shortly after the 2023 practice exercise, Avista was invited to participate with the Gray Fire Incident Command, ensuring that fire and utility crews worked safely together in the field. During this event Avista de-energized specific powerlines where firefighters were working and Fire Command permitted Avista work crews to come into the area when it was safe to ensure that customers had power and gas service when they returned home after the fire.

Fire Safety Mode Operations

In 2024 we further refined and enhanced Fire Safety Mode operations to provide a comprehensive scale of risk reduction based upon actual conditions. We are utilizing actual experience, such as the 2022 and 2023 fire seasons, to refine and improve these efforts. After experiencing use of Fire Safety Mode (FSM) over the past couple of fire seasons, in 2024 we chose to modify the trigger levels for modifying protection settings. Previously we had five FSM settings:

1. Normal Operations (at trigger points 0 to 3)
2. Base Fire Safety Mode (basically putting the circuits "on alert" during fire season with trigger points set a 3 to 6.4)
3. Elevated FSM (with trigger points between 6.5 and 6.9)
4. Extreme FSM (trigger points 7 to 7.5)
5. Potential De-energization/Public Safety Power Shutoff (above 7.5)

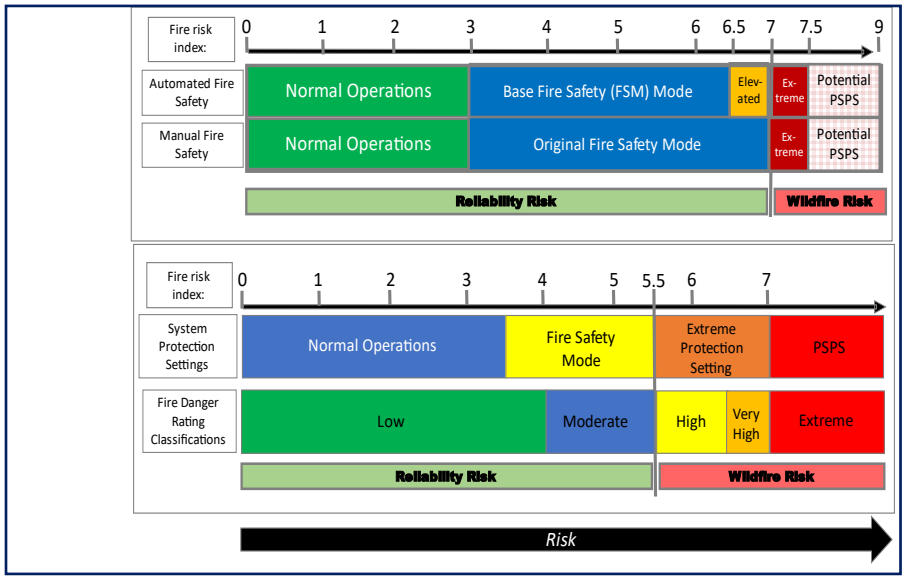


Figure 24. Fire Safety Mode Comparison: 2020-2023 vs. 2024

With the new version of FSM, the Elevated set points have been eliminated, so trigger points are:

1. Normal Operations are typically (approximately) from 0 to 3.4
2. Base Fire Safety Mode (trigger points 3.5 to 5.4)
3. Extreme (trigger points from 5.5 to 6.9)
4. PSPS starting at 7.0

These changes (including the original FSM concept) are highlighted in Figure 24. The new strategy utilizes trigger points reported by the Dashboard as well as expected accuracy of the weather forecasts, potential impacts to customers, and other factors to determine fire risk levels. We have also added the U.S. Forest Service Severe Fire Danger Index data to the Dashboard to further refine its analytics, as mentioned above. We believe that these adjustments will enhance our ability to protect our customers during high fire risk weather events by reducing the point at which our protection settings will be activated. After 2024, as we experience our first wildfire season with the addition of Public Safety Power Shutoffs in the strategy, these levels may again be adjusted based on experience.

Public Safety Power Shutoffs

We now have a full plan and strategy around Public Safety Power Shutoff events including new trigger points (as described above), an online live outage map, customer resource center options, provision of battery backup systems for medically vulnerable customers in high risk areas, a specialty customer service team to reach out and support our most vulnerable customers, and additional efforts to mitigate impacts on critical societal service providers. With our PSPS Plan, Avista will consider de-energizing distribution circuits in order to protect our customers and employees based on a combination of critical risk conditions at specific locations with a consequential risk of ignition and the potential for significant fire spread and community impact. This is the first year in which we have a PSPS plan, and as we gain experience in this area, this plan will be improved and refined.

We are learning through this evolution is that the biggest concerns of our public safety partners during a PSPS event are access to water and concern for medically vulnerable individuals in the event of a summertime power outage. Many municipalities and agencies (especially those in rural areas) do not have back-up generation for critical water and wastewater treatment facilities, which is high cause for concern and one we are working to address. We have also learned that although each individual county has its own emergency management system, not all are as robust as Spokane County so there is room for improvement in that area as well.

Undergrounding Distribution Conductor

Enhanced Grid Hardening/Undergrounding

Avista has had a strong grid hardening program in place for many years, focused on improvements made to overhead distribution to mitigate wildfire risk and increase reliability. These efforts reduce the risk of outages and equipment failures that could potentially lead to wildfire

during high fire risk periods. Avista sees the value in enhancing our grid hardening and risk reduction efforts through undergrounding overhead facilities in select, high risk areas. Avista is working to identify areas where large fire growth is coupled with proximity to communities which are vulnerable to total loss in the event of a wildfire. These areas will be risk-ranked and prioritized for sectional undergrounding of existing overhead conductor. This strategy will reduce wildfire risk and increase safety to the communities facing the highest risk from Avista's distribution electric facilities. It will also allow Avista to mitigate the most risk for the least cost related to conversion to underground by providing resources to efficiently eliminate risk at a surgical rather than a system-wide level. In 2025 we will begin a cost feasibility study on this strategy, and we anticipate that experience that will guide this work (and the associated expenditures required) going forward.

Working Effectively with Fire Professionals

Cross Training with Firefighters

Avista has always worked to create and maintain effective relationships with fire professionals, but through the Wildfire Plan have greatly expanded our engagement. We cross-train with fire professionals at the start of each fire season to prepare for events and have participated with them in their Incident Command Structure in actual fire situations. Fire professionals and emergency management personnel also participate with us in events such as our Emergency Operations exercises and telephone town hall meetings, and in our Public Safety Power Shutoff preparations and planning. Our engagement with these professionals, the joint understanding this promotes, and the ability to learn and understand each side's strategies, work processes, and terminology has been invaluable in actual fire situations. We continue to seek out ways to engage and partner with first responders.

Expedited Response

Firefighters put out ground fire caused by a pole fire.

As part of working effectively with fire professionals, Avista engaged with first responders including the Washington Dept. of Natural Resources and the Idaho Dept. of Lands to create Expedited Response Agreements. Over the past couple years, we have expanded these Expedited Response Agreements with firefighting agencies to cover nearly 100% of our service territory. The goal of these agreements is to get a quick response to the site of a transmission-level fault during fire season. If the fault causes a spark event and a fire results, trained fire fighters and apparatus respond and are able to engage the fire quickly, which is key to keeping fires smaller. In 2023 we used our expedited response agreements 4 times in Washington State and 2 times in Idaho. To date, there have been no fires found in these responses. The agreements have no expiration date, and there is no cost associated with the responses. This cost-free program is an excellent addition to our wildfire risk reduction strategies and plays a role in reducing fire risk – and spread – across our service territory.

Fuel Reduction Partnerships

Fuel Reduction Efforts Before & After

Fuel reduction measures reduce the fuels that allow fires to burn hotter, faster, and with higher flame lengths as well as eliminating ladder fuels that allow fires to move into treetops, where they are much harder to control.[66] A recent major joint study undertaken by the U.S. Forest Service, The Nature Conservancy, and the University of Montana found that this type of proactive forest management adds significant value by changing how fires behave and reducing their severity.[67] In 2022, Avista partnered with the Washington State Dept. of Natural Resources (DNR) to assist our customers in completing hazardous fuel reduction treatments on their property. As mentioned earlier, in 2023 the Company expanded this effort to include engagement with the Idaho Dept. of Lands, the U.S. Forest Service, the Nez Perce Tribe, and local and regional fire agencies across our service territory. This work reduces the risk of fire starts and fire spreading across our service territory by supporting key partners with financial assistance in removing fuel on their properties located near our facilities or within our service territory.

Safe Tree Program

Our Safe Tree Program was started in Kellogg, Idaho, in 2022 and the results were overwhelmingly favorable. As a result, we extended this program in WUI 2 and WUI 3 areas across the service territory. It works with customers directly to remove risk trees on their property. We also added a platform to the Company's website allowing customers to request Safe Tree work directly.[68] The "Safe Tree Customer Service Portal"[69] for this service is now available on the MyAvista website, allowing customers to communicate directly with arborists and schedule this work when it is convenient for them. The website takes customers through a series of questions to ensure that they are qualified for this free service. They are then scheduled in the order in which their requests are received. We see a real win-win with this program as we protect our customers from a potential hazard situation, reduce reliability risk, and provide offsets to future vegetation management work on their trees and the associated costs.

Strategizing with Peers

We continue to work with and learn from our utility peers and join with them to strategize and develop best practices. We are also partnering with them in attempting to acquire federal grant funding, on

[66] For more information on the benefits of fuel reduction, see a fuel reduction treatment analysis by the US Forest Service at An evaluation of the Forest Service Hazardous Fuels Treatment Program—Are we treating enough to promote resiliency or reduce hazard? | US Forest Service Research and Development (usda.gov)

[67] "Comprehensive Science Review Shows Fuel Treatments Reduce Future Wildfire Severity," The Nature Conservancy, June 24, 2024, Comprehensive Science Review Shows Fuel Treatments Reduce Future (nature.org)

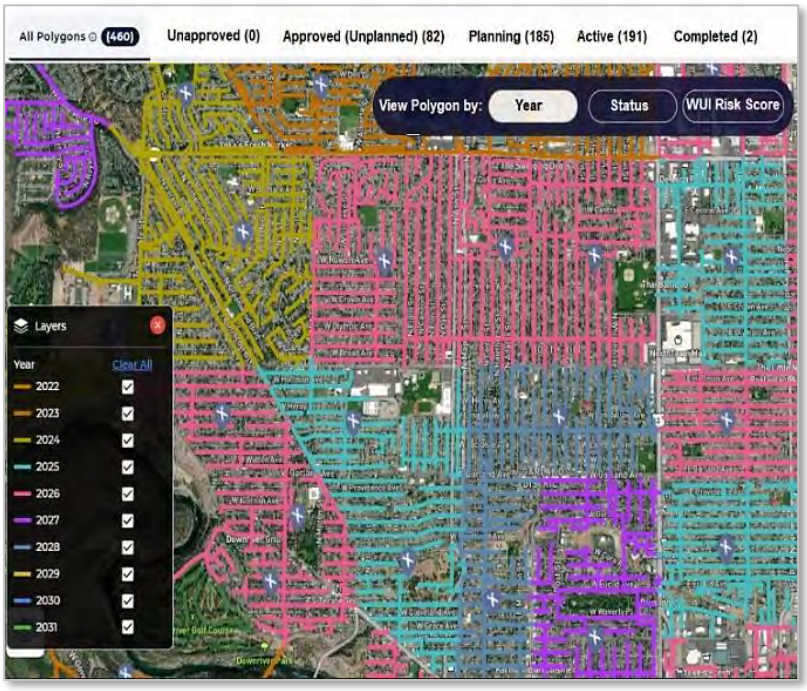
[68] Note that only eligible customers are allowed to request this service. The portal can be found at: Safe Tree Program (myavista.com)

[69] https://www.myavista.com/safety/were-doing-more-to-protect-against-wildfires or email Wildfire@avistacorp.com

regional and national wildfire interest forums, directly through sharing information, ideas, and strategies, and in any other arena possible. For example, Avista has visited San Diego Gas & Electric and worked with the wildfire experts there on strategies and proven methodologies. San Diego has been a mentor for Avista since we began developing our Plan, and we are continuing this engagement, as they are considered a utility industry leader in wildfire practices. We also joined with our Northwest peers in working on the Washington Legislature's mandated wildfire plan in an attempt to ensure that it provides comprehensive, useful information that could be applied consistently to all of us. We regularly invite all of our connected utilities to tabletop exercises and have offered to have joint discussions with all who would like to engage further. This sharing will continue to be a benefit.

Expanded Use of Digital Data

Digital data is both a learning experience and a source of continuous improvement. In acquiring digital data on both the transmission and distributions systems for identifying risk trees, we are becoming familiar with the large amount of data these tools provide and how to use all of this information to focus our vegetation efforts in areas that should provide the most positive impact and risk reduction. This data is detailed and very comprehensive and we are finding new uses for it all the time. For example, the analytics provided by LiDAR analysis allow our System Forester to focus tree work on the transmission system where it will provide the most value and protection, that is, where the most risk trees are present and using it to help us differentiate between high canopy and low vegetation areas for transmission resiliency planning (steel replacement versus fire mesh wrap as mentioned above). We are using satellite data to help refine our WUI maps by identifying vegetation near our facilities, pinpointing areas where vegetation-related risk is highest. There are many uses for this detailed information.



Example screenshot of digital data results.

We believe that the over-time analysis provided by the LiDAR and satellite tools will change the way our Vegetation Management programs are managed. The analysis provided is invaluable in directing planners and line clearing crews to specific locations on the system to perform maintenance and mitigate risk trees rather than the traditional method of working on an entire circuit or polygon. This data gives us the ability to send crews to the areas of greatest need with accuracy. Both of these tools essentially learn Avista's system and the vegetation around our lines to identify issues and growth rates over time, and both allow planning work in a more precise and predictable way, streamlining our vegetation management programs and helping to maximize their value.

Prioritizing Steel Grid Hardening

We have refined the Transmission Steel Replacement Program to include not only WUI map designations, but also the fire history and number of occurrences near each of our lines. Avista layered the fire maps associated with our service territory over our transmission system. This allowed us to see the historic fires that have occurred within strike distance of our transmission lines as well as acquire a count of the frequency of the fires near each line, identifying lines or segments most likely to experience fire issues based on actual events, helping inform the level of risk.

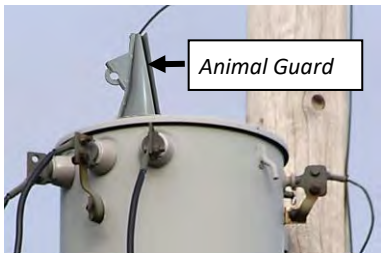
Avista Steel Transmission Pole Replacement Work

To add another dimension to this data, we layered a vegetation dataset over our transmission line maps to indicate whether the lines are in high tree level or forested areas versus low-growth and/or developed areas. This segregation is significant from a cost perspective, as it allows us to separate our mitigation efforts into poles in high canopy/forested areas which are candidates for steel replacement, and those in low vegetation areas which may be adequately protected with fire resistant mesh. The cost for replacement of a wood pole with steel is several thousand dollars per pole versus a few hundred dollars for installing mesh wrap on a pole. Thus, knowing where the poles are physically located and the geography of the area, has a significant budget impact.

Avista Wildfire Resiliency Plan Glossary of Terms

Access and Functional Needs (AFN): Customers who are especially vulnerable, such as those who are disabled, dependent on electrically operated medical equipment, who are transportation disadvantaged, etc.

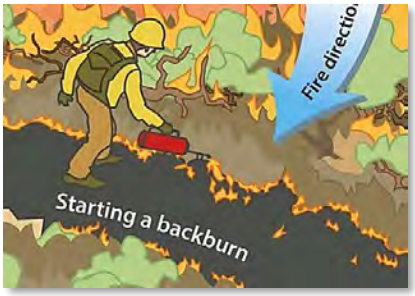
ADMS: Advanced Distribution Management System. This is the replacement system for Avista's current inhouse-created Outage Management System (OMS) designed to manage and track all planned and unplanned outages that affect the grid. It is an enterprise level system. Wildfire is among many other Company users of this system.



Animal Guards: Parts installed to act as a barrier to stop animals such as squirrels and birds from coming into contact with energized power equipment.

Asset: Electric lines, structures, equipment, or supporting hardware in the service of providing electric power to customers.

At-Risk Species: Species of vegetation that have an elevated risk of: (1) coming into contact with powerlines, (2) causing an outage or ignition, and/or (3) are easily ignitable and within close proximity to potential arcing, sparks and/or other utility equipment thermal failures. "At-risk species" are a function of species-specific characteristics including growth rate, failure rate of limbs, trunk, and/or roots (as compared to other species), height at maturity, flammability, vulnerability to disease or insects, etc.



Backburn/Backfire: A fire set along the inner edge of a fire line to consume the fuel in the path of a wildfire and/or change the direction of force of the fire to help get it under control.

Bail Connector: A protection device installed on hot taps to hold the conductor if the hot tap fails, preventing live conductor from falling to the ground and potentially starting a fire.

Base Level Fire Safety Mode (FSM): This is Avista's current "normal" Fire Safety Mode protection scheme that has the goal of balancing reliability and fire risk potential. In this configuration, circuit breakers will provide a fast trip to clear temporary fault conditions such as animal contact, small tree branch, or lightning disturbance with a short pause before a reclose attempt. If the circuit remains faulted, such as wire-down or a tree in the line, the nearest upstream fuse will operate and isolate the faulted line section. This reduces the spark-ignition potential associated with temporary faults and slightly increases the level for permanent faults. When protection devices are operating in Base Level Fire Safety mode, only the

time delay overcurrent element is active, meaning both the instantaneous tripping and automatic reclosing are disabled.

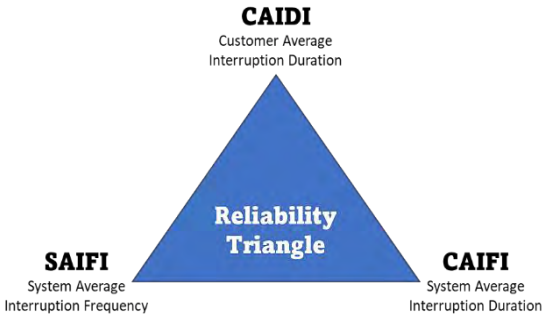
Baseline: A measure, typically of the current state or condition, which establishes a starting point for comparison with measures from other states or conditions.

Brush: Refers to vegetation dominated by shrubby, woody plants, or low growing trees.

Bulk-Power System: This includes all facilities and control systems necessary for operating the interconnected electric transmission network (or any part of it) as well as the electric energy from generation facilities needed to maintain transmission system reliability. This includes facilities that, if disrupted, would impact the grid beyond just one location or utility.

Burning Index: An estimate of the potential difficulty of fire containment, judged by the flame length at the most rapidly spreading portion of a fire's perimeter.

CAIDI: CAIDI refers to "Customer Average Interruption Duration Index." It is calculated as total minutes of customer interruption divided by the total number of customers interrupted. CAIDI describes the average time required to restore service. It only includes customers who actually experienced an interruption.



CAIFI: CAIFI refers to "Customer Average Interruption Frequency Index." It is calculated by dividing the number of interruptions by the number of customers experiencing interruptions. It describes how many interruptions each impacted customer experiences.

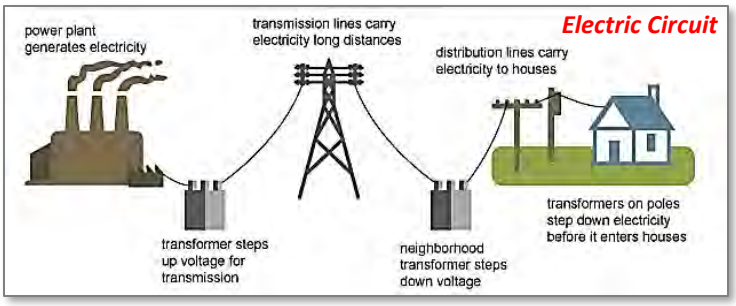
CARES: Customer Assistance Referral and Evaluation Services is a specialized team within Avista's customer contact center that supports our most vulnerable customers, assisting with resources such as food, housing, and medical care.

Cascading Outage: The uncontrolled successive loss of system elements triggered by an incident at any location that can cause a cascading outage that rolls across several sections or the entire interconnection. Usually there is one or more initiating events, such as heavy loading. For example, a transmission line experiencing high temperatures and sagging into a tree, causing the line to fail, which shifts the load it was carrying to other interconnected lines, overloading them, and triggering cascading events in widespread electric service interruption that reaches a point where it cannot be stopped from spreading beyond the area in which it started**.**

CEIP / Clean Energy Implementation Plan: Washington State's RCW 19.405, the Clean Energy Transformation Act (CETA).[70] This Act requires all retail sales of electricity to Washington customers

[70] RCW 19.405.040: Greenhouse gas neutrality—Responsibilities for electric utilities—Energy transformation project criteria—Penalties. Chapter 19.405

be greenhouse gas neutral by January 1, 2030. Avista's CEIP work impacts Wildfire as the CEIP team works to communicate better with customers, including on wildfire preparation, Fire Safety Mode, and Public Safety Power Shutoff impacts.

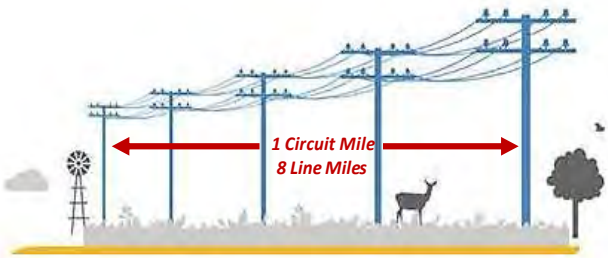


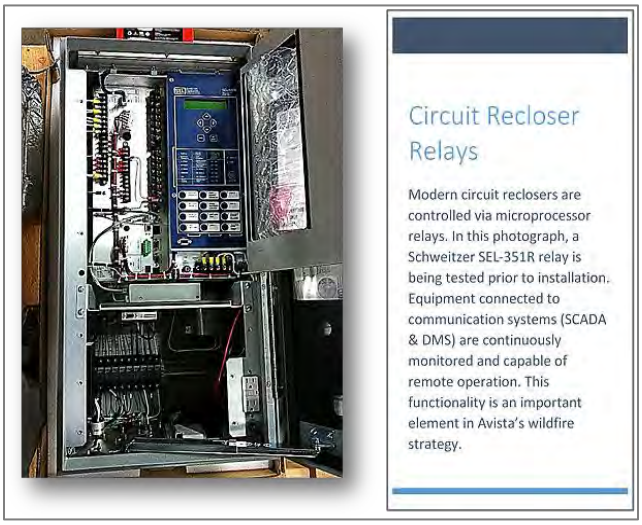
CEMI: Stands for "Customers Experiencing Multiple Interruptions" which indicates the ratio of customers experiencing 1 or more sustained interruptions as a percent of the total number of customers served. This is a customer-centric measurement that helps identify "worst served" customers.

Circuit: The path for transmitting electric current from the device that creates the current (generator) across all associated equipment (such as the wire or conductor, switches, transformers, breakers, etc.) to the end user, as shown in the graphic on the right.

Circuit Breaker

Circuit Breaker: An essential device usually located in a substation for interrupting excessive current flow typically initiated by a fault or heavy loading. Circuit breakers cut the power until someone can fix the problem. In addition, using a circuit breaker, interruption and reclosing times can be adjusted to keep temporary faults from resulting in a sustained outage. The circuit breaker can sense whether the fault is transient and choose to keep the electricity flowing. If it is a serious fault that must be addressed, the breaker halts the flow.



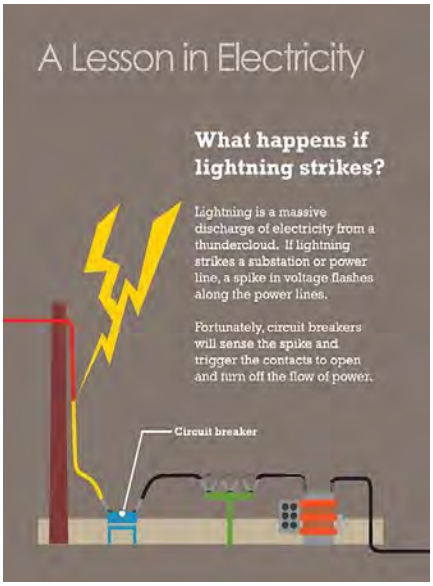


Circuit Mile: The total length in miles of separate circuits regardless of the number of conductors used per circuit.

Circuit Recloser: Circuit reclosers are similar to household breakers. They shut off the power when trouble has been detected then automatically test the line to see if the trouble has been removed. If the problem is only temporary, the recloser automatically resets itself and restores electrical power. Adding communications to circuit reclosers

RCW: WASHINGTON CLEAN ENERGY TRANSFORMATION ACT

provides monitoring and control functionality, including the ability to operate the device remotely. Also, by placing circuit reclosers at strategic locations, Avista Distribution Operations can re-task or control those devices during periods of elevated fire danger to operate in fire protection mode rather than in their typical reliability mode. In other words, if there is a high-risk situation, the reclosers can be set to not automatically reclose.



Community Response Ambassadors: An Avista employee team of volunteers who train with the Red Cross to provide help and support to our most vulnerable customers during outage events.

Complex: As related to fire, this is when two or more individual fire incidents located in the same general area are assigned to a single incident commander or unified fire command and typically given one name that includes the word "Complex" to indicate that the fire has individual components.

Condition-Based: Maintenance based on the way equipment is performing, its age, number of times it was actuated, and/or other factors that indicate the actual condition of an asset.

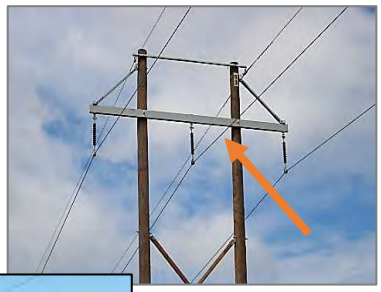
Conductor: This is the wires or lines suspend ed from towers or poles that help electricity to pass from one location to another, generally made of aluminum reinforced with steel or composite materials, though some low and medium voltage conductor is made of copper.

Consumer Average Interruption Duration Index: CAIDI is the average duration of an interruption, calculated based on the total number of sustained (over five minutes in length) interruptions in a year, considered the average restoration time over the course of a year across the entire utility.

Control Line: A completed fuel break around the fire. This break may include natural barriers, manually created barriers, and/or mechanically constructed fire lines in an attempt to control the fire.

Cooperating Agency/Partner: For Avista, this includes external fire professionals, agencies that provide customer assistance, law enforcement, the Red Cross, emergency management agencies, state and local governments, tribes, etc. that the Company works with in planning and implementing our Wildfire Plan as well as in actual fire or fire threat situations.

Critical Facilities/Infrastructure: Referring to outage events, these are elements critical to public safety such as emergency services, schools, jails/prisons, healthcare and medical services, water, waste and wastewater systems, communications, some manufacturing, and transportation. Referring to the utility, these are elements of the electrical grid that are required in order to provide customer service as well as human health and safety. Critical infrastructure is a priority for restoration of service.



Above: Transmission crossarm
Left: Distribution crossarm

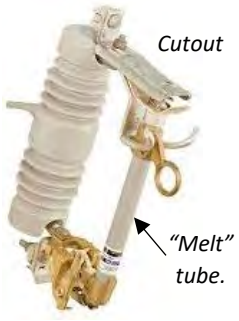
Crossarm: A crossarm is a piece of hardware providing an attachment point for insulators to support the loading of overhead conductors. The crossarm is typically made of wood, steel, or fiberglass.

Crowning: A crown fire is defined as a fire that has ascended from the ground into the forest canopy and is spreading through it, usually in conjunction with the surface fuels. When a forest fire spreads from treetop to treetop it often begins advancing at great speed, well in advance of the fire on the ground, and becomes extremely dangerous and difficult to control.

Customer Choice Right Tree Right Place Program: This has been renamed the "Safe Tree Program." It is a partnership with private landowners to remove trees located on private property that are likely to come into contact with power lines. This program reduces the chances of these trees contacting powerlines and creating fire potential, danger to the customer, or loss of reliability.

Customer Hours: In reference to power outages, this is the total number of customers multiplied by the average number of hours of power outages.

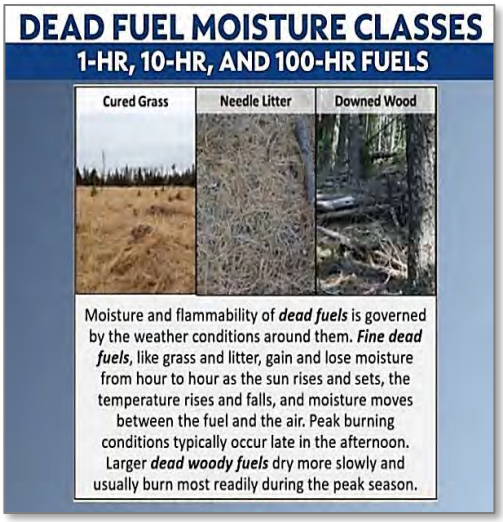
Cutout: A "C" shaped piece of insulated hardware with a tubular insulator that is designed to melt or break when the circuit going through it exceeds its rated value. This serves to disconnect one section of the line from another section of the line for maintenance or repair or to prevent an outage from spreading.



A sick and damaged "danger" tree located adjacent to power lines.

Cycle Trimming: At Avista, the routine vegetation management program divides the system into five segments which are patrolled on a rotating five-year basis, meaning about 20% of the system is inspected and subject to trimming each year. The Wildfire program added a 100% risk tree inspection to non-urban areas of the distribution system in addition to the routine cycle trimming to more rapidly identify and address vegetation issues that may lead to fire.

Danger Tree: At Avista, a danger or risk tree is a tree with the potential of imminent fall-in hazard to energized facilities. This is a

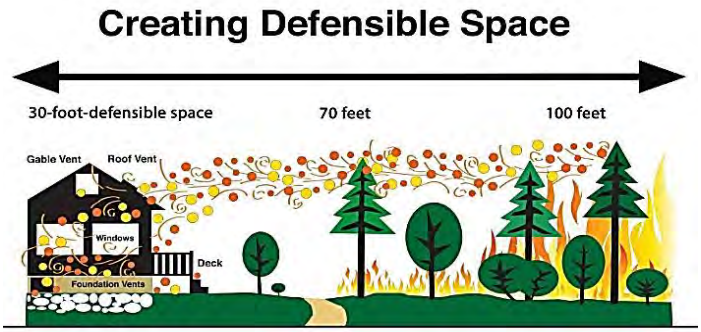


tree within or adjacent to the utility right-of-way that is dead, diseased, or dying or has a structural defect or lean that makes it likely to fail in whole or in part and contact electrical equipment or facilities.

Dead Fuels: Fuels with no living tissue, so moisture content is governed almost entirely by atmospheric moisture (relative humidity and precipitation).

Dead Fuel Moisture: Moisture content of dead vegetation, which responds to current environmental conditions. This is critical in determining fire risk potential.

Defensible Space: An area, either naturally or human-made, where material capable of causing a fire to spread has been treated, cleared, reduced, or changed to act as a barrier between an advancing wildland fire and the loss of life, property, or resources. In practice, "defensible space" is often defined as a buffer, an area a minimum of 30 feet around a structure that is cleared of flammable brush or vegetation. In forested areas, this buffer area increases to 100 feet of space.



Digital Data Collection: At Avista, this means collecting LiDAR and satellite images of our transmission and distribution systems in order to help pinpoint vegetation issues and other encroachments, which allows us to plan vegetation field work and mitigate problematic vegetation more accurately.

Dispatcher: A person who receives reports of discovery and status of outages, confirms their locations, and takes action to provide people and equipment likely to be needed, sending them to the proper place with all available information in order to make repairs or manage a situation effectively.

Distribution (DX): Electric facilities that have a voltage that is 60 kV or lower.

Distribution Automation: Avista's Wildfire Program to aid in implementing wildfire protection measures. This program will fund upgrading or replacing 240 devices (including about 50 midline and substation breakers) to enable dynamic protection settings, allowing these devices to be monitored and operated remotely and automatically during fire season.

Distribution Grid Hardening: Avista's Distribution Grid Hardening Program targets portions of circuits located in high-risk fire areas with the goal of reducing spark ignition outages. This work includes replacing wood crossarms with fiberglass units, replacing end-of-life wood poles, changing out

obsolete small copper wire with modern steel reinforced aluminum wire, installing wildlife guards to reduce animal related events, eliminating open wire secondary districts, installing wedge connected stirrups to provide protection and additional strength at hot tap connection points, and undergrounding conductor when cost-justified.

Distribution Infrastructure Upgrades: In Avista's Wildfire Plan, this means making improvements to our distribution system including adding wildlife guards, replacing wood crossarms with fiberglass, replacing wood poles with steel in specific locations, and replacing replaced obsolete equipment that has known spark potential. These changes are designed to increase resiliency and reduce the potential for sparks. Also called Distribution Grid Hardening.


Drip Torch

Drip Torch: A hand-held device for igniting fires by dripping flaming liquid fuel on the materials to be burned; consists of a fuel fount, burner arm and igniter. Fuel used is generally a mixture of diesel and gasoline. This tool is used to create back burns to help control a fire's spread.

Drought Index: A number representing net effect of evaporation, transpiration, and precipitation in producing cumulative moisture depletion in the soil. Studies done by NASA found a strong correlation between dry soil and an increase in fires.[71] Dry soil can help create favorable ignition conditions, especially in regard to its impacts on the health of vegetation.

Original Dry Land Mode Levels

Dry Land Mode (DLM): Renamed Fire Safety Mode, this is a non-reclosing distribution protection scheme used during summer fire season (typically July and August) on circuits determined to be at risk for fire activity based on a variety of factors including vegetation, past events, and age of equipment. This strategy modifies the protection settings of equipment in the field in response to fire threat conditions as a way to reduce the chance of utility equipment creating a spark.

Easement: An agreed-upon use of land by someone other than the landowner. An easement allows building on someone else's property versus a right-of-way which only allows access to travel across someone else's property.

Elevated Fire Safety Mode : Circuits whose fire risk exceeds nominal levels are modified to increase protection levels. This is similar to Base DLM/FSM but instead of a time delay tripping step the circuit will instantly trip if it tests bad. This allows service restoration for temporary faults but will

[71] Karl B. Hille, "NASA Study Finds a Connection Between Wildfires and Drought," Jan. 9, 2017, NASA Study Finds a Connection Between Wildfires and Drought - NASA

de-energize the entire circuit for permanent faults by tripping off at the breaker.

Elevated Fire Threat Areas: These are WUI Tiers 2 and 3 in which there is a higher risk for the ignition and rapid spread of wildfires due to the proximity of flammable vegetation, vegetation ignitability, human activity and habitation zones, and other environmental conditions.

Elevated Wildfire Risk: This means that based on existing weather and vegetation conditions, wildfires are possible should ignitions occur. At this level, the Company considers making changes to the distribution protection systems to reduce this risk.

Emergency First Responder Training: Protects both firefighters and utility workers in the event of a fire event by providing proper training in response to both. Avista first responders (field crews) are trained by fire personnel in fire safety and engaging with fire incident command, and fire responders are trained in safely operating around power equipment.


Training with Firefighters

Emergency Operating Procedures (EOP): An EOP is a command structure that shifts normal operations to emergency response, with service restoration typically the primary objective. For a Wildfire EOP, the primary focus is safety, and the engagement includes outside fire and emergency-related entities to prepare for potential or actual wildfire events. The Wildfire EOP defines key roles and responsibilities for personnel, identifies communications channels, and outlines strategies for engaging with fire protection professional and emergency operating agency staff during expected or actual wildfire events, creating a consistent and efficient joint approach.

Enhanced Grid Hardening: Avista is working to identify specific areas where large fire growth is coupled with proximity to communities which are excessively vulnerable to total loss in the event of a wildfire. These areas are being risk-ranked and prioritized for sectional undergrounding of existing overhead conductor. This strategy will reduce wildfire risk and increase safety to the communities facing the highest risk from Avista's distribution electric facilities. This strategic approach will allow Avista to mitigate the most risk for the least cost related to conversion to underground, allowing resources

to efficiently eliminate risk at a surgical rather than a system-wide level.

Enhanced Vegetation Management: Avista's Wildfire Plan created a separate vegetation management program from our existing routine vegetation management practices. This new program has the goals of inspecting 100% of the non-urban distribution system for risk trees annually and mitigating any such trees found within six months of identification. The Wildfire Plan also added LiDAR and satellite data collection for the transmission and distribution systems to provide detailed vegetation data to aid our vegetation managers in identifying, prioritizing, and developing plans to mitigate vegetation risk in the highest risk areas.

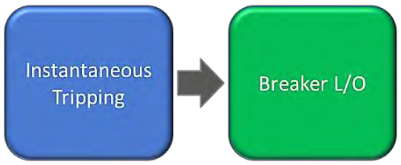
Episodic Wildfires: Wildfires that do not occur frequently or regularly.

Equity Advisory Group: Avista's specialized team that is working specifically with vulnerable customers and Named Community members to identify barriers and develop workable solutions for their needs, including multilingual communications and ensuring accessibility to programs and materials.

Expedited Fire Response: In Avista's Wildfire Plan, this is an agreement with state, local, and regional firefighting agencies to send fire crews directly to the site of a transmission trip during fire season event so if the fault results in a fire, it is managed immediately.

Extreme Fire Behavior: "Extreme" implies a level of fire behavior that ordinarily precludes methods of direct control action. One or more of the following is usually involved: high rate of spread, prolific crowning and/or spotting, presence of fire whirls, and/or a strong convection column. Predictability is difficult because such fires often exercise some degree of influence on their environment and behave erratically, often dangerously.

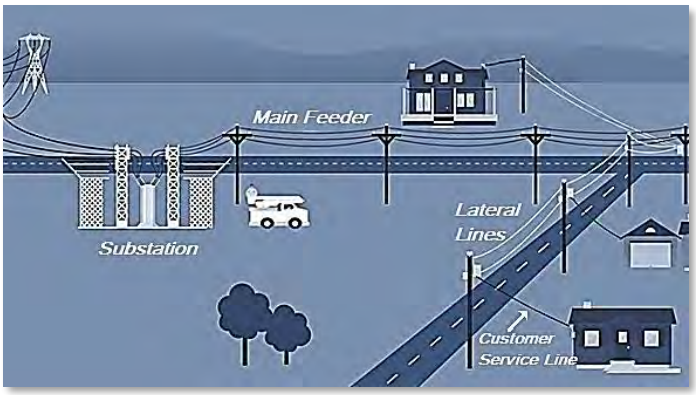
Extreme Fire Safety Mode: Circuits whose fire risk is judged to be extreme are configured in a way similar to the crew safety mode called "Hot Line Hold." In this configuration, auto reclosing is disabled, and instantaneous tripping is enabled. A circuit that experiences a fault will trip off and stay off at the first instance. It does not test or try to reclose. The circuit must be manually inspected to ensure it is safe before it is placed back into service.



Extreme Wildfire Risk: This means that based on existing weather and vegetation conditions, a large, rapidly growing wildfire is possible should ignition occur.

Fault: A fault is an abnormal condition present on the power system, usually a short circuit caused by lightning, tree contact, windblown object in the lines, or other similar problem.

Fault Reduction: In the utility world, this means decreasing the number of faults by prioritizing reliability programs that strengthen the utility's infrastructure, which is especially important in higher wildfire risk areas.



Feeder: A distribution circuit (feeder) coming out of a substation, consisting of a three-phase main feeder that splits into laterals at the customer level. Avista's distribution system follows the industry standard of using relatively short sections of main feeder trunk supporting longer connected lateral lines that carry electricity to the customer's service line.

Fiberglass Crossarms: Pole fires are a well understood phenomenon within the electric utility community. Electric current tracking during summer months leads to increased rates of pole fires. Fiberglass crossarms reduce or eliminate electric current tracking and hence, pole fires. Fiberglass crossarms are smooth and resistant to contamination, do not rot or degrade over time, and are much lighter while being up to six times stronger than wood. In addition, fiberglass crossarms are inherently self-extinguishing, so perform well in fire situations.

Pole Fire on a Wood Crossarm

Fiberglass Crossarm

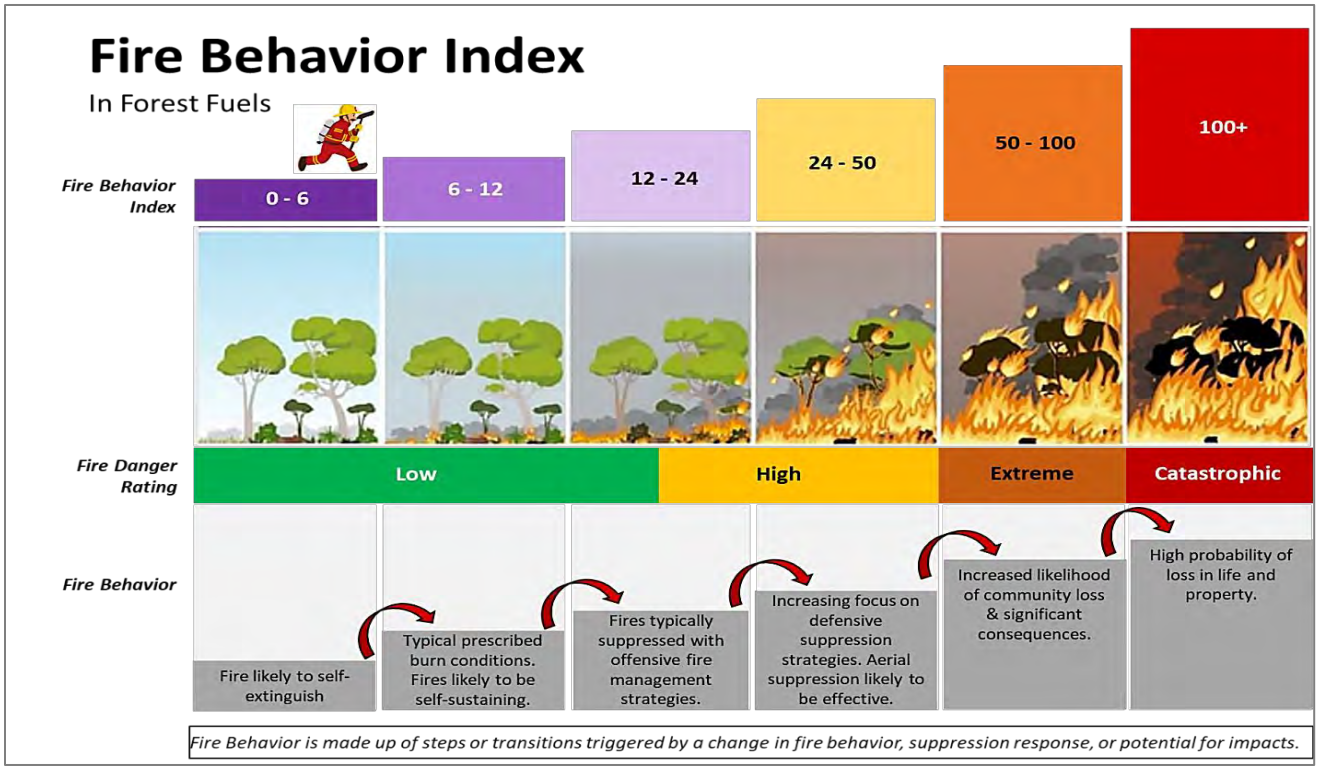
Fire Behavior: The manner in which a fire reacts to the influences of fuel, weather, and topography. Fire behavior provides an indication to firefighters on how to best battle the blaze.

Fire Behavior Forecast: A prediction of probable fire behavior, usually prepared by a fire professional, in support of fire suppression or prescribed burning operations.

Fire Behavior Index: A scale that captures fire severity as a function of flame length (intensity of burn) and rate of spread.

Fire Break: A natural or constructed barrier used to stop or check fires that may occur, or to provide a control line from which to work.

Crews bulldoze a fire break at the fire's edge along the fire front.



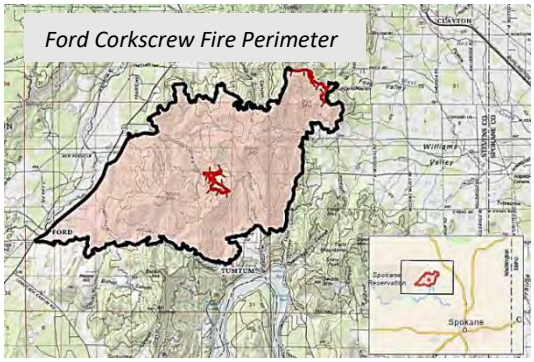
Fire Front: The part of a fire within which continuous flaming combustion is taking place. The fire front is usually assumed to be the leading edge of the fire perimeter. In ground fires, the fire front may be mainly smoldering combustion.

Fire Ignition Events: When a spark is created by the interaction of utility equipment and its surroundings (such as when a tree falls into a powerline) and results in a spark that, under the right circumstances, could become a fire.

Fire Mesh Wraps: Avista uses Genics Fire Mesh, a wire mesh treated with intumescent graphic that, when exposed to extreme heat, rapidly expands to form a barrier between the fire and the wood pole. These wraps help prevent low-burning fires from accessing wood poles, protecting them from damage or destruction.

Fire Perimeter: The entire outer edge or boundary of a fire.

Fire Prone: Areas where fires are most likely to occur or have a higher tendency to occur, often as a result of drought, forest health issues or insect infestations, human interaction, large amounts of dry undergrowth, low levels of humidity, etc.



Fire Retardant: Avista uses two primary forms of fire retardant protection on the transmission system and on some distribution poles. Historically we have placed fire resistant paint on wood transmission structures starting near the ground line and several feet up the pole, which is an effective means of preventing damage caused by ground fires. This product must be re-applied every 3-5 years. Fire resistant mesh is a new product the Company is switching to. It is chemically reactive to extreme heat, expanding to protect wood poles from fire. This product does not require ongoing maintenance and is quick and easy to apply for about the same cost.

Fire Risk Potential: This incorporates weather and fuels information to rate the overall fire threat at a particular location as well as a fire's likely behavior should one start.

Fire Safety Mode (FSM): Formerly called Dry Land Mode, Fire Safety Mode is a non-reclosing distribution protection scheme used during summer fire season (typically July through September) on circuits determined to be at risk for fire activity based on a variety of factors including vegetation, past events, and age of equipment. If not in elevated or PSPS mode, these circuits are configured so that when they trip, they will wait for a predetermined length of time then test the circuit. This allows the line to go back into service for incidental and transitory faults such as a tree branch touching the line, thus having a focus on reliability. Under Fire Safety Mode operations, reclosing is limited or not allowed to help prevent equipment from failing and creating a spark, thus focusing on safety.

Fire Safety Mode Automation: Avista's plan to upgrade midline and substation devices in areas at risk for wildfire to enable these devices to be operated remotely and automatically in response to fire situations.

Fire Safety Mode Ready Devices: Midline and substation devices located in high risk fire areas that Avista's Wildfire Program will upgrade or replace to allow protection settings to be operated remotely and automatically in reaction to wildfire or wildfire risk situations.

Fire Season: The time of year that wildfires are most likely to take place for a given geographic region due to seasonality, historical events and weather conditions, vegetative characteristics, etc.

Fire Spread: This is a measurement to help firefighters determine how far and fast a fire may spread. The intensity and movement of a wildfire ultimately depends on three factors: fuel, weather, and topography. A fuel's composition, including moisture level, chemical makeup and even density, influences how quickly a fire will spread. The moisture content of fuel helps determine how much area may burn. If vegetation has a low moisture level and is very dry, a fire will burn faster and more intensely because the heat does not have to eliminate water. The size and amount of fuel also affects wildfire behavior. Small fuel sources such as grasses typically burn quicker and do not generate as much heat as trees and other large fuel sources. And while a small amount of fuel will cause a fire to spread slowly with lower intensity, a lot of fuel will cause a fire to spread faster with more intensity. Some plants, trees and shrubs also contain oils and resins that cause them to burn more quickly and intensely. Weather conditions such as wind, temperature and humidity also play

In a forest where fires rarely happen, fuel Builds up.There is **surface fuel** (grass, logs, woody debris, brush), **ladder fuels** (shrubs, small trees), and **tree crowns**.	Surface fires spread quickly through brush and debris.	Ladder fuels allow the fire to move up toward the forest canopy.	Tree crown fires are so intense that they are difficult to control.

a major role in the behavior and spread of a wildfire. Wind supplies fire with additional oxygen. This can cause a fire to move across a landscape at a much faster rate. Topographical features of a landscape, such as slope, elevation, and aspect, can also facilitate wildfire progression. If a fire ignites at the bottom of a steep slope, for example, it will spread more quickly uphill because heat rises.

Fire Threat Areas: Areas which have the highest likelihood of impacting people and property and where additional action may be needed to reduce wildfire risk. Threat level is based on elements such as population, topography, vegetation type, and historical fires in the area.

Fire Threat Conditions/Fire Danger Rating: This considers current and antecedent weather, fuel types, and both live and dead fuel moisture to estimate the likelihood of a fire occurring as well as potential fire behavior should a fire occur.

Fire Triangle: The "fire triangle" is composed of fuel, heat, and oxygen. Fire is the effect of a chemical reaction known as combustion, which occurs between oxygen in the air and some sort of fuel that has been heated to its flash point (the lowest temperature at which it will ignite.) Fuel is any kind of flammable material, including trees, grasses, shrubs, and even houses. These materials emit a vapor. Heat brings these fuels to their flash point, causing the vapor to evaporate and mix with oxygen. Oxygen is the naturally occurring element needed for igniting and sustaining a fire. When burning fuel is exposed to oxygen from the air, a chemical reaction occurs that releases heat and generates combustion. A fire can only occur when all three components react together.

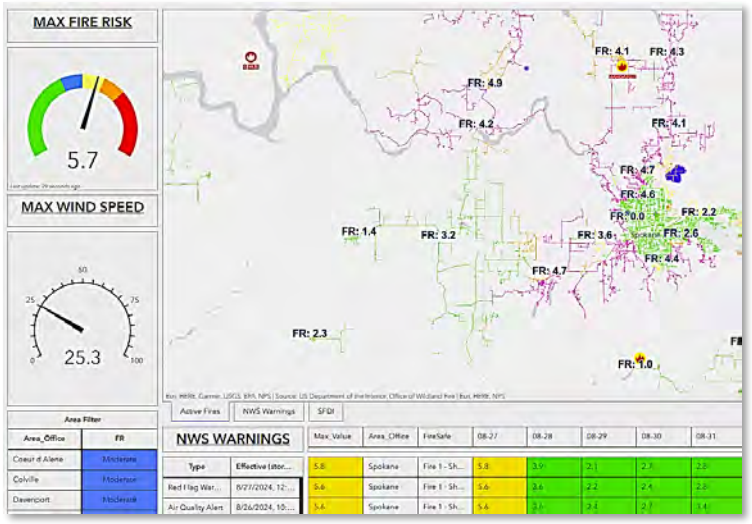
Fire Weather: Weather conditions that influence fire risk, ignition, behavior, and suppression.

Fire Weather Dashboard: This is Avista's primary means of determining fire risk across our system. It is a risk-based computer program that combines the 7-day weather forecast with equipment performance and fire risk levels based on time of year, drought conditions, type of vegetation and moisture levels, sustained winds, wind gusts, and more. It indicates the risk level on each of Avista's

distribution circuits for the upcoming week and highlights the maximum expected daily risk for every feeder on Avista's distribution and transmission systems.

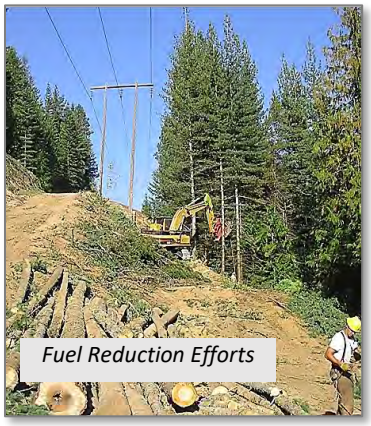
Fuel: Combustible material. Includes, vegetation, such as grass, leaves, ground litter, plants, shrubs, and trees that feed a fire.

Fuel Concentration/Density: Mass of fuel (vegetation) in an area which could combust in a wildfire.



Fire Weather Dashboard Screenshot

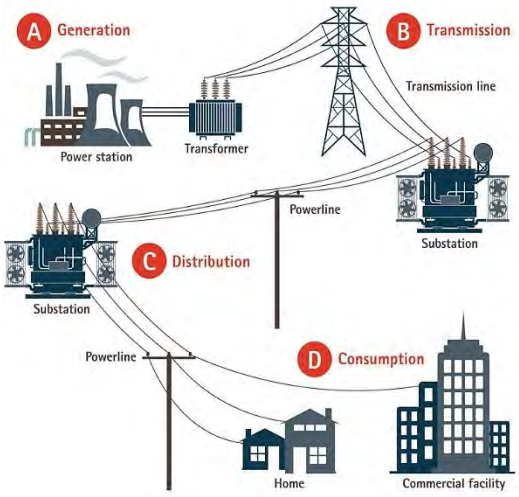
Fuel Management: Removing, thinning, or otherwise altering vegetation to reduce the potential rate of propagation or intensity of wildfires.

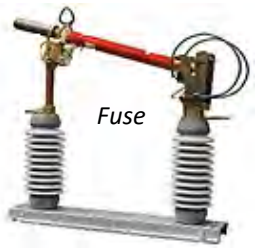

Fuel Reduction Efforts

Fuel Moisture Content: Amount of moisture in a given mass of fuel (vegetation), measured as a percentage of its dry weight.

Fuel Reduction: Manipulation, including removal of fuels (vegetation management) to reduce the likelihood of ignition and/or to lessen potential damage and resistance to control.

Fuel Reduction Partnerships: Partnering with external land management agencies, leveraging funding to remove fuels near Avista facilities. Sharing the cost allows both parties to do more work than each could accomplish with individual budgets.

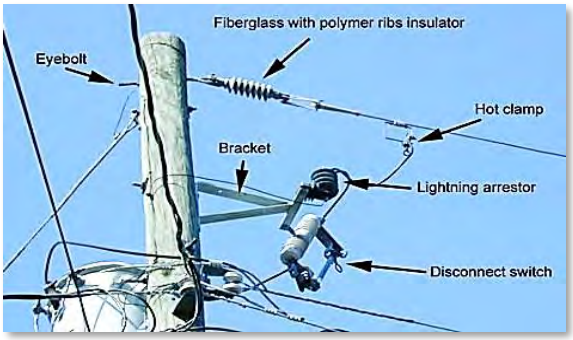



Fuse

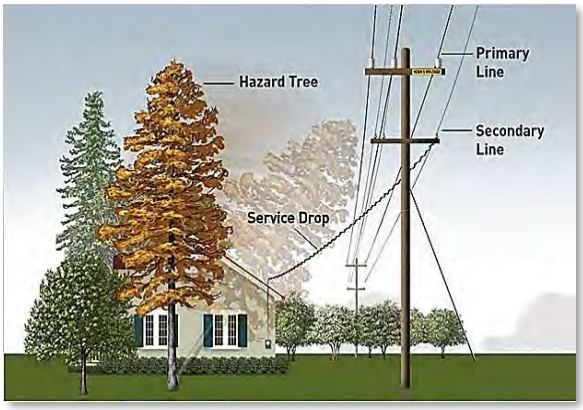
Fuse: A device that limits the amount of current flowing through the circuit. The fuse is constructed with a small piece of metal that, when exposed to high current typically caused by a fault, melts and interrupts the flow of electricity. Fuses are typically placed on lateral tap lines off the main circuit.

Grid: General design of an electric grid, whether looped or radial, with consequences for reliability and ability to support de-energization (e.g., being able to deliver electricity from an additional source).

Grid Hardening: Actions such as equipment upgrades, maintenance, and planning for more resilient infrastructure, taken in response to the risk of undesirable events (such as outages or wildfires) or undesirable conditions (such as old or unreliable equipment) of the electrical system in order to reduce or moderate those events and conditions, informed by an assessment of the relevant risk drivers or factors. In the Wildfire Plan, this specifically means adapting transmission and distribution materials and construction to minimize the potential for utility-involved fires in addition to protecting utility infrastructure in the event of a fire.



Hazard Tree: A risk or hazard tree is defined as one that is dead, dying, diseased or exhibits obvious structural defects such as a co-dominate stem which pose an increased fall-in risk with conductor during severe weather. At Avista, a "risk tree" is a tree with the potential of imminent fall-in hazard to energized facilities.



Herbicides: Typically used on the right-of-way to control incompatible tall growing species and noxious weeds. For the past several years, at Avista herbicide applications have primarily consisted of treating the stumps of fast-growing deciduous trees after they are removed to prevent resprouting. These applications are recorded within the same work records as the tree removals which are generally categorized as risk tree work.

High Canopy: Forested areas with tall mature trees. In these types of areas, fire can spread from the ground into the tree tops, where it becomes difficult to control. In relation to utility infrastructure, this high fire can access the tops of poles and structures and burn them down to the ground. Thus, replacing more burnable wood poles with steel helps protect against this type of high level fire.

High Canopy Fire near the Noxon-Pine Creek transmission line in 2023.

High Risk Fire Areas: Areas in Avista's service territory that have been identified as most at risk for wildfire and associated damage, locations in wildland urban interfaces (WUI zones) for which there

is little or no fire protection (typically rural or remote areas), or which have experienced historic wildfires.

High Value Locations: In Avista's Wildfire Plan, this refers to situations where wood poles are replaced with steel to add strength and durability at high consequence locations such as high-volume traffic areas, railroad, highway, and river crossings, at hard angles, or if access for maintenance is particularly difficult. These are locations where mechanical or fire-related pole failures could lead to increased safety risks and reliability impacts.

High Wind Advisory or Warning: Level of wind risk from weather conditions as declared by the National Weather Service (NWS). The difference between a high wind advisory and a high wind warning is the level of winds associated with the event. Advisories go into effect for sustained winds of 40 mph or less with gusts of at least 45 mph. Warnings are issued if sustained winds are above 40 mph and gusts are 50 mph and above.

Highly Impacted Communities: As defined in Washington State, highly impacted communities must meet at least one of the following criteria: are within the limits of an Indian reservation and/or suffer environmental health disparities such as pollution, hazardous waste, poverty, or cardiovascular disease.[72]

Hot Line Hold: A hot-line hold is an assurance to the worker that an automatic protective device has been set to not reclose in the event the line or equipment becomes de-energized, typically used when line crews are working on a powerline or power equipment issue. With a hot line hold, the applicable device will not be re-energized until the appropriate dispatcher determines workers are in the clear. A hot line hold always pertains to energized lines or equipment. In this configuration, auto reclosing is disabled, and instantaneous tripping is enabled.


Hot Tap Connectors

Hot Tap: A connection to the utility's powerline. A hot tap is a connection that can easily be removed

[72] Washington State Dept. of Health, "Instructions for Utilities to Identify Highly Impacted Communities," Instructions for Utilities to Identify Highly Impacted Communities | Washington State Department of Health

versus a wedge connector, which is more permanent. The traditional hot line tap is attached via a bolt. Over time this type of connection can come loose and arc and spark and can melt through the conductor, dropping it to the ground. Thus, adding parts that keep the conductor from falling may help prevent fires.

Ignition probability: The relative possibility that an ignition will occur, quantified as a number between 0% and 100% (where 0% indicates impossibility and 100% indicates certainty). The higher the probability of an event, the more certainty there is that the event will occur. (Often informally referred to as likelihood or chance).

Impact/Consequence of Ignitions: The effect or outcome of a wildfire ignition upon objectives, which may be expressed by terms including, but not limited to, maintaining health, and safety, ensuring reliability, and minimizing economic and/or environmental damage.

Incident: A human-caused or natural occurrence, such as wildland fire, that requires emergency service action to prevent or reduce the loss of life or damage to property or natural resources.

Incident Command Structure (ICS): The combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure, with responsibility to manage assigned resources to effectively manage an incident. Every incident needs to have someone in charge, overseeing the event and the associated response, ensuring that adequate supplies and manpower are in place, to know who is operating and where, and to identify who might be impacted and how to protect them. The ICS provides a standardized approach to the command, control, and coordination of emergency response, providing a common hierarchy within which all responders (including Avista) can be effective, as well as commonly understood procedures designed to keep everyone safe and communicating effectively. It helps provide an orderly, systematic approach to incidents.

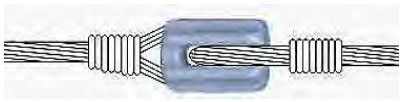
InciWeb: This is an Interagency All-Risk Incident Information Management System that provides a single source for fire incident related information and a standardized reporting tool for public use. Fire information is available for events across the U.S.

Infrastructure: This refers to the equipment Avista utilizes in order to serve customers, including poles, transformers, conductor, switches, substations, etc.

Inherent Risk: In Avista's Wildfire Plan, this is the <u>current state</u> wildfire risk level which reflects Company wildfire defense strategies initially in place.

InciWeb Fire Map

Insulator: Insulators have the duty of keeping the electrically charged line from touching the poles or towers so the line can continue to transmit and is not grounded. Insulators must be strong enough to withstand the weight of the conductor and the potential stress of the electricity wanting to connect to the earth. They are designed to be non-conducting, but getting wet can cause flashovers, which is why many insulators are designed with an umbrella or petticoat at the top to keep the lower part insulated from the rain.[73] Extreme weather, sun and vandalism can reduce the strength of the insulator, making it more likely to break and cause an outage so insulators are monitored during inspections. There are many kinds of insulators depending upon their application.



Stay Insulator

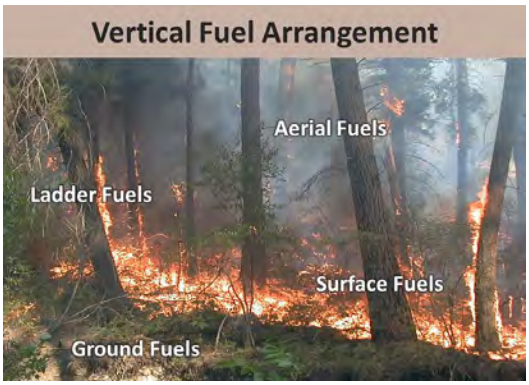
Dead-end Insulator

Strings of transmission insulators, sometimes called bells

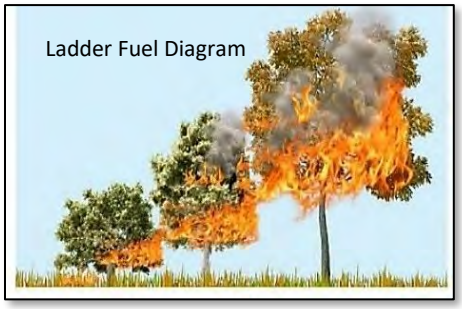
Insulator with pin

Insulator Pin: This is a piece of overhead hardware that fastens the insulator to the crossarm. The insulator pin is bolted through the crossarm and the insulator is screwed onto the top of the insulator pin.

IVR: Interactive Voice Response is a technology that allows telephone users to interactive with a computer-operated telephone system with voice recognition technology. It allows automatic call distribution, allowing the Company to reach out to multiple customers at the same time.



Ladder Fuels: Fuels which provide a vertical path between the ground strata and higher vegetation, allowing fire to carry from surface fuels into the crowns of trees or shrubs with relative ease. These fuels help initiate and assure the continuation of crowning where the fire spreads very rapidly from treetop to treetop, becoming much more difficult and dangerous to control.

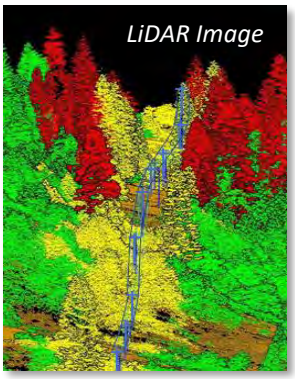


Lateral: In the distribution system, these are circuits that break off from the main feeder trunk (that comes out of the substation) and deliver electricity to customer's

[73] For more than you ever wanted to know about insulators, see: Glossary of Insulator Terms (insulators.info)

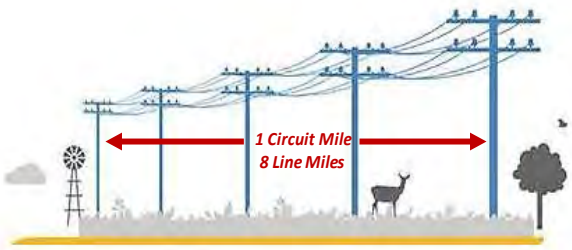
homes (service lines). The laterals normally have fuses to separate them from the mainline if they are faulted.

LiDAR: Light Detection and Ranging, sometimes called 3-D laser scanning, which can be used to make high resolution representations of the earth's surface. At Avista it is used on the transmission system to identify vegetation encroachment and risk trees. It works well for transmission due to the open linear transmission rights-of-way. LiDAR is primarily collected via helicopter and fixed wing aircraft.

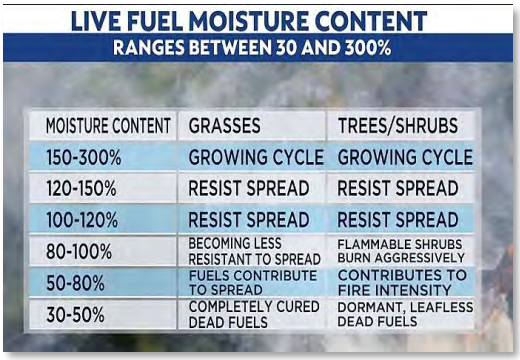


Lightning Arrester: A piece of hardware that reduces voltage surges from direct or nearby lightning strikes. When a lighting strike occurs, the overhead conductor experiences higher than normal voltage levels. This high voltage is dissipated via the lighting arrester, mitigating potential damage to equipment.

Line Miles: The number of miles of transmission and/or distribution line. Differs from circuit miles because individual circuits, such as the two circuits of a double-circuit line, are not counted separately in circuit miles but <u>are</u> counted as separate in line miles.



Live Fuel Moisture Content: Moisture content within living vegetation, which can retain water longer than dead fuel. Moisture content is the most critical factor related to how much fuel is available to burn in a wildfire. When moisture content in living vegetation reaches a critical low threshold, fire danger increases.



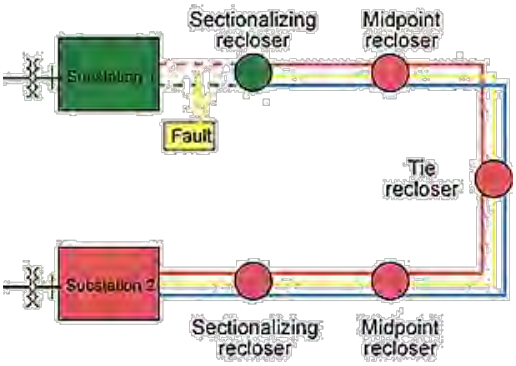
Managed Risk: In Avista's Wildfire Plan, this is the <u>future state</u> wildfire risk level as it is impacted by the addition of Wildfire Resiliency elements like grid hardening.

Medical Baseline Customers: Residential customers with qualifying medical conditions and/or who are dependent on power for qualifying medical devices for certain medical needs. For example, customers that have specific heating and cooling, breathing, or mobility needs.

Member of the Public: Any individual not employed by the utility.

Metrics: In Avista's Wildfire Program, these are measurements that track how much utility wildfire mitigation activity has changed the conditions of utility wildfire risk exposure or the ability to manage and reduce wildfire risk.

Midline (Midpoint) Circuit Reclosers: Often used on long distribution lines where substation-based equipment cannot adequately protect the entire length of the circuit. Avista's Wildfire Plan adds communications to these midline circuit reclosers in order to provide monitoring and control functionality, including the ability to operate the device remotely. By placing automated midline circuit reclosers at strategic locations, Avista Distribution Operations can re-task those devices during periods of elevated fire danger to operate in fire protection mode rather than in their typical reliability mode. In other words, if there is a high-risk situation, the reclosers can be set to not automatically reclose.

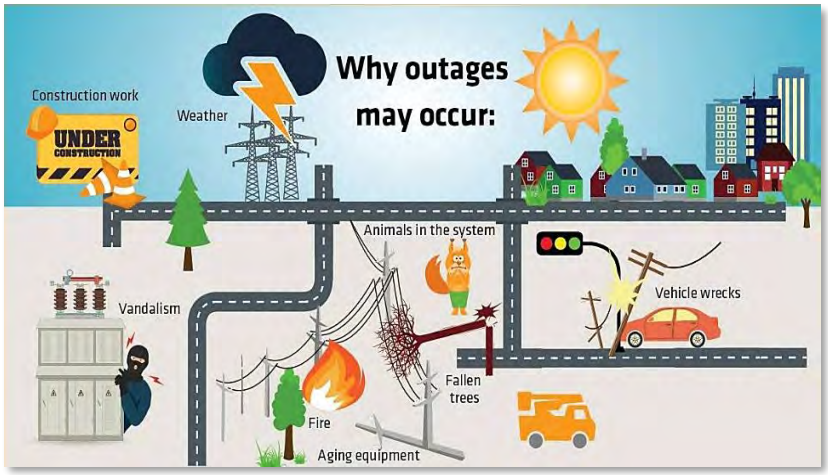


Miles Completed: In the Avista Vegetation Management Plan, this is a calculated value that equates to the known overhead line mileage within a work polygon multiplied by the percentage of planned work completed within that polygon. Completion of planned work means executing the plan (trimming, removing, replacing) to the Company's specifications.

Miles Patrolled: The number of miles inspected via foot, vehicle, or aerial patrols. Miles patrolled and miles planned effectively mean the same thing within the vegetation work plans.

Miles Planned: In Avista's Wildfire Resiliency Plan, this is the number of miles of risk tree inspections projected for completion. Miles patrolled and miles planned effectively mean the same thing within the vegetation work plans.

Mitigation: A measure or activity proposed or in process that is designed to reduce the impact/consequences and/or the likelihood/probability of a risk event such as wildfire.



Momentary Outage: The IEEE defines "momentary" outages as a brief loss of power (less than five minutes in length) caused by the opening and closing operation of an interrupting device.

Multi-Agency Coordination/Partnerships: A generalized term which describes the functions and activities of representatives of involved agencies and/or jurisdictions who come together to make decisions regarding the prioritizing of incidents, and the sharing and use of critical resources. Also refers to agencies who work together, sometimes via financial assistance, in reducing fire risk.

Named Communities: According to Washington State, these are communities that are highly impacted by adverse socioeconomic conditions, pollution, and climate change, or who experience a disproportionate risk of environmental burdens. They are comprised of a combination of "Highly Impacted Communities" and "Vulnerable Populations" (each defined elsewhere in this report).

Some of Avista's Wildfire Partners

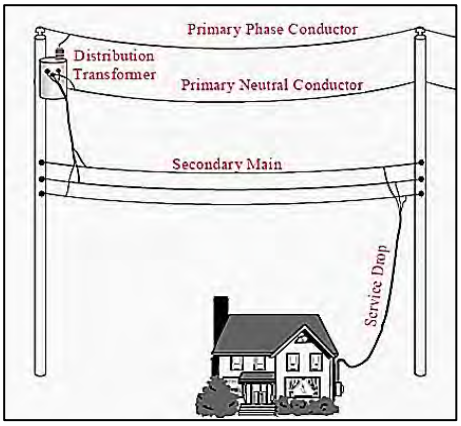
National Weather Service: An agency of the United States federal government tasked with providing weather forecasts, warnings of hazardous weather, and other weather-related products to organizations and the public for the purposes of protection, safety, and general information. Most of its products are in the public domain and available free of charge.

Normal Fire Season: A season or time of year when weather, fire danger, number and distribution of fires are about average.

"Old" Fire Safety Mode: This is the original program implemented by Avista in the early 2000s, when, during the summers, Avista changed the distribution system to turn off automatic re-closing when a fault occurs in certain parts of the system at the beginning of fire season (typically June) and back on at the end of fire season (usually September). Note that when breakers are automated, they move from "Old" Fire Safety Mode to Base Fire Safety Mode.

OMS/OMT: Outage Management System or Outage Management Tool. This is an Avista inhouse developed tool for tracking electric outage cause information (such as car hit pole, tree fall-in, wind, pole fire, etc.) as well as time stamp, reason, type, number of customers impacted, and length of outage. The OMS was designed to record actual events based upon cause, not impact, with the goal of repairing or replacing equipment that has or could lead to an outage. The current OMS does not include provisions for tracking outcomes beyond direct customer impacts, so is not set up to capture if an outage results in a fire unless that is noted in Dispatcher comments.

Open Wire Secondary Districts: Three conductors with 120/240 volts that run pole to pole below the primary conductors (primary conductors are on top of the pole in an overhead distribution system). It is called "open wire" because the three wires are clearly visible as opposed to a design in which the three conductors are bundled together. Sometimes called "Secondary Main."



Open Wire Secondary Districts

Operations and Response: Many of Avista's circuit breakers cannot be remotely operated and require manual intervention to make changes to settings or to identify an issue. This may take several hours depending on location and crew availability. Avista's Wildfire Program funds communications and control equipment that will help us have "eyes" on critical equipment out in the field as well as be able to control and adjust it remotely in case of fire or high fire threat conditions. This automation equipment as well as our work with internal and external partners in reducing the risk of wildfire are part of the "Operations and Response" portion of Avista's Wildfire Resiliency Plan.

Outstanding Plan: A still-to-be-completed plan. As inspections are performed, plans are created that consist of one or more units of work that need to be performed. Sometimes completion of a plan is delayed due to customer permission, access, inclement weather, etc. and thus are categorized as "outstanding."

NIFC/National Interagency Fire Center: Located in Boise, Idaho, this is the home to the National Interagency Coordination Center (NICC) and National Multi-Agency Coordination (NMAC) groups, which provide unified guidance to fire agencies, coordinate fire response, manage firefighting resources, and track and document fires, sources, size, and impact across the United States.

Patrol: In Avista's Wildfire Plan, this refers to ground, vehicle, and aerial inspections of our transmission and distribution systems to identify vegetation or structural issues, right-of-way infringement or encroachment, ground profile changes, etc.

Patrol Inspection: A visual inspection of applicable utility equipment and structures that is designed to identify obvious structural problems and hazards.

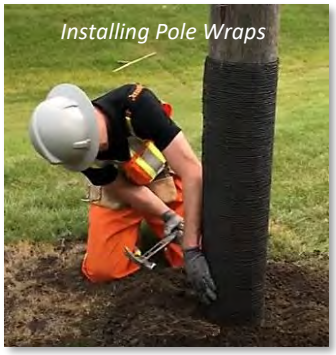
Peak Fire Season: That period of the fire season during which fires are expected to ignite most readily, to burn with greater than average intensity, and to create damages at an unacceptable level.

Plan-Do-Check-Adjust: A continuous improvement technique also known as the Deming Circle or Shewhart Cycle. Avista's Wildfire program uses this technique to help continue to grow and improve the program.

Planned Outage: Electric outage announced ahead of time by the utility.

Pole Fires: Pole fires are a significant contributor to wildfire risk. The mechanism that causes pole top fires is well-known. This issue is related to periods of hot, dry weather when insulators become covered with dust and other contaminants, creating a path for leakage current. A light rain after the dry spell increases leakage current and creates the right conditions for pole fires. This leakage current is concentrated between wood-to-wood contacts such as the contact point between wood crossarms and wood poles. Fiberglass crossarms virtually eliminate pole fires. Avista has been installing

fiberglass crossarms since the early 2000s. As part of Wildfire Resiliency, the Company has an additional focus on replacing wood crossarms on structures located in elevated fire areas.



Pole Wraps: Avista uses Genics Fire Mesh, a wire mesh treated with an intumescent coating that, when exposed to extreme heat, rapidly expands to form a barrier between the fire and the wood pole. These wraps help prevent low-burning fires from accessing wood poles, protecting them from damage or destruction. Mesh is more durable than the fire-resistant paint and is considerably less expensive than replacing a wood pole with steel. At Avista, pole wraps are used in areas subject to routine grassland, sage-shrub, or other low level fires.

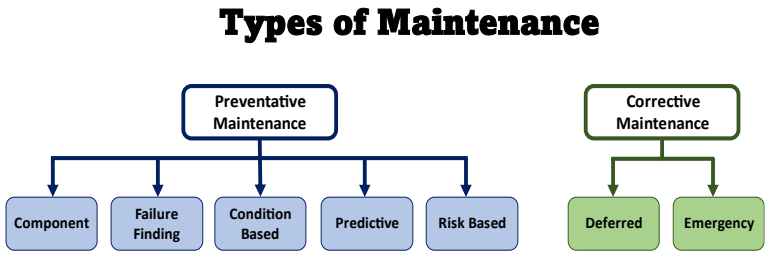
Polygons: Between 2017 and 2018 Avista's Vegetation Management planning was changed from circuit level to polygon level. Polygons contain many circuits. Prior to switching to the polygon method, the overhead line mileage of a circuit was multiplied by the percentage of the circuit planned/inspected to arrive at Miles Planned and the percentage of the work on the circuit completed was multiplied by overhead line mileage to arrive at Miles Completed.

Polygon Planned Work Completed: This is a Vegetation Management work polygon that has 100 percent Miles Planned and 100 percent Miles Completed and thus requires no further remediation – all tree work has been completed. It is technically possible that an inspection could lead to no work needed at all, but it is not something that has been encountered in practice.

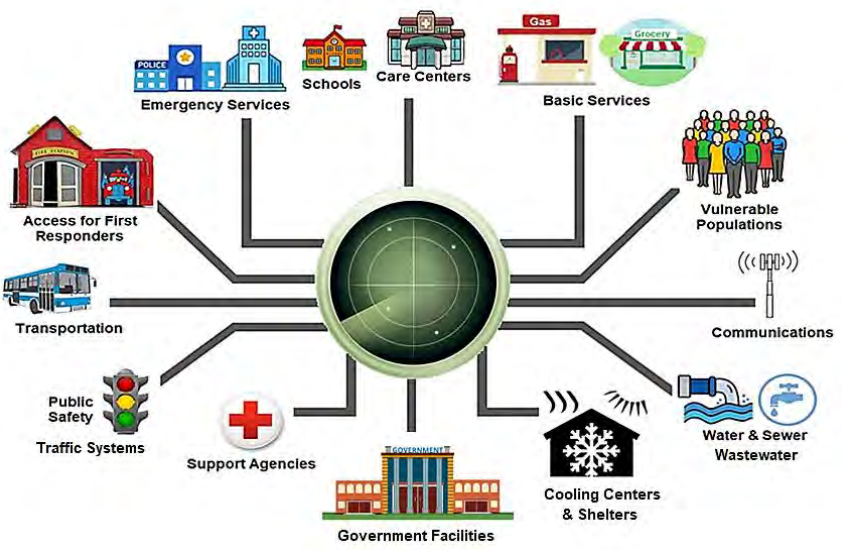
Polygon Planned Work Not Done: The entire vegetation management work polygon has been planned/inspected but tree work is incomplete. This category helps keep track of inspections and work spanning between two plan years, so that those polygons will be carried into the following year for completion.

Preparedness: Condition or degree of being ready to cope with a potential fire situation.

Preventive Maintenance (PM): The practice of maintaining equipment on a regular schedule based on risk, elapsed time, run-time meter readings, or number of operations. The intent of PM is to prevent maintenance problems or failures before they take place by following routine and comprehensive maintenance procedures. The goal is to achieve fewer, shorter, and more predictable outages.



Priority Essential Services: Critical first responders, public safety partners, critical facilities and infrastructure, operators of telecommunications infrastructure, and water utilities/agencies. It is important for a utility to know who and where these customers are located so they can be prioritized for service restoration during an outage or de-energization.



Program Targets: Quantifiable measurements of activity identified in WMPs and subsequent updates used to show progress towards reaching the objectives.

Progress Metrics: Measurements that track how much utility wildfire mitigation activity has changed the conditions of utility wildfire risk exposure or utility ability to manage wildfire risk exposure, in terms of leading indicators of ignition probability and wildfire consequences.

Protection System: This comprises protective relays, associated communication systems, voltage and current sensing devices, station batteries, and DC control circuitry designed to protect equipment and facilities.

Protective Relay

Protective Relays: These devices detect and attempt to identify and correct faults. They read measurements such as current, voltage, and frequency and can be set to recognize when these indicate a problem. For example, if a protective relay senses that a circuit breaker is interrupting the system, it can disconnect it.

Public Safety Power Shutoff (PSPS): When electric companies preemptively turn off the power to specific areas of the system to reduce the risk of wildfires and to help keep customers and infrastructure safe. These events differ from typical outages because they are based on a prediction of risk rather than the occurrence of an actual event.

Public Safety Power Shutoff Deciding Factors

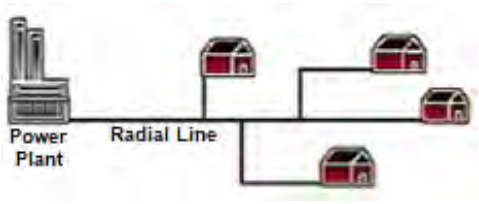
PSPS Event: Defined as the time from the when the first public safety partner is notified of a planned public safety de-energization to the final customer being re-energized.

PSPS Risk: The potential for the occurrence of a PSPS event expressed in terms of a combination of various outcomes of the event and their associated probabilities.

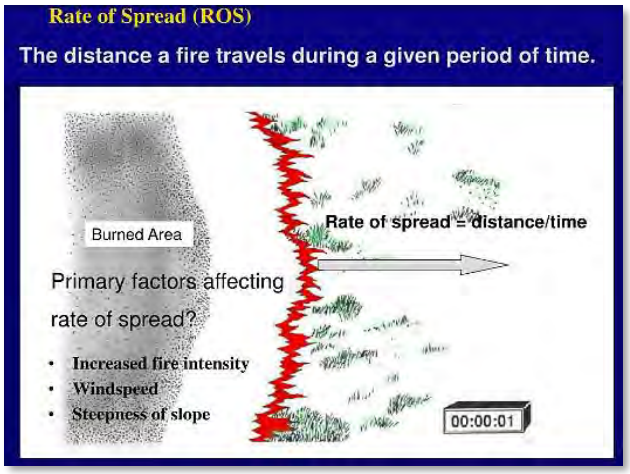
Public Safety Power Shutoff Typical Timeline

PSPS Weather: Weather that exceeds a utility's risk threshold and creates decisions around initiating a PSPS in specific areas of the system.

Radial: A transmission or distribution line that does not have a redundant feed – it is a single line running from the generator to the customer, so if this line is lost, customers lose service, versus a redundant system that has another line or lines available to serve load if one line is lost (see Looped or Redundant). These are common for low density rural areas where more complex systems are cost prohibitive.



Rate of Spread: The relative activity of a fire in extending its horizontal dimensions. It is expressed as the rate the total perimeter of the fire is growing, as rate of forward spread of the fire front, or as rate of increase in area, depending on the intended use of the information. Usually, it is expressed in acres per hour for a specific period in the fire's history.



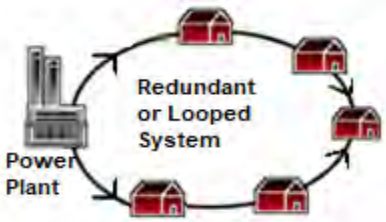
Fire Rate of Spread

Reburn: The burning of an area that has been previously burned but that contains flammable fuel that ignites when burning conditions are more favorable.

Viper Recloser

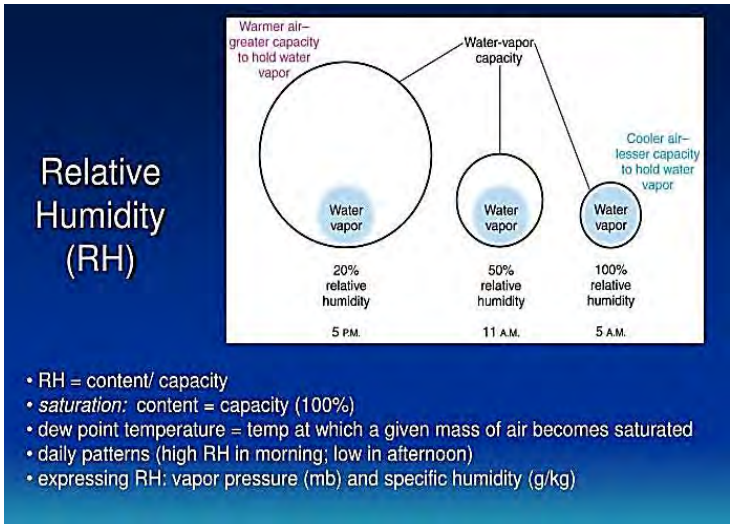
Recloser: A device that operates similarly to a circuit breaker but is installed on a distribution circuit. Reclosers are available for both single-phase and three-phase fault interruptions. The main purpose of a recloser is to sectionalize a portion of a circuit from the rest of the circuit to prevent outages from spreading**.**

Red Flag Warning (RFW): Level of wildfire risk based on weather conditions, as declared by the National Weather Service. This is a term used by fire weather forecasters to alert the public to an ongoing or imminent critical fire weather pattern that would allow for rapid fire starts and/or spread, as well as extreme fire behavior. This pattern must coincide with fuels that are critically dry and fire danger that is moderate to high.



Redundant: This is also called a looped system. In the transmission world, this means that more than one line or route runs between the generation source and the end customer, so if one line is lost, the power is rerouted via another line and the customer suffers either a shorter outage or no outage at all.

Relative Humidity (RH): Relative humidity is expressed as a percent of the amount of moisture *in* the air to the amount of moisture needed to *saturate* the air. Humidity can either dampen or dry out potential fuel. When relative humidity decreases, fire behavior increases because fine fuels like grass and pine needles become drier quickly. Heavy fuels are less easily affected by changes in humidity, and it often takes a larger or longer-lasting event to affect their moisture significantly. Low humidity levels dry out vegetation fuels on a short-term basis, and they can also cause a short-term spike in fire danger. The relative humidity is lowest when the air temperature is high and the dewpoint temperature is low. The dewpoint temperature is the temperature when the air needs to be cooled to become saturated. When there are cooler temperatures and/or high atmospheric moisture levels, it reduces fire danger.



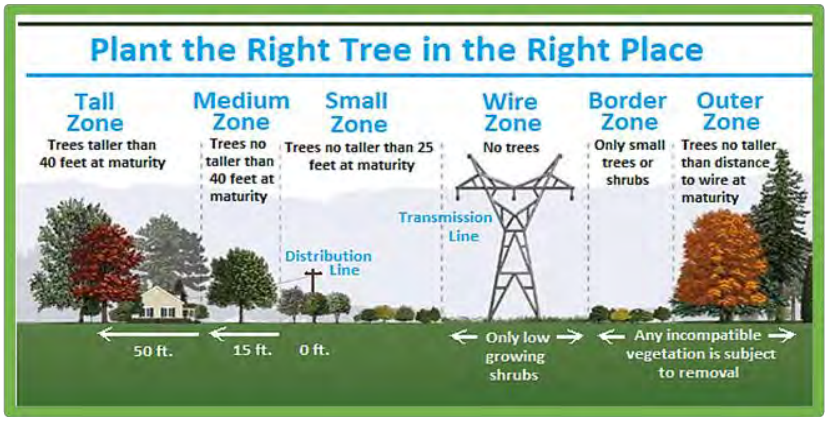
Reliability: Maintaining customer service continuity.

Restoration: When a threat has ended and it is safe to begin making repairs, crews are organized and dispatched to the site of a power outage. Typically, the priority is to restore service to as many customers as possible through line switching and by isolating faulted circuits with preference given (as possible) to critical service providers and vulnerable customers and communities.

Typical PSPS Restoration Process

Right Tree Right Place: This has been renamed the "Safe Tree Program." It is a partnership with private

landowners to remove risk trees on their private property that are at risk of coming into contact with powerlines and creating fire potential or loss of reliability.



Risk Based: Making decisions based upon how much risk is involved. Typically, a utility identifies specific risks to elements such as safety of employees, first responders, and the public as well as financial well-being, customer reliability impacts, probability of occurrence, and consequence of occurrence among other factors. This is done in order to develop programs and plans which seek to reduce those risks.

Risk Based Vegetation Inspections: A new vegetation management goal based on the Company's Wildfire Plan that requires 100% of non-urban distribution areas to be inspected for vegetation issues each year. At Avista, this called our Enhanced Vegetation Management program.

Risk Event: An event with probability of ignition, including wires down, contacts with objects, events with evidence of heat generation, and other issues that cause sparking or have the potential to cause sparks.

Risk Tree: At Avista, a visibly dead, diseased, damaged, or dying tree or one which possesses obvious structural defects that could fall into energized facilities.

Right-of-Way (ROW): A right-of-way is the right to come onto a property owned by another. For a utility, this allows us to do maintenance and/or tree trimming work on land that is not our own.

Avista Transmission Right-of-Way Restored with Low-Growing Vegetation

Right-of-Way Work: ROW work includes re-clearing or reclaiming the right-of-way with planning and completion of work at the span (from one pole to the next) level as opposed to spot work planned and completed at the individual tree level.

Routine Vegetation Inspections: As opposed to risk-based vegetation inspections, routine inspections consist of cycle-based tree trimming, focused on about 1,500 miles (20% of the system) annually.

Run-to-Failure: A maintenance approach that replaces equipment only when it fails.

Rural: Areas of our service territory with small populations, often having less access to services such as firefighting. This is typically an area with a population of less than 1,000 persons per square mile as determined by the U.S. Census.

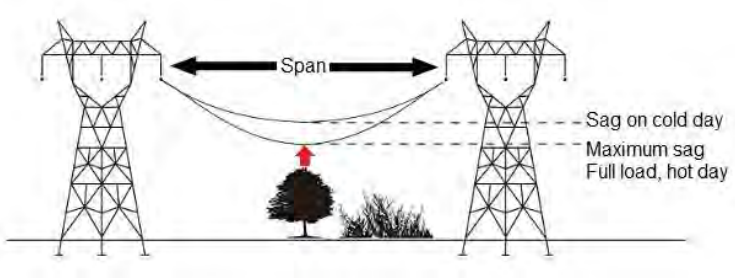
SAIDI: SAIDI refers to "System Average Interruption Duration Index." It is calculated by multiplying the average duration of customer interruptions by their total number and then dividing by the total number of customers in the system. SAIDI describes the total duration of the average customer interruption. It is calculated by dividing the sum of all customer interruption minutes by the number of customers served (for a year).

SAIFI: SAIFI refers to "System Average Interruption Frequency Index." It describes the average number of non-momentary interruptions a customer experiences in a year (not including major event days). It is calculated by dividing the total number of customer interruptions by the average number of customers served during a year.

Safe Tree Program: This is a partnership with private landowners to remove risk trees on their property to reduce the chances of their trees contacting powerlines and creating fire potential or loss of reliability. At Avista this program is offered to customers in high fire threat (typically WUI 2 or 3) areas who have trees likely to come into contact with our powerlines. At the customer's request the tree is removed, the debris cleared, and a new low-growing tree is planted in the same place (if they wish to do so) at no cost to the customer.

Safety Hazard: A condition that poses a significant threat to human life or property.

Sag: For overhead transmission lines, sag is the difference between the point of support, being the transmission pole or tower, and the lowest point on the conductor. Calculating sag is critical, as conductor must be held at a safe tension level to ensure that it does not break under its own weight or the added weight of snow and/or ice or as it is stressed by wind, loads, or ambient temperatures. Engineers also carefully calculate the amount of sag to ensure that the conductor remains a safe distance from the ground. This is especially tricky when the line is on uneven terrain.



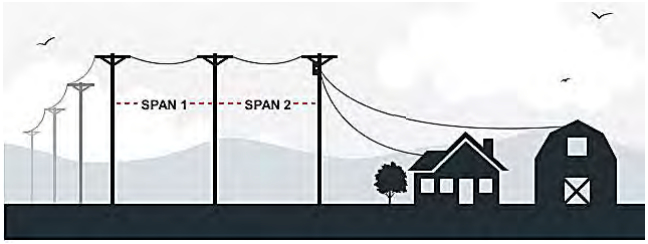
Satellite Imaging: In Avista's Wildfire Plan, this means using satellites to capture images of the distribution system to detect vegetation issues and changes in vegetation over time. Satellite-powered artificial intelligence systems such as that used by Avista can predict vegetation growth years in advance. Satellite imaging works well for the distribution system, which is more widespread and convoluted than the transmission system and is located in a wide variety of environments not always accessible or visible from the aircraft used to collect LiDAR images.

Severe Fire Danger Index (SFDI): This is a forecastable metric that can help forecast extreme fire conditions based on historical data related to fire intensity and spread potential. When this data is combined with current wildfires it helps predict fire intensity, potential resulting damage and loss of life. This metric helps firefighters and communities by providing critical information to help improve early warnings and situational awareness. When we are entering Fire Safety Mode, Avista overlays this information over our service territory, and when it indicates any "extreme" levels we declare Fire Safety Mode operations.

Situational Awareness: Tools designed to identify and manage risk, primarily Avista's Fire Weather Dashboard and WUI Map. In the future this will include weather stations and wildfire cameras.

Slash: Branches or limbs less than four inches in diameter, and bark and split product debris left on the ground as a result of utility vegetation management or other vegetation management work. Slash can become a fuel for wildfires.

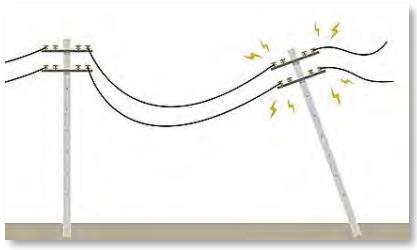
Span: The space between adjacent supporting poles or structures on a circuit consisting of electric lines and equipment.



Spark Ignition Event: A situation when something such as equipment failure creates a spark that can potentially lead to a fire.

Spark Ignition Potential: The risk of heat (usually via spark or arc) creating the ability for a fire to start, spread, and do damage.

Spark Ignition Source: Something that creates a spark that may lead to a fire under the right circumstances, such as a failed piece of equipment, blown fuse, or conductor that touches dried vegetation on the ground.

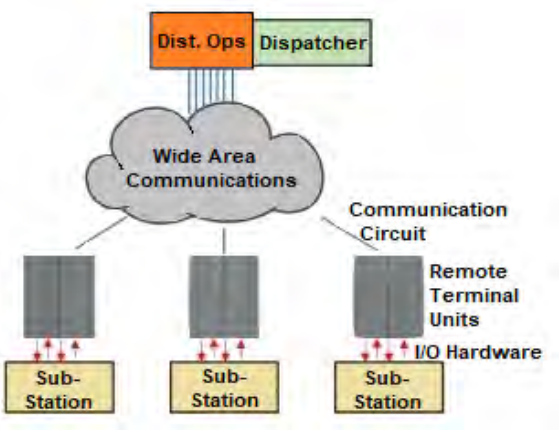


Steel Conversion: One of Avista's wildfire resiliency strategies is to replace wood transmission poles in areas at an elevated risk of fire with steel, as steel is less likely to be damaged and fail when exposed to fire or other damage risk.

Strike Distance: A term used to describe a tree that has the potential to impact powerlines and other equipment.

Supervisory Control & Data Acquisition: Control system architecture comprising computers, networked data communications and graphical user interfaces (GUI) for high-level process supervisory management, used to monitor and control a variety of critical infrastructure in manufacturing, power generation, and other complex circuit infrastructure. It provides the ability, for example, to monitor and control reclosers to isolate and/or reroute power during outages or

fire events. SCADA provides insights for operators into the operation of the system in addition to helping them remotely control and operate it.



Simplified SCADA Diagram

Substation SCADA / Substation Fire Safety Mode Automation: Provides automation that allows remote control and operation of substation equipment to allow it to respond more quickly if fire conditions indicate elevated risk. In Avista's Wildfire Plan, fifteen remote substations located in high fire risk areas will be upgraded with communications equipment and hardware/software that allows them to support fully automated Fire Safety Mode operations.

Surface Fuels: Loose surface litter on the soil surface, normally consisting of fallen leaves or needles, twigs, bark, cones, and small branches; also grasses, forbs, low and medium shrubs, tree seedlings, heavier branches, downed logs, and stumps interspersed with or partially replacing the litter. These fuels are more susceptible to fire and fire spread as they tend to react to humidity and dry out more quickly.

Sustained Outage: The IEEE defines a sustained outage as a disruption in power supply lasting more than five minutes. It is the de-energized condition of a line resulting from a fault or disturbance following an unsuccessful automatic reclosing sequence and/or unsuccessful manual reclosing procedure.


Air Switch in open position


Air switches waiting to be installed.

Switch: A disconnection point used to interrupt the flow of electricity. Switches can be mounted on overhead lines, on underground lines, and in substations. Switches mounted overhead and underground are used as a disconnection point as well as a sectionalizing device. During outages the switch can be opened in order to sectionalize the faulted or damaged part of the circuit. Switches mounted in a substation can be used to isolate devices in a substation, such as a regulator, to protect them in case of fault.

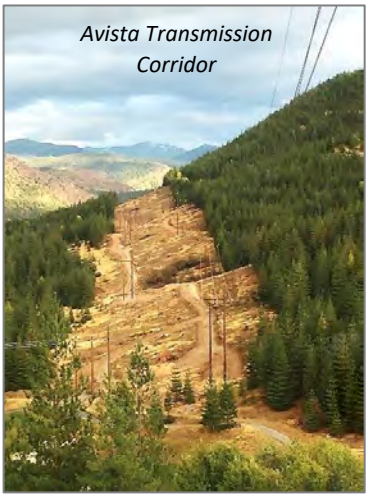
System Average Interruption Duration Index (SAIDI): SAIDI is a system-wide tally of the total number of minutes per year of sustained outage per customer served. It is measured in units of time, usually minutes or hours, and is measured over the course of a year. It basically measures the average length of time an average customer is without power over the course of a year.

System Average Interruption Frequency Index: SAIFI is the average number of sustained interruptions per customer during the year. It is the number of non-momentary outages the average customer experiences in a year.

Third-party Contact: Contact between a piece of electrical equipment and another object, whether natural (tree branch) or human (vehicle).

Tiers: In Avista's Wildland Urban Interface, the power system is divided into sections based upon the risk of a fire occurring and having impact. These are called Tiers and include: Tier 0 (Low or no risk), Tier 1 (Moderate), Tier 2 (Elevated), and Tier 3 (Extreme).

Transmission: Electric facilities that have a voltage of 60 kV or above.


Avista Transmission Corridor

Transmission Corridor: The right-of-way associated with a transmission line in which the utility has the right to remove vegetation that may interfere with the line.


Transmission Work on Chelan-Stratford 115 kV line

Transmission Line Inspection: Avista uses ground patrols, aerial inspections, and LiDAR data to inspect their transmission lines and structures each year. Transmission inspections are regulated by NERC and, in the Western Grid, by WECC (Western Electricity Coordinating Council) requirements.[74]

Transmission Steel Conversion: Avista's effort to replace wood poles specifically in areas with elevated fire risk with steel poles to protect both infrastructure and customer reliability. The Company has experienced wildfire burning through steel pole lines with no impact from the fire.

Tree Fall-In: Trees (or limbs) that are dead, dying, or damaged by illness, by lumberjack errors, storms, etc. that fall and come into contact with powerlines, often causing an outage.

Tree Fall-In

Tree Grow-In: Trees planted under powerlines that over time grow into and contact those lines.

Trip and Reclose: (T/R) A trip and reclose occurs when a circuit breaker is able to clear a fault and quickly restore power by closing the circuit breaker to put the line back in service.


Tree Grow-In

TX: Transmission.

Undergrounding: Undergrounding is the replacement of overhead distribution powerlines with underground cables. In Avista's current Grid Hardening efforts, select portions of distribution overhead line will be converted to underground facilities where feasible and cost justified. In the

[74] FAC-501-WECC-2: Transmission Maintenance, WECC-0120 Posting 5 FAC-501-WECC-2 Transmission Maintenance Posting 5 Clean (nerc.com)

new Enhanced Grid Hardening Program, areas of our distribution system at particularly high risk will be undergrounded based on extensive analysis. Converting facilities to underground fully mitigates potential spark-ignition risk.

Unplanned Outage: Electric outage that occurs with no advance notice from the utility.

Urban: Population centers such as cities and towns, typically having access to firefighting resources. Includes areas with a population of more than 1,000 persons per square mile as determined by the United States Bureau of the Census.

Utility-Related Ignitions: Ignitions involving utility infrastructure or utility employees as determined by official investigation.

Vegetation Issues: This typically means trees and other vegetation that has the potential to or has contacted powerlines and which is likely to cause an outage.

Vegetation Issues

Vegetation Management, Risk-Based: Under Avista's Wildfire Plan, risk tree inspections are increased to 100% of non-urban polygons in an effort to mitigate the potential for vegetation to contact powerlines and create an outage or spark event.

Vegetation Management, Routine: Trimming, removal, and other remediations of vegetation used to maintain utility right-of-way and reduce the risk of outages, ignitions, or other disruption and danger. At Avista, routine vegetation management is five-year cycle with 20% of the system completed each year.

Vegetation Risk Index: Risk index indicating the probability of vegetation-caused outages and/or the potential for ignitions along a particular circuit based on the vegetation species, density, height, growth rate, etc.

Vulnerable Populations: The State of Washington defines vulnerable populations as people who are unable to care for themselves, have a developmental disability, or receiving healthcare services.[75]

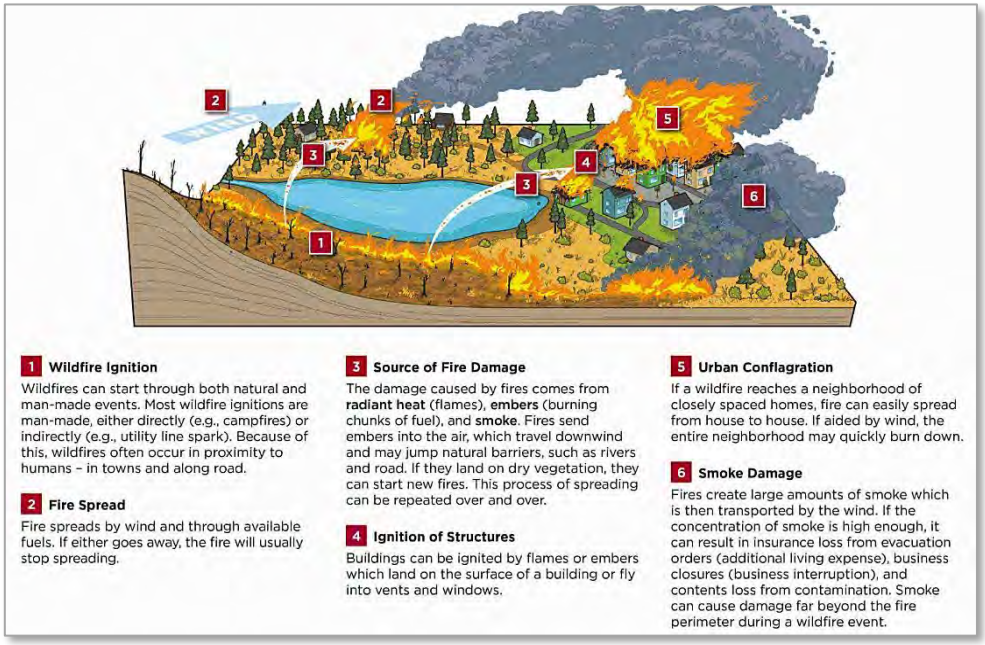
Wedge Connected Stirrups: The traditional hot line tap is attached via a bolt. Over time this type of connection can come loose, arc and spark, and melt through the conductor, dropping it to the ground. The wedge connected stirrup device prevents the hot tap from being directly connected to the conductor. The stirrup attaches in such a

Wedge Connected Stirrup

[75] Washington State Dept. of Social & Health Services, "Vulnerable Adult," Vulnerable Adult | DSHS (wa.gov)

way that if the connection loosens and if the stirrup melts, the conductor is still intact and does not fall to the ground. A wedge connected stirrup is a more permanent connection to the powerline than a hot tap.

Wildfire Impact/Consequence: The effect or outcome of a wildfire affecting objectives, which may be expressed in terms including, although not limited to, health, safety, reliability, economic and/or environmental damage.



Wildfire Mitigation Plan: A thoughtful approach to addressing the utility's responsibility in preventing their equipment from starting a wildfire, while at the same time protecting assets paid for by customers.

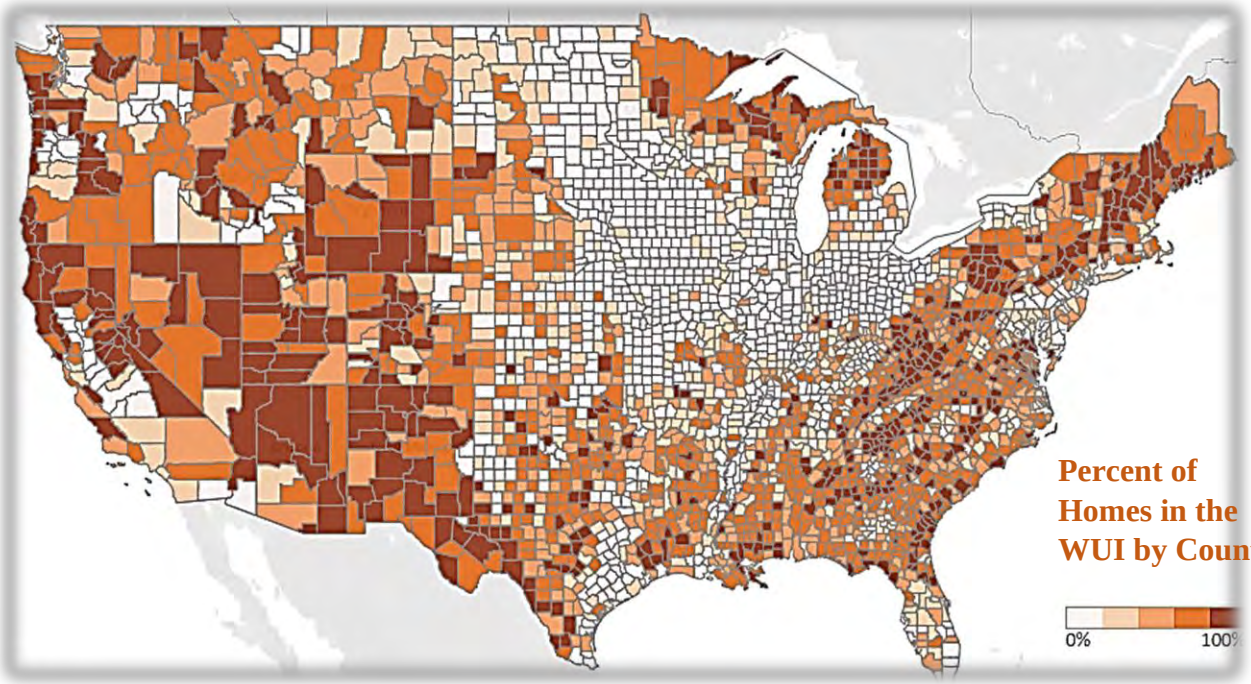
Wildfire Programs: Activities, practices, and strategies that are only necessitated by wildfire risk beyond that required by minimum reliability and/or safety requirements. Such programs are not indicated or in common use in areas where wildfire risk is minimal (e.g., territory with no vegetation or fuel) or under conditions where wildfires are unlikely to ignite or spread (e.g., when rain is falling).

Wildfire Risk: The potential for the occurrence of a wildfire event expressed in terms of ignition probability and wildfire impact/consequence, and the likelihood that an ignition will grow to become a large or rapidly growing wildfire due to dry vegetation and weather conditions.

Wildfire Risk Reduction: The average percentage difference between the current state of risk and future state risk levels as wildfire measures are implemented.

Wildland Urban Interface: Or WUI, is the zone of transition between wilderness (unoccupied land) and land developed by human activity; basically, where the natural environment (typically forested areas) meets the built environment. Homes and businesses located in WUI zones are most at-risk from the impact of wildfires, as they are often located in rural areas lacking adequate fire suppression resources. The WUI map helps to identify and prioritize these areas of greatest risk and serves to inform the recommendations and operational decisions related to wildfire resiliency. Using a WUI map specific to our service territory, we can target our programs where they have the potential to reduce the most risk and have the greatest positive impact in the safety and protection

of our customers and infrastructure.[76]



Wire Down: Instance where an electric transmission or distribution conductor is broken and falls from its intended position to rest on the ground or on a foreign object. If the conductor contacts dry materials on the ground and is live, the sparks created can lead to a fire.

Wood Pole Wraps: Avista uses Genics Fire Mesh, a wire mesh treated with an intumescent material that, when exposed to extreme heat, rapidly expands to form a barrier between the fire and the wood pole. These wraps help prevent low-burning fires from accessing wood poles, protecting them from damage or destruction.


Avista's Mesh Pole Wrap Test

[76] Source of map: USDA/USFS "Understanding the Wildland-Urban Interface (1990-2020)," September 20, 2023, Understanding the Wildland Urban Interface (1990-2020) (arcgis.com)

Appendix A: Avista's Wildfire Public Safety Shutoff Plan Summary

Based on Avista's PSPS Plan Version 1.0 – July 2024

Summary of Avista's PSPS Plan

2024 represents Avista's first year of implementing a Public Safety Power Shutoff (PSPS) Plan. As part of its operational mitigation strategies, Avista developed a PSPS Plan to guide the assessment and decision making process when determining whether to proactively de-energize electrical facilities in areas identified as being at extreme wildfire risk, times when conditions are so severe that it is deemed unsafe to operate our electrical facilities. This effort reduces the potential of those electrical facilities becoming a wildfire ignition source or creating safety concerns for our customers, communities, and employees. The PSPS Plan identifies relevant considerations, decision process flow, and implementation protocols before, during, and after a PSPS event, subject to the recognition that each situation is unique and that actual considerations and/or actions will vary depending on the circumstances. In general, the Plan will be active during wildfire season (typically June-October), reviewed annually, and updated as necessary prior to the start of each wildfire season.

Note that nothing in this Plan supersedes the general authority of the Company to de-energize a power line during an emergency or as requested by firefighters, and a decision (i.e., to protect fire response personnel or to protect company assets from fire damage) might be made without complying with the notification and outreach sections of the PSPS Plan. In addition, extreme weather events are, by their nature, unpredictable and unique, so the specific considerations applicable to any decision regarding possible de-energization may vary based on each individual circumstance. Based on the inherently disruptive nature of power outages, PSPS events must be carefully evaluated to balance wildfire risk with potential PSPS impacts on Avista customers and the communities we serve. Thus, a planned de-energization is a measure of last resort to reduce public safety risk.

The key goals Avista considers as foundational for the PSPS Plan are listed below:

- Advancing the safety of customers, communities, and Avista employees
- Collaborating with key external stakeholders (agencies, counties, local governments, public safety partners, tribes and first responders)
- Minimizing both potential wildfire risk and power outage impacts to communities and customers
- Maintaining reliable electric service

As described in the report above, Avista uses a customized WUI map to identify areas at highest risk of wildfire occurrence and impact. Communities such as Chewelah and Colville border national forest

lands, as do many other areas including Sandpoint, St. Maries, Grangeville, and portions of the Lewiston/Clarkston Valley, placing them at higher risk. Spokane County, having seen significant population growth, also has an increasing number of housing developments within high fire threat areas, increasing the risk of wildfire impacts. According to our current WUI map, approximately 2,746 miles of electric distribution lines are in high fire risk areas, or about 36% of the system. In 2023 the Company identified the top 25 most at-risk distribution feeders across our service territory in the Spokane, Coeur d'Alene, Sandpoint, Kellogg, and Grangeville areas.[77] This list is based on the Avista Fire Weather Dashboard, the WUI map, historic wildfires, historic outage data, and scenario planning. These are the feeders most likely to experience a PSPS event, but this list does not preclude Avista from initiating a PSPS on other circuits in its service territory and the list may change over time.

At this time, PSPS is only being considered for use on Avista's electric distribution system; use of PSPS on Avista's transmission system is not currently part of this PSPS plan. Avista's transmission system is part of the Bulk Electric System (BES) which requires strict operational standards for maintaining integrity of the grid. Additional analysis of the impacts of PSPS on Avista's transmission system and development of the process to implement a transmission PSPS are required before being incorporated into this Plan.

Preparation

Each year as Avista prepares for fire season, we engage with public safety partners, state and local governments, critical facilities, tribal partners, communities, and customers regarding wildfire prevention and Wildfire Resiliency Plan mitigation activities, as well as to provide education in safely and effectively implementing the PSPS plan. The Director of Electrical Engineering along with the Wildfire Resiliency Manager coordinate and facilitate activities of multiple Avista business units for wildfire prevention and mitigation activities including Fire Safety Mode and PSPS operations, while Business & Public Affairs, Customer Solutions, and Corporate Communications facilitate public outreach and coordination efforts with external stakeholders. Coordination with agencies like the Washington State Dept. of Natural Resources (DNR) and Idaho Dept. of Lands (IDL) are part of this work.

Decision-Making

As a general matter, Avista would initiate a PSPS if the Company determines, based on the circumstances and information available at the time, that a combination of critical conditions at certain locations creates a consequential risk of wildfire ignition and severe resulting harm, and that those risks outweigh the corresponding risks associated with initiating the PSPS. As described earlier in this report, the Fire Risk Index (FRI) generated by the Fire Weather Dashboard will be one of the deciding factors. As a reminder, these levels are:

1) Green (Low)—Risk of fire spread is low to near zero e.g., typical winter conditions: FRI score

[77] Details are available in Avista's Public Safety Power Shutoff Report located on Avista's website: Public Safety Power Shutoffs (myavista.com)

of 0 – 4.0.

2) Blue (Moderate) – Risk of outage is high, while fire spread is low, **or** Risk of outage is low, while fire spread is high, **or** Risk of outage is moderate and fire spread is moderate: FRI score of 4.1 - 5.4.

3) Yellow (High) (Extreme FSM) – Risk of outage is high, while fire spread is moderate, **or** Risk of outage is moderate, while fire spread is high, **or** Risk of outage is high and fire spread is high: FRI score of 5.5 - 6.4.

4) Orange (Very High) (Extreme FSM) – Risk of outage is extreme, while fire spread is high, **or** Risk of outage is high, while fire spread is extreme, **or** Risk of outage is very high and fire spread is very high: FRI score of 6.5 to 6.9.

5) Red (Extreme)– Risk of outage is extreme, and risk of fire spread is extreme: FRI: >7.0

The FRI supports operational decision-making to reduce potential wildfire risk. Fire Safety Mode which includes enhanced protection settings are used begins at an FRI of approximately 3.5, and elevating to extreme FSM is typical at levels of 5.5. The Company will consider the possibility of initiating a PSPS when the FRI forecast is at 7.0 or greater, and where other factors applicable to the situation warrant such an action. All of these levels and associated decisions are approximate, as the final decision is based upon a number of factors such as expected accuracy of the weather forecasts, potential impacts to customers, and other factors.

Timelines

PSPS Watch. Avista will transition from normal wildfire season operations to PSPS Watch approximately 7-2 days prior to a potential PSPS event at the direction of the Director of Electrical Engineering (Wildfire Lead) when conditions indicate elevated risk. During the PSPS Watch phase, Avista will activate the PSPS Assessment Team who will meet as needed to discuss current and forecasted weather conditions and other critical information. An operational risk assessment will be performed to determine, risks, and vulnerabilities. The Director of Electrical Engineering will determine whether to remain at a PSPS Watch, escalate to PSPS Warning, or de-escalate to seasonal FSM operations. The PSPS Assessment Team will decide if Avista will issue a preliminary notification of a potential PSPS event to public safety partners, critical facilities operators, governmental agencies, and emergency management partners. An Emergency Operating Plan (EOP) briefing will also be initiated as early as 7 days prior to the initiation of a PSPS Event.

PSPS Assessment Team

- *Director of Electrical Engineering*
- *Wildfire Resiliency Manager*
- *Director of Business & Public Affairs*
- *Electric Operations*
- *Corporate Communications*
- *Regulatory*
- *System Operations*
- *Customer Service*
- *Manager of Social Impact*
- *Legal*

PSPS Warning. 48-24 hours in advance of a potential event if it is believed that a PSPS outage is either probable or is already scheduled, the full PSPS team will be placed on stand-by. Executives will be given detailed information. Operations will help determine which circuits should be de-energized and begin developing a restoration plan. Impacted customers will be contacted and are warned to take steps to prepare for an outage. Internal stakeholders such as line crews and provisioners will begin preparations. The utility continues to coordinate with identified external partners such as first responders and community support organizations to provide them with information and develop a joint strategy.

Full PSPS Team

- PSPS Assessment Team plus:
- Wildfire Executive Committee
  - *President and COO*
  - *VP of Energy Delivery*
  - *VP of Community Affairs & Chief Customer Officer*
  - *Sr. VP and General Counsel*
  - *Sr. VP CFO Treasurer*
  - *Regulatory Affairs Officer*
  - *Director of Corporate Communications*

PSPS Event. The power has been shut off. Information on all channels is continuously updated, including the outage map, to keep customers informed about the situation and when the Company expects to restore power.

PSPS End. An "all clear" is issued based on weather projections and in consultation with necessary parties. At this point, Avista determines that the threat has ended and that it is safe to begin making repairs. Crews are organized and dispatched. This process may take several days. Communications will continue to be a priority. It is important that customers are kept informed throughout this process, including estimated restoration time.

Restoration

One of the challenges when using PSPS is the process of re-energization. Power restoration following a PSPS is akin to a major storm. In traditional utility restoration efforts, the priority is to restore service to as many customers as possible through line switching and by isolating faulted circuits. Restoration efforts may also include a consideration of customers most heavily impacted by outages or located in Named Communities.

It is important to note that a PSPS event and associated complexities related to patrol and repair work does not account for the outages on other circuits and there would likely be hundreds of such outages in an event of this magnitude.

If a utility de-energizes lines for a PSPS event, facilities cannot be re-energized until all impacted circuits and lines are thoroughly inspected or patrolled to ensure that the situation is safe. After inspection, lines are re-energized segment by segment. Patrol of all impacted overhead electric facilities can only commence once the weather event has subsided and it is safe for crews to enter the area. Restoration following a typical PSPS event normally requires three to six days depending upon the location, crew availability, the total number of lines to be inspected, and other factors. For this reason, several PSPS events in California have taken up to 14 days for full restoration. Restoration efforts following a PSPS will always require additional time to fully inspect each circuit and line even if they weren't damaged during the weather event and must account for the fact that a situation that would lead to a PSPS is likely to cause damage system-wide, not only on PSPS circuits.

Customer Communications & Support

Strong partnerships have been developed between Avista and local public safety and health organizations, other utilities, tribal and community leaders, and emergency management agencies to assist in the coordination for any event which impacts the communities we serve. Avista will serve as the initiating agency in the event of a PSPS and will coordinate with all local agencies as appropriate. If requested, an Avista employee may be dispatched to the affected State or County Emergency Operations Centers in the role of Liaison Officer and will provide a constant and direct conduit for information.

As discussed previously in this report, multiple channels of communication will be used before, during, and after a PSPS event. Avista Regional Business Managers will maintain regular outreach with local jurisdictions including voice and email notifications during the event with specific information about the location of a PSPS event and estimated restoration times. This information is also included on our website and outage map. As mentioned previously, Avista has a Customer Service CARES Team which is engaged with medically vulnerable customers and acts as a liaison to support those customers and any who are identified as being on life support.

Another way Avista will support customers during a PSPS event is to operate Community Resource Centers (CRCs). CRCs are an integral part of ensuring that customers affected by PSPS events have access to basic resources and up-to-date information during a PSPS event. Avista utilizes a contracted vendor, FireDawg, for logistical support in deploying CRCs. CRCs will be activated once a PSPS de-energization is imminent. The center(s) will generally be open from the beginning of a PSPS event until final re-energization, with typical hours of operation being 8 am to 8 pm. CRCs generally include air conditioning, electronic and medical device charging, snacks/water/ice, and information regarding the outage. Avista will utilize brick-and-mortar facilities for CRC locations unless such a facility is not available, in which case FireDawg will deploy a large generator-powered trailer or tent. Avista personnel, Community Resource Ambassadors, and the contracted vendor will staff the center(s) to assist and provide information to customers in need.

Avista has identified many potential locations for CRCs throughout the service territory based upon estimated customer needs. The work of formalizing agreements and securing additional locations for CRCs is ongoing and will continue into 2025. Avista is working both internally and externally with local public safety partners, other community partners, and tribal leadership to identify appropriate CRC sites. In most circumstances one CRC location will be established within each de-energized area and will provide the ability for the community to have specific needs met during a PSPS event.

In 2024 the Company reached out to over 14,000 first responders, emergency managers, critical customer groups, service providers, health organizations, city and county leaders, state agencies, and others to provide education around our PSPS Plan and to strategize about protecting and supporting customers through potential outages. Details of this engagement can be found in the tables below.

Wildfire Outreach Summary 2024				
Date:	**Agency/Event:**	**Representatives:**	**Attendees:**	**Topics:**
January 29th	Horizon Hospice	Executive Director and Case Manager	3	Potential implications of PSPS and extended outages and opportunities to partner together
February 8th	Lakeland Village/Eastern State Hospital	Managers of Facilities at Eastern State Hospital and Lakeland Village	5	Implications of upcoming PSPS and discussing opportunities for communication and collaboration during emergency events
March 14th	Idaho Office of Emergency Management, North Central Region	Emergency Managers from Clearwater, Latah, Lewis, Idaho, Nez Perce, City of Lewiston, National Weather Service, Kootenai Health, Public Health North Central District and Nez Perce County	17	Shared about PSPS, discussed medically vulnerable customers, questions about length of outage, CRCs
March 21st	North Idaho Healthcare Coalition	Kootenai Health, Kootenai County EMS, North Central Health District, Panhandle Health District	20-25	Discussed impacts of PSPS and introducing the topic to the group, also discussed work with medically vulnerable customers
March 22nd	Community Resilience & Vulnerable Populations Luncheon	Executive Directors of Providence, Multicare, Aging & Long Term Care of EW; representatives from WA State DOH, Spokane Regional Health District, DSHS, Horizon Hospice, Indian Health Services	15-20	Discussed impacts of PSPS and how we can continually improve our reach and service to medically vulnerable customers. Also discussed continued desire to partner together
April 10th	Shoshone County LEPC		17	Discussed Wildfire Resiliency and PSPS, questions about medically vulnerable, backup generation
April 11th	Bonner County LEPC		22	Discussed Wildfire Resiliency and PSPS, questions about medically vulnerable, backup generation
April 17th	Benewah County LEPC		16	Discussed Wildfire Resiliency and PSPS, questions about medically vulnerable, backup generation
April 18th	Idaho County Local Emergency Planning Committee	Cottonwood Fire Dept., North Idaho Healthcare Coalition, Public Health N. Idaho, Elk City Fire Dept., Idaho County Mapping, Harpster Fire Dept., Idaho Office of Emergency Mgmt., 3 Rivers Ham Radio, Lewis County Ham Radio, Idaho County Emergency Mgmt. and Idaho Dept. of Lands	17	Discussed PSPS, questions about medically vulnerable, length of outages, CRCs
April 23rd	City of Spokane	City of Spokane Mayor and Cabinet	18	Discussed PSPS and medically vulnerable customers, other partnerships and data sharing opportunities
May 2nd	Spokane Fire Chiefs Meeting	Spokane Fire Chiefs, Providence Emergency Manager, Dept. of Natural Resources, Spokane County	18-20	Discussed PSPS and changes to Fire Safety Mode (FSM), discussed water resources, where to send information about potential PSPS event and water resources in event of wildfire
May 6th	Public Health Emergency Planning Region Meeting (9 East)	Spokane Regional Health District, NE Tri-County Health, Whitman County Public District, Lincoln County Public Health, Adams County Health District	12-14	Discussed PSPS and medically vulnerable customers, wells and wastewater treatment
May 7th	Press Conference regarding PSPS presented by Heather Rosentrater (President and CEO of Avista)	Partners: City of Spokane, Spokane County, Dept. of Natural Resources and Idaho Dept. of Lands, Spokane County Fire Chiefs	20-24	Provided an overview of PSPS and the importance of partnerships helping keep our communities safe
May 8th	Lewis County Emergency Planning Committee	Lewis County Emergency Mgmt., Lewis County Sheriff, 3 Rivers Amateur Radio, Idaho Transportation Dept., City of Nez Perce, Kamiah Fire Protection, National Weather Service, Nez Perce Tribe, Craigmont Rural Fire Dept., Winchester Rural Fire Dept., Public Health North Central District, Lewis County Commission and City of Nez Perce Planning and Zoning,	17	PSPS discussion, questions about communication timeline, length of outage, backup generation for wastewater treatment plants
May 8th	CDA Executive Round Table		35	Discussed Wildfire Resiliency and PSPS, questions about medically vulnerable, backup generation, water resources for rural customers
May 13th	Community Response for Vulnerable Population During Outages	Spokane County, Spokane Transit, WSDOT, Spokane Regional Health District, Aging and Long Term Care of EW, Spokane Neighboorhood Action Partners, Disability Action Center NW, International Rescue Committee	18	Discussed PSPS/medically vulnerable customers and strategized about most important issues for vulnerable populations and things we should be focused on going forward
May 13th	City of Spokane Fire Chiefs	Spokane Fire Chief, executive chief staff, wildland planner, wildland group battalion chiefs	12	Discussed PSPS and updates to FSM, discussed medically vulnerable customers and continued efforts to partner together for outreach events
May 14th,	Panorama Counties School and Community Emergency Responders Meeting	Stevens County, Kettle Falls School District, ESD 101, Newport School District, Pend Oreille School District	12-14	Discussed PSPS and using schools as potential CRC locations
May 14th	Stevens County Commissioners Meeting	Stevens County Commissioners, Stevens County Emergency Manager, Fire Personnel	15	Discussed PSPS and Wildfire Resiliency Program
May 15th	Medical Lake Recovery Group	Agencies and organizations around the community who assist in disaster recovery	80	Discussed PSPS and Wildfire Resiliency Program
May 16th	Providence Hospitals	Providence Emergency Manager and Facilities Managers	5	Discussed PSPS for the hospitals, best points of contacts, backup generation
May 20th	Commercial and Industrial Accounts	Various industrial and commercial accounts		Discussed PSPS and Wildfire Resiliency Program answered questions from group
May 20th	Washington State Department of Social and Health Services	DSHS employees from around the state	70+	Discussed PSPS and the implications of DSHS facilities, discussed communications and implored folks to discuss this topic with their local municipalities
May 22nd	Kootenai County LEPC		25	Discussed Wildfire Resiliency and PSPS, questions about medically vulnerable, backup generation, water resources for rural customers
May 24th	Asotin County Local Emergency Planning Committee	Asotin County Dept. of Emergency Mgmt., Washington State Emergency Mgmt., Nez Perce County/City of Lewiston Emergency Mgmt., Garfield County Emergency Mgmt., National Weather Service, Avista, City of Asotin Mayor, Asotin County Public Works, Asotin County Commission, Asotin County Conservation District, Asotin County Fire Chief, Asotin County Sheriff, Asotin County Health District, Tri State Health.	15	Discussed PSPS and questions about length of outages, communications prior to PSPS event

Wildfire Outreach Summary 2024				
Date:	Agency/Event:	Representatives:	Attendees:	Topics:
June 10th	Spokane Valley Council Member Discussion	1 City Council Member with Spokane Valley		Discussed PSPS and questions about length of outages, communications prior to PSPS event and medically vulnerable customers
June 11th	NE Washington Telephone Town Hall Event	Stevens & Ferry Counties and Avista speakers, to include the Director of Electrical Engineering, Manager of WF Resiliency, Electric Operations Manager, and guest speakers from local Fire Agencies and Emergency Managers	951	Discussed Wildfire/PSPS Resiliency and what Avista is doing within their communities to prepare for wildfire season sharing info about our Vegetation Management programs, Operational changes, the WMP, CRC's, and what our guest speakers within the community are using to address the threat of wildfire. This was a live event, allowing the people on the call to ask questions, answering them towards the last 15 minutes of the call
June 12th	Lewis-Clark Valley Chamber of Commerce (Presenter Heather Rosentrater)	Chamber members, business leaders, elected officials, educational institutions and other VIPs from the Lewis-Clark Valley, active and retired	150+	Discussed Avista's Wildfire Resiliency Program and briefly discussed the potential for PSPS
June 13th	Spokane Tribe yearly wildfire meeting	Fire Mgmt. Officer, Wildlife Manager and Acting Forestry Manager with Spokane Tribe		Discussed Avista's Wildfire Resiliency Program and discussed the potential for PSPS, also discussed best points of contact during emergency
June 13th	Colville Confederated Tribe yearly wildfire meeting	Natural Resources Director, Emergency Mgmt. Coordinator, Assistant Forest Manager, Forest Manager, Health and Human Services Director, and Fire Chief of Nespelem,		Discussed Avista's Wildfire Resiliency Program and discussed the potential for PSPS, also discussed best points of contact during emergency
June 13th	Nez Perce Tribe yearly wildfire meeting	Fire Prevention & Mitigation Specialist, Natural Resource Manager and Deputy Executive Director		Discussed Avista's Wildfire Resiliency Program and discussed the potential for PSPS, also discussed best points of contact during emergency
June 13th	North Idaho Telephone Town Hall Event	Kootenai, Benewah, Bonner, and Shoshone Counties and Avista speakers, to include the Director of Electrical Engineering, Manager of WF Resiliency, Electric Operations Manager, and guest speaker from Idaho Dept. of Lands	2,076	Discussed Wildfire/PSPS Resiliency and what Avista is doing within their communities to prepare for wildfire season sharing info about our Vegetation Management programs, Operational changes, the WMP, CRC's, and what our guest speakers within the community are using to address the threat of wildfire. This was a live event, allowing the people on the call to ask questions, answering them towards the last 15 minutes of the call
June 17th	Providence Hospice Care of Spokane	Executive Director and Care Coordinator		Discussed PSPS and questions about length of outages, communications prior to PSPS event and medically vulnerable customers
June 18th	N. Central Idaho Telephone Town Hall Event	Clearwater, Asotin, Lewis County, Lewis Clark Valley, Nez Perce and Whitman Counties and Avista speakers, to include the Director of Electrical Engineering, Manager of WF Resiliency, Electric Operations Manager, and guest speakers from Idaho Dept. of Lands and County Fire Chief	2,275	Discussed Wildfire/PSPS Resiliency and what Avista is doing within their communities to prepare for wildfire season sharing info about our Vegetation Management programs, Operational changes, the WMP, CRC's, and what our guest speakers within the community are using to address the threat of wildfire. This was a live event, allowing the people on the call to ask questions, answering them towards the last 15 minutes of the call
June 20th	North Central Multi Agency Coordinating Group	County emergency managers from Asotin, Clearwater, Idaho, Lewis and Nez Perce counties as well as the City of Lewiston, Nez Perce Tribe as well as Idaho Office of Emergency Mgmt.	45	Discussed Avista's Wildfire Resiliency Program and briefly discussed the potential for PSPS
June 20th	Spokane Region Telephone Town Hall Event	Northern Spokane County, Deer Park, West Plains, Greater Spokane Valley areas, Southern Spokane County, and Avista speakers, to include the Director of Electrical Engineering, Manager of WF Resiliency, Electric Operations Manager, and guest speaker from Cheney Fire, and Spokane County Emergency Mgmt.	2,407	Discussed Wildfire/PSPS Resiliency to include what Avista is doing within their communities to prepare for wildfire season to include, Vegetation Management, Operations, the WMP, CRC's, and guest speakers from our partners within the community. This was a live event, allowing the people on the call to ask questions, answering them towards the last 15 minutes of the call
June 25th	City of Spokane Telephone Town Hall Event	City of Spokane, and Avista speakers, to include the Director of Electrical Engineering, Operations Manager of Vegetation Mgmt., Electric Operations Manager, and guest speaker from the City of Spokane Fire, and Director of Emergency Mgmt.	3,634	Discussed Wildfire/PSPS Resiliency and what Avista is doing within their communities to prepare for wildfire season sharing info about our Vegetation Management programs, Operational changes, the WMP, CRC's, and what our guest speakers within the community are using to address the threat of wildfire. This was a live event, allowing the people on the call to ask questions, answering them towards the last 15 minutes of the call
June 26th	Panhandle Health/Medical Reserve Corps		32	Discussed Wildfire Resiliency and PSPS, questions about medically vulnerable, backup generation, water resources for rural customers
June 28th	Stevens County Fire Chiefs Meeting	Fire Chiefs from Stevens County area and Stevens County Emergency Manager	16	Discussed Wildfire Resiliency and PSPS, questions about medically vulnerable, backup generation, water resources for rural customers
July 2nd	Liberty Lake City Council	Liberty Lake City Council, City Administrator, Liberty Lake Mayor, other Liberty Lake City staff, Spokane Valley Fire Dept., Liberty Lake Police, plus several Liberty Lake citizens	20	Discussed Wildfire Resiliency and PSPS, questions about medically vulnerable, backup generation, water resources for rural customers
July 2nd	Medical Lake City Council	City Council and members from public	30	Discussed Wildfire Resiliency Plan and PSPS
July 2nd	Palouse Region Telephone Town Hall Event	Adams, Latah, Lincoln, Whitman Counties, and Avista speakers, to include the Director of Electrical Engineering, Manager of WF Resiliency, Electric Operations Manager, and guest speakers from Pullman Fire, and Whitman County Emergency Mgmt.	1,919	Discussed Wildfire/PSPS Resiliency and what Avista is doing within their communities to prepare for wildfire season sharing info about our Vegetation Management programs, Operational changes, the WMP, CRC's, and what our guest speakers within the community are using to address the threat of wildfire. This was a live event, allowing the people on the call to ask questions, answering them towards the last 15 minutes of the call
July 8th	Conversation with Verizon Wireless	Regional Director		Discussed PSPS and best contacts during emergency
July 9th	Kootenai County Fire & Rescue/ Northern Lakes Fire District		11	Discussion focused on vulnerable water districts without backup generation and communications during PSPS
July 11th	Idaho Regional Wildfire Prep Discussion Group	Emergency Mgmt. personnel from Asotin, Nez Perce, Lewis, Idaho, Clearwater and Latah counties, as well as the Nez Perce Tribe and the Idaho Office of Emergency Mgmt.	8	Discussed Wildfire Resiliency Plan and PSPS
July 11th	Meeting with Spokane County Library District	Operations Manager of Spokane County Libraries		Discussed specifics of PSPS Plan and request to use locations for CRCs
July 12th	Presentation to Faith Based Regional Committee	Representatives from various faiths including Christian, LDS, Buddhist, Sikh, salvation army	8-10	Discussed specifics of Wildfire Resiliency and PSPS Plans and request to potentially use church locations in rural areas for CRCs
July 24th	Meeting with Whitworth Water District	Executive Director and Lead Engineer		Discussed specifics of PSPS communications strategy and concerns about backup generation for water district
July 25th	Follow-up with agencies working in rural communities	WSDOT and Disability Action Center NW		Discussed new methods to reach customers in rural areas and the efforts to combat false information
July 27th	Settlers Day Deer Park, WA	Citizens from Deer Park and surrounding area	20	Had booth open to discuss PSPS and wildfire program
August 3rd	Family Day (Location: City of Spokane)	General public (put on by group of religious organizations in the PNW region)	150-200	Had booth open to discuss PSPS and wildfire program
August 14th	Meeting with AT&T to discuss PSPS protocols	AT&T employees from Washington, Idaho and California and Spokane County Emergency Mgmt.	8-10	Discussed PSPS and best contacts during emergency
August 15th	Spokane Fire District 5	Fire Commissioner	1	Discussed Wildfire Resiliency Plan and PSPS and answered questions