



CITY OF CORONA

DEPARTMENT OF WATER AND POWER ELECTRIC UTILITY

WILDFIRE MITIGATION PLAN 2021 INFORMATIONAL RESPONSE

**RESPONSES TO WILDFIRE SAFETY ADVISORY BOARD'S
2021 GUIDANCE ADVISORY OPINION**

JUNE 16, 2021

I. PURPOSE OF THIS 2021 INFORMATIONAL RESPONSE

The California Wildfire Safety Advisory Board (WSAB) issued the *Guidance Advisory Opinion for the 2021 Wildfire Mitigation Plans of Electric Publicly Owned Utilities and Cooperatives* ("2021 WSAB Guidance Advisory Opinion") on December 15, 2020. The City of Corona Department of Water and Power (CDWP) provides this document to the WSAB in order to respond to each of the recommendations included in the 2021 WSAB Guidance Advisory Opinion. POU's will provide a narrative response and/or a cross reference to the location in CDWP's Wildfire Mitigation Plan (WMP) where the topic is addressed. Where the recommendation is not applicable to CDWP, the response will provide a brief description supporting this conclusion.

II. CONTEXT SETTING INFORMATION

Table 1: Context-Setting Information

	The City of Corona Department of Water and Power	
Service Territory Size	[1.5] square miles	
Owned Assets	<input type="checkbox"/> Transmission <input checked="" type="checkbox"/> Distribution <input type="checkbox"/> Generation	
Number of Customers Served	[1,850] customer accounts	
Population Within Service Territory	[3,182] people	
Customer Class Makeup	<i>Number of Accounts</i>	<i>Share of Total Load (MWh)</i>
	[70]% Residential; [2]% Government; [0]% Agricultural; [27]% Commercial; [1]% Industrial	[51]% Residential; [3]% Government; [0]% Agricultural; [28]% Commercial; [18]% Industrial
Service Territory Location/Topography¹	[0]% Agriculture [5]% Coastal Scrubland ** [0]% Barren/Other [91]% Urban [0]% Conifer Forest [0]% Water [0]% Conifer Woodland [1]% Wetlands ** [3]% Grassland* [0]% Desert [0]% Hardwood Forest [0]% Hardwood Woodland [0]% Herbaceous <small>*Maintained golf course with UG assets **All UG electric assets</small>	

¹ This data shall be based on the California Department of Forestry and Fire Protection, California Multi-Source Vegetation Layer Map, depicting WHR13 Types (Wildlife Habitat Relationship classes grouped into 13 major land cover types) available at: <https://www.arcgis.com/home/item.html?id=b7ec5d68d8114b1fb2bfbf4665989eb3>.

Service Territory Wildland Urban Interface² (based on total area)	X Includes maps
Percent of Service Territory in CPUC High Fire Threat Districts (based on total area)	X Includes maps Tier 2: [3]%* Tier 3: [0]% * All service territory in Tier 2 areas include all underground electric assets. No overhead exposure to public property.
Prevailing Wind Directions & Speeds by Season	X Includes maps CDWP has minimal overhead exposure, as the system is nearly 100% underground, with the exception of only 3 poles spanning approximately 78 linear feet, with a total of roughly 105 linear feet of overhead cable, including the dive to underground cable on City-owned property. This location (Waste Water Treatment Plant #2) at 652 Harrison Street, Corona, CA 92879 has no vegetation and the property surface area and structures consist of concrete, asphalt and rock. Additionally, this location is not within a HFT area.
Miles of Owned Lines Underground and/or Overhead	Overhead Dist.: [105] Feet Overhead Trans.: [0] miles Underground Dist.: [31.1] miles Underground Trans.: [0] miles
	Explanatory Note 1 - Methodology for Measuring "Miles": [164196 feet of underground cable verified in GIS and converted to underground (UG) miles]
	Explanatory Note 2 – Description of Unique Ownership Circumstances: [None]
	Explanatory Note 3 – Additional Relevant Context: [None]
Percent of Owned Lines in CPUC High Fire Threat Districts	<i>Overhead Distribution Lines as % of Total Distribution System (Inside and Outside Service Territory)</i>
	Tier 2: 0% Tier 3: 0%
	<i>Overhead Transmission Lines as % of Total Transmission System (Inside and Outside Service Territory)</i>
	Tier 2: 0% Tier 3: 0%
	Explanatory Note 4 – Additional Relevant Context: [e.g., explain any difference from data reported in WMP due to different numerator used for this form]
Customers have ever lost service due to an IOU PSPS event?	<input type="checkbox"/> Yes X No
Customers have ever been notified of a potential loss of service to due to a	<input type="checkbox"/> Yes X No

² This data shall be based on the definitions and maps maintained by the United States Department of Agriculture, as most recently assembled in *The 2010 Wildland-Urban Interface of the Conterminous United States*, available at https://www.fs.fed.us/nrs/pubs/rmap/rmap_nrs8.pdf.

forecasted IOU PSPS event?	
Has developed protocols to pre-emptively shut off electricity in response to elevated wildfire risks?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Has previously pre-emptively shut off electricity in response to elevated wildfire risk?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, then provide the following data for calendar year 2020: <i>Number of shut-off events:</i> [__n/a__] <i>Customer Accounts that lost service for >10 minutes:</i> [__n/a__] <i>For prior response, average duration before service restored:</i> [__n/a__]

III. CROSS REFERENCE TO STATUTORY REQUIREMENTS

WSAB requested that POU's provide a clear roadmap as to where each statutory requirement is addressed within the POU WMP.

Table 2: Cross References to Statutory Requirements

Requirement	Statutory Language	Location in WMP
Persons Responsible	PUC § 8387(b)(2)(A): An accounting of the responsibilities of persons responsible for executing the plan.	Section [III] Page [2]
Objectives of the Plan	PUC § 8387(b)(2)(B): The objectives of the wildfire mitigation plan.	Section [II] Page: [2]
Preventive Strategies	PUC § 8387(b)(2)(C): A description of the preventive strategies and programs to be adopted by the local publicly owned electric utility or electrical cooperative to minimize the risk of its electrical lines and equipment causing catastrophic wildfires, including consideration of dynamic climate change risks.	Section [V] Page [8]
Evaluation Metrics	PUC § 8387(b)(2)(D): A description of the metrics the local publicly owned electric utility or electrical cooperative plans to use to evaluate the wildfire mitigation plan's performance and the assumptions that underlie the use of those metrics.	Section [VII] Page [11]
Impact of Metrics	PUC § 8387(b)(2)(E): A discussion of how the application of previously identified metrics to previous wildfire mitigation plan performances has informed the wildfire mitigation plan.	Section [VII] Page [11]
Deenergization Protocols	PUC § 8387(b)(2)(F): Protocols for disabling reclosers and deenergizing portions of the electrical distribution system that consider the associated impacts on public safety, as well as protocols related to mitigating the public safety impacts of those protocols, including impacts on critical first responders and on health and communication infrastructure.	Section [V] Page [9]

Customer Notification Procedures	PUC § 8387(b)(2)(G): Appropriate and feasible procedures for notifying a customer who may be impacted by the deenergizing of electrical lines. The procedures shall consider the need to notify, as a priority, critical first responders, health care facilities, and operators of telecommunications infrastructure.	Section [V] Page [9]
Vegetation Management	PUC § 8387(b)(2)(H): Plans for vegetation management.	Section [V] Page [9]
Inspections	PUC § 8387(b)(2)(I): Plans for inspections of the local publicly owned electric utility's or electrical cooperative's electrical infrastructure.	Section [V] Page [9]
Prioritization of Wildfire Risks	<p>PUC § 8387(b)(2)(J): A list that identifies, describes, and prioritizes all wildfire risks, and drivers for those risks, throughout the local publicly owned electric utility's or electrical cooperative's service territory. The list shall include, but not be limited to, both of the following:</p> <p>(i) Risks and risk drivers associated with design, construction, operation, and maintenance of the local publicly owned electric utility's or electrical cooperative's equipment and facilities.</p> <p>(ii) Particular risks and risk drivers associated with topographic and climatological risk factors throughout the different parts of the local publicly owned electric utility's or electrical cooperative's service territory.</p>	Section [IV] Page [7]
CPUC Fire Threat Map Adjustments	PUC § 8387(b)(2)(K): Identification of any geographic area in the local publicly owned electric utility's or electrical cooperative's service territory that is a higher wildfire threat than is identified in a commission fire threat map, and identification of where the commission should expand a high fire threat district based on new information or changes to the environment.	Section [IX] Page [16]
Enterprisewide Risks	PUC § 8387(b)(2)(L): A methodology for identifying and presenting enterprisewide safety risk and wildfire-related risk.	Section [IV] Page [7]
Restoration of Service	PUC § 8387(b)(2)(M): A statement of how the local publicly owned electric utility or electrical cooperative will restore service after a wildfire.	Section [VI] Page [10]
Monitor and Audit	<p>PUC § 8387(b)(2)(N): A description of the processes and procedures the local publicly owned electric utility or electrical cooperative shall use to do all of the following</p> <p>(i) Monitor and audit the implementation of the wildfire mitigation plan.</p> <p>(ii) Identify any deficiencies in the wildfire mitigation plan or its implementation, and correct those deficiencies.</p>	Section [VII] Page [11]

	(iii) Monitor and audit the effectiveness of electrical line and equipment inspections, including inspections performed by contractors, that are carried out under the plan, other applicable statutes, or commission rules.	
Qualified Independent Evaluator	PUC § 8387(c): The local publicly owned electric utility or electrical cooperative shall contract with a qualified independent evaluator with experience in assessing the safe operation of electrical infrastructure to review and assess the comprehensiveness of its wildfire mitigation plan. The independent evaluator shall issue a report that shall be made available on the Internet Web site of the local publicly owned electric utility or electrical cooperative, and shall present the report at a public meeting of the local publicly owned electric utility's or electrical cooperative's governing board.	Section [VII] Page [12]

IV. WSAB GUIDANCE ADVISORY OPINION RECOMMENDATIONS

The WSAB Guidance Advisory Opinion identifies 14 specific recommendations that POUs are requested to address in their 2021 WMPs. As specified in Public Utilities Code § 8387(b)(1), each POU is required to perform a comprehensive revision to the POU's WMP at least once every three years. Pursuant to this guidance, the POUs will be updating their WMPs based on the direction of their local governing boards within this 3-year cycle. Because the WSAB's recommendations have been provided after the initial WMP submission, the POUs will have varying capacities to fully address each recommendation in their 2021 WMP. This Section IV restates each of the WSAB recommendations and provides an opportunity for each POU to do one or more of the following: (1) provide a narrative response to the recommendation; (2) provide a cross reference to where in the POU's WMP this topic is addressed; (3) describe why the recommendation is not applicable to the POU; or (4) inform the WSAB of the POU's intent to address the recommendation at the point of the POU's next comprehensive revision, occurring in either the 2022 or 2023 WMP.

A. Plan Structure

WSAB Recommendation #1: Provide context-setting information about the POU and provide a simple guide to where the statutory requirements are addressed within the WMP.

POU Response: See Sections II and III above.

WSAB Recommendation #2: Provide a short description of the POU's public review and approval (if required) for the WMP. This description may also include a brief explanation of the funding mechanisms for wildfire mitigation efforts.

POU Response: The City of Corona is a general law city that operates under a Council-Manager form of government. The City is governed by a five-member City Council. This Wildfire Mitigation Plan will be presented to CDWP's City Council and will present updates to this plan to the City Council on an annual basis. Based on the recommendations of its City Council, CDWP will correct any identified deficiencies. All City Council items are posted publicly and public comment is always welcomed during the approval process.

WSAB Recommendation #3: Identify where the POU has posted the most recent Independent Evaluator (IE) Report and if your POU plans to enhance future IE reports, please summarize in what ways.

POU Response: CDWP's IE report, along with the WMP is published and available on the City's Website located at www.coronaca.gov. This report will continue to be reviewed and evaluated by the City of Corona Fire Department as required.

WSAB Recommendation #4: Develop, in collaboration with POU industry associations, WMP guidelines for future WMPs, understanding that it may take multiple cycles for POUs to integrate these recommendations into the WMPs.

POU Response: This document is intended to include, as appropriate, responses to the recommendations in the WSAB's Guidance Advisory Opinion for the POUs' 2021 WMP. This document also represents the combined effort of the POU industry associations to further the development of a template to respond to the WSAB's Guidance Advisory Opinion in a future reporting WMP cycle.

B. Customer Impacts

WSAB Recommendation #5: Describe the potential impact investor-owned utilities (IOU) public safety power shutoff (PSPS) events could have on POU customers and how the POU manages these impacts. For POUs that are also balancing authorities, describe the criteria for wildfire related de-energizations. Responses shall only provide aggregated information that does not provide customer-specific information or other potentially sensitive data.

POU Response: Although minimal, CDWP's customers have the potential to be impacted by the PSPS events ordered by SCE. During these events, SCE may need to proactively shut off power temporarily as a result of elevated weather conditions that can cause a power

line to fall and spark, possibly creating a wildfire. PSPS events are temporary and are meant to keep the community safe. SCE considers a number of factors and conditions before declaring a PSPS. These include, but are not limited to:

- High winds (including Red Flag Warnings declared by the National Weather Service)
- Low humidity
- Dry vegetation that could serve as fuel
- On-the-ground observations
- Fire threat to electric infrastructure
- Public safety risk

The following provides responses to specific questions included in the WSAB's 2021 WSAB Guidance Advisory Opinion:

- What is the relationship between the IOU and the POU during PSPS events?

POU Response: CWDP and SCE have constant and open communication during the potential for and during any PSPS event. In advance of PSPS events, SCE will notify CDWP, the emergency management community, and first responders. They will also intend to notify affected customers approximately two days in advance of a potential power shutoff. This notification will be via email, text or phone call. They may also send another notice to customers about one day before a potential power shutoff.

- Is the POU affected at the transmission or distribution level?

POU Response: Distribution

- Is the POU implementing a mitigation strategy for IOU PSPS?

POU Response: CDWP works closely with SCE to ensure both entities are aligned in any mitigation strategy for IOU initiated PSPS.

- Does the POU have its own permanent or temporary generation, (or customer provision of same) allowing it to withstand an IOU PSPS?

POU Response: [N/A]

- Does the POU distribute back-up generators to customers?

POU Response: Due to the underground nature of the system, the Wildfire and PSPS risks to CDWP customers and assets are extremely low. The need for back-up generator distribution will continue to be assessed for critical care customers on an as needed basis.

- Does the POU deenergize their own lines when a wildfire threat looms, even if it is not labelled a PSPS?

POU Response: The CDWP facilities are nearly 100% underground with the exception of only 3 poles spanning approximately 78 linear feet, with a total of roughly 105 linear feet of overhead cable, including the dive to underground cable on City-owned property, these can be assessed for deenergizing as needed, but it is not anticipated to occur.

- In the above instance, what customer communication takes place?

POU Response: CDWP's outage map is always the most up to date place for real-time information. Due to the extreme minimal risk of CDWP's electrical supply facilities causing a power-line ignited wildfire, CDWP is not adopting specific protocols for de-energizing and customer notification for any portions of its electric distribution system. CDWP will re-evaluate this determination in future updates to this Wildfire Mitigation Plan.

WSAB Recommendation #6: Describe the utility customer communication plans with respect to wildfires and PSPS, and in particular describe the methods, content and timing used to communicate with the most vulnerable customers, such as Access and Functional Needs (AFN) customers, medical baseline customers, non-English speakers, and those at risk of losing water or telecommunications service.

POU Response: Please see Section F, page 10 of CDWP's WMP.

C. The Grid

WSAB Recommendation #7: Provide details on each POU's system hardening and grid design programs, including: (1) the goals of the programs and the risk any particular program is designed to mitigate; (2) approach to PSPS mitigation and prevention; and (3) identify any resource shortages.

POU Response: CDWP's electric supply system is located nearly 100% underground in conduit and vaults. Historically, underground electric lines have not been associated with catastrophic wildfires. The undergrounding of electric lines serves as an effective grid hardening measure that reduces the potential of power-line ignited wildfires. As described in CDWP's WMP, CDWP has reviewed the fire risk factors and historical fire data for CDWP's service territory has determined that its electrical lines and equipment do not pose a significant risk of catastrophic wildfire. Informed by this analysis, CDWP's system hardening and grid design efforts are focused on following all applicable design, construction, operation, and maintenance requirements that reduce safety risks associated with CDWP's system.

The following provides responses to specific questions included in the WSAB's 2021 WSAB Guidance Advisory Opinion:

- Is supplemental generation available such as backup batteries or backup power facilities?

POU Response: All water facilities in CDWP service territory have back-up generation available in the event of an electric interruption.

WSAB Recommendation #8: Describe annual visual patrols on potentially impacted circuits and the risks the POU is inspecting for. Describe whether and how system inspections lead to system improvements. Describe line patrols before, during, and/or after a critical fire weather event, such as a Red Flag Warning with strong winds, or following a fire that burned in areas where electric facilities are or could have been impacted.

POU Response: Due to the underground nature of the system in CDWP service territory, visual inspections and line patrols are minimal. CDWP meets or exceeds the minimum inspection requirements provided in CPUC GO 165 and CPUC GO 95, Rule 18. Pursuant to these rules, utilities inspect electric facilities in the High Fire Threat District more frequently than the other areas of its service territory. As described above, CDWP currently does not have any overhead powerlines located within or near the High-Fire Threat District within the CPUC's Fire Threat Map. However, CDWP staff uses their knowledge of the specific environmental and geographical conditions of CDWP's service territory to determine if any particular areas require more frequent inspections

WSAB Recommendation #9: Describe options considered by POU (including through the joint efforts of the POU associations) to identify previously unidentified risks that could lead to catastrophic wildfires.

POU Response: The California Municipal Utilities Association (CMUA) will be holding a special meeting of its Wildfire Preparedness, Response, and Recovery Working Group this fall, which will be focused on risk drivers for power-line caused catastrophic wildfires and innovative mitigation options. CMUA plans to invite a broad range of utility staff, state agency staff (including the WSAB), industry experts, and academics to participate in this discussion. As part of this meeting, the working group will discuss unidentified wildfire risk drivers and mitigation measures that could address these risks. Based on the input provided during this meeting, CMUA will produce a publicly-available, post-meeting report that summarizes the group's conclusions and recommendations. CDWP's staff will participate in CMUA's meeting and will discuss any changes that CDWP has made to its operations in response to the conclusions and recommendations of the working group in a future WMP.

D. Risk Assessment

WSAB Recommendation #10: Describe the particular wildfire risks associated with system design and construction such as topography and location near the HFTD areas of another utility's service territory. Describe any G.O. 95 exempt assets and possible updates to G.O. 95 that could facilitate more resilient utility transmission and distribution assets.

POU Response: CDWP's assessment of wildfire risks is discussed in CDWP's WMP. CDWP's entire electric supply system is located underground in conduit and vaults. Historically, underground electric lines have not been associated with catastrophic wildfires. The undergrounding of electric lines serves as an effective mitigation measure to reduce the potential of power-line ignited wildfires. Based on a review of local conditions and historical fires, CDWP has determined that its electrical lines and equipment do not pose a significant risk of catastrophic wildfire. Despite this low risk, CDWP takes appropriate actions to help its region prevent and respond to the increasing risk of devastating wildfires. In its role as a public agency, CDWP closely coordinates with other local safety and emergency officials to help protect against fires and respond to emergencies.

The following provides responses to specific questions included in the WSAB's 2021 WSAB Guidance Advisory Opinion:

- How will the utility address risks associated with facilities requiring power that abut a Tier 2 or Tier 3 HFTD?

POU Response: There is currently minimal areas within CDWP's service territory in HFTD, however all electric assets in that area are underground and there is no overhead exposure.

- How does the utility assess its risks associated with system design and construction?

POU Response: CDWP follows all applicable design, construction, operation, and maintenance requirements that reduce safety risks associated with its system. This Wildfire Mitigation Plan describes the safety-related measures that CDWP follows to reduce its risk of causing wildfires.

E. SITUATIONAL AWARENESS TECHNOLOGY

WSAB Recommendation #11: Provide context-setting information about the prevailing wind directions and speeds, differentiated by season, along with average weather conditions by season. Describe how and why situational awareness technology is installed, and where on the

system. Describe the decision-making process regarding the installation of situational awareness technology, including constraints such as budgets, availability of equipment, knowledge to effectively deploy, or qualified personnel to install and monitor effectively. Identify any other agencies, utilities, or fire professionals that the data from these devices is shared with.

POU Response: The CDWP facilities are nearly 100% underground with the exception of only 3 poles spanning approximately 78 linear feet, with a total of roughly 105 linear feet of overhead cable, including the dive to underground cable. This location (Waste Water Treatment Plant #2) at 652 Harrison Street, Corona, CA 92879 has no vegetation and is not in a HFT area. Thus, minimizing the overhead asset, wind and fire risk to any private property. Wind and weather data will continue to be analyzed in future annual updates.

F. VEGETATION MANAGEMENT

WSAB Recommendation #12: Describe treatment plans for all types of vegetation associated with utility infrastructure, from the ground to the sky, which includes vegetation above and below electrical lines.

POU Response: CDWP's vegetation management program is discussed in Section V of the WMP. CDWP's vegetation risk is considered low due to the underground nature of the system.

WSAB Recommendation #13: List the qualifications of any experts relied upon, such as scientific experts in ecology, fire ecology, fire behavior, geology, and meteorology. Specify the level of expertise of the POU staff that manages the contractors performing vegetation management. Describe measures each POU takes to ensure that POU staff and contractors comply with or verify compliance with Cal/OSHA standards on Minimum Approach Distances (MAD).

POU Response: CDWP staff, in partnership with its maintenance and operations provider (Contracted Services) and Engineering Provider (Contracted Services) is responsible for electric facility design, maintenance, and inspection, including vegetation management. CDWP meets or exceeds the minimum industry standard vegetation management practices. For distribution-level facilities, CDWP complies with NERC FAC-003-4, where applicable. For distribution level facilities, CDWP meets: (1) California Public Resources Code section - PRC §4292; (2) California Public Resources Code section - PRC §4293; (3) GO 95.

WSAB Recommendation #14: Describe whether the POU has considered innovative and alternative approaches to vegetation management.

POU Response: In adhering to industry standard vegetation management and the continued partnership with the Corona Fire Department, CDWP continues to remain vigilant with all vegetation management best practices in the service territory.



SERVICE TERRITORY



VEGETATION









*COWP's grassland area is a well-maintained golf course with all USGA awards.



WILDLAND URBAN INTERFACE





*CDWP's only OH lines and equipment consist of 3 poles spanning 79 tower ft. with 105 tower ft. of cable, including the drive to UGA in an uninhabited no vegetation or HPT area.







HIGH-FIRE THREAT DISTRICTS





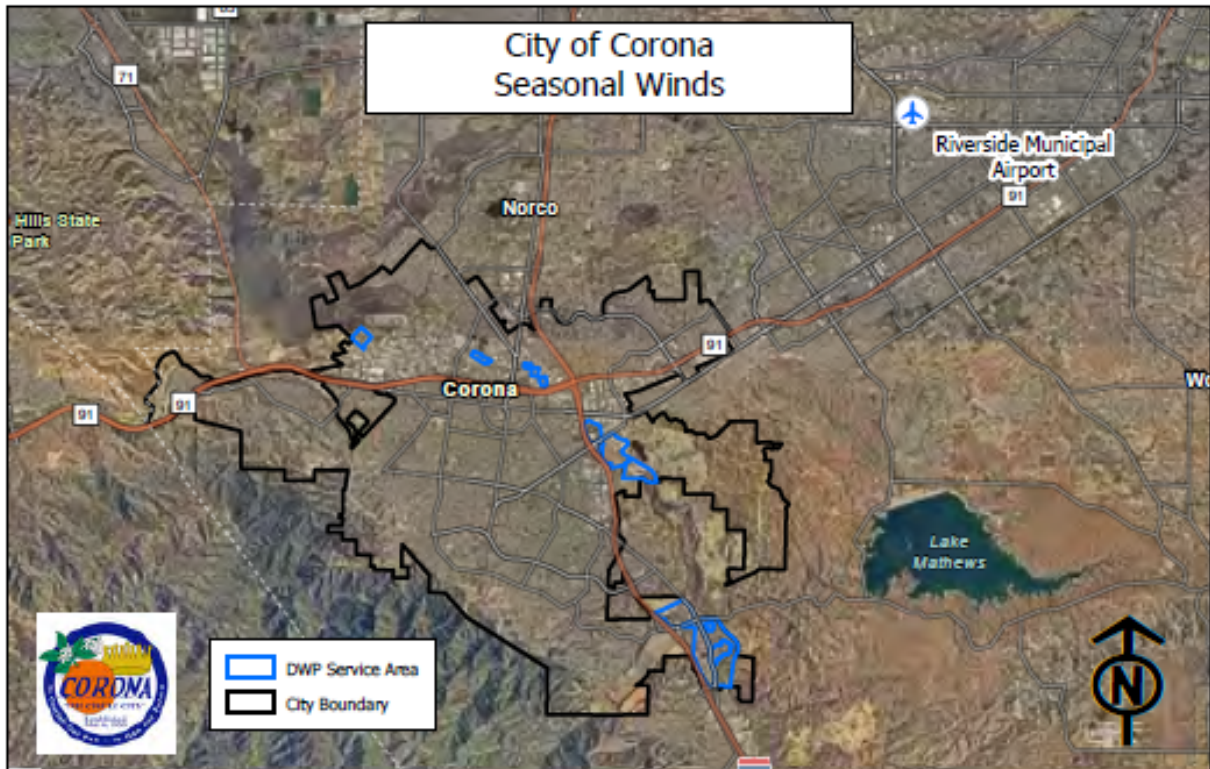






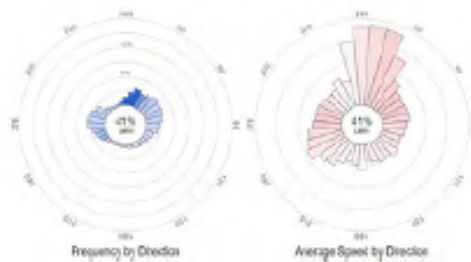


PREVAILING WIND DIRECTIONS AND SPEEDS BY SEASON



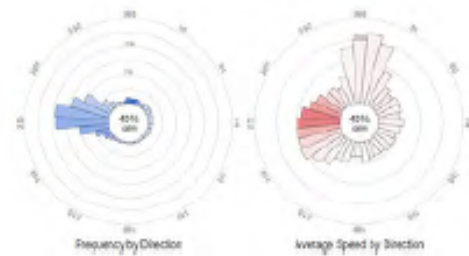
Winter

KRAL: Riverside Municipal Airport



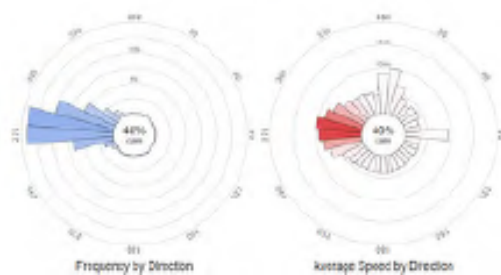
Spring

KRAL: Riverside Municipal Airport



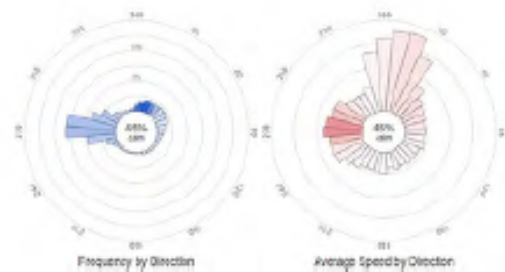
Summer

KRAL: Riverside Municipal Airport



Fall

KRAL: Riverside Municipal Airport



*CDWP's OH assets consist of 3 poles spanning 78 linear feet with roughly 105 linear feet of cable including the dig to UG. This minimal OH exposure is not located in HFT or wind risk areas.

