

# CITY OF CORONA UTILITIES DEPARTMENT

# 2023 ELECTRIC UTILITY WILDFIRE MITIGATION PLAN

**VERSION 1.0** 

June 7, 2023

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#### I. EXECUTIVE SUMMARY

The City of Corona Utilities Department's (CUD) Wildfire Mitigation Plan (WMP) details CUD's strategies for wildfire mitigation as it relates to the electric utility. CUD plans to continue to maintain a very low level of wildfire risk in our service area. CUD's WMP includes roles and responsibilities, risks, preventative strategies, and metrics that will help CUD evaluate and improve strategies annually.

#### II. UTILITY OVERVIEW AND CONTEXT

#### A. UTILITY DESCRIPTION AND CONTEXT SETTING TABLE

CUD runs a small electric utility with service area of 1,405 square miles and approximately 1,844 customers. CUD's overarching goal is to provide safe, reliable, and economic electric service to its local community. In order to meet this goal, CUD constructs, maintains, and operates its electrical lines and equipment in a manner that minimizes the risk of catastrophic wildfire posed by its electrical lines and equipment. The City facilities are nearly 100% underground with the exception of three poles spanning approximately 78 linear feet, with a total of roughly 105 linear feet of overhead cable, including the dive to underground cable in the entire system (Exhibit A).

<b>Context-Setting Information</b>			
Service Territory Size	1,405 square miles		
Owned Assets	□ Transmission ⊠Distribution □ Generation		
Number of Customers Served	1,842 customer accounts		
Population Within Service Territory	6,306* people *Estimated based on US Census Bureau data		
Customer Class Makeup – Number of Accounts)	69.92% Residential; 29.59% Commercial/Government;		
Customer Class Makeup – Share of Total Load (MWH)	0.49% Industrial 10.15% Residential; 53.70% Commercial/Government; 36.15% Industrial		
Service Territory Location/Topography13	<ul> <li>1.39% Agriculture</li> <li>0% Barren/Other</li> <li>0% Conifer Forest</li> <li>0% Conifer Woodland</li> <li>0% Desert</li> <li>0% Hardwood Forest</li> <li>10.42% Hardwood Woodland</li> <li>16.25% Herbaceous</li> <li>7.76% Shrub</li> <li>63.29% Urban</li> <li>0.89% Water</li> </ul>		
Service Territory Wildland Urban Interface14 (based on total area)	20.44% Wildland Urban Interface; 0% Wildland Urban Intermix;		
Percent of Service Territory in CPUC High Fire Threat Districts (based on total area)	⊠Includes maps Tier 2: 39.45% Tier 3: 7.77%		
Prevailing Wind Directions & Speeds by Season	⊠Includes maps		

Miles of Owned Lines Underground and/or Overhead	Overhead Dist: 0.03 miles Overhead Trans: 0 miles Underground Dist: 31.097 miles Underground Trans: 0 miles
Percent of Owned Lines in CPUC High Fire Threat Districts	Overhead Distribution Lines as % of Total Distribution System (Inside and Outside Service Territory) Tier 2: [0]% Tier 3: [0]% Overhead Transmission Lines as % of Total Transmission System (Inside and Outside Service Territory) Tier 2: 0% Tier 3: 0%
Customers have ever lost service due to an IOU PSPS event?	□Yes ⊠No
Customers have ever been notified of a potential loss of service to due to a forecasted IOU PSPS event?	⊠Yes □No
Has developed protocols to pre-emptively shut off electricity in response to elevated wildfire risks?	□ Yes ⊠□ No
Has previously pre-emptively shut off electricity in response to elevated wildfire risk?	□ Yes ⊠No

#### B. STATUTORY CROSS-REFERENCE TABLE

Statutory Expectation	Section
An accounting of the responsibilities of persons responsible for executing the plan.	Section IV A
The objectives of the wildfire mitigation plan.	Section III
A description of the preventive strategies and programs to be adopted to minimize the risk of electrical lines and equipment causing catastrophic wildfires, including consideration of dynamic climate change risks.	Section IV D Section VI
A description of the metrics the City of Corona plans to use to evaluate the wildfire mitigation plan's performance and the assumptions that underlie the use of those metrics.	Section IX A
A discussion of how the application of previously identified metrics to previous wildfire mitigation plan performances has informed the wildfire mitigation plan.	Section IX B
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 VI G
Appropriate and feasible procedures for notifying a customer who may be impacted by the deenergizing of electrical lines. The procedures shall direct notification to all public safety offices, critical first responders, health care facilities, and operators of telecommunications infrastructure with premises within the footprint of potential deenergization for a given event.	Section VI H
Plans for vegetation management.	Section VI D
Plans for inspections of the electrical infrastructure.	Section VI E
A list that identifies, describes, and prioritizes all wildfire risks, and drivers for those risks, throughout the City of Corona's service territory. The list shall include, but not be limited to, both of the following: (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. (ii) Particular risks and risk drivers associated with topographic and climatological risk factors throughout the different parts of the City of Corona's service territory.	Section V
Identification of any geographic area in the City of Corona'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 V C
A methodology for identifying and presenting enterprisewide safety risk and wildfire- related risk.	Section V B
A statement of how the City of Corona will restore service after a wildfire.	Section VIII

A description of the processes and procedures the City of Corona shall use to do all of the following: (i) Monitor and audit the implementation of the wildfire mitigation plan. (ii) Identify any deficiencies in the wildfire mitigation plan or its implementation and correct those deficiencies. (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.

Section IX C Section IX D Section IX E

#### C. PROCESS FOR UTILITY ADOPTION AND SUBMITTAL OF ANNUAL WMP AND OPPORTUNITIES FOR PUBLIC COMMENT

Corona City Council evaluated both resolution 2023-023 adopting the Wildfire Mitigation Plan and the City of Corona Fire Department's qualified independent evaluator report at the June 7, 2023 City Council Meeting. A properly noticed public hearing was conducted, and all persons interested were given an opportunity to speak.

## D. DESCRIPTION OF WHERE WMP INFORMATION CAN BE FOUND ON UTILITY WEBSITE

To locate CUD's Wildfire Mitigation Plan on the City's website www.coronaca.gov, select "Government" on the main menu. Under Departments/Divisions, choose "Utilities Department" to navigate to the Utilities Department webpage. Select "About Us" on the main menu. Under Services, select "Electric Service" then scroll down to the Wildfire Mitigation Plans section. The search bar may also be used by searching "Wildfire Mitigation Plan".

#### E. PURPOSE OF THE WILDFIRE MITIGATION PLAN

CUD is a department within the City of Corona. CUD's electric supply system is located nearly 100% underground in conduit and vaults. Historically, undergrounded 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, CUD has determined that its electrical lines and equipment do not pose a significant risk of catastrophic wildfire.

Despite this low risk, CUD takes appropriate actions to help its region prevent and respond to the increasing risk of devastating wildfires.

In its role as a public agency, CUD closely coordinates with other local safety and emergency officials to help protect against fires and respond to emergencies. In the City of Corona's 2020-2040 General Plan, the following goals address wildfire safety and prevention:

- Goal PS-8
  - Ensure that there is an adequate service level of fire protection and suppression services provided for all residents, visitors, and businesses throughout the City of Corona to meet community expectations and budgetary resources for safety.

- Goal PS-9
  - Through fire prevention and educational efforts, promote participation, voluntary compliance, and community awareness of fire safety issues in order to reduce the incidence and severity of fire and related emergencies and loss.
- Goal PS-10
  - Reduce fire risk to life and property through effective land use planning and compliance with federal, state, local laws, ordinances, and standards.

In the City of Corona's Local Hazard Mitigation Plan (LHMP), the following strategies and goals are listed as high priorities for wildfire mitigation:

- Public education on wildfire defense
- Code enforcement
- Codes prohibiting fireworks
- Fuel modification/removal
- Maintaining catch basins

In its role as a utility, CUD 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 CUD follows to reduce its risk of causing wildfires.

#### F. ORGANIZATION OF THE WILDFIRE MITIGATION PLAN

This Wildfire Mitigation Plan includes the following elements:

- Executive summary;
- Utility overview and context;
- Objectives of the plan;
- Roles and responsibilities for carrying out the plan;
- Identification of key wildfire risks and risk drivers;
- Description of wildfire prevention, mitigation, and response strategies and programs;
- Wildfire preventative strategies;
- Description of community outreach and education, covering as appropriate communication about wildfire prevention, utility wildfire mitigation efforts and strategies, and potential de-energization and re-energization practices;
- Metrics for evaluating the performance of the plan and identifying areas for improvement
- Annual and historic results for metrics; and
- Review and validation of the plan;

#### III. OBJECTIVES OF THE WILDFIRE MITIGATION PLAN

#### A. MINIMIZING SOURCES OF IGNITION

The primary goal of this Wildfire Mitigation Plan is to describe CUD's existing programs, practices, and measures that effectively reduce the probability that CUD electric supply system could be the origin or contributing source for the ignition of a wildfire. To support this goal, CUD regularly evaluates the prudent and cost-effective improvements to its physical assets, operations, and training that can help reduce the risk of equipment-related fires.

#### **B. RESILIENCY OF THE ELECTRIC GRID**

The secondary goal of this Wildfire Mitigation Plan is to improve the resiliency of the electric grid. As part of the development of this plan, CUD assesses new industry practices and technologies that will reduce the likelihood of a disruption in service (frequency) and improve the restoration of service (duration of outage).

#### C. WILDFIRE RESPONSE PREPARATION

The third and final goal of the Wildfire Mitigation Plan is to prepare to respond quickly and efficiently to potential wildfires to minimize health and safety risks to the public and damage to property. The City of Corona has a broad communication and alert system for efficient communication during an emergency.

CUD's distribution system is monitored remotely through a Supervisory Control and Data Acquisition (SCADA) system networked to all substations and circuits. CUD field staff utilize hard line telephones, cellular telephones, and portable radios to communicate with internal and external stakeholders during an outage or emergency. CUD's SCADA system auto-generates notifications to field, office, and administrative staff. CUD has On-Call contractual service as well as City staff to respond in Emergency situations to facilities and expedite field response times and recovery.

The City of Corona maintains a two-way VHF mobile and base stations for communications enhanced by a repeater system to extend the coverage area. This includes three Full Simulcast repeater sites and two receive only sites in the VHF Public Safety band. The Fire Department uses the City-owned VHF Conventional Simulcast radio system. The Police Department primarily operates on the Riverside County wide PSEC system, 700/800 P-25 Phase II TDMA. The PSEC system has two sites within the city limits with three other sites that contribute to the City's coverage. The Fire Battalion Chief vehicles are also equipped with PSEC radios on the PD talk groups. As a fail-over the PD can also revert to the City's VHF system. The City VHF system has four simulcast channels, two dedicated for Fire's use and two for the Police and other's use. The PSEC system is a trunked system and Corona PD has ten Talk Groups assigned to it.

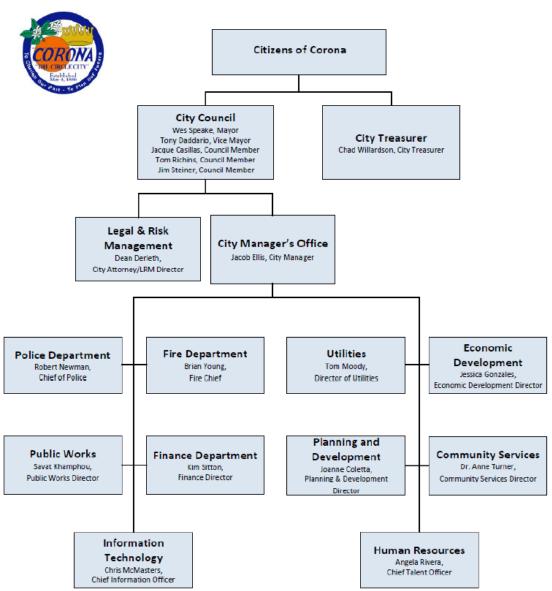
The City of Corona owns multiple satellite phones located in the EOC storage room. Corona PD does have an Amateur Radio user group they work with under Civil Emergency circumstances, which operates on HAM radio frequencies in support of governmental emergency

communications. The frequencies can augment existing systems and establish communication links with otherwise inaccessible areas. They are also capable of sending live video and audio from an incident site to our City's emergency operations center via HAM radio and through audiovisual capability. Additionally, all City employees have a Government Emergency Telecommunication Card (GETS) and Wireless Priority Service (WPS) which allows for both the universal GETS access number and a Personal Identification Number (PIN). This will allow cellular communications network priority in an emergency.

At the county level, a Riverside County Emergency Operations Center (EOC) talk group is programmed into the Omniquest radio and is used to communicate with EOCs within Riverside County during a disaster or emergency. The City of Corona has connectivity to access the Low Band Western Riverside County Disaster Net radios to communicate with all EOCs within Riverside County during a disaster or emergency. This system uses low frequency bands and access to several back up channels in case of an outage.

CUD adheres to California Public Utility Commission GO 95, 165, and 174 for all system infrastructure inspection, maintenance, and reporting.

#### A. CUD ROLES AND RESPONSIBILITIES



**Citywide Organizational Chart** 

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. The Five Council Members (3 Council Members, a Vice Mayor and the Mayor) are elected by district to four-year terms. The Mayor and/or Vice Mayor are not directly elected to the position rather, Council members are appointed to the positions for a one-year term, the Vice Mayor progresses to the position of

Mayor. Volunteer Commissions and Boards, as well as Citizen Advisory Committees help guide the Council in its decisions. Commissioners are citizen volunteers, appointed by the City Council. The Council appoints the City Manager, who oversees the daily operations of the City. The Director of Utilities manages the Electric Utility under the general direction of the City Manager. The Electric Utility Manager and Maintenance Manager report directly to the Director of Utilities.

In the event of an emergency, emergency personnel would be contacted. This effort would be coordinated by the Emergency Manager, utilizing updated contacts lists citywide. The Director of Utilities would be notified along with the Assistant Director of Utilities, Maintenance Manager and Electric Utility Manager. The Director of Utilities would notify the City Manager and City Council. The Emergency Operations Center (EOC) may be activated, and procedures would be followed as referenced in the Standardized Emergency Management System section below.

CUD's electrical infrastructure is nearly 100% underground in a flat, urban service area. CUD utility staff and its electrical contractors have the following responsibilities regarding fire prevention, response and investigation:

- Conduct work in a manner that will minimize potential fire dangers.
- Conduct work in accordance with industry standards and NFPA 70E.
- Take all reasonable and practicable actions to prevent and suppress fires resulting from CUD electric facilities by performing routine maintenance of all distribution facilities, conducting seasonal weed abatement to maintain standard clearances at at-risk sites, and perform routine fire and life safety inspections with the Corona Fire Department.
- Follow federal and state guidelines, including industry standards established by the California Public Utilities Commission.
- Coordinate with the City of Corona Fire Department to ensure that appropriate preventative measures are in place and to implement CUD's Wildfire Mitigation Plan.
- Coordinate with City Public Information Officer and Emergency Manager to disseminate safety warnings, provide emergency public information, and evacuation notices to local residents.
- Immediately report fires, pursuant to existing CUD practices and the requirements of this Wildfire Mitigation Plan.
- Take corrective action when observing or having been notified that fire protection measures have not been properly installed or maintained. CUD conducts annual inspections to ensure that measures are in place.
- Ensure compliance with relevant federal, state, and industry standard requirements.
- Ensure that wildfire data is appropriately collected.
- Maintain adequate training programs for all relevant employees and contractors.

#### B. COORDINATION WITH WATER DIVISION

The Water Division of CUD works closely with the Fire Department to ensure that water is available for fire-fighting purposes. In the event of a wildfire, the Water Division is proactive in filling the affected and surrounding zones with water. CUD has six diesel engine-powered emergency standby trailer pumps that are only to be used in the event of a fire or other natural disaster that could render a booster pumping station without power or mechanically inoperable. Bypass connection points have been installed at nine critical booster stations to isolate the

station and continue to pump by means of a portable diesel engine-driven booster pump. These pumps are mounted on trailers and kept at the Water Division's Desalter Water Treatment Plant, ready for deployment. Additionally, CUD has four percolation ponds with available water to be used by helicopters for fire-fighting purposes.

## C. COORDINATION WITH COMMUNICATION INFRASTRUCTURE PROVIDERS

CUD has three electric poles and does not have joint-use poles.

#### D. STANDARDIZED EMERGENCY MANAGEMENT SYSTEM

As a local governmental agency,<sup>1</sup> CUD adheres to the National Incident Management System (NIMS). CUD has planning, communication, and coordination obligations pursuant to the California Office of Emergency Services' Standardized Emergency Management System ("SEMS") Regulations,<sup>2</sup> adopted in accordance with Government Code section 8607. The SEMS Regulations specify roles, responsibilities, and structures of communications at five different levels: field response, local government, operational area, regional, and state.<sup>3</sup> Pursuant to this structure, CUD annually coordinates and communicates with the relevant safety agencies as well as other relevant local and state agencies. When activated, CUD serves as the Infrastructure & Utilities Branch under the Operations Section Chief as part of the City of Corona's Emergency Operations Center. In the event the incident centered on CUD facilities, CUD would serve as the Operations Section Chief.

(1) "Field response level" commands emergency response personnel and resources to carry out tactical decisions and activities in direct response to an incident or threat.

(2) "Local government level" manages and coordinates the overall emergency response and recovery activities within their jurisdiction.

(3) "Operational area level" manages and/or coordinates information, resources, and priorities among local governments within the operational area and serves as the coordination and communication link between the local government level and the regional level.

(4) "Regional level" manages and coordinates information and resources among operational areas within the mutual aid region designated pursuant to Government Code §8600 and between the operational areas and the state level. This level along with the state level coordinates overall state agency support for emergency response activities.

(5) "State level" manages state resources in response to the emergency needs of the other levels, manages and coordinates mutual aid among the mutual aid regions and between the regional level and state level, and serves as the coordination and communication link with the federal disaster response system.

<sup>&</sup>lt;sup>1</sup> As defined in Cal. Gov. Code § 8680.2.

<sup>&</sup>lt;sup>2</sup> 19 CCR § 2407.

<sup>&</sup>lt;sup>3</sup> Cal. Gov. Code § 2403(b):

The Emergency Operation Center activation procedures, levels, section and position specific roles and responsibilities are outlined in the City of Corona's Emergency Operation Plan (EOP). CUD participates in training and exercises to the EOP on an annual basis.

The City of Corona is a part of the Riverside County Operational Area coordinating with Riverside County Emergency Management (RivCo EMD). A significant amount of preparation is done through advanced planning at the local county level through partnerships, including the coordination of public, private, and nonprofit organizations. RivCo EMD is guided by the California Office of Emergency Services, Southern Region. The Operational Area includes local and regional organizations that bring relevant expertise to wildfire prevention and recovery planning processes. These participants include:

Agency/ Dept.	Mailing Address	Contact	Phone	Fax
AMR American Medical Response	879 Marlborough Ave. Riverside, CA. 92507		951.782.5234	951.782.5617
AMR American Medical Response	879 Marlborough Ave. Riverside, CA. 92507	Dispatch	877.267.6622	951.782.5605
Communications Providers in Corona				
		AT&T- Internet Service	888.613.6330, prompts 3 & 2	
Internet		Impulse Adv Communication	800.456.5800	
Land Lines		AT&T	562.618.1221	
Internet Phone Service		Impulse Advanced Communications	800.456.5800	
Cable Service in Corona	17777 Center Court Dr, Suite 800 Cerritos, CA 90703	Spectrum Cable	Office: 562.677.0310 Cell: 714.715.3581	
Cell Service		Verizon	951.473.7551	
Cell Service		AT&T	562.618.1221	
City of Corona: Fire: Emergency Services Division	735 Public Safety Way, Corona, CA 92878	Emergency Services Manager	951.496.1299	951.736.2220
City of Corona: Utility	755 Public Safety Way, Corona, CA 92878	Director of Utilities	951.736.2477	951.736.2455
City of Corona: Utility	755 Public Safety Way, Corona, CA 92878	Electric Utility Manager	951.817.5795	951.736.24555
City of Corona: Special Districts	400 S. Vicentia Ave., Corona, CA 92882	Division Manager- Public Works	951.817.5765	951.279.3627
City of Corona: Fire Dept.	735 Public Safety Way, Corona, CA 92878	Fire Chief	951.279.3536	951.736.2497
City of Corona: Police Dept.	730 Public Safety Way, Corona, CA 92878	Police Chief	951.817.5787	
City of Corona: Traffic & Transportation	400 S. Vicentia Ave., Corona, CA 92882	Public Works	951.736.2266	
City of Corona: Facilities Management	755 Public Safety Way, Corona, CA 92878	Division Manager	951.736.2443	
US Forest Service: Cleveland National Forest Corona Fire Station	1148 E 6th St, Corona, CA 92879		951.371.1004	
Caltrans Corona Yard	842 El Sobrante Rd., Corona, CA 92879	Facility Supervisor	Office: 951.272.0628 Cell: 951.314.3630	
Corona Norco Unified School District	2820 Clark Avenue, Norco, CA 92860	Maintenance Supervisor	951.736.5000	
Corona Regional Hospital	800 S. Main St., Corona, CA 92882	Facilities	951.737.4343	
Riverside County: Dept. of Environmental Health	4065 County Circle Riverside, CA.	Deputy Director	951.358.5172	951.358.5017
Riverside County: Dept. of Environmental Health	4065 County Circle Riverside, CA.	Supervising Environmental Health Specialist	951.358.5172	951.358.5017
Riverside County: Dept. of Environmental Health	800 S. Sanderson Ave. #200, Hemet, CA. 92545	Supervising Environmental Health Specialist	951.766.2824	
Riverside County: Emergency Management Department	4210 Riverwalk Pkwy Riverside, CA 92505	Duty Officer	951.312-5167	
Riverside County: Fire Department	210 W. San Jacinto Ave. Perris, CA 92570	Dispatch	951-940-6948	

Pursuant to the SEMS structure, CUD participates in training and exercises. Training and exercises include workshops, tabletop exercises, and field drills. A sample of topics covered include; earthquake safety, disaster response & management and active shooter. These are NIMS/SEMS/ICS compliance.

The City of Corona has specific Mutual Aid Agreements with local cities and agencies such as Riverside County, Riverside City, Orange County, Chino and the US Forest Service. The City of Corona is a participant in the California Disaster and Civil Defense Mutual Aid Agreement which allocates state resources to cope with any type of disaster.

#### V. WILDFIRE RISKS AND DRIVERS ASSOCIATED WITH DESIGN, CONSTRUCTION, OPERATION, AND MAINTENANCE

## A. PARTICULAR RISKS AND RISK DRIVERS ASSOCIATED WITH TOPOGRAPHIC AND CLIMATOLOGICAL RISK FACTORS

CUD's service territory is located almost entirely underground with the exception of three overhead poles spanning approximately 78 linear feet, with a total of roughly 105 linear feet of overhead cable, including the dive to underground cable. This small section of overhead lines is located outside of any identified high fire threat area on the maps (<u>Exhibit C</u>). The primary risk drivers for wildfire are the following:

- Earthquake
  - Earthquakes can disrupt power lines and result in potential wildfire risk. Corona is surrounded by active geologic fault lines with the potential to generate strong ground shaking, surface fault rupture, and secondary damage including power outages. These faults include San Andreas, San Jacinto, and Elsinore. CUD manages this risk by keeping areas surrounding electrical equipment free of fuel such as weeds and brush.
- High Winds
  - CUD's service area can experience high winds, especially during a "Santa Ana" wind event. These wind events typically occur during hotter and dryer times of year when fire danger is high. Though CUD does not have any overhead power lines in high fire threat areas, the utility does connect to lines from the local Investor Owned Utility (IOU) that run through these zones.
- Electrical Storms
  - Electrical storms occur during certain times of year in the City of Corona, particularly in the Canyon area located in the vicinity of Temescal Canyon Road and Cajalco Road. These storms carry the potential for wildfire risks associated with lightning and high winds. Because CUD's electrical system is almost entirely underground, facilities are not likely to be affected. However, CUD mitigates any risk by keeping areas surrounding electrical equipment free of fuel such as weeds and brush.

- Extended Drought
  - Droughts result in drier vegetation which creates a fuel source for wildfires. CUD does connect to overhead lines from the local IOU that must mitigate wildfire dangers associated with extended drought.

CUD prioritizes wildfire risks in the following order: Earthquake, High Winds, Electrical Storms, and Extreme Drought. Though not as frequent, earthquakes have the potential to cause the most damage depending on the severity of the quake. High Winds, Electrical Storms, and Extreme Drought are more prevalent in CUD's service area but are less of a concern because the electrical system is mainly underground. For this reason, changing weather patterns do not affect CUD's risk factors significantly. The potential for increased temperatures and drier climate will dry out vegetation and increase stress on trees, which may affect the local IOU that CUD connects to for power.

#### B. ENTERPRISEWIDE SAFETY RISKS

Wildland Fires are listed as the second highest hazard ranking for the City of Corona in the current Local Hazard Mitigation Plan (LHMP). The LHMP lists several factors that affect wildfire risk. These include weather patterns (drought, high winds, and climate change), topography, vegetation, and earthquakes.

Weather Patterns

• Drought is common in Southern California. The City of Corona frequently experiences temperatures above 90 degrees and humidity of 20 percent or less, with low amounts of rainfall throughout the year. Climate change has resulted in longer drier droughts. These types of weather patterns result in dry ground covering that turns into fuel for wildland fires. Dry brush coupled with 40-50 mile per hour "Santa Ana" winds can result in dangerous wildfire conditions.

Topography

• Topography considerably affects wildfire behavior. Steep topography can create erratic winds in canyons, which can cause wildfire to spread rapidly. The City of Corona has many surrounding hills with a history of wildfires and has experienced erratic winds and fire in the Santa Ana Canyon. Water supply in rough terrain areas such as this can be limited based on pumping and availability of electricity.

Vegetation

 The south side of the City of Corona borders the Cleveland National Forest for approximately 12 miles. The remainder of the City is bordered by a combination of heavy fuels and light flashy fuels due to frequent burning. Weather patterns and topography may be beyond our control, but vegetation as fuel for fires is within our control. CUD follows local fire guidelines to ensure that vegetation is controlled in our service area.

Earthquakes

• There are three major faults/fault zones that directly affect the City of Corona. They are the southern section of the San Andreas Fault, the Elsinore Fault Zone, and the San Jacinto Fault Zone. The Elsinore Fault Zone is the closest fault to City of Corona, as it runs adjacent to the City boundaries. The San Jacinto Fault Zone is located approximately 25 miles northeast of the City of Corona. The San Andreas Fault Zone is located approximately 35 miles northeast of the City. In 1992, the 7.3 magnitude Landers earthquake occurred on this fault. It was the largest earthquake to occur within 100

miles of Corona. Earthquakes have the potential to cause fires that may turn into wildfires.

#### C. CHANGES TO CPUC FIRE THREAT MAP

No change is needed to the CPUC Fire Threat Map.

#### VI. WILDFIRE PREVENTATIVE STRATEGIES

#### A. HIGH FIRE THREAT DISTRICT

CUD directly participated in the development of the CPUC's Fire-Threat Map,<sup>4</sup> which designates a High-Fire Threat District. In the map development process, CUD coordinated with Southern California Edison Company (SCE) and determined that because CUD's system is nearly 100% undergrounded, that SCE would serve as territory lead for the region served by CUD. CUD has incorporated the High Fire Threat District into its construction, inspection, maintenance, repair, and clearance practices, where applicable.

#### B. WEATHER MONITORING

The City of Corona Fire Department monitors current and forecasted weather data from two sources including:

- United States National Weather Service (RAWS Stations)
- Cal Fire daily weather reports

In the event of high fire danger conditions (such as a red flag warning), the Fire Department may staff extra fire apparatus when warranted.

CUD practices and policies do not change based on weather conditions because nearly 100% of CUD's system is underground, and overhead lines are not in a high fire threat area.

#### C. DESIGN AND CONSTRUCTION STANDARDS

CUD's electric facilities are designed and constructed to meet or exceed the relevant federal, state, or industry standard. CUD treats CPUC General Orders (GO) 95 and 128 as a key industry standard for design and construction standards for overhead and underground electrical facilities. CUD meets or exceeds all standards in GO 95 and GO 128. Additionally, CUD monitors and follows, as appropriate, the National Electric Safety Code. CUD constructs, maintains, and operates its electrical lines and equipment in a manner that will minimize the risk of wildfire posed by those electrical lines and equipment.

<sup>4</sup> Adopted by CPUC Decision 17-12-024. Corona Utilities Department Wildfire Mitigation Plan Version 1.0 June 7, 2023

#### D. VEGETATION MANAGEMENT

CUD meets or exceeds the minimum industry standard vegetation management practices. For distribution-level facilities, CUD complies with NERC FAC-003-4, where applicable. For distribution level facilities, CUD meets: (1) California Public Resources Code section - PRC §4292; (2) California Public Resources Code section - PRC §4293; (3) GO 95 Rule 35; and (4) the GO 95 Appendix E Guidelines to Rule 35. CUD's system is almost entirely underground and does not have trees in the vicinity of the existing overhead lines.

CUD conducts regular weed clearing at the Wholesale Distribution Access Tariff (WDAT) interconnect locations. The overhead line area is hardscape and does not require vegetation management. CUD takes pad transformer ignition risk seriously and conducts annual inspections of facilities owned by entities other than CUD. If vegetation is in need of clearing, the facility owner will be notified and expected to complete the clearing promptly.

#### E. INSPECTIONS

CUD meets or exceeds the minimum inspection requirements provided in CPUC GO 165 and CPUC GO 95, Rule 18. Pursuant to these rules, CUD inspects overhead lines more frequently than the other areas of its service territory. As described above, CUD currently does not have any overhead powerlines located within or near the High-Fire Threat District within the CPUC's Fire Threat Map. However, CUD staff uses their knowledge of the specific environmental and geographical conditions of CUD's service territory to determine if any particular areas require more frequent inspections. Infrared inspections of lines and connections are included in the annual inspection process.

If CUD staff discovers a facility in need of repair that is owned by an entity other than CUD, CUD will issue a notice to repair to the facility owner and work to ensure that necessary repairs are completed promptly.

#### F. WORKFORCE TRAINING

CUD has implemented work rules and complementary training programs for its workforce to prepare staff for wildfire response and help reduce the likelihood of the ignition of wildfires. Training includes:

- Electrical Hazard Training Program
- Incident Command
- Emergency Action Plan: Crisis under Control
- Fire Safety: Safety Matters
- Heat Stress
- HazCom: Hazard Communication Standards

#### G. RECLOSER POLICY

CUD only has one overhead recloser deployed in its electrical system as the system is nearly 100% underground. This recloser does not automatically reset, it must be manually reset prior to reenergizing the circuit, and therefore does not pose additional fire danger. Relay settings are not changed during certain conditions because there is not a threat of fire danger in this location.

#### H. DEENERGIZATION

CUD has the authority to preemptively shut off power due to fire-threat conditions, however, this option will only be used in extraordinary circumstances. Due to the extreme minimal risk of CUD's electrical supply facilities causing a powerline ignited wildfire, CUD is not adopting specific protocols for de-energizing and customer notification for any portions of its electric distribution system. CUD will re-evaluate this determination in future updates to this Wildfire Mitigation Plan.

#### VII. COMMUNITY OUTREACH AND PUBLIC AWARENESS

The City of Corona's Fire Department communicates with the Public regarding wildfire safety. Each year in the spring, notices are sent out to property owners regarding weed and fire hazard abatement. The Fire Department has a webpage <u>Wildfire Ready!</u> where residents can learn about wildfire prevention and how to prepare for potential wildfires. This page includes a link to the Risk Assessment and Community Wildfire Protection Plan (CWPP). Information regarding wildfires is also available in pamphlets.

#### VIII. RESTORATION OF SERVICE

In the event of any power outage, the CUD Operations and the Call Center is appropriately staffed for handling of trouble calls from customers and dispatching to field personnel.

Outage support includes:

- City Outage Map Management
- Field Dispatching
- Customer Callbacks

Response Prioritization:

- First Priority: Response to imminent threats to life and/or public property
- Second Priority: Removals of immediate hazards (fallen trees, power poles, etc.)
- Third Priority: Clearing of arterial roadways

- Fourth Priority: Maintenance of traffic control/closures to prevent potential accidents
- Fifth Priority: Restoration of power

CUD standard practice for power restoration after any power outage is to fully isolate the circuit. The area is patrolled for any additional potential trouble spots prior to restoration. When all areas are cleared by visual inspection, CUD restores the power.

#### IX. EVALUATING OF THE PLAN

#### A. METRICS AND ASSUMPTIONS FOR MEASURING PLAN PERFORMANCE

CUD will track two metrics to measure the performance of this Wildfire Mitigation Plan: (1) number of fire ignitions; and (2) electrical infrastructure inspection.

#### METRIC 1: FIRE IGNITIONS

For purposes of this metric, a fire ignition is defined as follows:

- CUD facility was associated with the fire;
- The fire was self-propagating and of a material other than electrical and/or communication facilities;
- The resulting fire traveled greater than one linear meter from the ignition point; and
- CUD has knowledge that the fire occurred.

CUD has not had any fire ignitions to date. In future Wildfire Mitigation Plans, CUD will provide the number of fires that occurred that were less than 10 acres in size. Any fires greater than 10 acres will be individually described.

#### METRIC 2: ELECTRICAL INFRASTRUCTURE INSPECTION

The second metric will be based on inspections conducted on Capacitor Banks, Pad Mounted Equipment, Pad Mounted Transformers, Burd Transformers, Vaults, and evaluation of underground electric lines. CUD plans to inspect each piece of equipment annually and conduct infrared inspections of lines and connections.

#### B. IMPACT OF METRICS ON PLAN

CUD has not had any fire ignitions to date. If a fire ignition were to occur, CUD will use the data to ensure that additional preventative measures are in place in the future. This may include upgrade of equipment, additional safety measures, additional vegetation management, etc.

In 2022, CUD contracted a firm to do a full evaluation and inspection of its entire electrical infrastructure and developed a 5-year capital improvement plan for replacement of assets. CUD has a plan in place to complete inspections of all equipment and infrared inspections of lines and connections annually.

#### C. MONITORING AND AUDITING THE PLAN

This Wildfire Mitigation Plan is subject to review by CUD's City Council. CUD will present this plan to City Council on an annual basis. Additionally, a qualified independent evaluator report on this plan will be presented to the City Council once every three years.

#### D. IDENTIFYING AND CORRECTING DEFICIENCIES IN THE PLAN

CUD has incorporated the following changes in the plan based on recommendations from the Wildfire Safety Advisory Board (WSAB).

- Updated the City's website to make the WMP more accessible to the public.
- Updated maps as requested.
- Updated metrics to be more relevant to CUD's system.

CUD will continue to monitor regulatory requirements and data obtained through metrics to identify any deficiencies. CUD will take into consideration recommendations from the WSAB and the independent auditor when identifying deficiencies in the plan.

Based on the recommendations of its City Council, CUD will correct the identified deficiencies.

#### E. MONITORING THE EFFECTIVENESS OF INSPECTIONS

CUD reviews and evaluates its system reliability indices to monitor inspection and maintenance efforts. SAIDI, SAIFI, CAIDI, and MAIFI systems statistics are recorded, tracked and evaluated with respect to SCE transmission interruptions vs. City distribution interruptions to its customers for internal reliability.

CUD's utility maintenance management system (NexGen Asset Management System) is used to collect all data subject to GO165. All maintenance and inspection efforts are recorded and tracked in NexGen for the City electric distribution facilities. Maintenance history for each piece of equipment is archived in NexGen. Additionally, CUD's substation inspections and maintenance program complies with GO174 guidelines as well as manufacturer specifications, standards, and recommendations. CUD performs inspections of all substation and systems components including recording and analysis of all alarms, heat signatures, fluid levels, meters, fuses, contacts, cable connections, breaker settings, etc.

#### X. INDEPENDENT AUDITOR

Public Utilities Code section 8387(c) requires CUD to contract with a qualified independent evaluator with experience in assessing the safe operation of electrical infrastructure to review and assess the comprehensiveness of this Wildfire Mitigation Plan. The independent evaluator must issue a report that is posted to CUD's website. This report must also be presented to CUD's City Council at a public meeting.

The City of Corona Fire Department (CFD) conducted the qualified independent evaluator review and presented their findings to the City Council and Wildfire Safety Advisory Board as a separate action from the CUD Wildfire Mitigation Plan in compliance with the 2020 submittal.

CUD requested a qualified independent evaluator review of the 2023 WMP by CFD which was conducted in May 2023. Recommendations from the independent evaluation were incorporated into the 2023 WMP.

#### XI. EXHIBITS

#### <u>Exhibit A</u>

#### <u>City of Corona Utilities Department Owned Overhead Electrical Lines and Sunkist</u> <u>Wholesale Distribution Access Tariff (WDT 204) Equipment at Water Reclamation Facility</u> <u>Plant #2 652 E. Harrison Street</u>

The only Corona owned overhead lines and equipment in the system are located within the fence line of the Corona Utilities Department's Water Reclamation Facility Plant #2 at 652 E. Harrison Street. The overhead lines and equipment consist of 3 poles spanning approximately 78 linear feet, with a total of roughly 105 linear feet of overhead cable, including the dive to underground cable.





#### <u>Exhibit B</u>

#### <u>City of Corona Utilities Department Other Wholesale Distribution Access Tariff (WDAT)</u> <u>Locations</u>

Water Reclamation Facility #1 (Clearwater) at 2205 Railroad Street (WDT124)

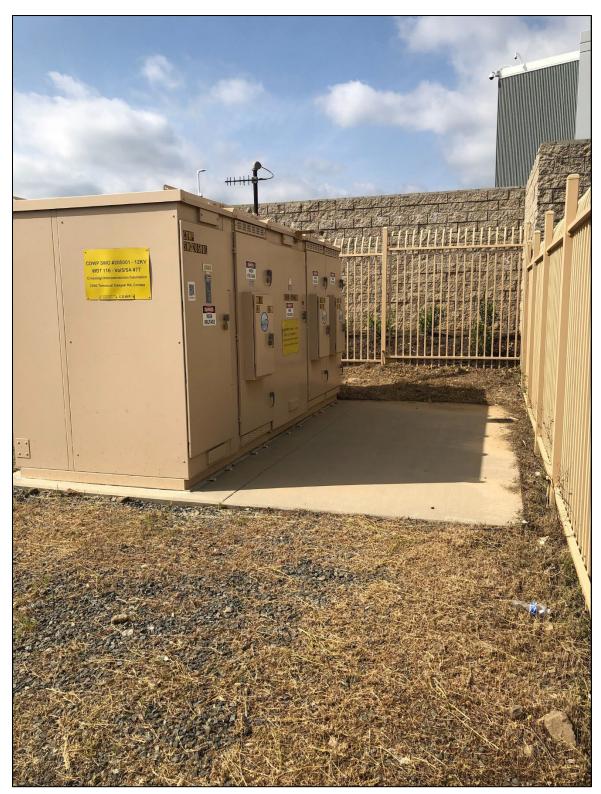








Water Reclamation Facility #3 at 3855 Temescal Canyon Road (Dos Lagos)



Corona Crossings (WDT116) at 3260 Temescal Canyon Road at Tom Barnes Street





Corona Pointe (WDT128) at the Corona Animal Shelter 1330 Magnolia Avenue

Exhibit C

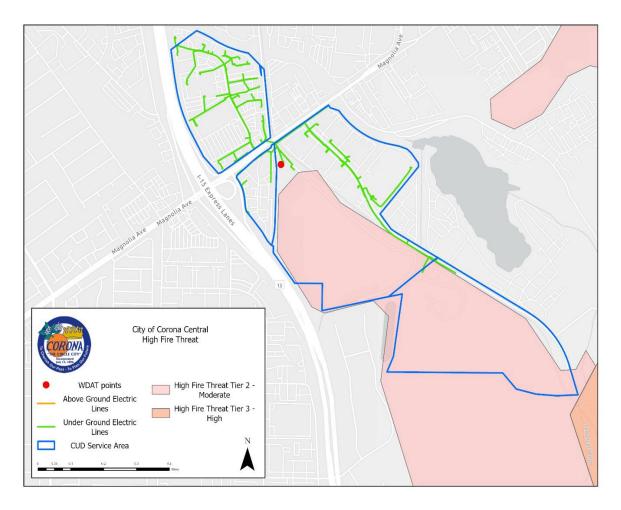
#### <u>City of Corona Utilities Department Owned Overhead Electrical Lines and Equipment</u> Locations to CPUC Fire Threat Map

#### <u>City of Corona North (section of the service area containing overhead lines)</u>

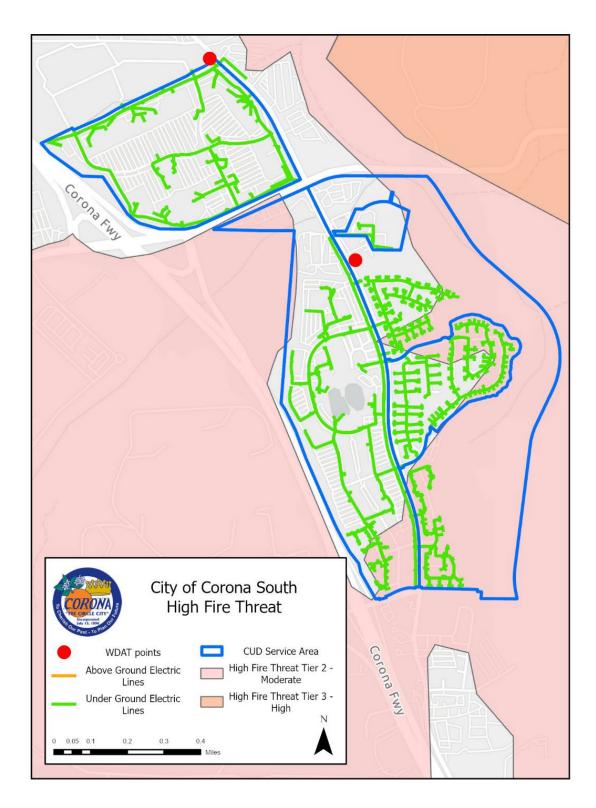
\*Not located in or near high fire threat areas



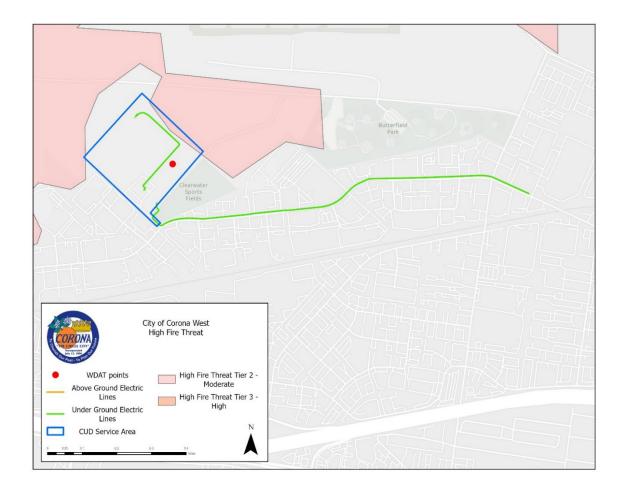
#### City of Corona Central



#### City of Corona South



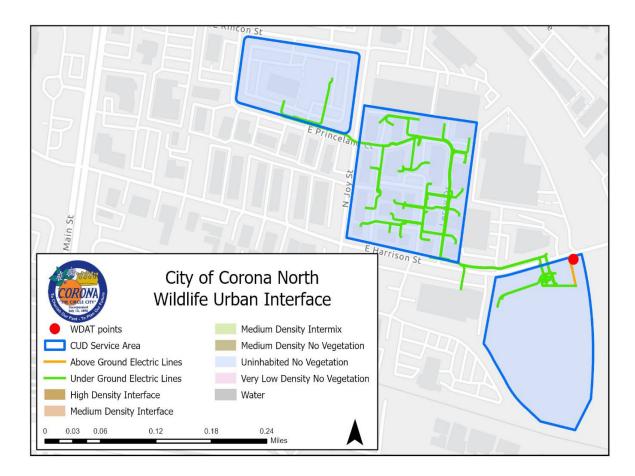
#### City of Corona West



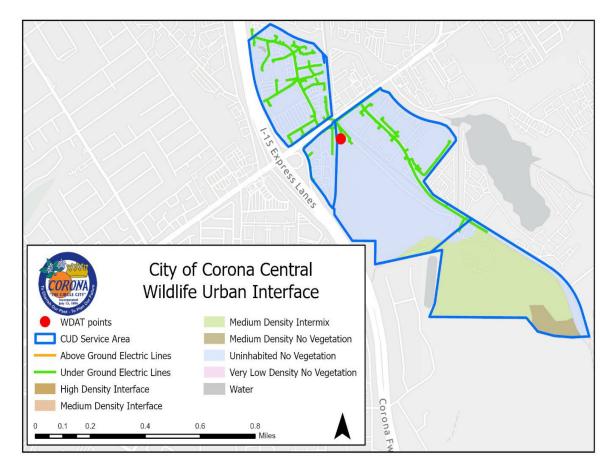
<u>Exhibit D</u>

#### <u>City of Corona Utilities Department Owned Overhead Electrical Lines and Equipment</u> Locations to Wildland Urban Interface Map

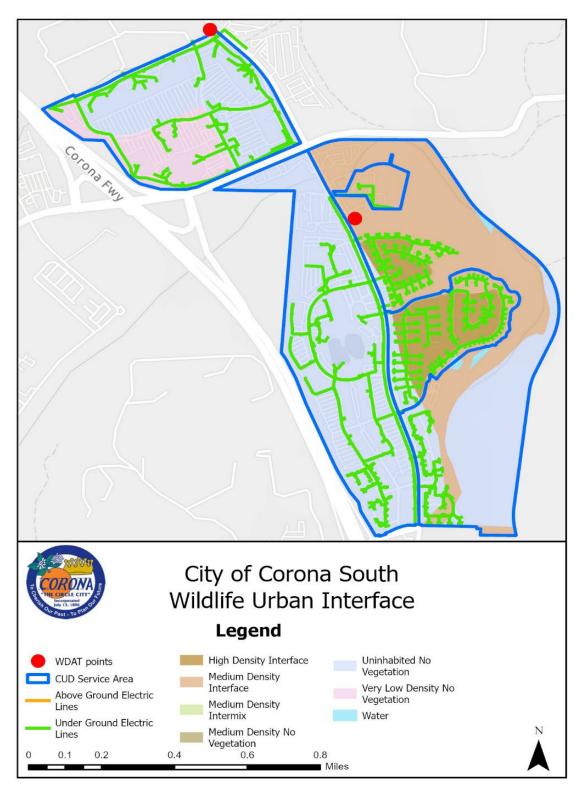
City of Corona North (section of the service area containing overhead lines)



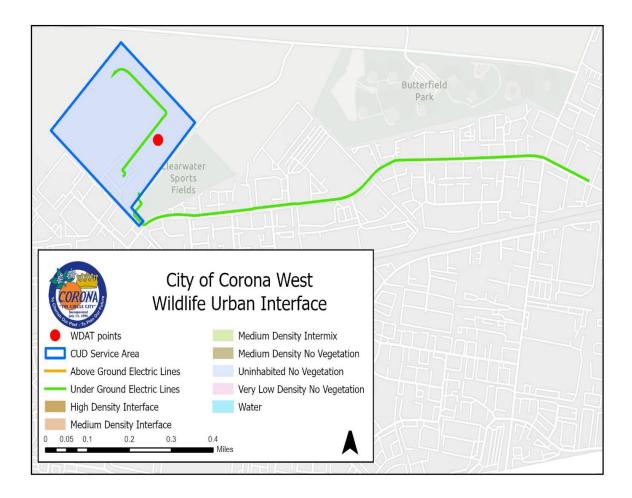
#### City of Corona Central



#### City of Corona South



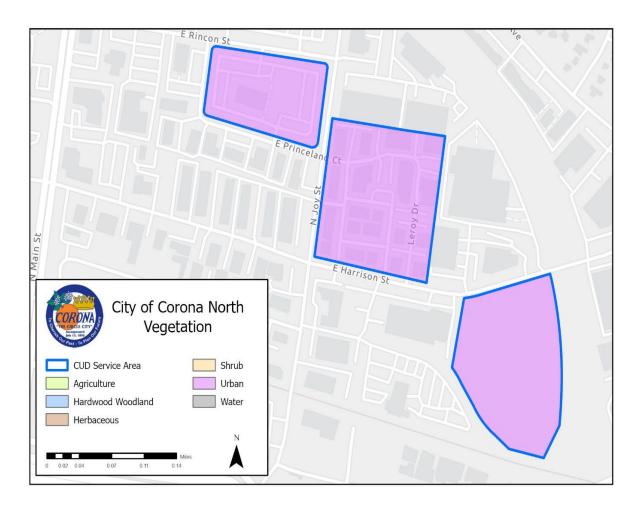
#### City of Corona West



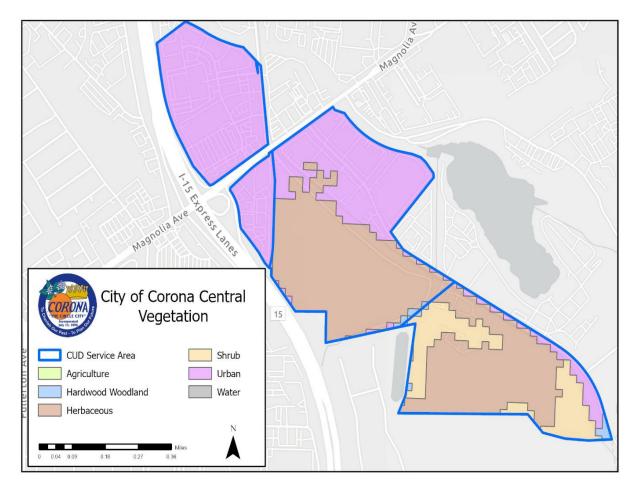
#### <u>Exhibit E</u>

#### City of Corona Vegetation Maps

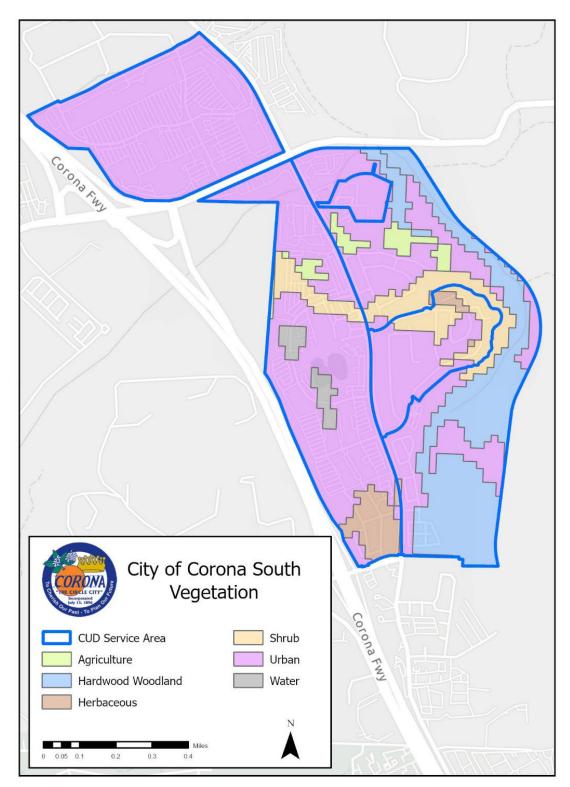
#### City of Corona North (section of the service area containing overhead lines)



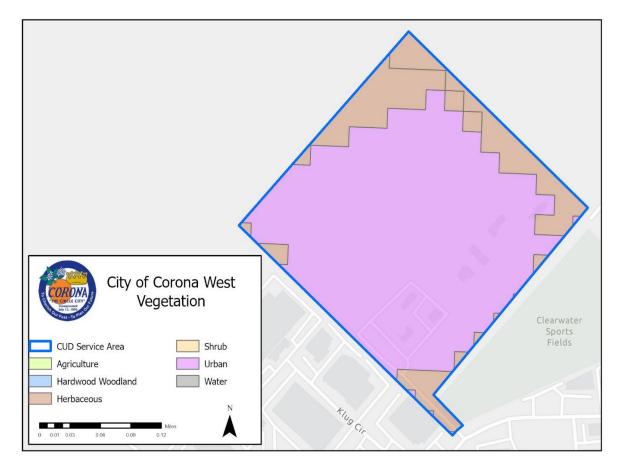
#### City of Corona Central



#### City of Corona South

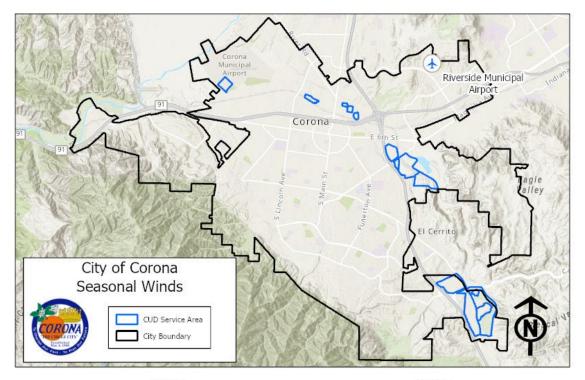


#### City of Corona West



#### <u>Exhibit F</u>

#### City of Corona Wind Map



<u>Winter</u>

<u>Spring</u>

KRAL: Riverside Municipal Airport



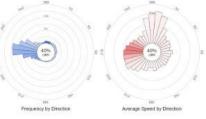
ed by Direc

Summer

by by Direction

#### KRAL: Riverside Municipal Airport





Fall

KRAL: Riverside Municipal Airport

