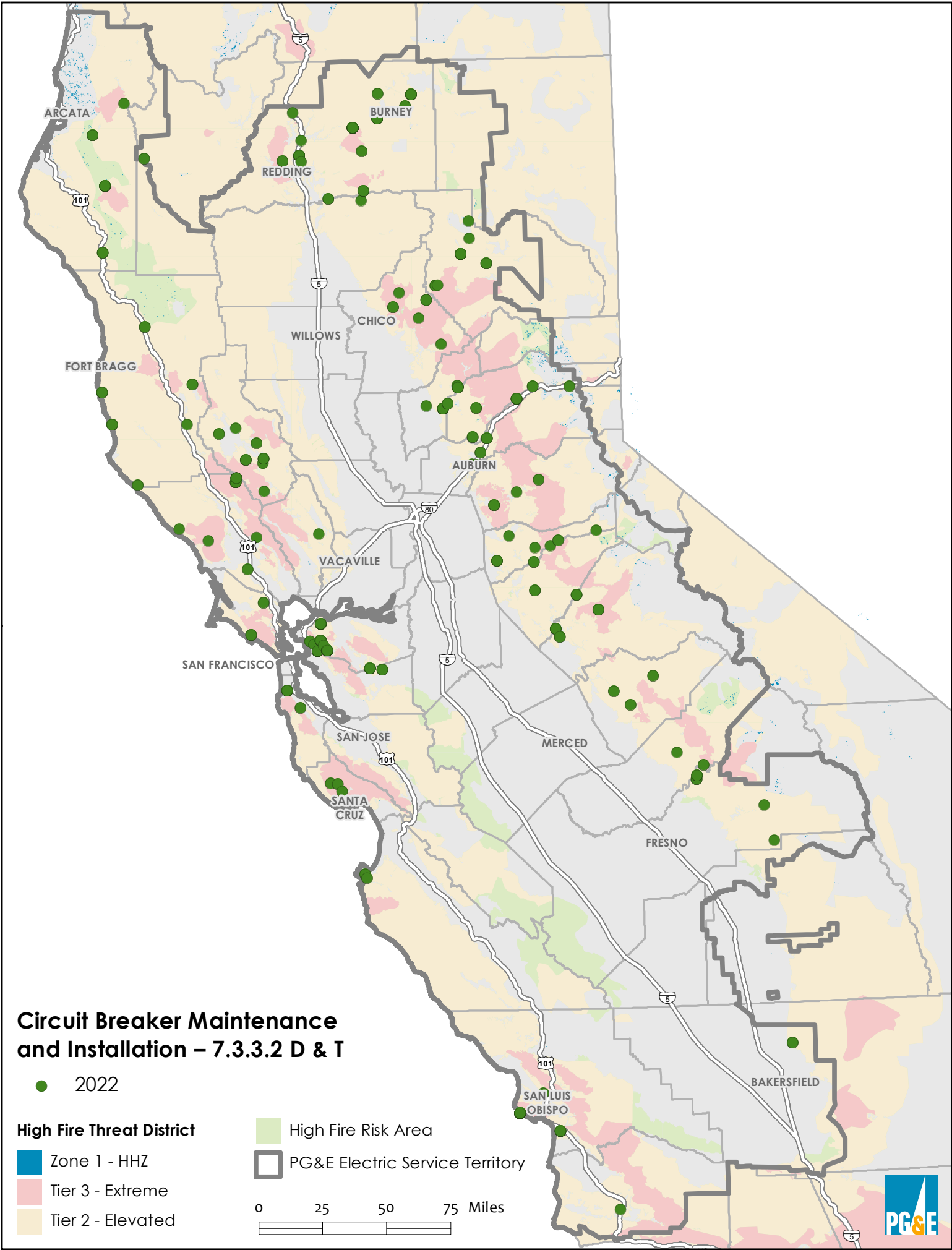


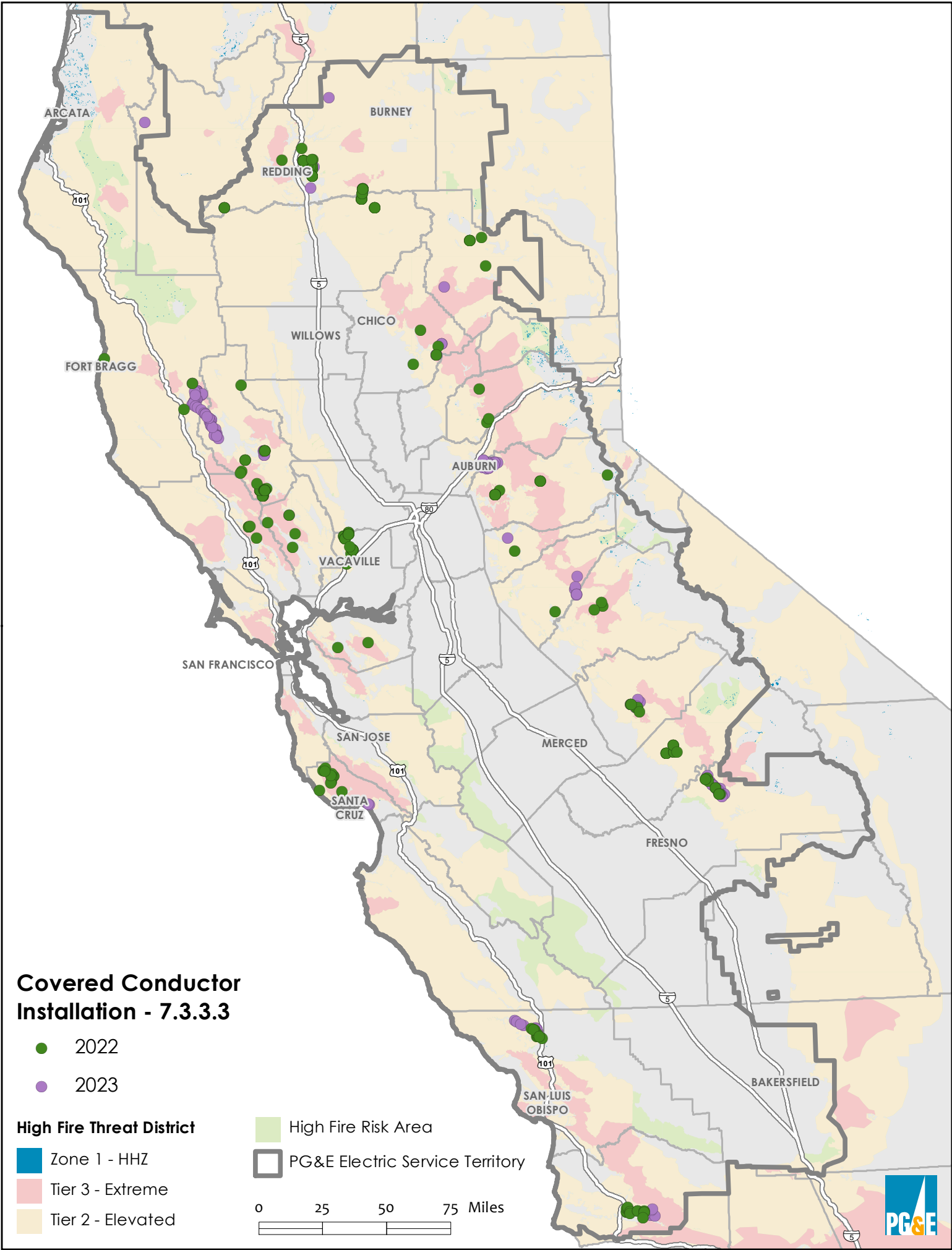
### **Capacitor Maintenance and Replacement Program – 7.3.3.1**

For inspections/maintenance work, please refer to our response to Section 7.1.I (Asset Management and Inspections). There is no current replacement program for capacitors outside of work resulting from inspections. Therefore, we have not provided a map for planned work in 2022 and 2023.



### **Circuit Breaker Maintenance and Installation to De-Energize Lines Upon Detecting a Fault – 7.3.3.2 D & T**

This map shows PG&E substation locations where proactive maintenance of Transmission and Distribution circuit breakers in HFTD are planned in 2022. Proactive circuit breaker maintenance has not yet been planned for 2023 because the program uses some condition-based triggers such as oil sample results and actual performance in addition to time-based intervals to initiate maintenance tasks. The intervals are not strictly time-based and some frequencies between maintenance tasks can be variable. We anticipate the 2023 forecast to be completed in Q4 2022. Please note the locations depicted on the map are of the substation facility and not of each particular asset, as PG&E does not currently have that level of spatial detail in GIS.

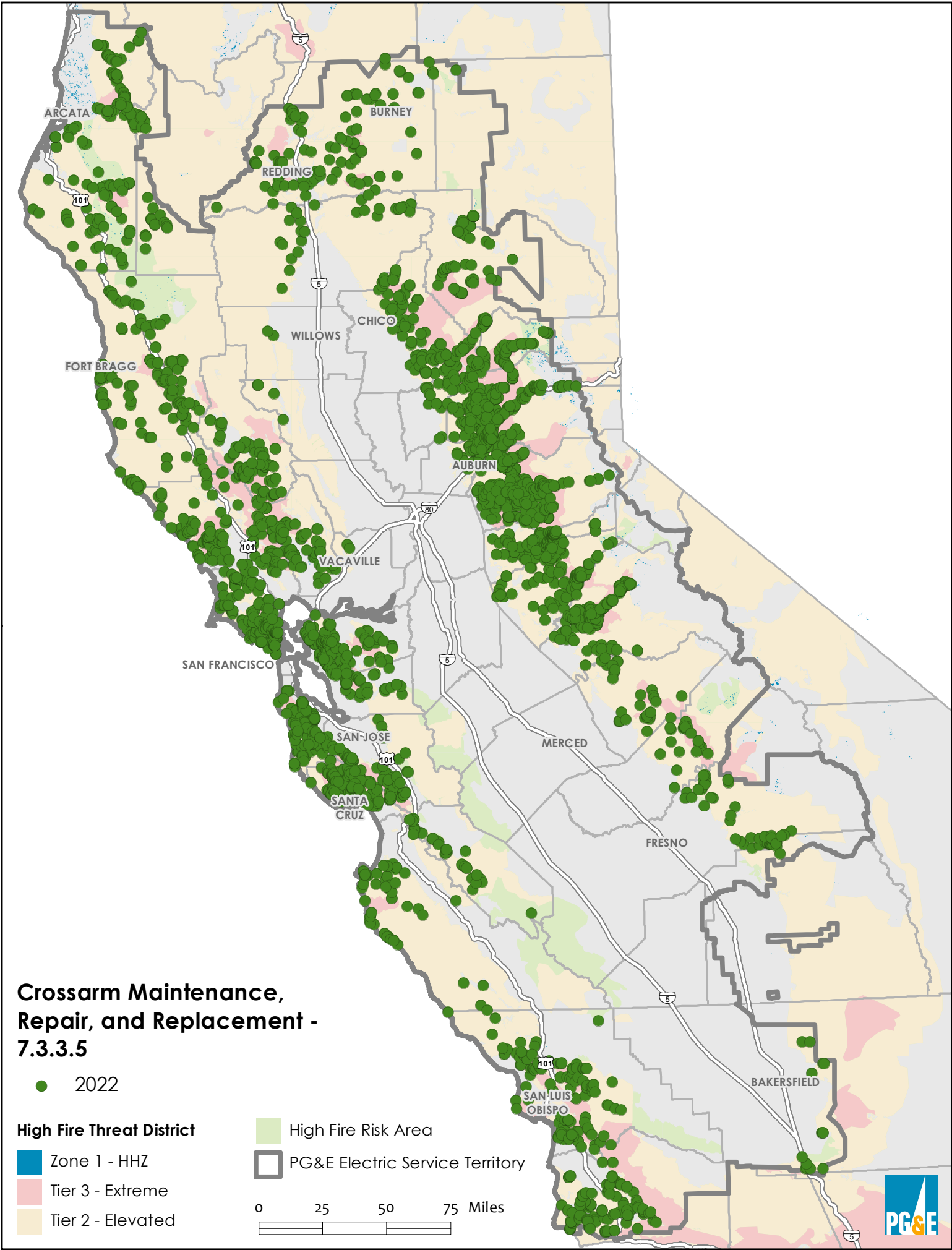


### **Covered Conductor Installation - 7.3.3.3**

This map shows PG&E's current planned Distribution overhead hardening for 2022 and 2023. Planning for 2023 is not yet complete. We expect the 2023 plan to be completed by the end of Q4 2022. Planned work is subject to change based on "reasonable circumstances" outlined in GO-95 Rule 18.B.1.b. Execution risks may also include material long lead times, permitting, access and clearance constraints, and potential loss of resources (e.g., due to potential high priority emergent work, Covid-19 limitations etc.).

#### **Covered Conductor Maintenance – 7.3.3.4**

For inspections/maintenance work, please refer to our response to Section 7.1.I (Asset Management and Inspections). There is no current covered conductor maintenance program outside of work resulting from inspections. Therefore, we have not provided a map for planned work in 2022 and 2023.



### Crossarm Maintenance, Repair, and Replacement - 7.3.3.5

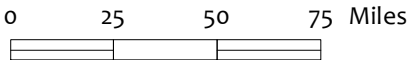
● 2022

#### High Fire Threat District

- Zone 1 - HHZ
- Tier 3 - Extreme
- Tier 2 - Elevated

■ High Fire Risk Area

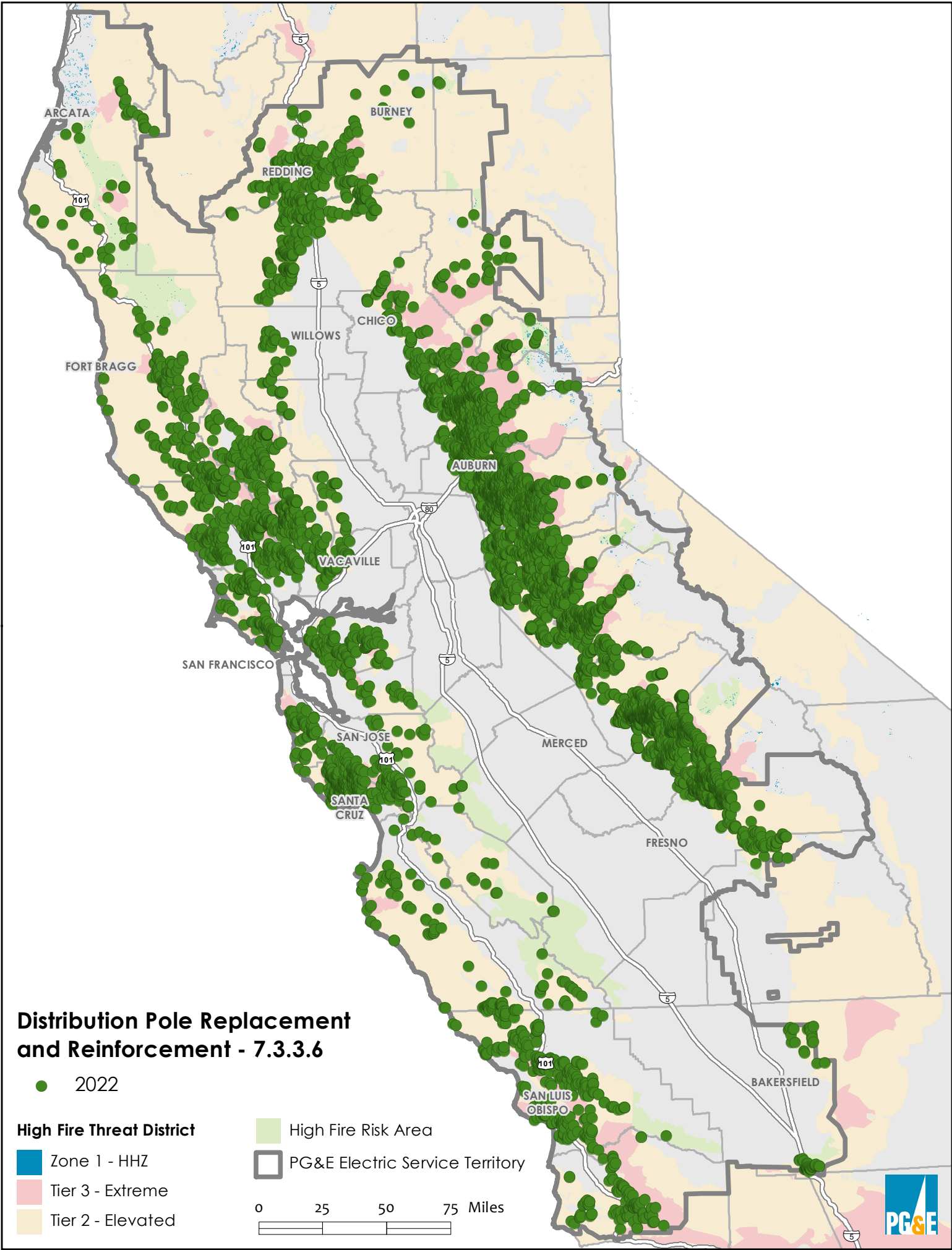
PG&E Electric Service Territory



### **Crossarm Maintenance, Repair, and Replacement - 7.3.3.5**

This map shows PG&E's planned crossarm maintenance, repair, and replacement tags in the 2022 workplan. Crossarm maintenance, repair, and replacement tags for 2023 have not been planned because this will be developed after we have the full set of newly identified tags from 2022 inspections. We anticipate the 2023 plan to be completed by the end of Q3 2022. Please note that this map does not include crossarm notifications that may be found in 2022 and that may be added based on associated risk level. Execution risks may also include material long lead times, permitting, access and clearance constraints, and potential loss of resources (e.g., due to potential high priority emergent work, COVID-19 limitations etc.).





### Distribution Pole Replacement and Reinforcement - 7.3.3.6

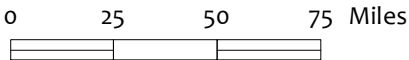
● 2022

#### High Fire Threat District

- Zone 1 - HHZ
- Tier 3 - Extreme
- Tier 2 - Elevated

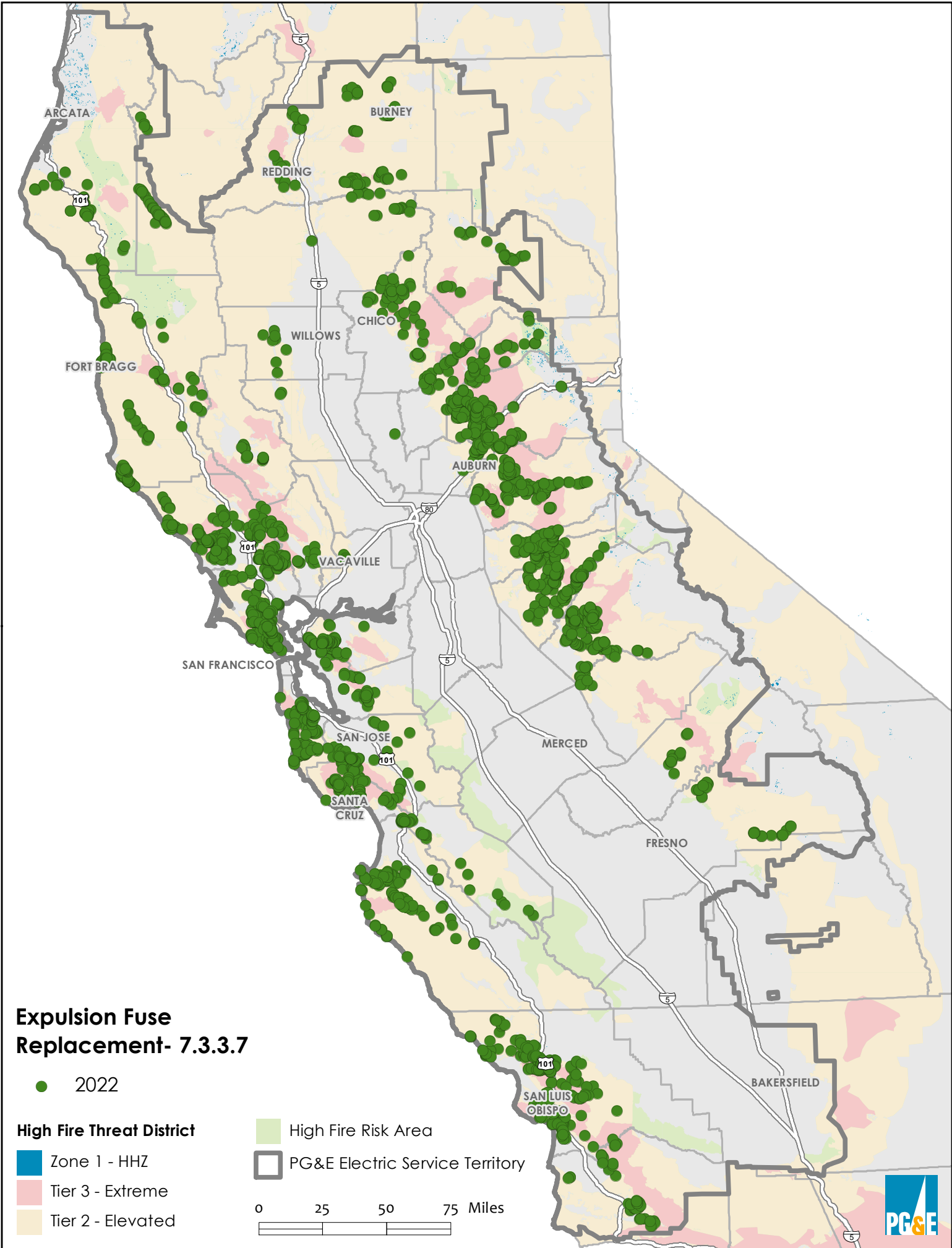
■ High Fire Risk Area

PG&E Electric Service Territory



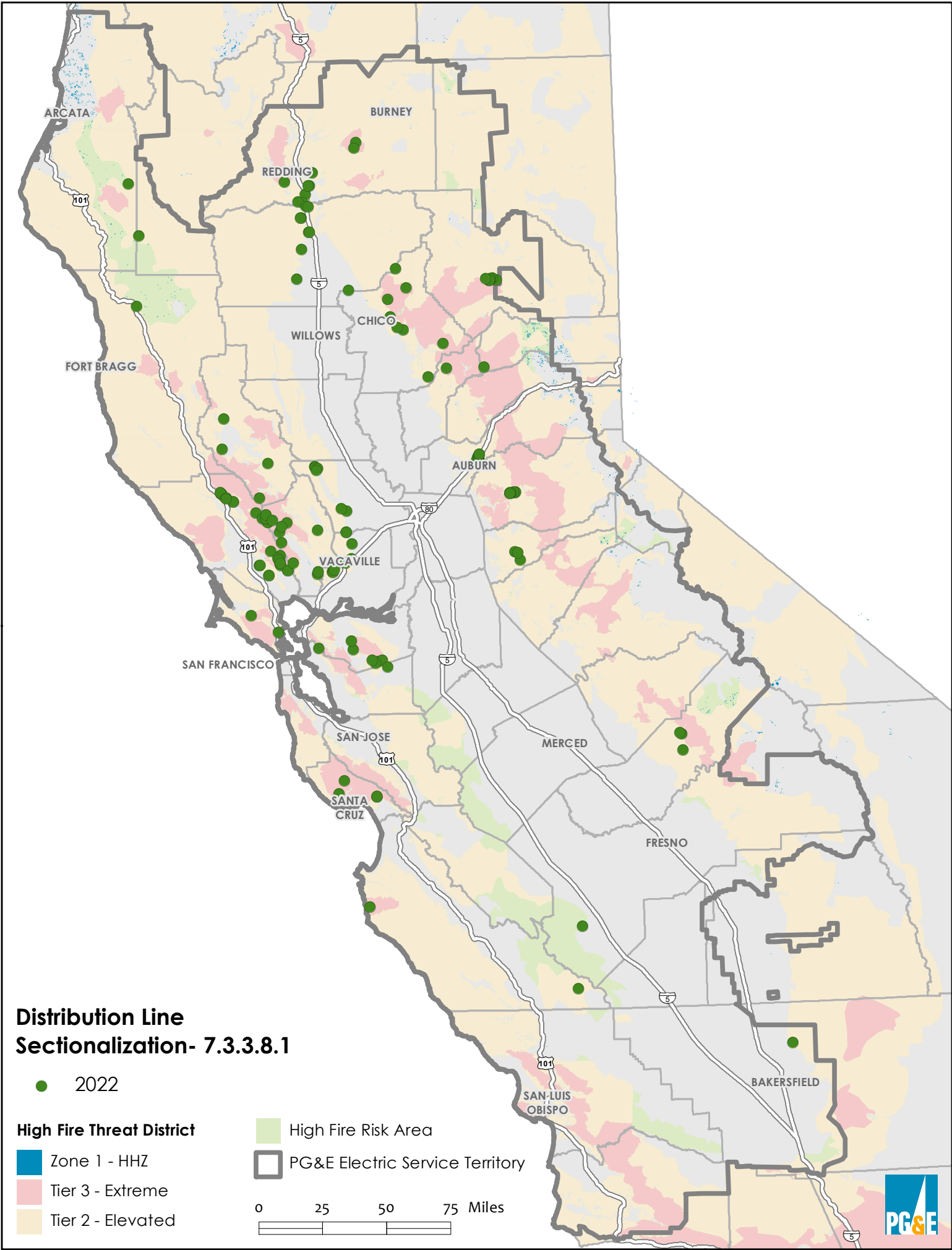
### **Distribution Pole Replacement and Reinforcement, Including with Composite Poles – 7.3.3.6**

This map shows PG&E’s planned distribution pole replacements for 2022. Planned distribution pole replacements have not been completed for 2023 because we are finalizing our methodology for risk prioritization and getting the required approvals. We expect the 2023 plan to be completed by the end of Q1 2022. Please note that this map does not include notifications that may be found in 2022 and is subject to change based on “reasonable circumstances” outlined in GO-95 Rule 18.B.1.b. Execution risks may also include material long lead times, permitting, access and clearance constraints, and potential loss of resources (e.g., due to potential high priority emergent work, COVID-19 limitations, etc.).



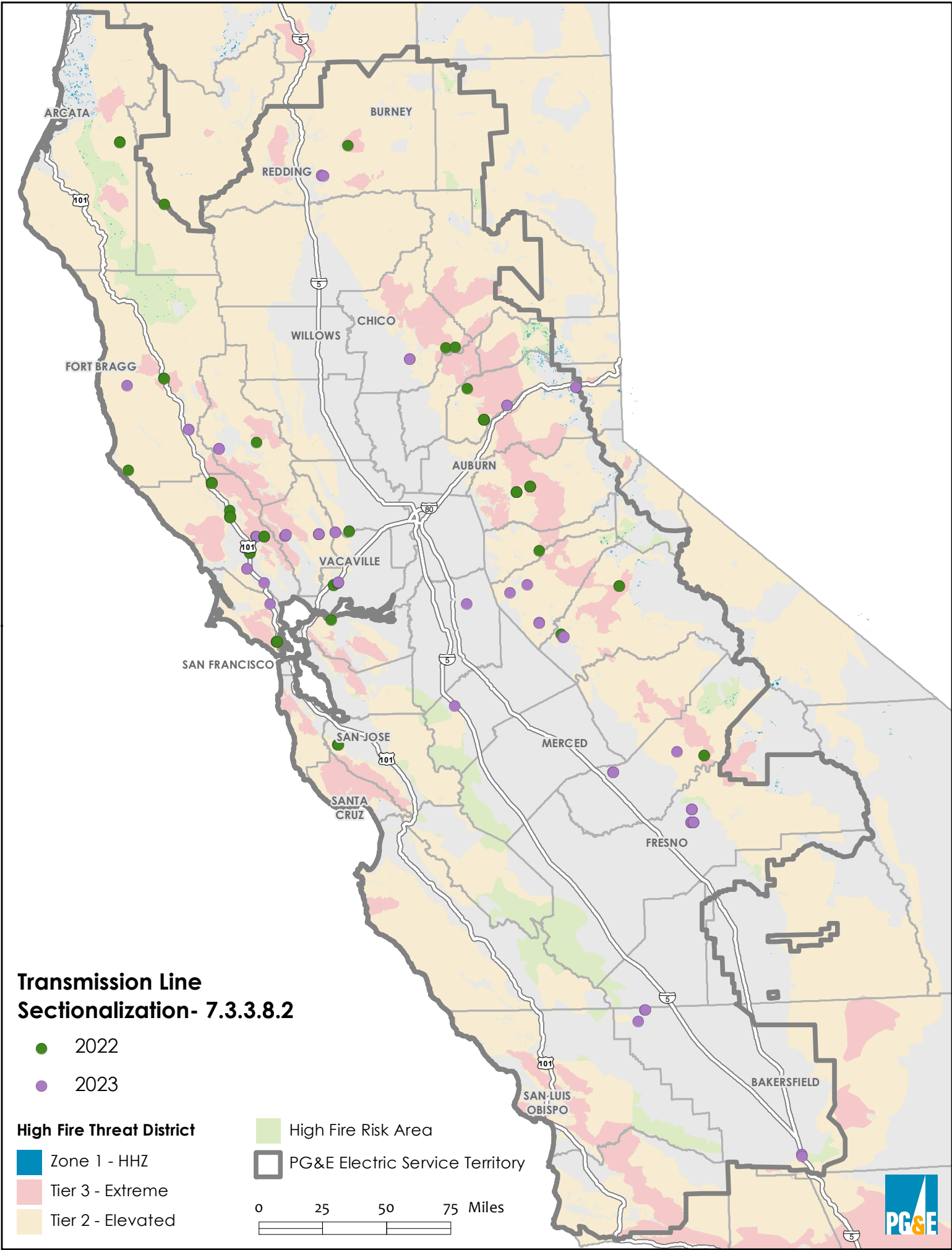
### **Expulsion Fuse Replacement – 7.3.3.7**

This map shows PG&E's planned Non-Exempt Expulsion Fuse replacements for 2022 in HFTD, HFRA. When planning non-exempt fuse replacement, engineers conduct coordination studies to ensure protective devices are adequate to operate during the maximum available fault current and ensure that devices will properly operate in sequence to isolate the fault and minimize customer impact. In some cases, replacing existing non-exempt fuses with exempt fuses will disrupt the protection scheme for that circuit and require complex analysis or studies to redesign the protection on that circuit. In these cases, the replacement of non-exempt fuses may be delayed until such an analysis can be completed. The prioritization of consequence risk is leveraged alongside these limitations. We anticipate that the 2023 workplan will be ready for mapping by Q2 2022.



### **Distribution Line Sectionalization – 7.3.3.8.1**

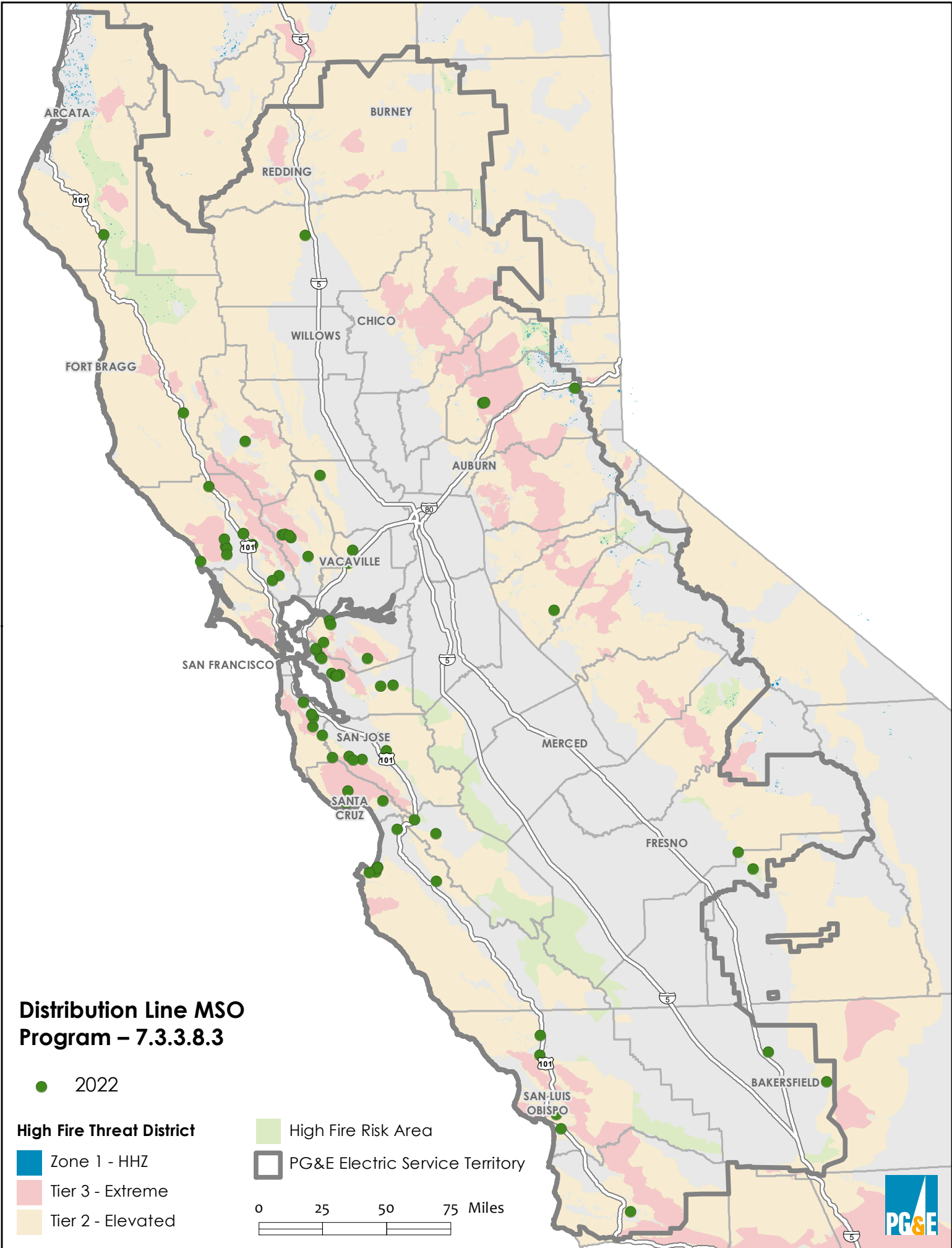
This map shows over 100 new distribution PSPS SCADA enabled distribution sectionalizing devices that PG&E has in scope for installation in 2022. These devices allow PG&E to remotely isolate the HFTD areas via SCADA automation during PSPS events. Some devices are located at the boundary between non-Tier areas and Tier-2/Tier-3 areas, while other devices are located within Tier-2/Tier-3 areas to allow PG&E to be more surgical when shutting off power depending on the forecast weather during each individual PSPS event. Please note that this map includes locations beyond our stated 2022 WMP target of at least 100 new PSPS SCADA enabled Distribution Sectionalizing devices because we have built in contingencies to ensure we meet our target even if unforeseen circumstances arise. There are no 2023 locations shown on the map as PG&E is still working on the details of identifying these locations.



### **Transmission Line Sectionalization – 7.3.3.8.2**

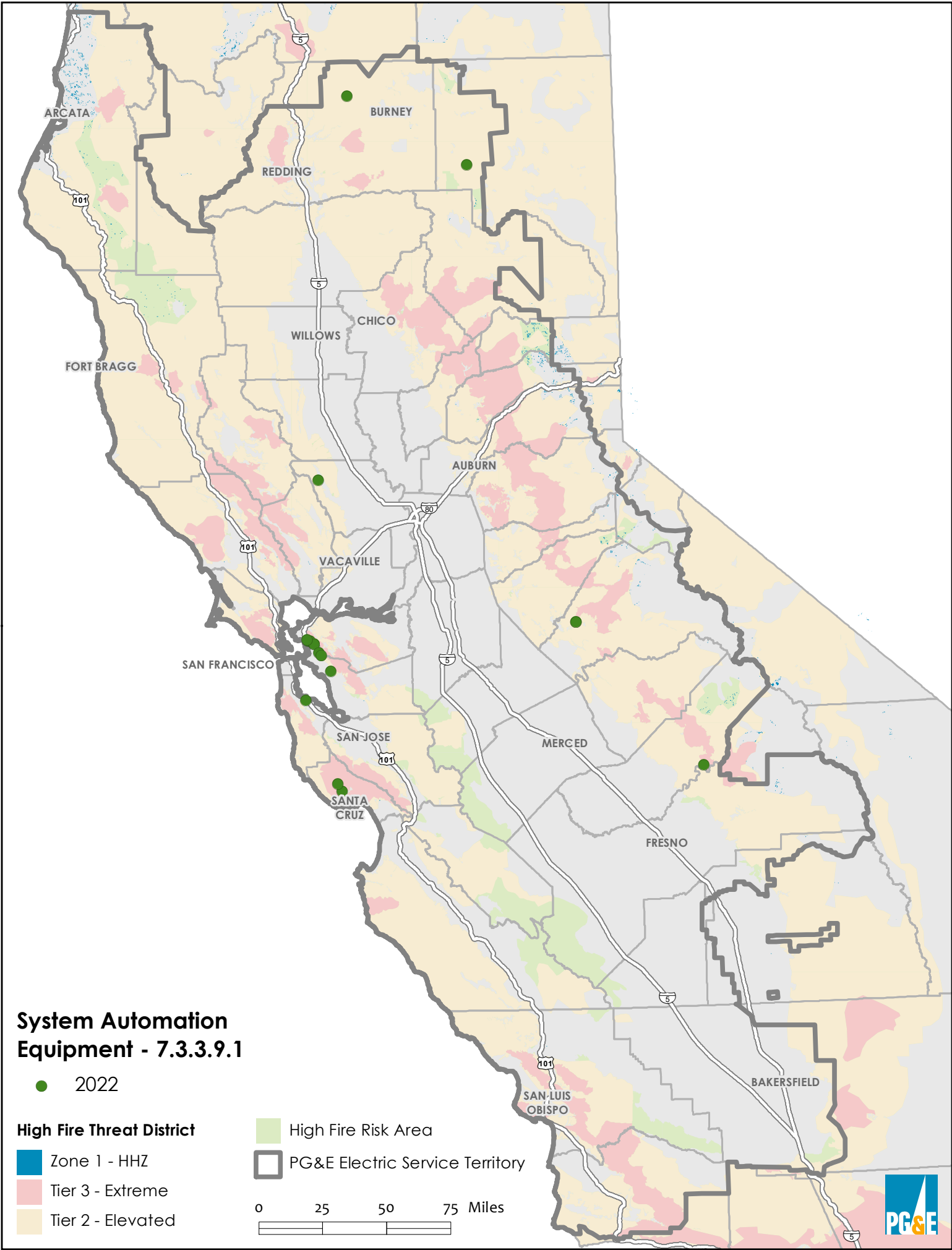
This map shows PG&E's planned transmission line switch installations on lines traversing HFTD in 2022 and 2023. Please note that this map includes locations beyond our stated 2022 WMP target of 15 transmission line switches because we have built in contingencies to ensure we meet our target even if unforeseen circumstances arise. Also note that planned 2022 and 2023 work is preliminary and is subject to change based on various execution risks including material long lead times, permitting, access and clearance constraints, and potential loss of resources (e.g., due to potential high priority emergent work, COVID-19 limitations, etc.). Changes in program prioritization (e.g., through new PSPS lookback studies) may also affect future year workplans.





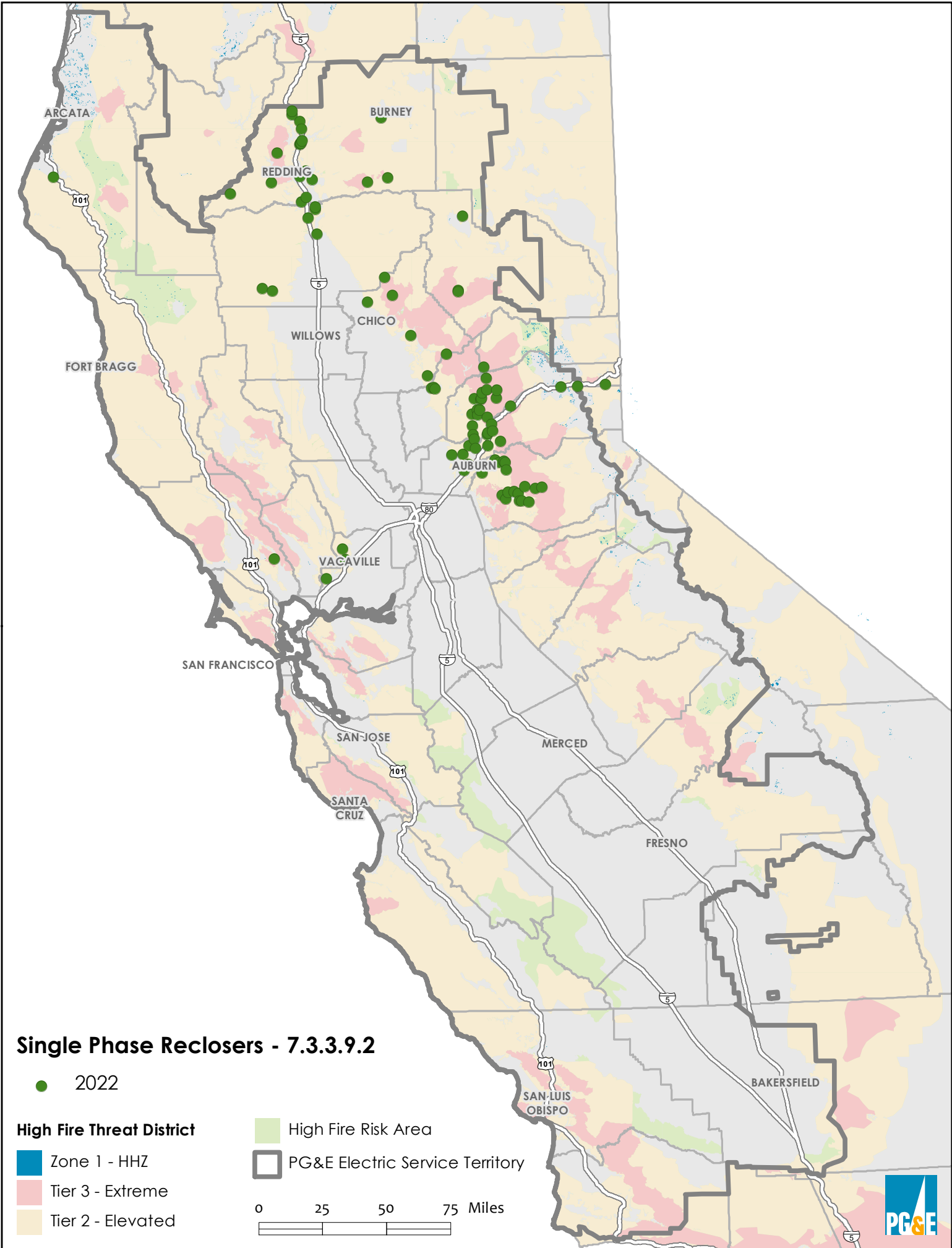
### **Distribution Line MSO Program – 7.3.3.8.3**

This map shows the locations of over 70 Motorized Switch Operators (MSOs) that are planned to be replaced in 2022 with safer equipment to mitigate fire ignitions. The 2022 work is preliminary and is subject to change based on various execution risks including material long lead times, permitting, access and clearance constraints, and potential loss of resources (e.g., due to potential high priority emergent work, COVID-19 limitations, etc.). Please note that this map includes locations beyond our stated 2022 WMP target of at least 50 MSO replacements because we have built in contingencies to ensure we meet our target even if unforeseen circumstances arise. There are no 2023 locations shown on the map as PG&E is still working on the details of identifying these locations. We expect the 2023 plan to be completed in Q2 2022.



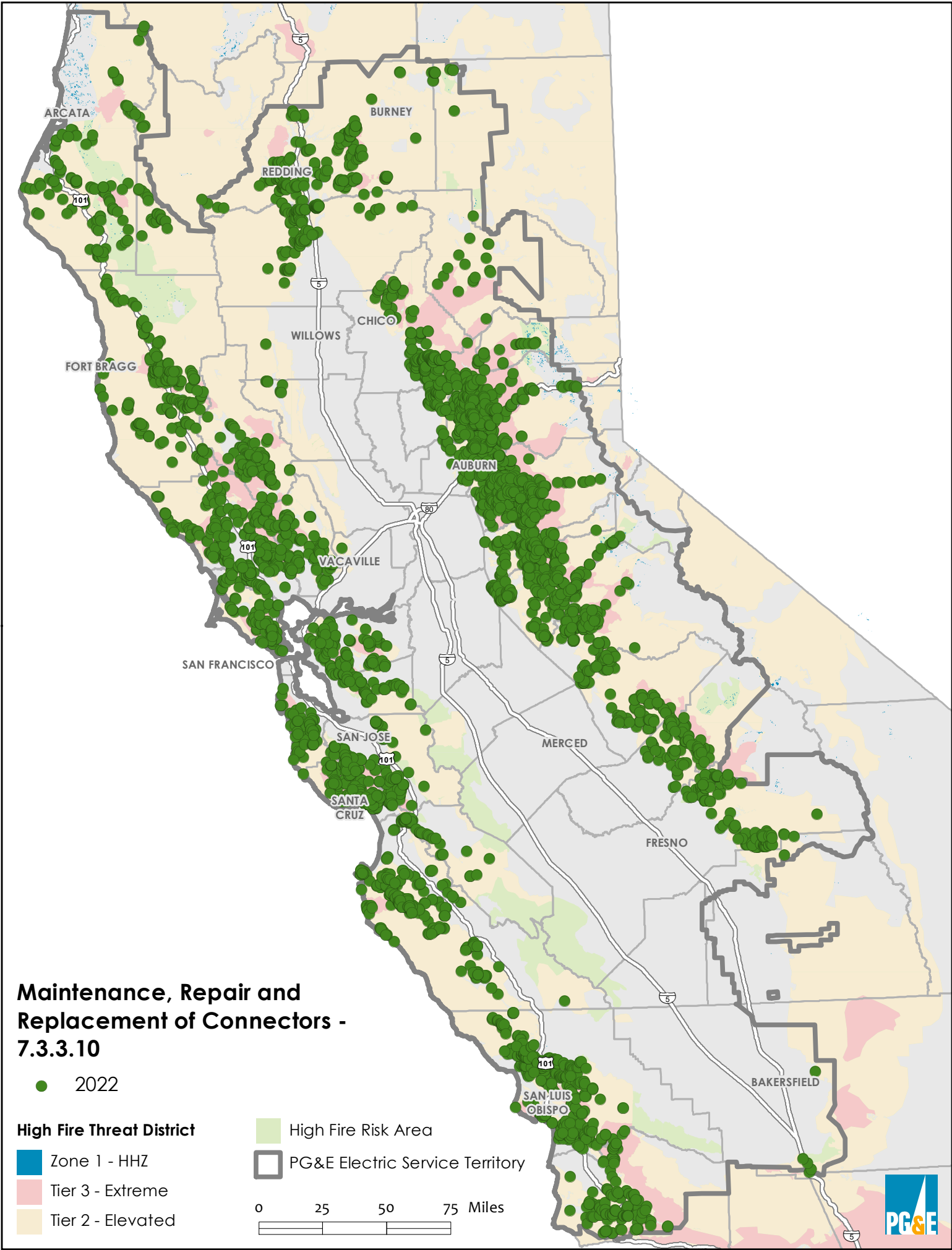
### **Installation of System Automation Equipment – 7.3.3.9.1**

This map shows the 17 locations where PG&E plans to install new substation SCADA enabled Reclosers for the “Non-Reclose Program” which is a part of the Wildfire Mitigation Program in 2022. This program will be completed in 2022 with no HFTD projects currently planned for 2023 or later.



### **Single Phase Reclosers – 7.3.3.9.2**

This map shows 160 locations where PG&E intends to install single phase recloser sets (or Fuse Savers) in 2022 and 2023. PG&E plans to install the Fuse Savers based on the following criteria: (1) in Tier 2 or Tier 3 HFTD areas; (2) areas that experienced one or more wire down outages in the last 10 years; and/or (3) locations where fused cutout have experienced elevated fire potential (R3, R4, or R5, which are elevated fire risk classifications).



### Maintenance, Repair and Replacement of Connectors - 7.3.3.10

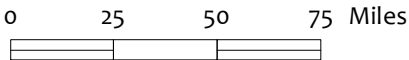
● 2022

#### High Fire Threat District

- Zone 1 - HHZ
- Tier 3 - Extreme
- Tier 2 - Elevated

■ High Fire Risk Area

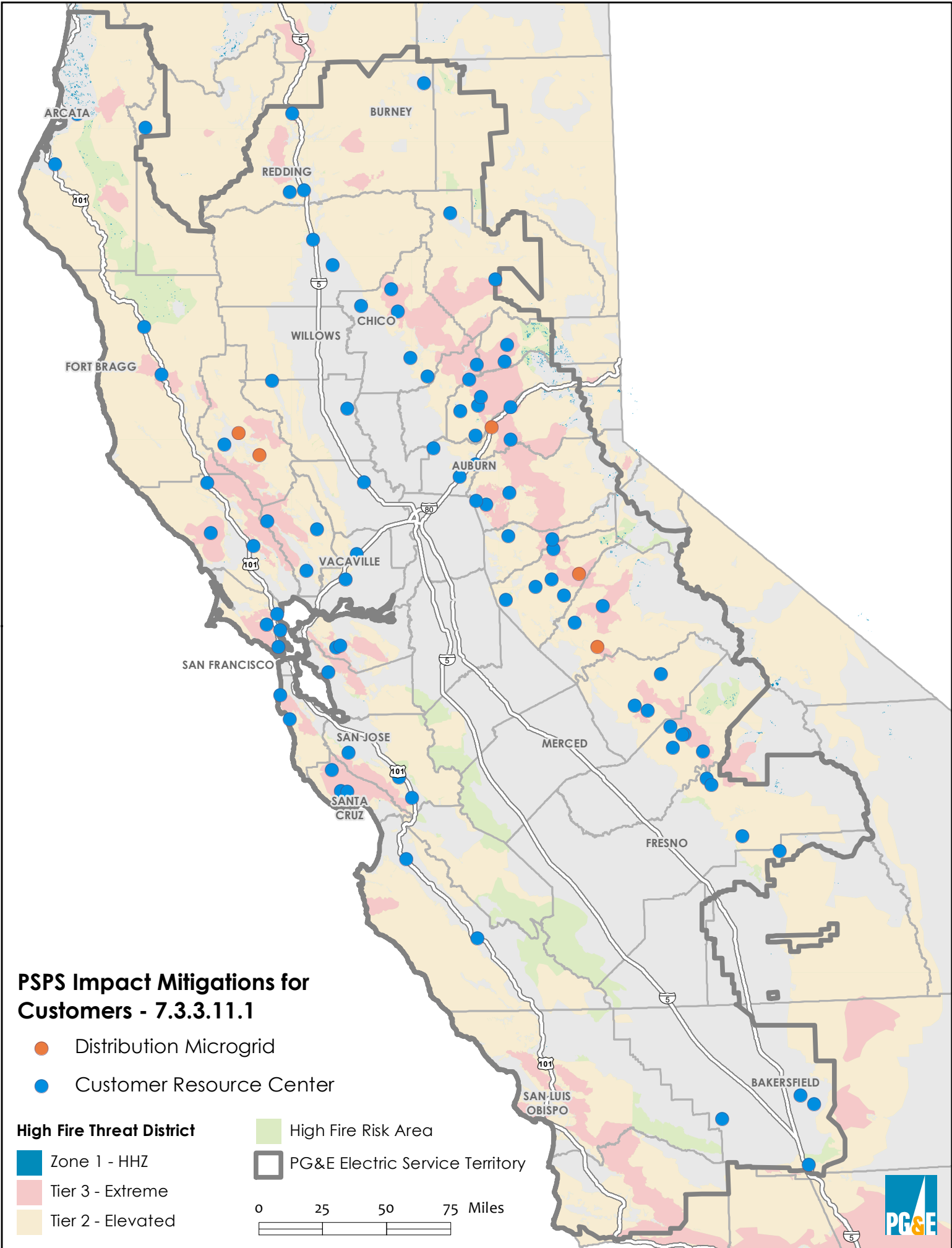
PG&E Electric Service Territory



### **Maintenance, Repair, and Replacement of Connectors, Including Hotline Clamps – 7.3.3.10**

This map shows PG&E's planned connector/clamp maintenance, repair, and replacement tags in the 2022 workplan. Connector/clamp maintenance, repair, and replacement tags for 2023 have not been planned because this will be developed after we have the full set of newly identified tags from 2022 inspections. We expect the 2023 plan to be completed by the end of Q3 2022. Please note that this map does not include connector/clamp notifications that may be found in 2022 and may be added based on associated risk level. Execution risks may also include material long lead times, permitting, access and clearance constraints, and potential loss of resources (e.g., due to potential high priority emergent work, COVID-19 limitations etc.).





### PSPS Impact Mitigations for Customers - 7.3.3.11.1

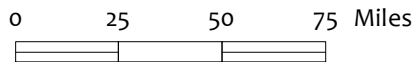
- Distribution Microgrid
- Customer Resource Center

#### High Fire Threat District

- Zone 1 - HHZ
- Tier 3 - Extreme
- Tier 2 - Elevated

■ High Fire Risk Area

PG&E Electric Service Territory



### **Generation Enablement and Deployment - 7.3.3.11.1.A**

This PG&E-defined sub-initiative describes our Temporary Generation (TG) organization that focuses on the safety of internal and contractor crews during deployments, operational readiness and PSPS activations and reporting data and invoicing process. Accordingly, there are no maps to provide for planned work in 2022 and 2023.

### **Temporary Substation Microgrids - 7.3.3.11.1.B**

PG&E will not be pursuing temporary substation microgrids in 2022. Accordingly, there are no maps of planned work for 2022 and 2023.

### **Temporary Distribution Microgrids - 7.3.3.11.1.C**

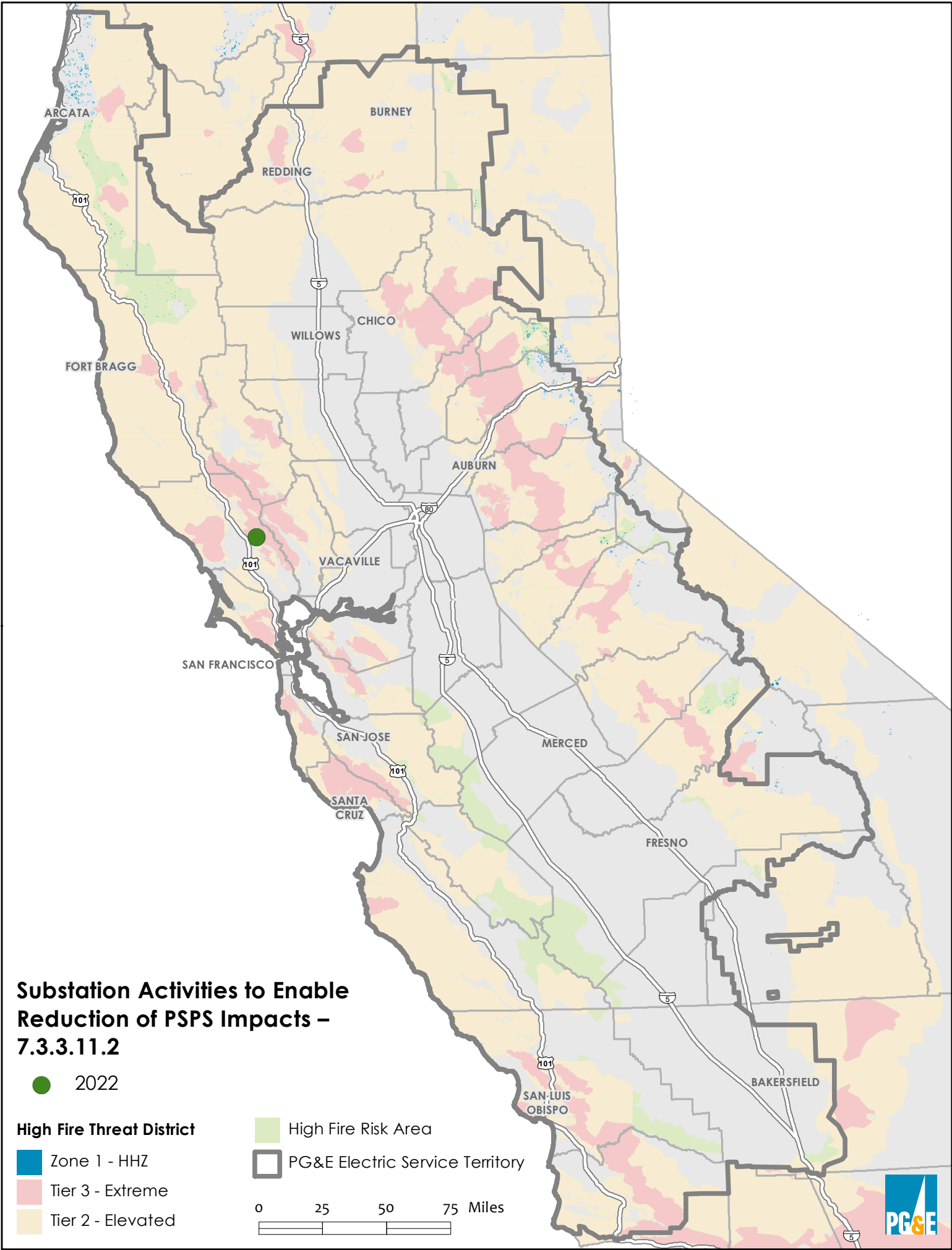
This map shows Distribution Microgrids with pre-installed interconnection hubs (PIHs) planned to be made operationally ready for the first time in 2022. The map shows the approximate location of each Distribution Microgrid's PIH, which is the location where temporary generation will be interconnected to energize the Distribution Microgrid during PSPS events. Please note that the number of planned Distribution Microgrids that will be made operationally ready for the first time on the map exceeds our 2022 WMP target by one as a contingency to ensure we meet our target even if unforeseen circumstances arise. The map does not show the full area within each community that would be energized by the Distribution Microgrid. Nor does the map include Distribution Microgrids that were made operationally ready in prior years that may again be made operationally ready in 2022. PG&E does not currently plan on developing additional Distribution Microgrids in 2023, but this plan may be updated for the 2023 WMP.

### **Back Up Power for Individual Critical Customer Facilities, Small Essential Business, and Residential Customers - 7.3.3.11.1.D**

Backup power locations are not known until a planned or unplanned outage event, when customers request assistance, and are approved based on established criteria to support public health and safety. Therefore, PG&E has not provided maps for this work in 2022 or 2023.

### **Community Resource Centers - 7.3.3.11.1.E**

This map shows the indoor Community Resource Center (CRC) locations where PG&E plans to pre-stage temporary generation during PSPS season. Pre-staged temporary generators are connected to automatic transfer switches so sites are energized and can open quickly when needed. Note that the map only shows those CRC locations for which PG&E rents temporary generation and does not include those CRCs with their own generators or that do not require temporary generation. These locations will mostly stay constant through 2022 and 2023 but are subject to change as additional indoor CRC locations are added to the portfolio, sites leave the portfolio, and/or other hardening efforts make pre-staged temporary generation unnecessary at select locations.



### **Substation Activities to Enable Reduction of PSPS Impacts** – 7.3.3.11.2

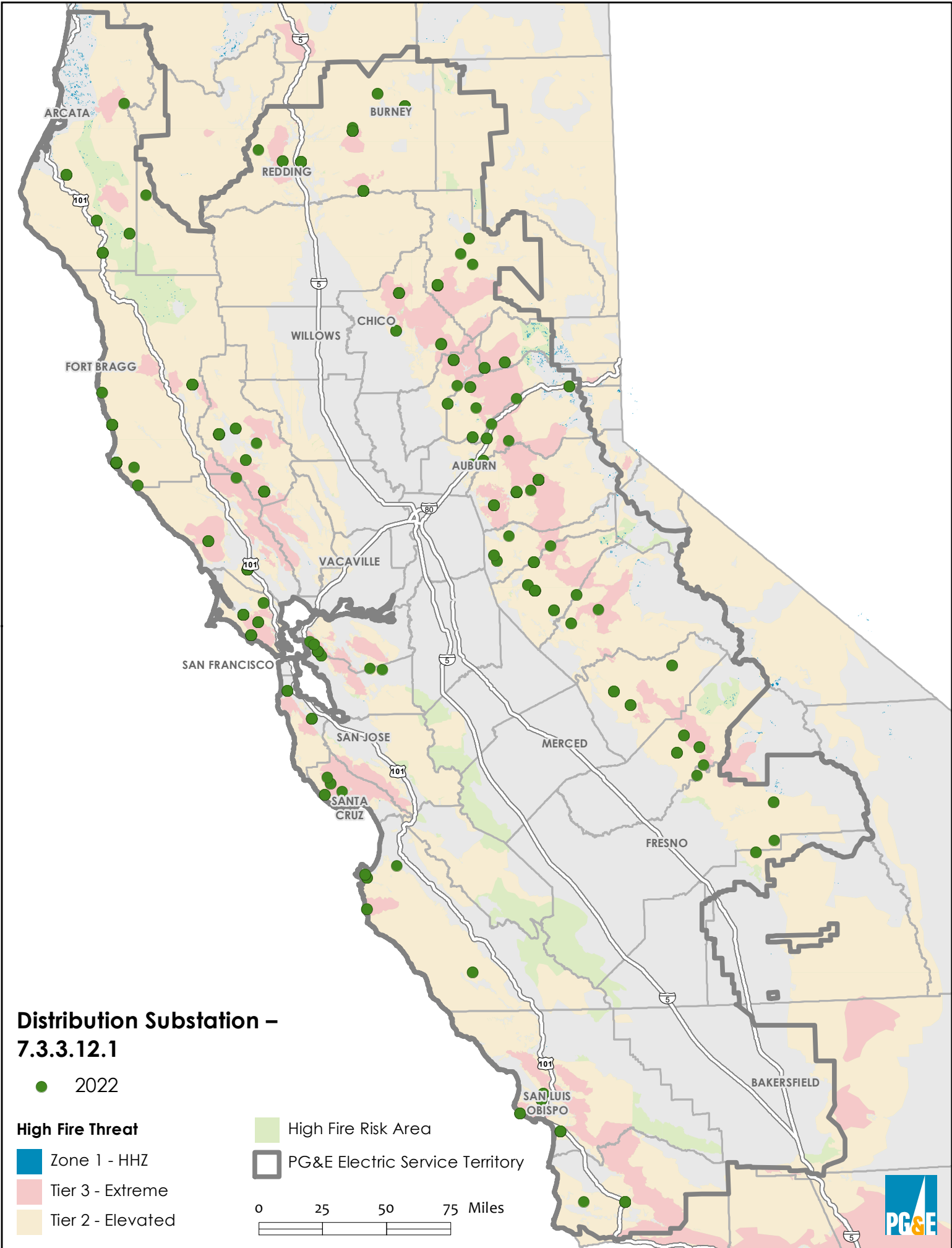
This map shows the Rincon substation location where the proactive replacement and upgrade of circuit switcher 176 will occur in 2022. This project will upgrade from high side fuse protection to circuit switcher protection to provide better protection of Transformer Bank #1. This will increase PSPS operational flexibility and reduce impacts from PSPS events. Additional proactive upgrades of substation equipment to limit the impacts of PSPS events are being evaluated for implementation in and beyond 2023. Please note the location depicted on the map is of the substation facility and not of each particular asset as PG&E does not currently have that level of spatial detail in GIS.

**Emergency Back-Up Generation - PG&E Service Centers & Materials  
Distribution Centers – 7.3.3.11.3**

Backup power locations are not known until a planned or unplanned outage event, when customers request assistance, and are approved based on established criteria to support public health and safety. Therefore, PG&E has not provided maps for this work in 2022 or 2023.

#### **Fixed Power Solutions – 7.3.3.11.4**

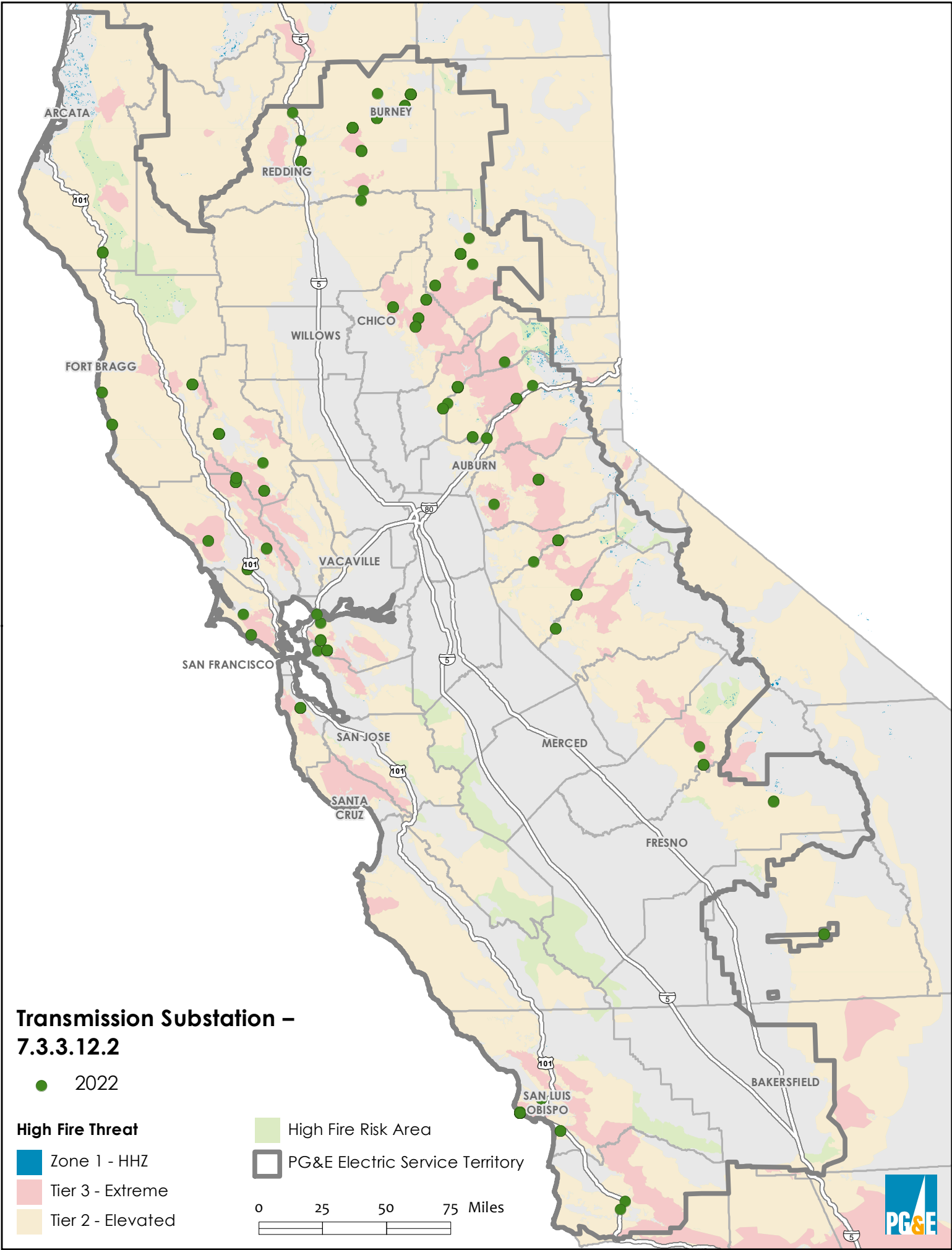
Fixed Power Solutions mitigations will be targeted at customer facilities (homes and businesses). The targeted Customers must accept installation, and the project will be installed. As a new program, PG&E does not yet have specific locations in scope for Fixed Power Solutions in 2022 and 2023 and is therefore not providing corresponding maps. PG&E will need to evaluate data privacy considerations prior to sharing this mitigation data in the future, if requested.



### **Distribution Substation – 7.3.3.12.1**

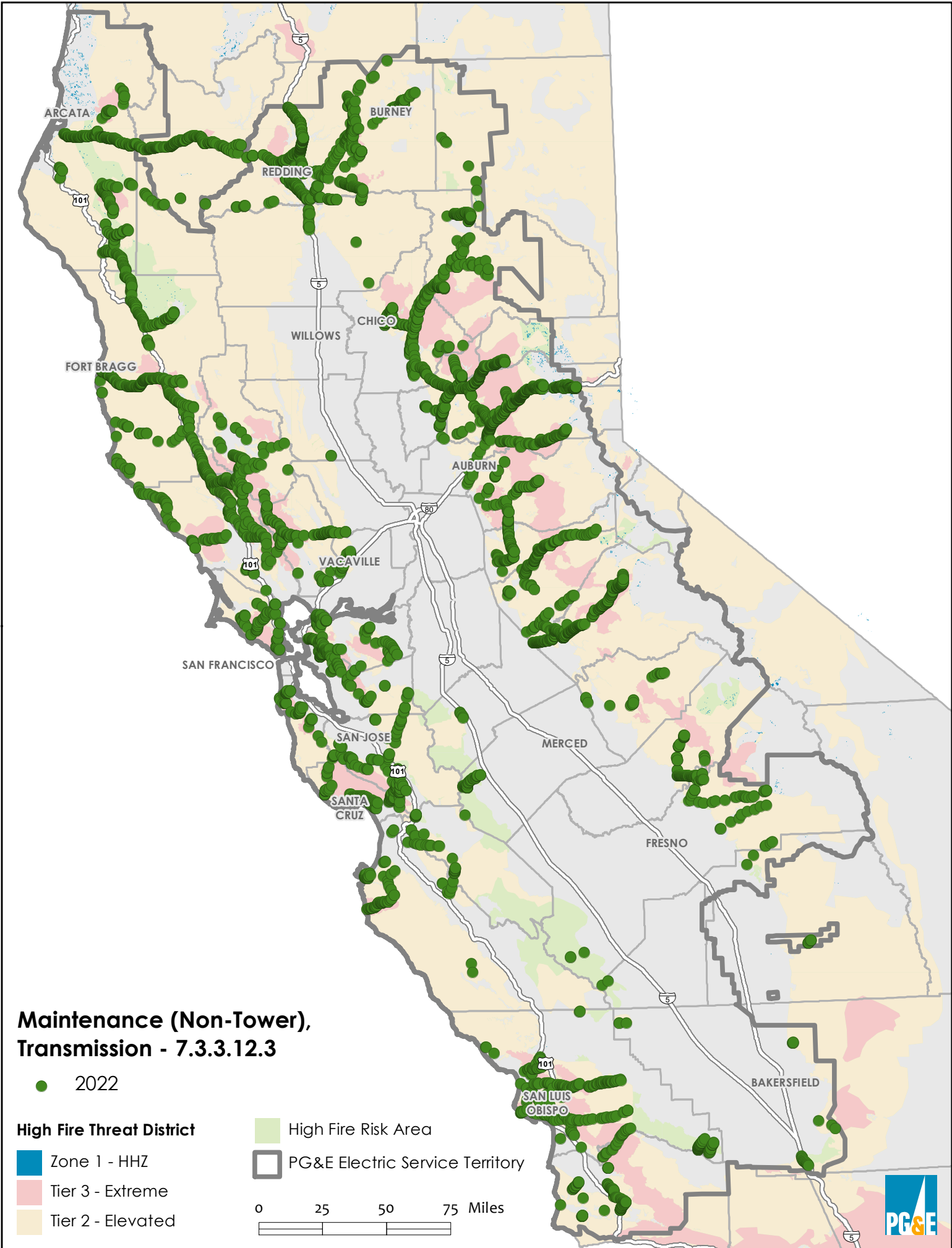
This map shows PG&E substation locations where distribution corrective maintenance tags for substation equipment in HFTD are planned in 2022. These tags are in progress and carried over from 2021 to 2022. Distribution corrective tag locations for 2023 are not included because corrective tags are generated based on results of supplemental substation inspections that have not yet occurred. We anticipate corrective tags to be identified resulting from supplemental substation inspections in 2022 and 2023. Please note the locations depicted on the map are of the substation facility and not of each substation asset as PG&E does not currently have that level of spatial detail in GIS.





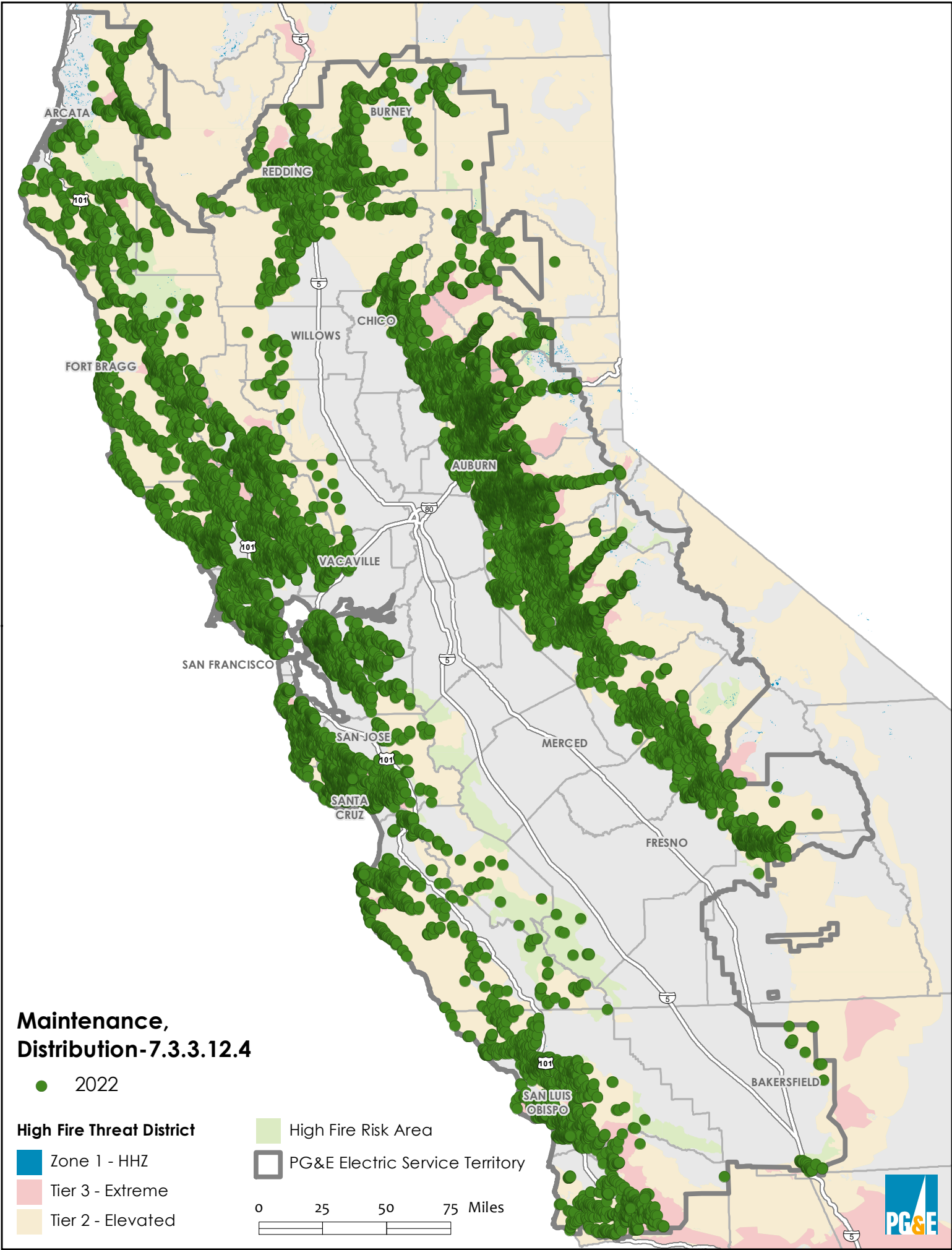
### **Transmission Substation – 7.3.3.12.2**

This map shows PG&E's substation locations where transmission corrective maintenance tags for substation equipment in HFTD are planned in 2022. These tags are in progress and carried over from 2021 to 2022. Transmission corrective tag locations for 2023 are not included because corrective tags are generated based on results of supplemental substation inspections that have not yet occurred. We anticipate corrective tags to be identified resulting from supplemental substation inspections in 2022 and 2023. Please note the locations depicted on the map are of the substation facility and not of each substation asset, as PG&E does not currently have that level of spatial detail in GIS.



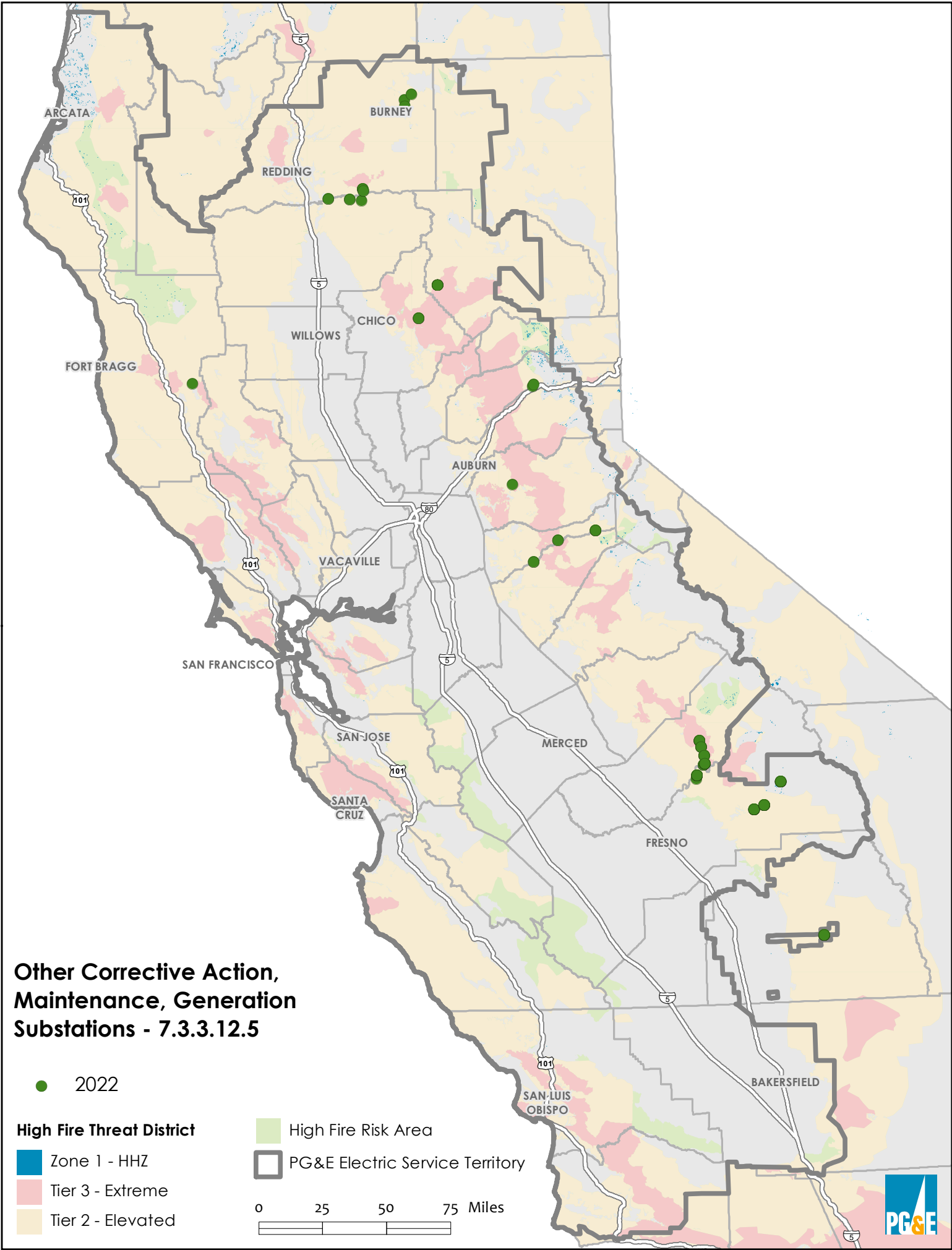
### **Maintenance (Non-Tower), Transmission – 7.3.3.12.3**

This map shows PG&E’s planned HFTD/HFRA maintenance notifications for 2022 on non-steel structures. Maintenance notifications have not been planned for 2023 since new findings from 2022 inspections helps inform the final 2023 plan. We expect the 2023 plan to be completed in Q3 2022. Please note that this map does not include notifications that may be found in 2022 or are subject to change based on “reasonable circumstances” outlined in GO-95 Rule 18.B.1.b. Execution risks may also include material long lead times, permitting, access and clearance constraints, and potential loss of resources (e.g., due to potential high priority emergent work, COVID-19 limitations etc.).



#### **Maintenance, Distribution – 7.3.3.12.4**

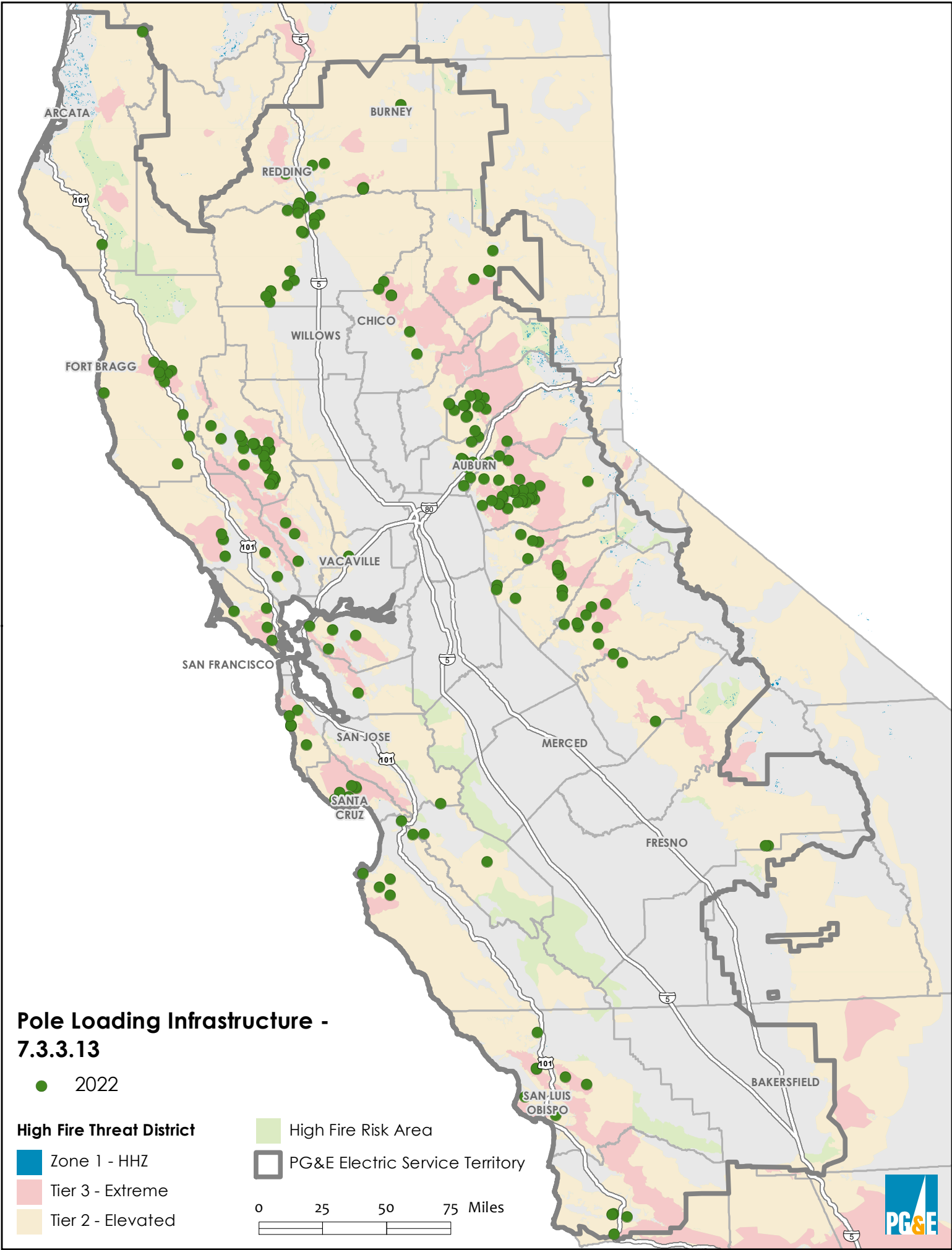
This map shows PG&E's maintenance, repair, and replacement tags for distribution facilities in the 2022 workplan, excluding pole, cross-arm, and connector/clamp notifications because they are included in other sections (see Sections 7.3.3.5, 7.3.3.10, 7.3.3.6). The maintenance, repair, and replacement tags for 2023 have not been planned because this will be developed after we have the full set of newly identified tags from 2022 inspections. We expect the 2023 plan to be completed by the end of Q3 2022. Please note that this map does not include new maintenance notifications that may be found in 2022 or are subject to be added based on associated risk level. Execution risks may include material long lead times, permitting, access and clearance constraints, and potential loss of resources (e.g., due to potential high priority emergent work, COVID-19 limitations, etc.).



### **Other Corrective Action Maintenance, Generation Substation – 7.3.3.12.5**

This map shows PG&E's hydro substation locations where generation corrective maintenance tags for substation equipment in HFTD are planned in 2022. These tags are in progress and carried over from 2021 to 2022. Transmission corrective tag locations for 2023 are not included because corrective tags are generated based on results of supplemental substation inspections that have not yet occurred. We anticipate corrective tags to be identified resulting from supplemental substation inspections in 2022 and 2023. Please note the locations depicted on the map are of the hydro substation facility and not of each substation asset as PG&E does not currently have that level of spatial detail in GIS.





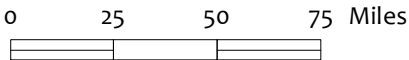
**Pole Loading Infrastructure - 7.3.3.13**

● 2022

**High Fire Threat District**

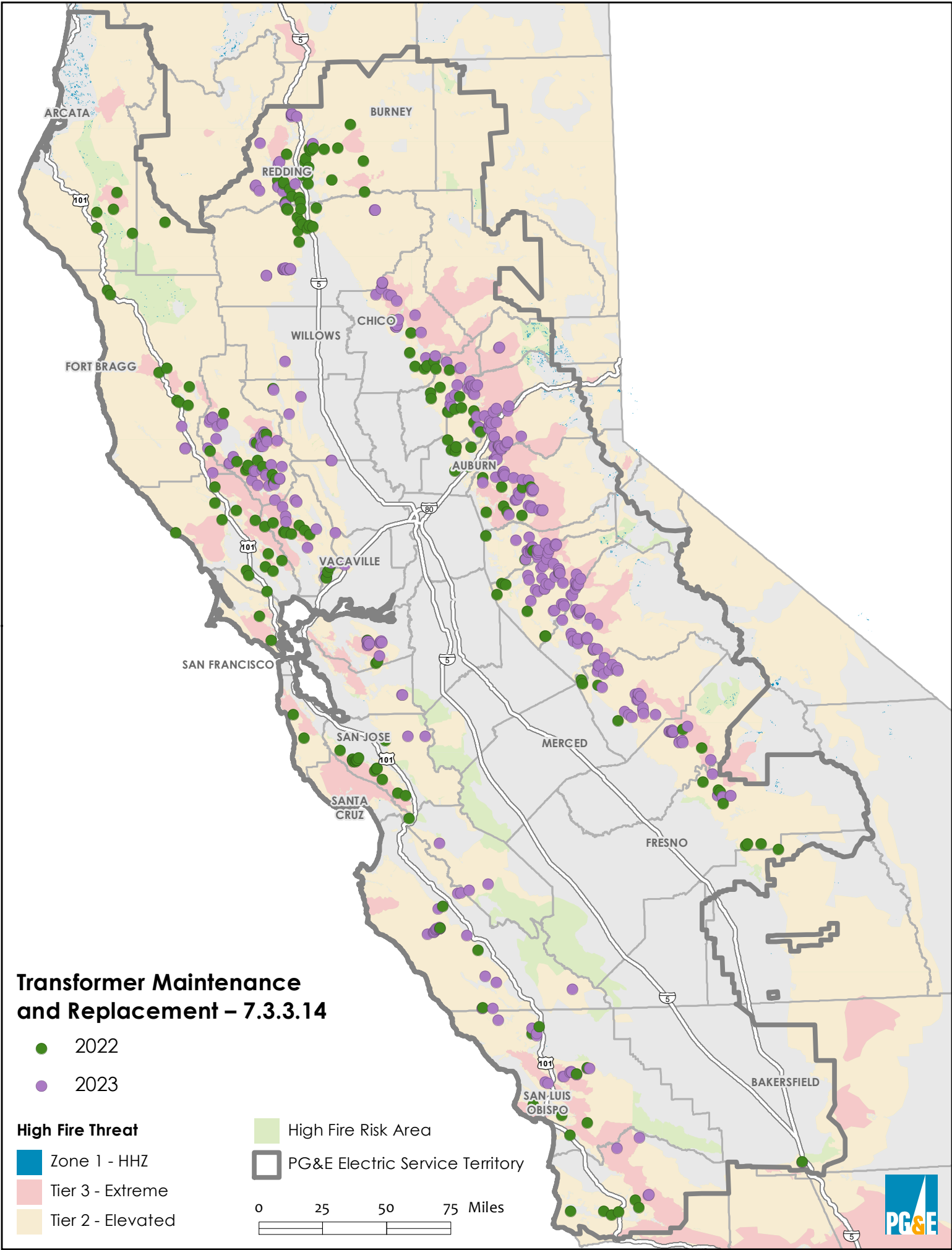
- Zone 1 - HHZ
- Tier 3 - Extreme
- Tier 2 - Elevated

- High Fire Risk Area
- PG&E Electric Service Territory



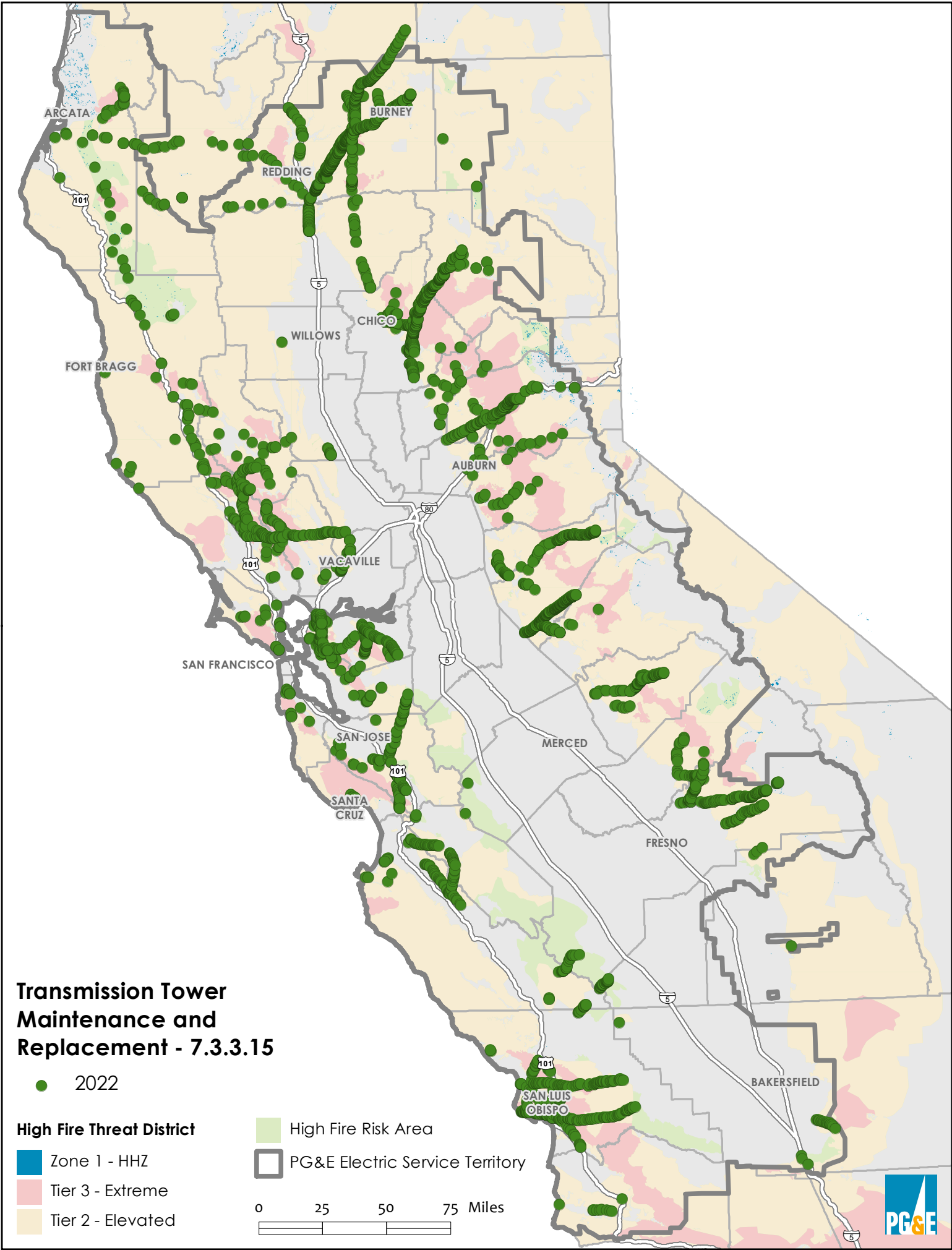
### **Pole Loading Infrastructure Hardening and Replacement Program Based on Pole Loading Assessment Program – 7.3.3.13**

This map shows PG&E's planned distribution overloaded pole replacements for 2022. Planned Distribution overloaded pole replacements have not been completed for 2023 because we are finalizing our methodology for risk prioritization and getting the required approvals. We expect the 2023 plan to be completed by the end of Q1 2022. Please note that this map does not include notifications that may be found in 2022 and is subject to change based on "reasonable circumstances" outlined in GO-95 Rule 18.B.1.b. Execution risks may also include material long lead times, permitting, access and clearance constraints, and potential loss of resources (e.g., due to potential high priority emergent work, COVID-19 limitations, etc.).



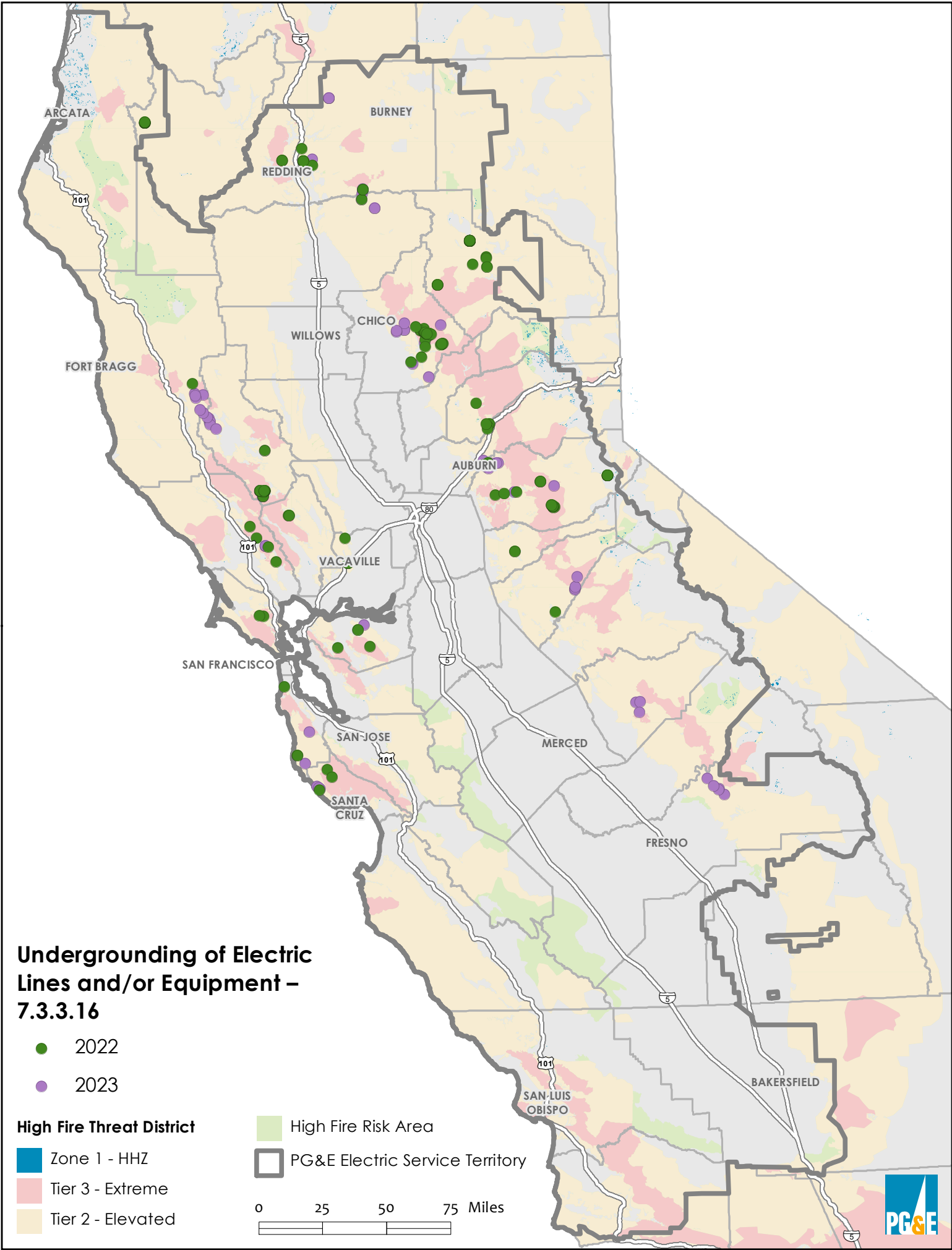
### **Transformer Maintenance and Replacement – 7.3.3.14**

These maps show PG&E's planned HFTD transformer replacements for 2022 and 2023. The selections for 2022 were prioritized by the 2021 Wildfire Distribution Risk Model. The planned selections for 2023 were prioritized using a proposed updated version of the Wildfire Distribution Risk Model. Please note that this map of planned work is subject to change due to the dynamic nature of overloaded conditions.



### **Transmission Tower Maintenance and Replacement – 7.3.3.15**

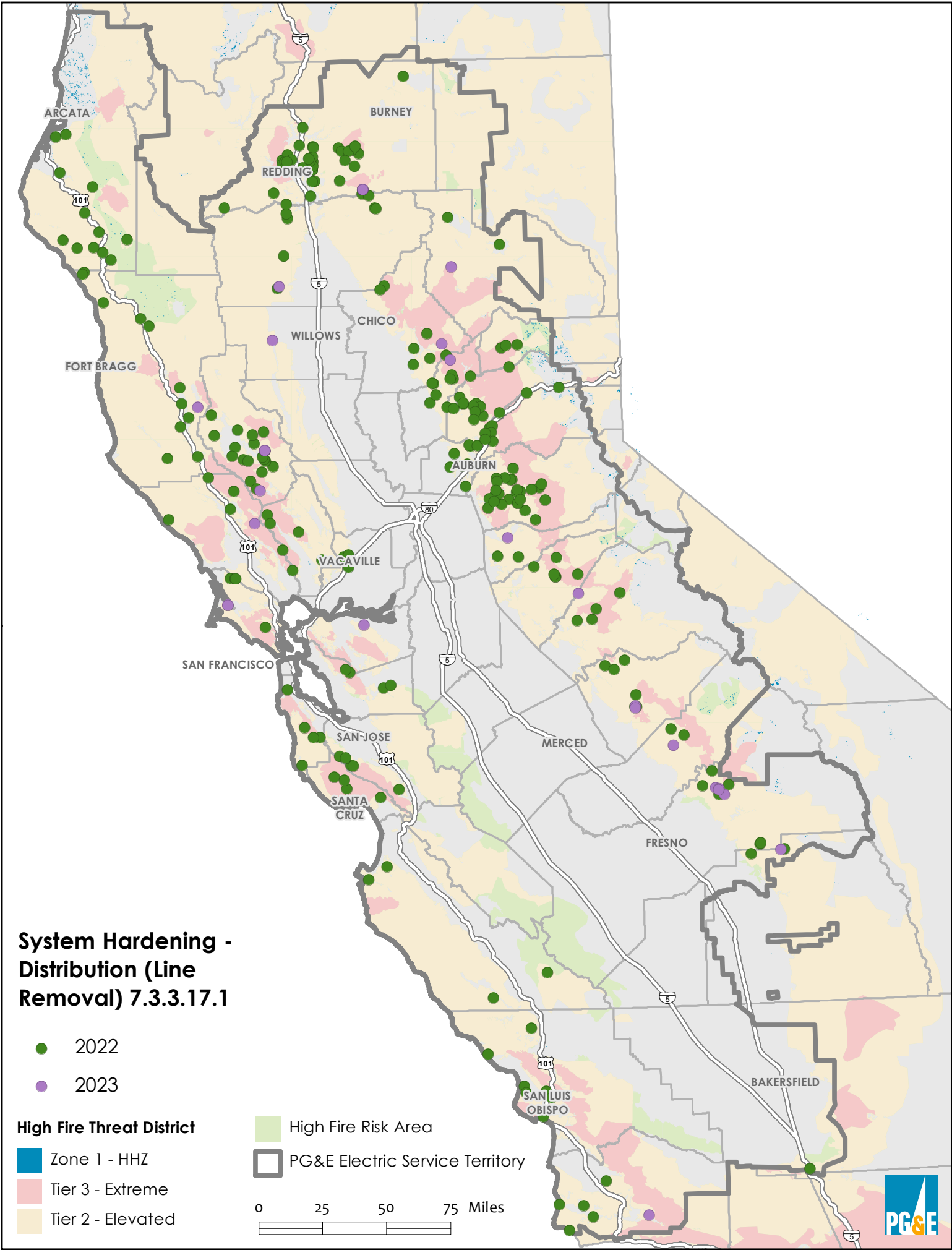
This map shows PG&E’s planned HFTD/HFRA maintenance notifications for 2022 on steel structures. Maintenance notifications have not been planned for 2023 since new findings from 2022 inspections help inform the final 2023 plan. We expect the 2023 plan to be completed in Q3 2022. Please note that this map does not include notifications that may be found in 2022 and are subject to change based on “reasonable circumstances” outlined in GO-95 Rule 18.B.1.b. Execution risks may also include material long lead times, permitting, access and clearance constraints, and potential loss of resources (e.g., due to potential high priority emergent work, COVID-19 limitations, etc.).



### **Undergrounding of Electric Lines and/or Equipment – 7.3.3.16**

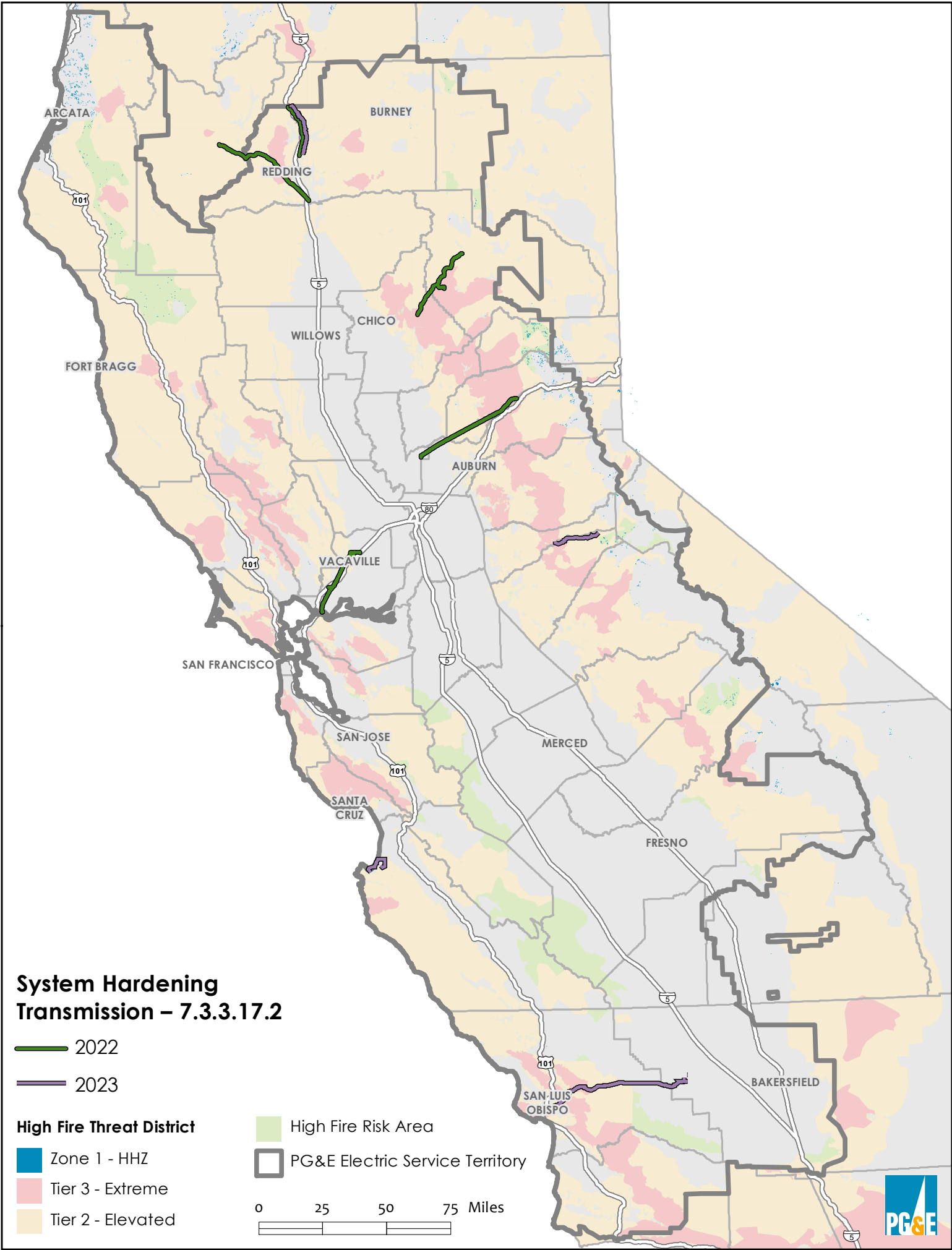
This map shows PG&E’s planned distribution undergrounding locations for 2022 and 2023. Please note that the map references planned undergrounding work that exceeds our stated target of at least 175 miles to ensure we meet our stated target. This map does not include Butte County Rebuild miles. Planning for 2023 is not yet complete. We expect the 2023 plan to be completed by the end of Q4 2022. Planned work is subject to change based on “reasonable circumstances” outlined in GO-95 Rule 18.B.1.b. Execution risks may also include material long lead times, permitting, access and clearance constraints, and potential loss of resources (e.g., due to potential high priority emergent work, COVID-19 limitations, etc.).





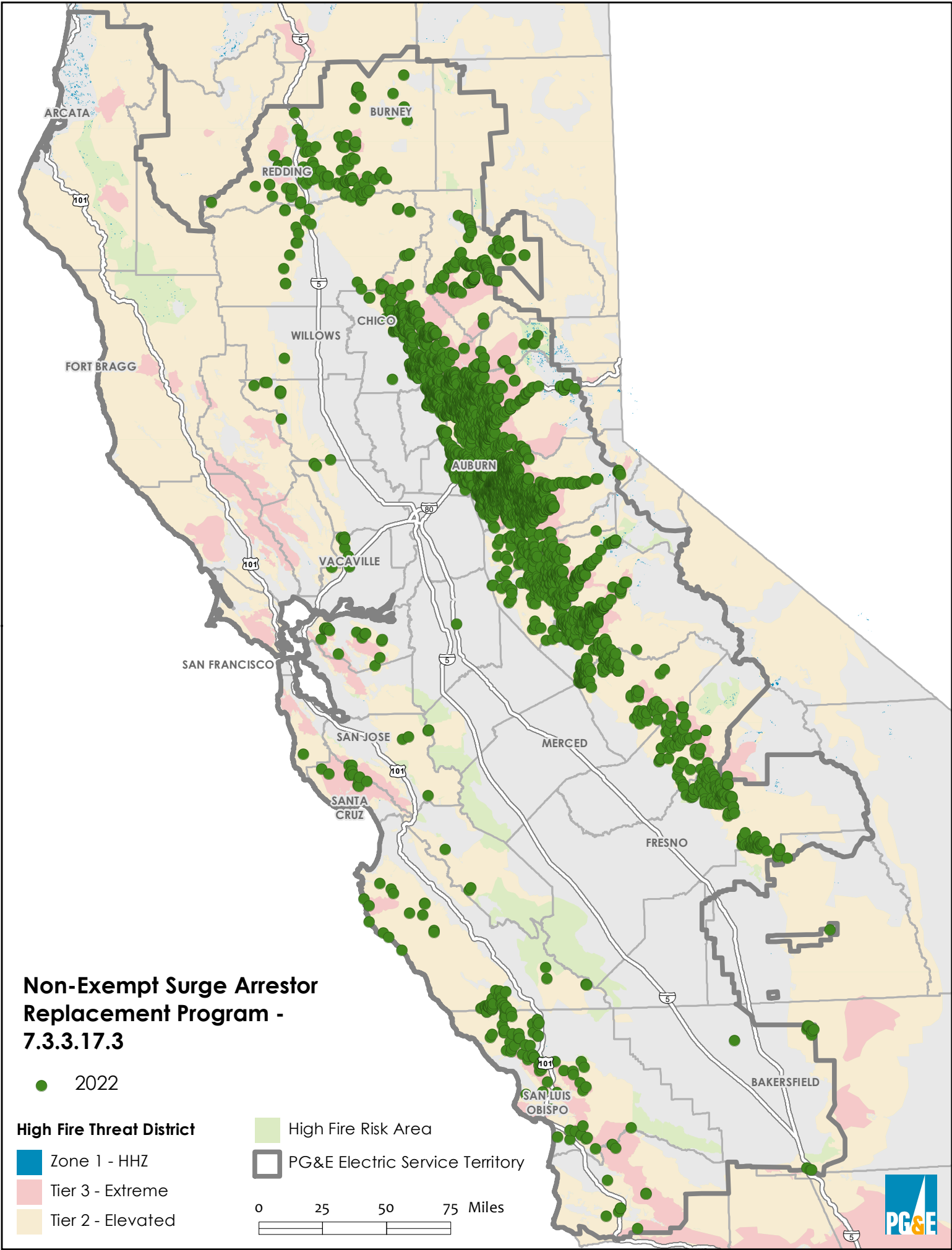
### **System Hardening - Distribution (Line Removal) – 7.3.3.17.1**

Section 7.3.3.17.1 includes all System Hardening work covered in 7.3.3.3 (covered conductor installation) and 7.3.3.16 (undergrounding). The map included here reflects other system hardening efforts that are not covered in sections 7.3.3.3 and 7.3.3.16. In particular, it includes planned distribution line removals for 2022 and 2023. Planning for 2023 is not yet complete. We expect the 2023 plan to be completed by the end of Q4 2022 Q4. Planned work is subject to change based on “reasonable circumstances” outlined in GO-95 Rule 18.B.1.b. Execution risks may also include material long lead times, permitting, access and clearance constraints, and potential loss of resources (e.g., due to potential high priority emergent work, COVID-19 limitations, etc.).



### **System Hardening - Transmission – 7.3.3.17.2**

This map shows PG&E's planned conductor removal or replacement work on transmission lines traversing HFTD areas in 2022 and 2023. Although entire lines are mapped, the conductor work may only be occurring on certain sections of line. Please note that some in-progress projects forecasted in service towards the end of 2022 are included in this map, but they are not included in the target given significant execution challenges. Please also note that the 2023 work plan is still being prepared and is subject to change based on various execution risks including material long lead times, permitting, access and clearance constraints, and potential loss of resources (e.g., due to potential high priority emergent work, COVID-19 limitations, etc.).



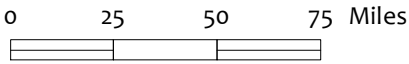
### Non-Exempt Surge Arrestor Replacement Program - 7.3.3.17.3

● 2022

**High Fire Threat District**

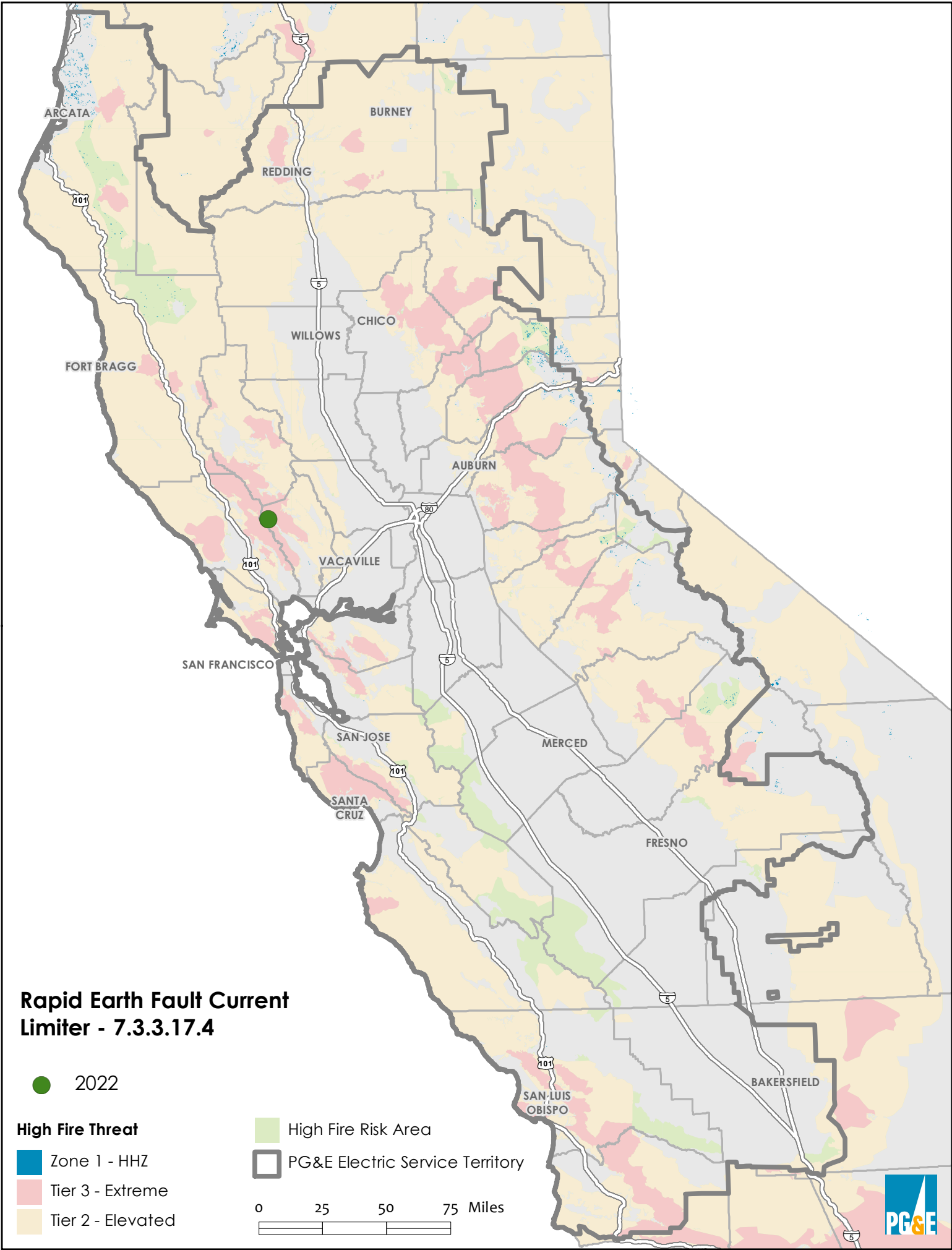
- Zone 1 - HHZ
- Tier 3 - Extreme
- Tier 2 - Elevated

- High Fire Risk Area
- PG&E Electric Service Territory



### **Non-Exempt Surge Arrester Replacement Program – 7.3.3.17.3**

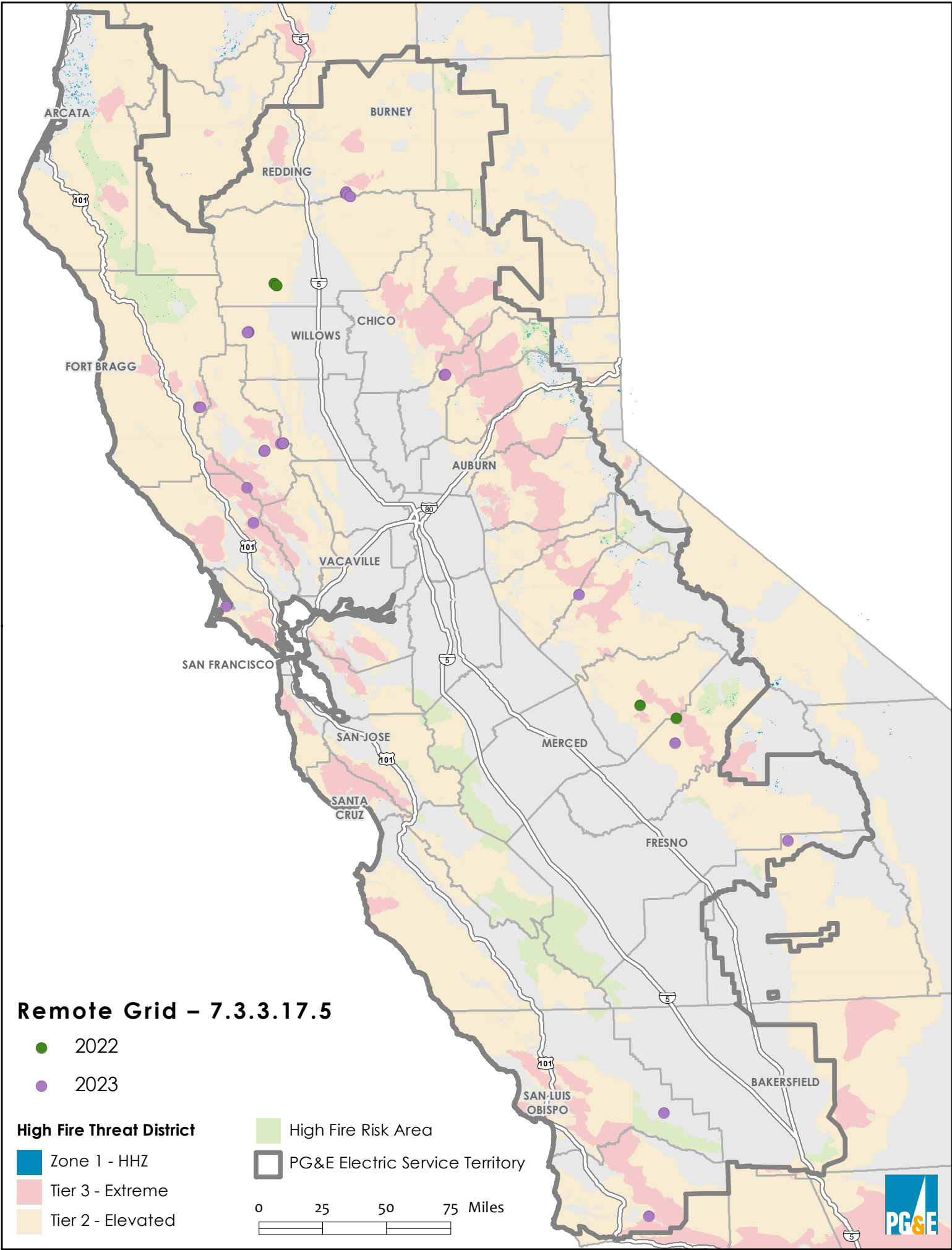
This map shows PG&E's planned removal and replacement work for non-exempt Surge Arrestors in 2022. The replacement of all HFTD units based on the known population of surge arrestors as of January 1, 2022 should be completed in 2022. We will pivot to non-HFTD replacements of Surge Arrestors for the remainder of 2022 and moving forward.



#### **Rapid Earth Fault Current Limiter (REFCL) – 7.3.3.17.4**

This map shows where PG&E plans to repair and rebuild the REFCL installation at Calistoga to complete additional pilot evaluation. If the additional pilots are successful, PG&E will look for opportunities to place REFCL into full service as well as evaluate whether any additional sites are appropriate for future installations in 2023.





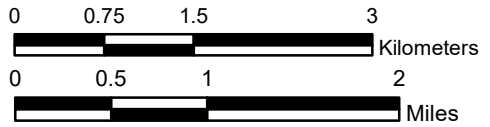
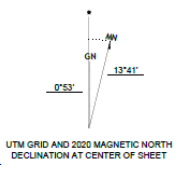
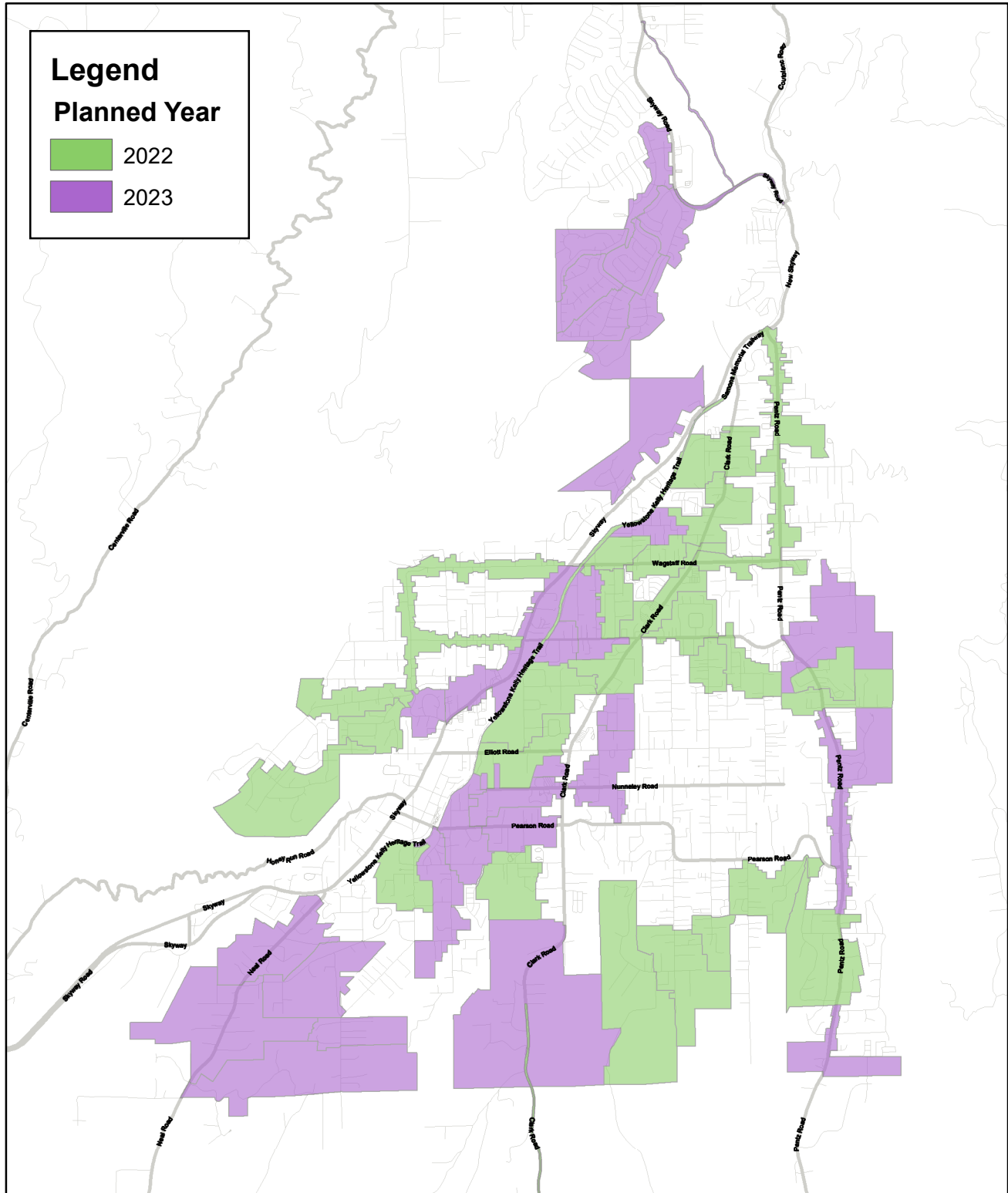
### **Remote Grid – 7.3.3.17.5**

This map shows PG&E's planned remote grid installation sites in scope for 2022 as well as those in development for 2023. Please note that the 2022 planned sites exceed the 2022 WMP stated target of two to account for unforeseen circumstances in work execution. Also, some of the sites in development for 2023 are still in the scoping and easement acquisition stage. More information regarding the 2023 sites in development will be available by August 2022.



# Butte County Rebuild Program

7.3.3.17.6



### **Butte County Rebuild Program – 7.3.3.17.6**

This map shows PG&E’s planned undergrounding work included in the Butte County Rebuild Program for 2022 and 2023. Planned undergrounding work in 2022 is shown in green. Planned undergrounding work in 2023 is shown in purple. The planned year legend on the map is the year the project will start, not finish. Therefore the 2022 WMP target of 55 circuit miles does not correlate exactly with the planned 2022 work on the map. In addition, planned work is in various stages of design and easement acquisition. PG&E intends to complete all the planned undergrounding work by the end of 2025.