

# **1, 2, 3-TRICHLOROPROPANE SAMPLING IN Q1 2018**

JUNE 29, 2018  
*(Revised July 18, 2018)*



## **1,2,3-Trichloropropane Sampling in Q1 2018**

### **June 29, 2018 (revised)**

On December 14, 2017, the California Water Resources Control Board Division of Drinking Water (DDW) adopted a regulation promulgating a Maximum Contaminant Level (MCL) for 1,2,3-trichloropropane (1,2,3-TCP) of 0.000005 milligrams per liter (mg/L, or 5 parts per trillion or 5 ppt). This regulation requires Community Water Systems and Nontransient Noncommunity Water Systems to begin initial sampling of 1,2,3-TCP from their drinking water sources. Initial sampling began January 1, 2018, and the regulation requires four quarterly samples to be completed as part of this initial sampling. With the passing of the first quarter of required sampling, 1,2,3-TCP data has been compiled and evaluated as explained below.

*Figure 1* and *Figure 2* below demonstrate the sampling effort and percentage of sources that have completed the required initial monitoring. *Figure 1* shows the number of drinking water sources per DDW District/Local Primacy Agency (LPA) and the number of sources that were sampled during the first quarter. *Figure 2* is similar to *Figure 1* but presents the data as a percentage of drinking water sources that were sampled during the first quarter.

As shown in Figures 1 and 2, there is a gap between the total number of water sources for which sampling is required to the number of sources that were sampled. The following bullets list reasons why all drinking water sources depicted may not have been sampled.

- Water Systems may have applied to receive a waiver from 1,2,3-TCP monitoring. If granted, the water system would not need to sample.
- Water Systems may have failed to conduct the required sampling. Enforcement actions would have been issued to water systems that failed to sample.
- Water Systems may have requested that previous monitoring to be substituted for the first quarter monitoring. Pursuant to Section 64445(i), results obtained from groundwater sources not more than two calendar years prior to the effective date of the 1,2,3-TCP regulation may be substituted to satisfy the initial monitoring requirements.
- Monitoring may not have been required for the drinking water source listed. Some sources listed may have been entered into the Safe Drinking Water Information System database incorrectly and therefore appear on this list as needing to be monitored when in fact they do not.

*Appendix A* shows a statewide map of 388 drinking water sources that exceeded the 1,2,3-TCP MCL during the first quarter of 2018. Note that a single exceedance of the MCL does not necessarily constitute a violation of the MCL. Regulations outline the requirement for increased monitoring following any exceedance of an MCL, from which

compliance is then determined. However, the map provided in Appendix A is an indicator of the areas across California that will be most impacted by groundwater contamination from 1,2,3-TCP as initial monitoring continues.

*Figure 3* tallies these 388 drinking water sources and how they are distributed in the 23 counties that are impacted. There is a clear correlation between the location of the of drinking water sources that exceed the 1,2,3-TCP MCL and agricultural/industrial activities. The majority of the impacted drinking water sources are in the Central San Joaquin Valley, which is attributed to the past agricultural practice of using soil fumigants that contained 1,2,3-TCP. Much of the Southern California area impacts come from past industrial activities (defense/aerospace) that have resulted in Superfund cleanup projects.

*Appendix B* shows which of the 388 drinking water sources mentioned above remain online with no treatment, of which there are 253 sources.

*Figure 4* breaks down the 388 drinking water sources that have exceeded the 1,2,3-TCP MCL and categorizes them into their current operational status.

### Figures

- Figure 1: Drinking Water Sources Sampled During Q1 2018 for 1,2,3-TCP (as a count of sampled sources, by DDW District/LPA)
- Figure 2: Drinking Water Sources Sampled During Q1 for 1,2,3-TCP (as a percentage of all sources, by DDW District/LPA)
- Figure 3: Drinking Water Sources with 1,2,3-TCP MCL Exceedances per County during Q1 2018
- Figure 4: Status of Drinking Water Sources with 1,2,3-TCP MCL Exceedances per County during Q1 2018

### Appendices

- Appendix A: Map of Public Drinking Water Wells Exceeding the 1,2,3-TCP MCL in Q1 of 2018
- Appendix B: Map of Public Drinking Water Wells Exceeding the 1,2,3-TCP MCL that remain online without Treatment in Q1 of 2018

Figure 1. Drinking Water Sources Sampled during Q1 2018 for 1,2,3-TCP

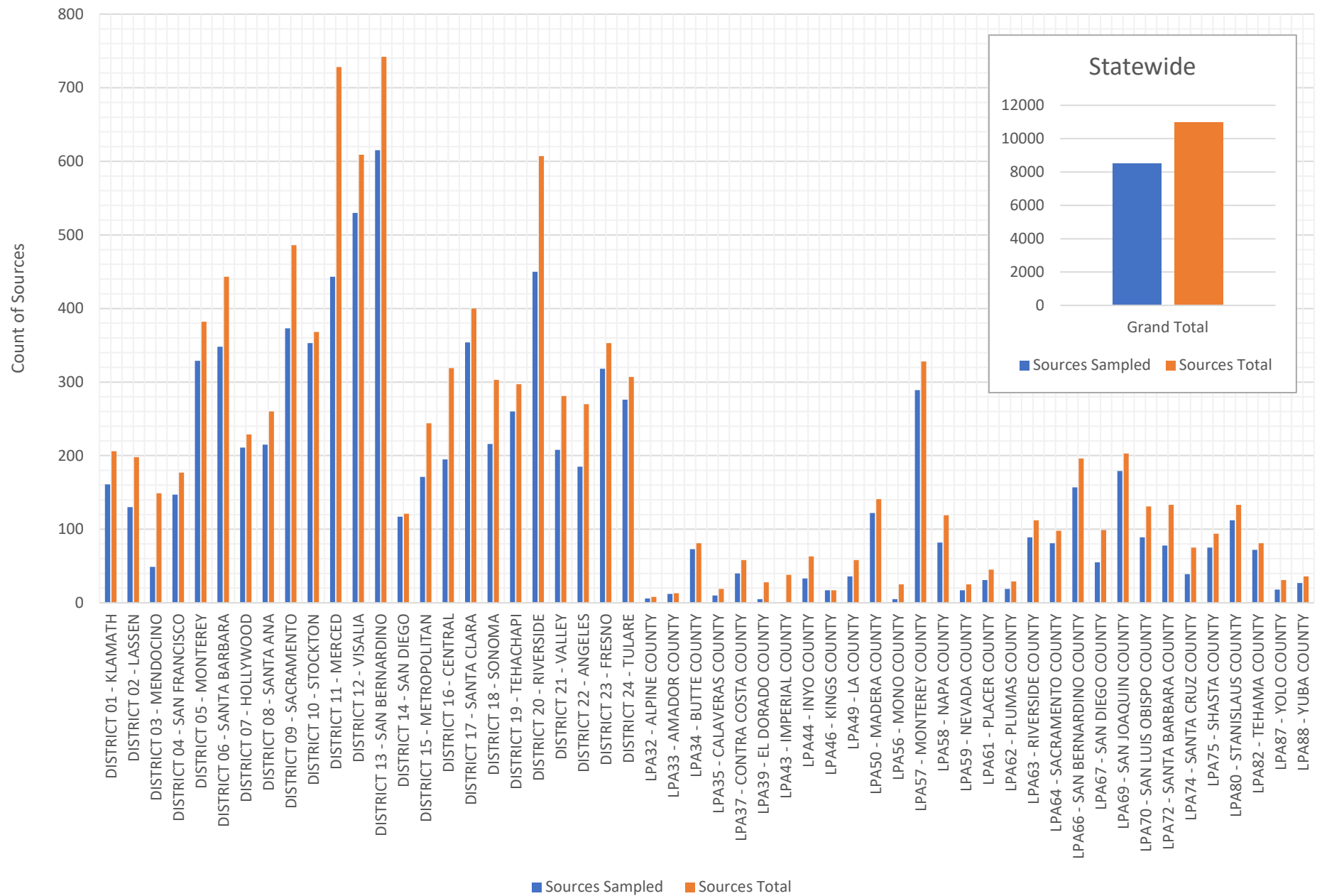




Figure 2. Drinking Water Sources Sampled during Q1 2018 for 1,2,3-TCP

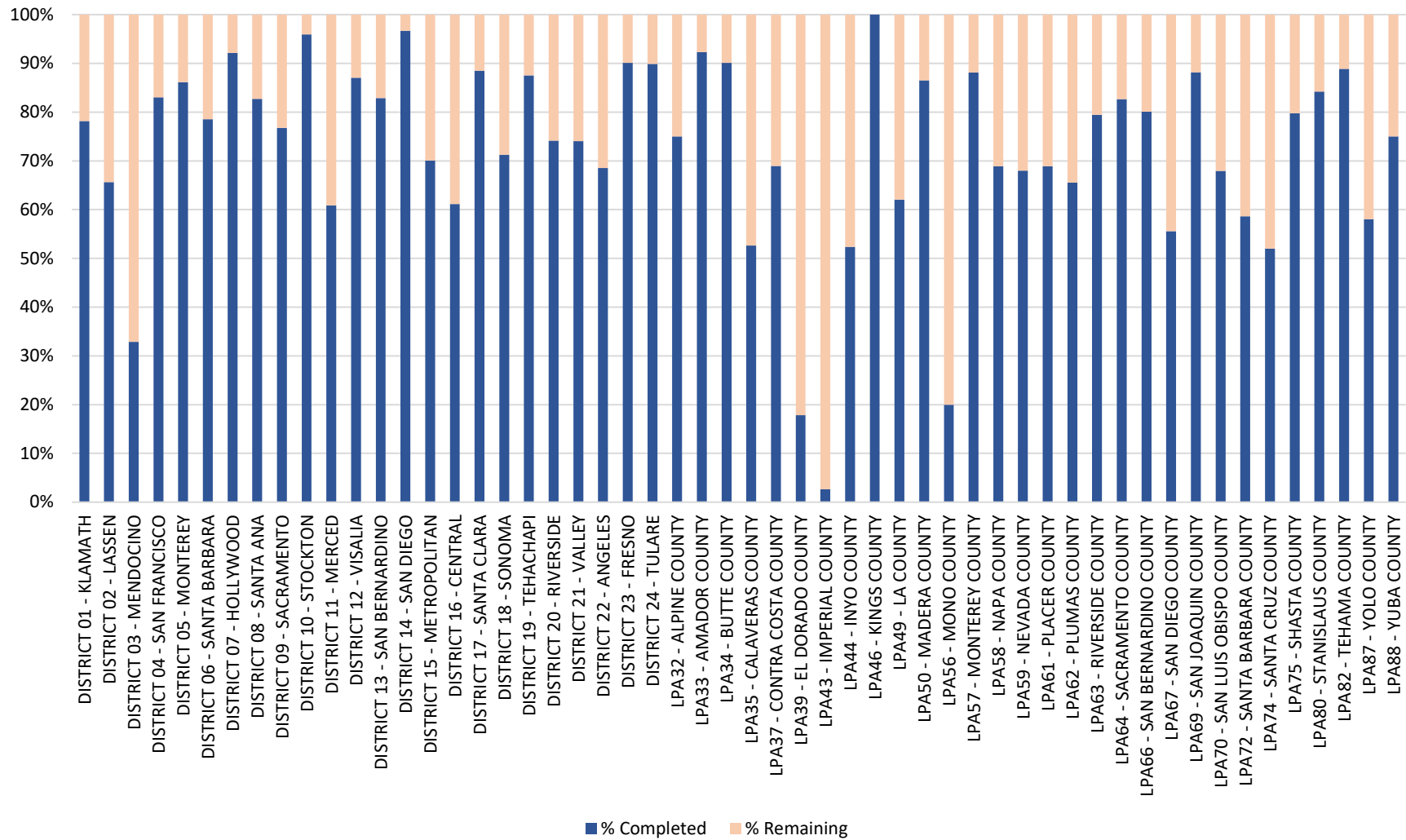


Figure 3. Drinking Water Sources with 1,2,3-TCP MCL Exceedances per County during Q1 2018

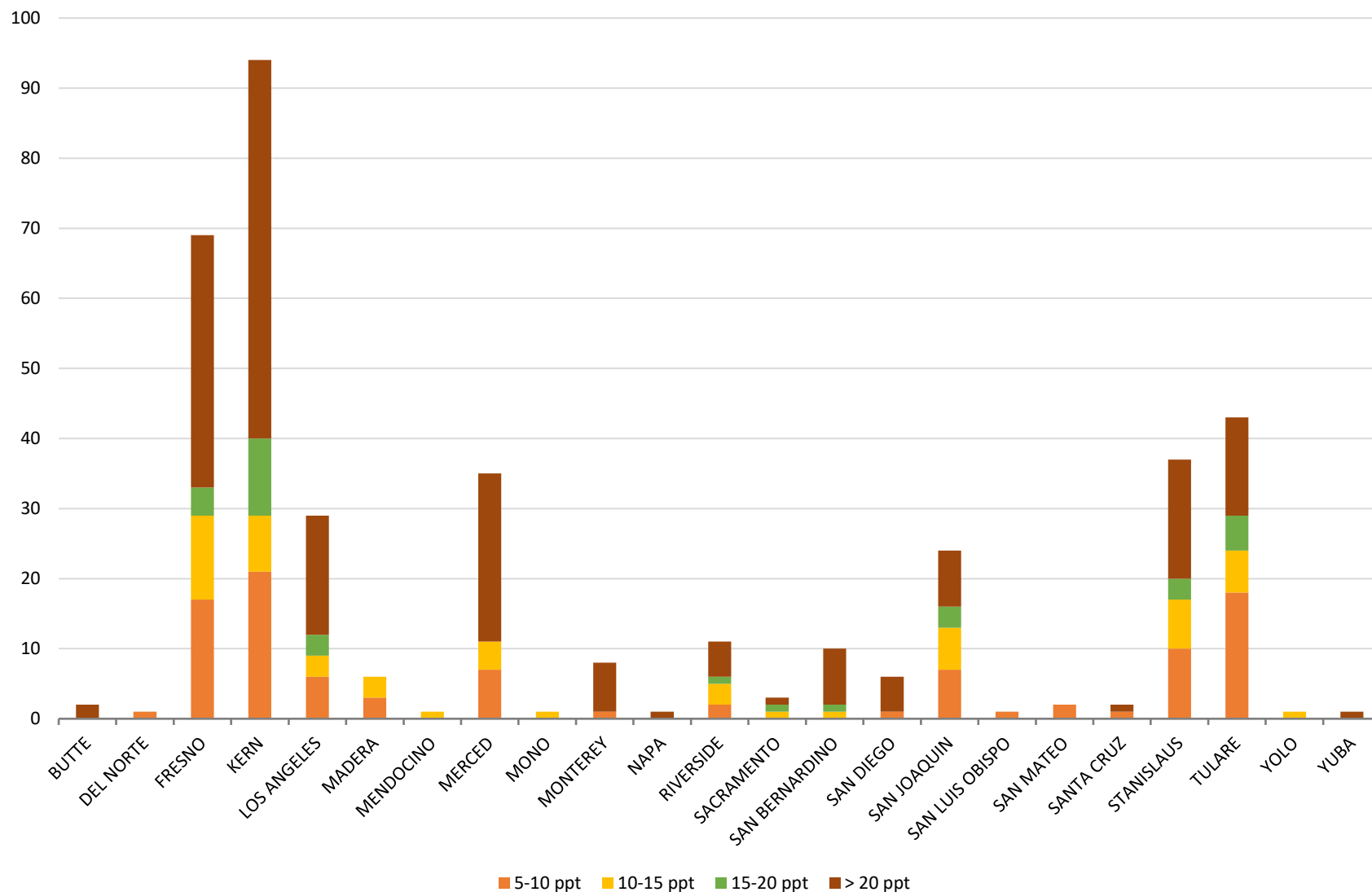
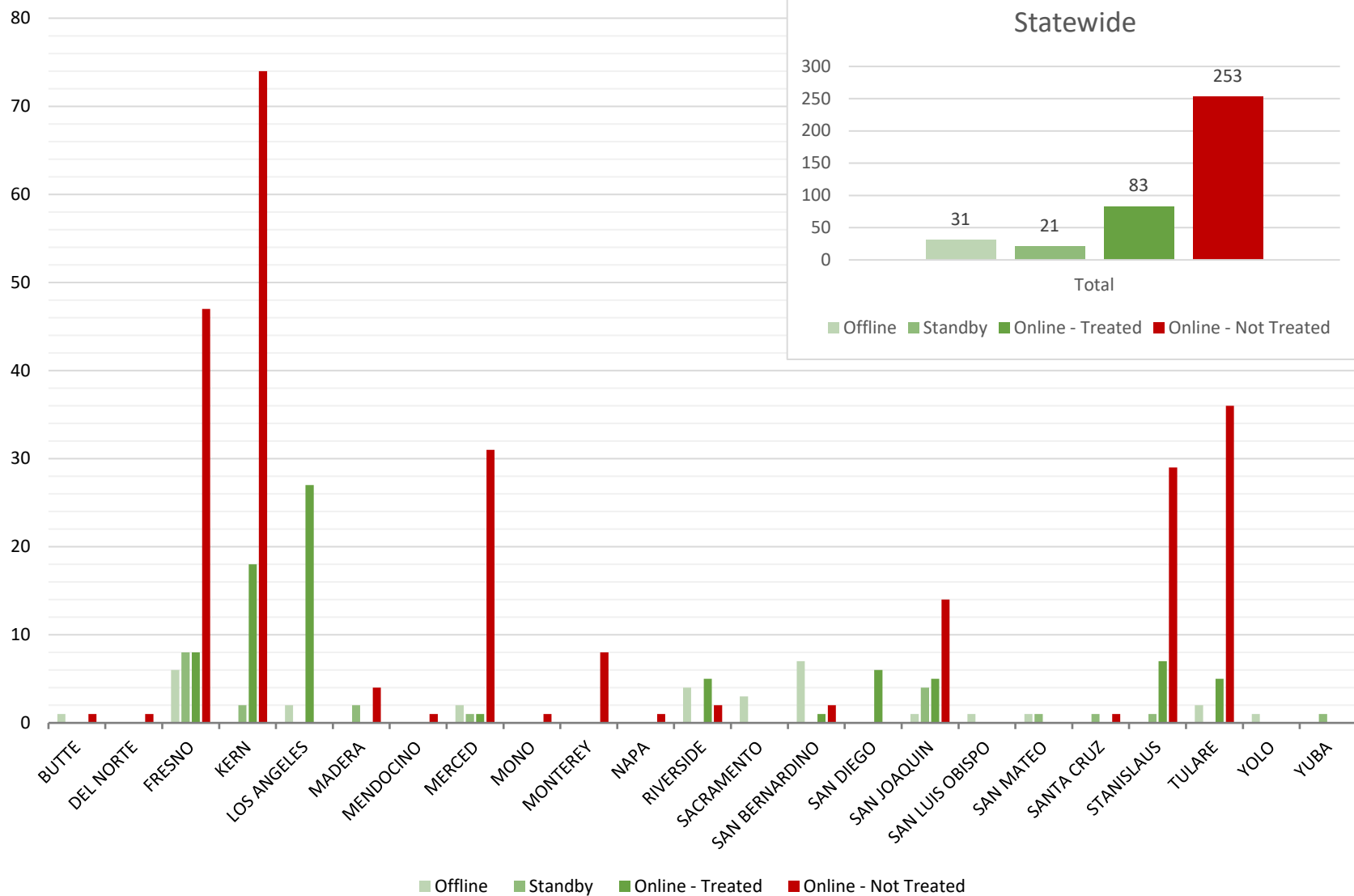
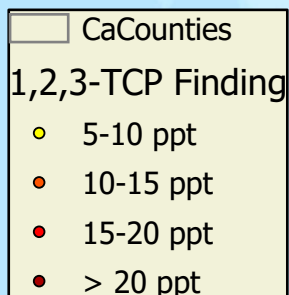


Figure 4. Status of Drinking Water Sources with 1,2,3-TCP MCL Exceedances per County during Q1 2018

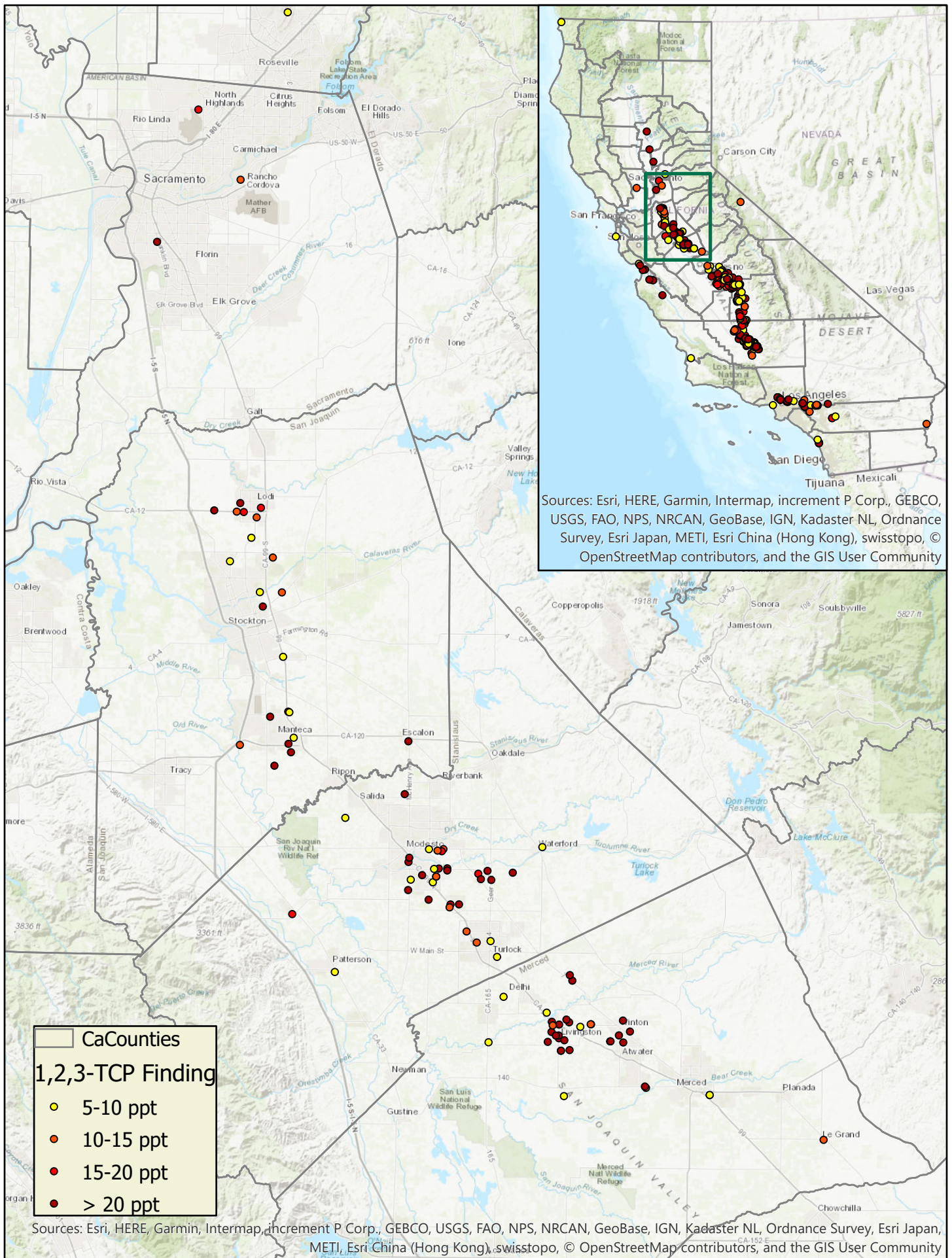


# Public Drinking Water Wells Exceeding the 1,2,3-TCP MCL in Q1 of 2008

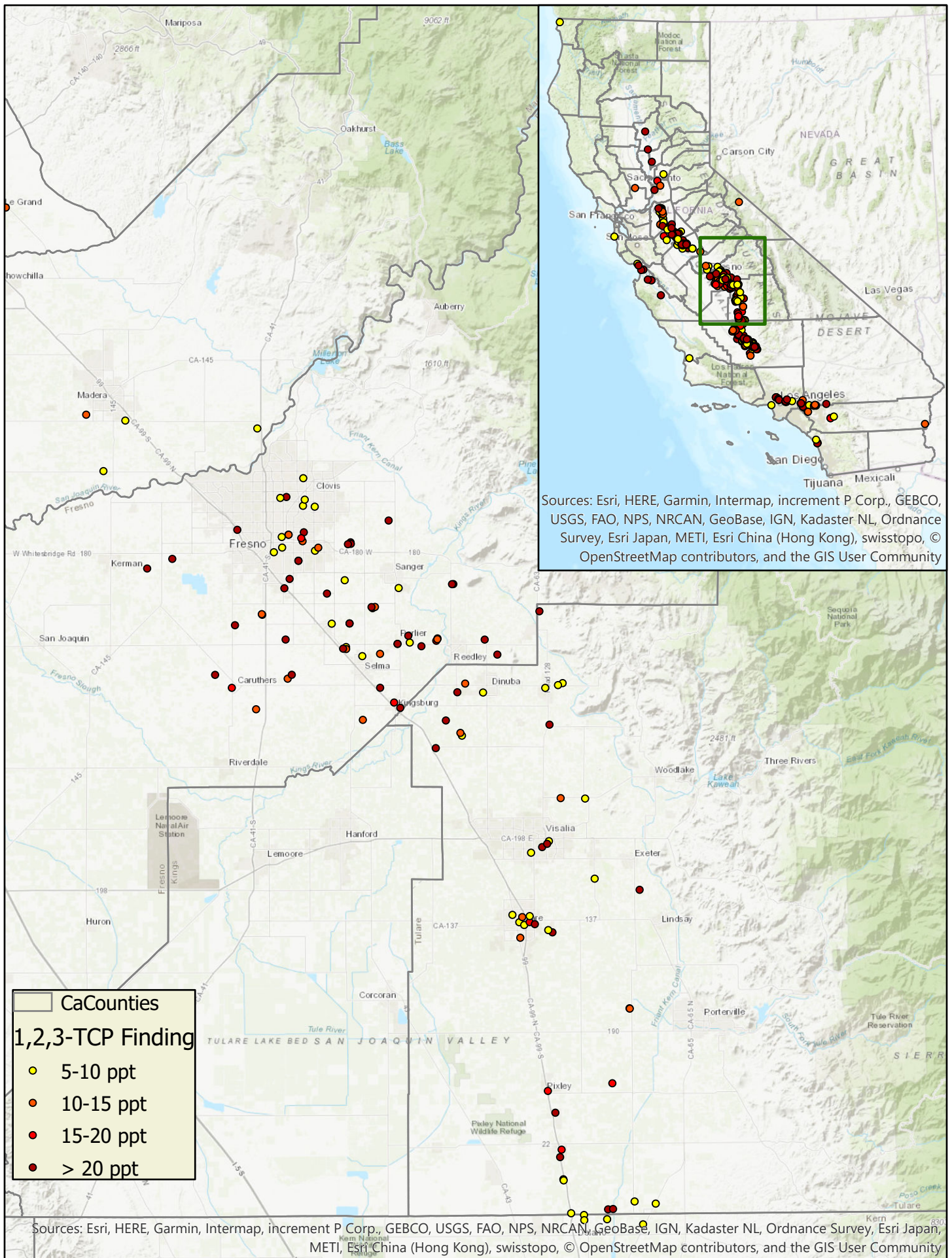


Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community

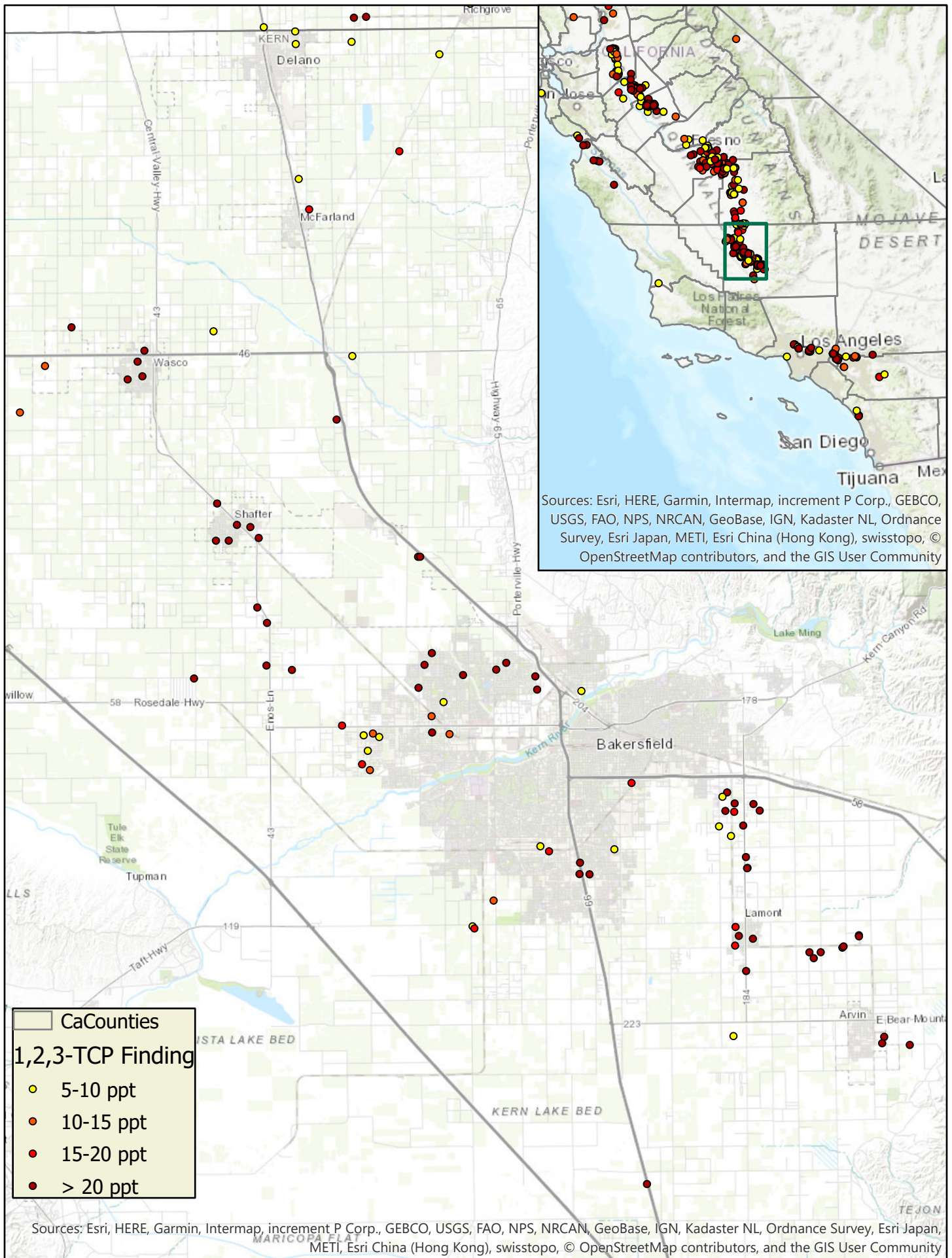




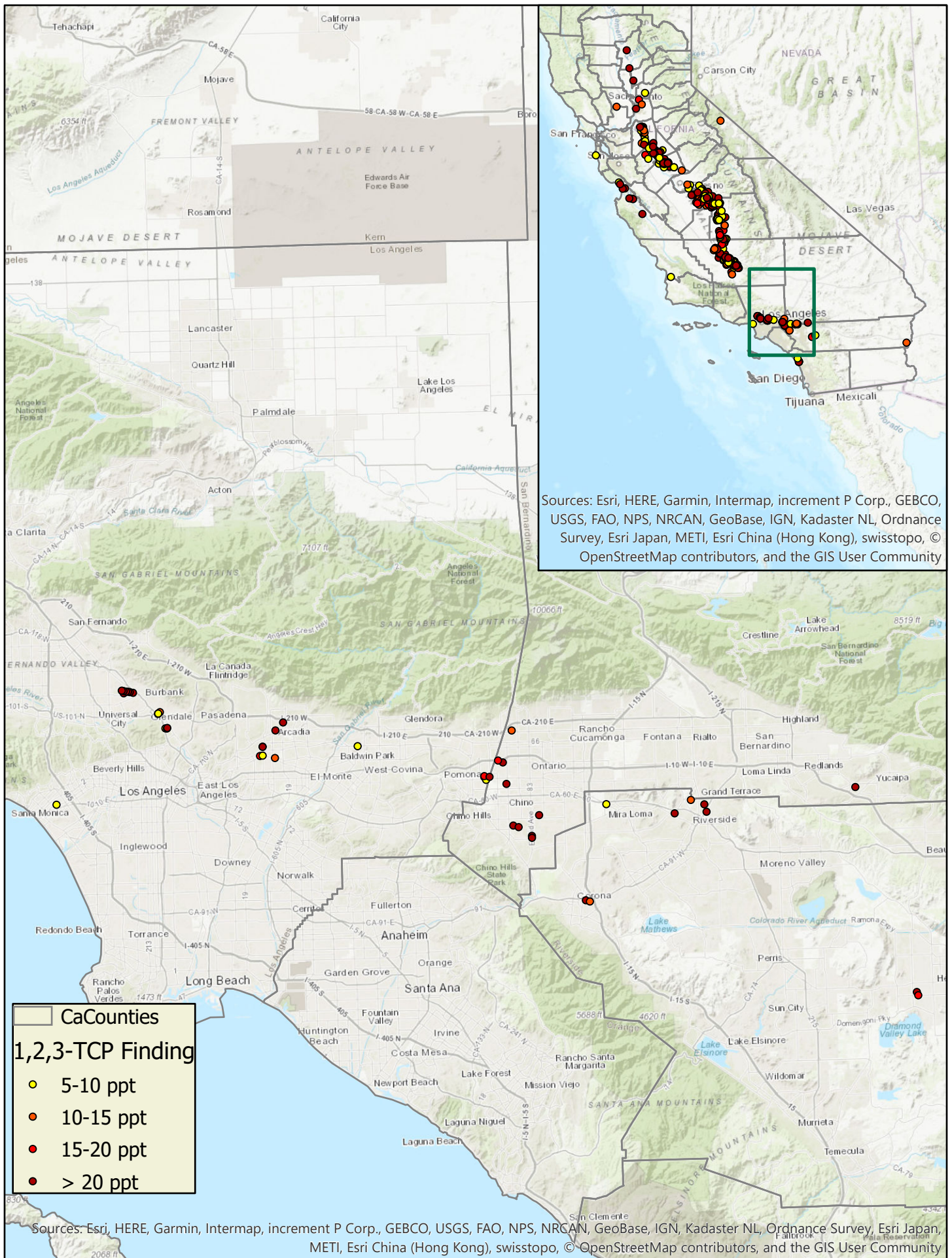






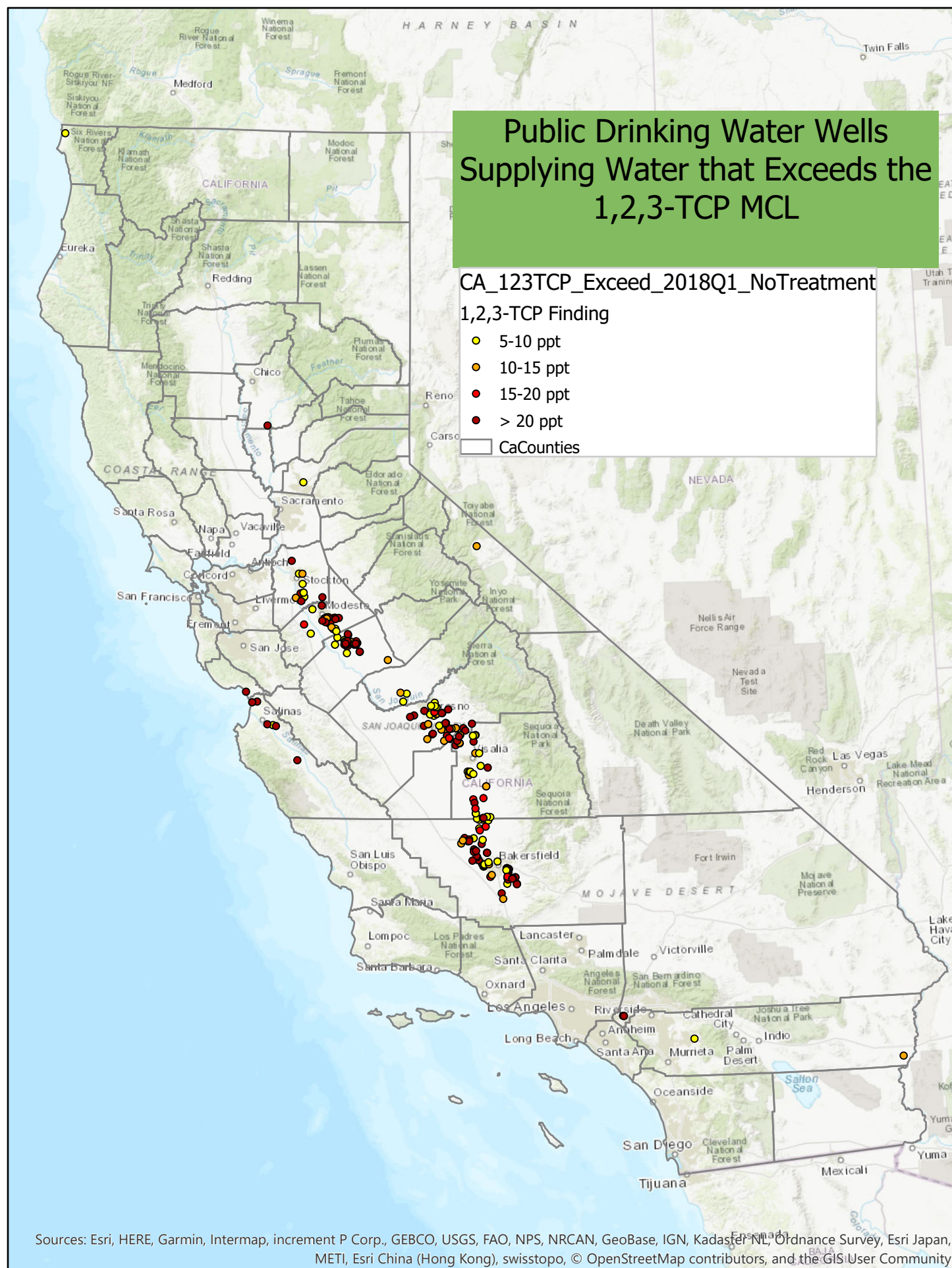






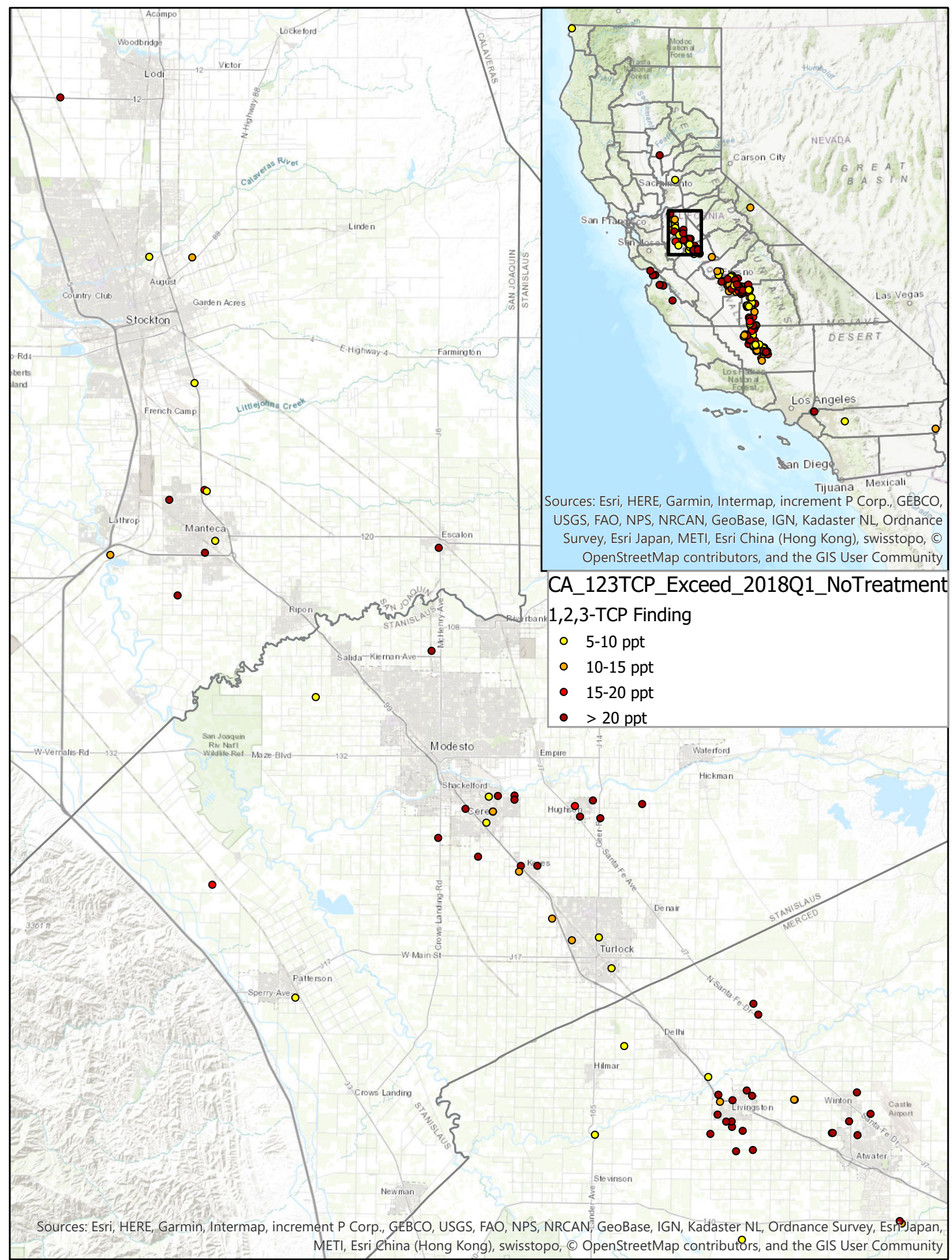


## Appendix B: Public Drinking Water Wells Exceeding the 1, 2, 3-TCP MCL without Treatment in Q1 of 2018



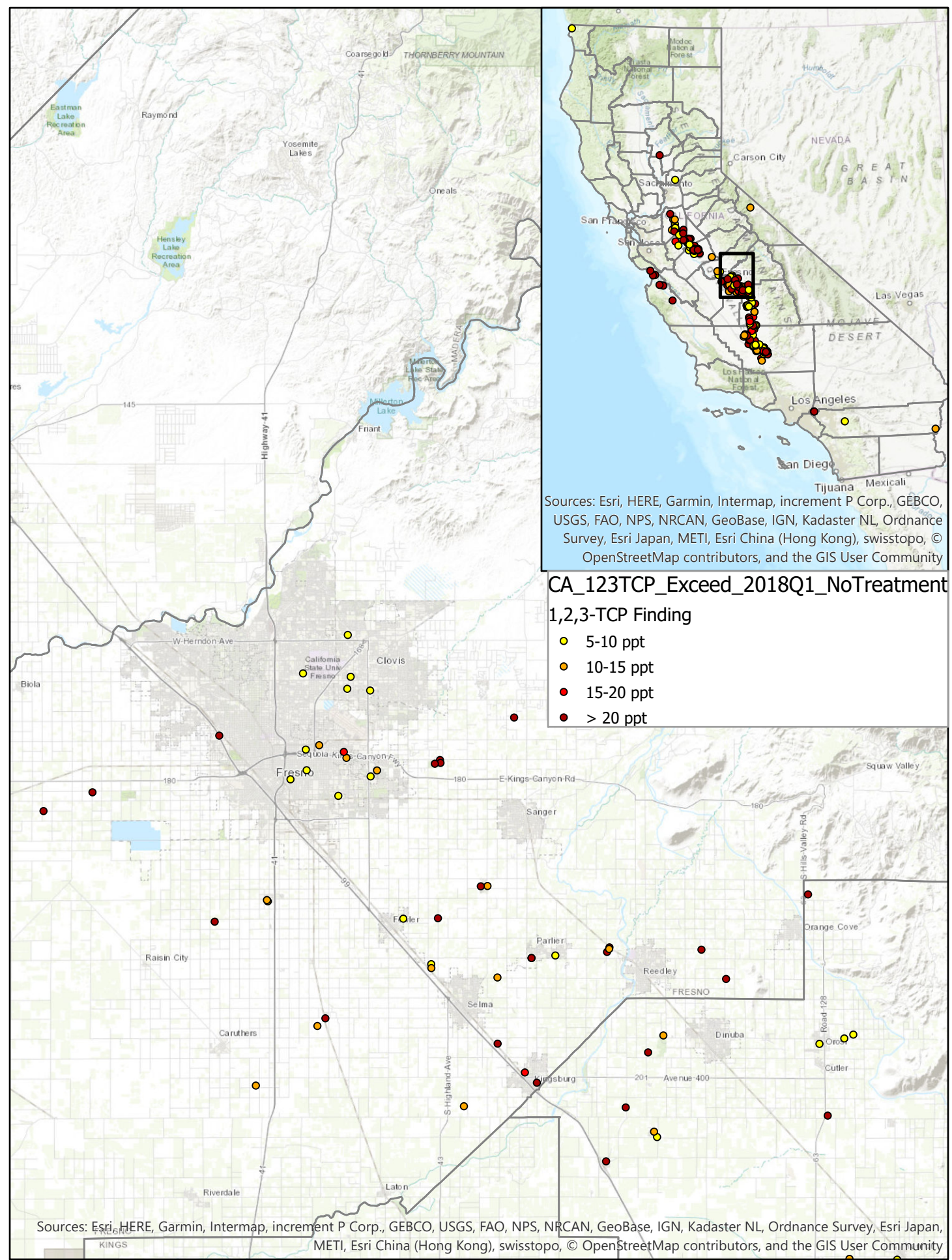


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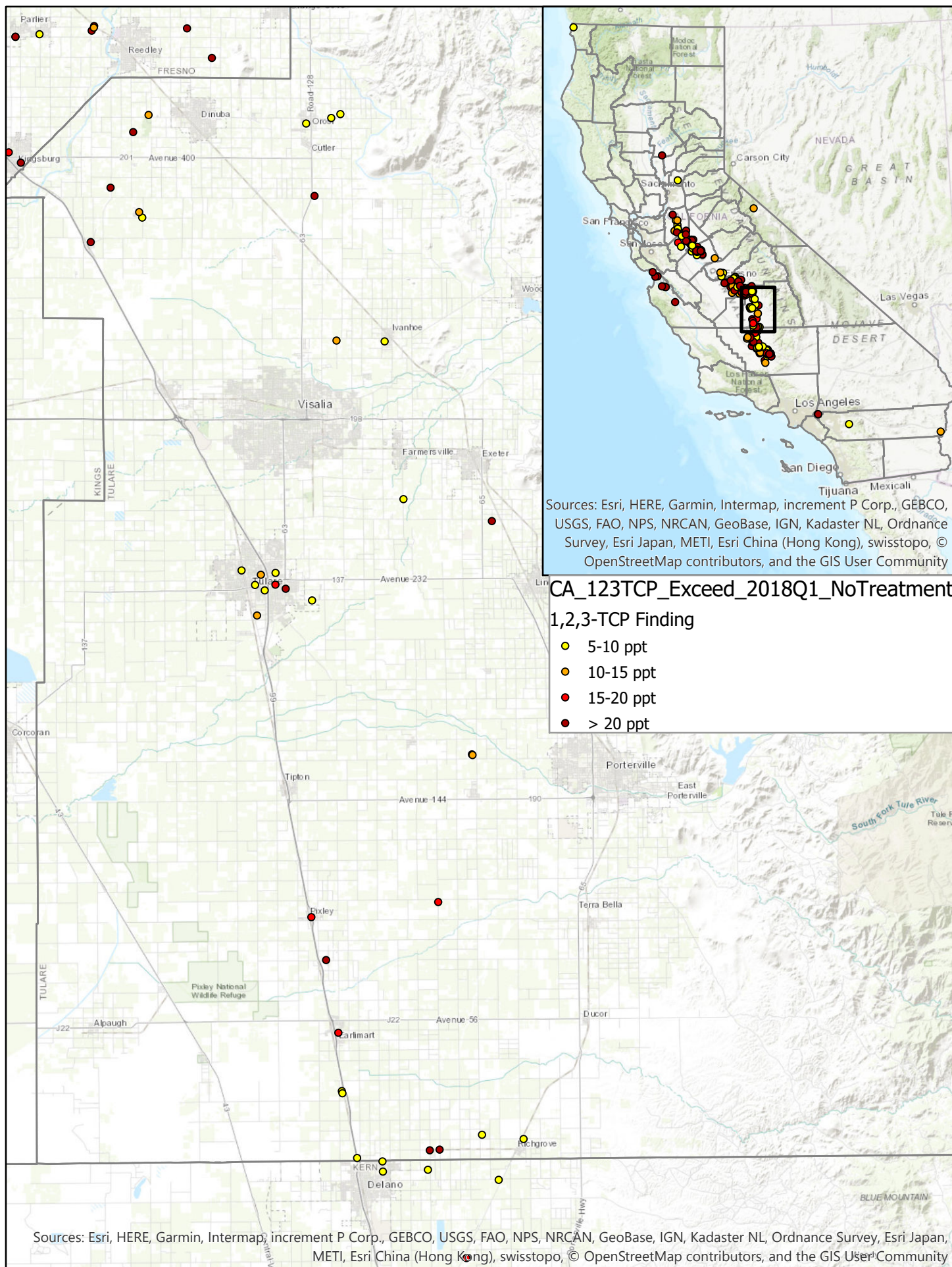


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