1, 2, 3-TRICHLOROPROPANE SAMPLING IN Q1 2018

JUNE 29, 2018

CALIFORNIA
Water Boards
STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

On December 14, 2017, the California Water Resources Control Board adopted a Maximum Contaminant Level (MCL) for 1,2,3-trichloropropane (1,2,3-TCP) of 0.000005 mg/L (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 requires four quarterly samples. With the passing of the first quarter, 1,2,3-TCP data has been compiled and evaluated as explained below.

The first two figures demonstrate the sampling effort and percentage of sources that have completed the required monitoring. *Figure 1* shows the number of drinking water sources per 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.

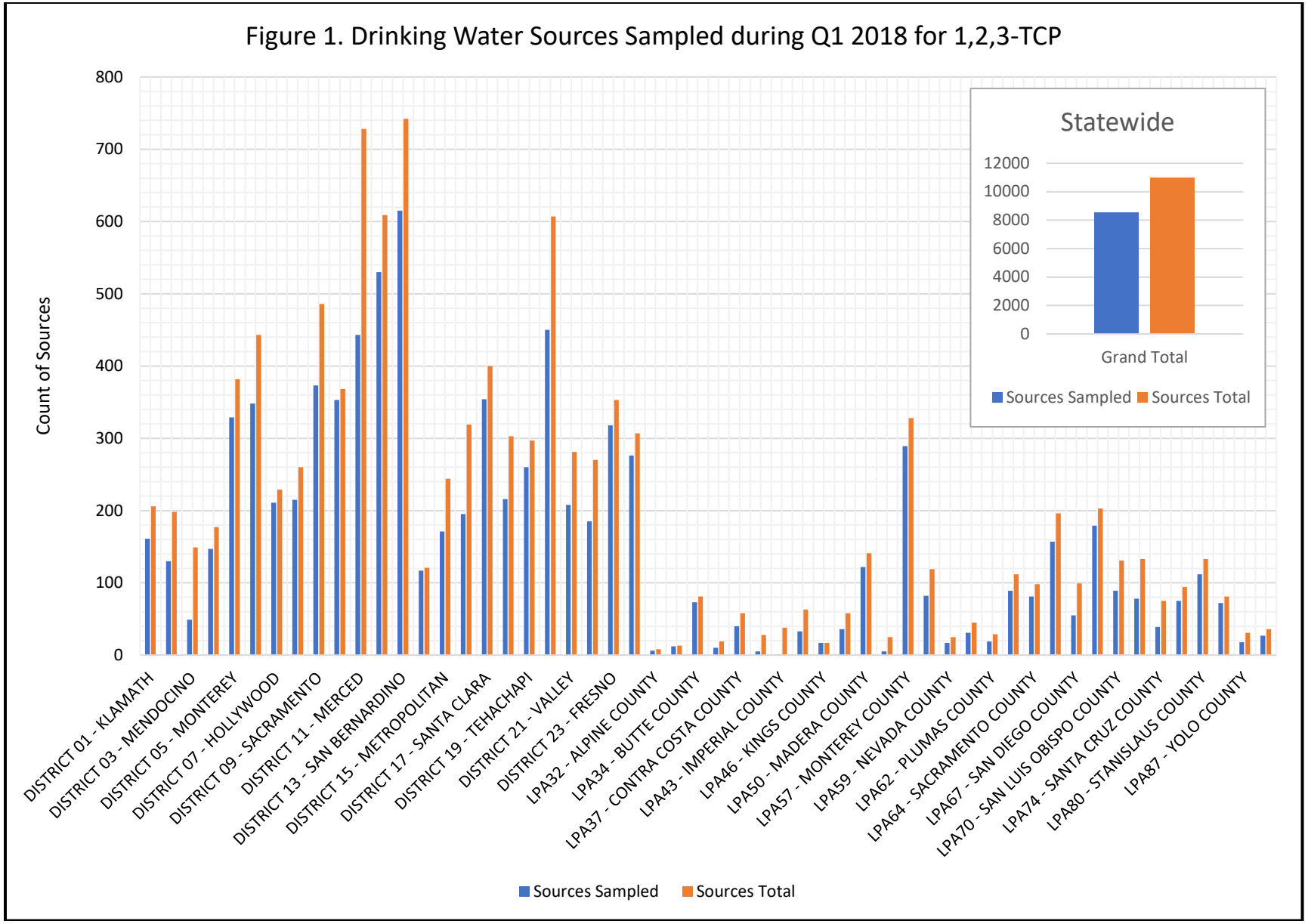


Figure 1. Drinking Water Sources Sampled during Q1 2018 for 1,2,3-TCP
Count of Sources
800
700
600
500
400
300
200
100
0
DISTRICT 01 - KLAMATH
DISTRICT 03 - MENDOCINO
DISTRICT 05 - MONTEREY
DISTRICT 07 - HOLLYWOOD
DISTRICT 09 - SACRAMENTO
DISTRICT 11 - MERCED
DISTRICT 13 - SAN BERNARDINO
DISTRICT 15 - METROPOLITAN
DISTRICT 17 - SANTA CLARA
DISTRICT 19 - TEHACHAPI
DISTRICT 21 - VALLEY
DISTRICT 23 - FRESNO
LPA32 - ALPINE COUNTY
LPA34 - BUTTE COUNTY
LPA37 - CONTRA COSTA COUNTY
LPA43 - IMPERIAL COUNTY
LPA46 - KINGS COUNTY
LPA50 - MADERA COUNTY
LPA57 - MONTEREY COUNTY
LPA59 - NEVADA COUNTY
LPA62 - PLUMAS COUNTY
LPA64 - SACRAMENTO COUNTY
LPA67 - SAN DIEGO COUNTY
LPA70 - SAN LUIS OBISPO COUNTY
LPA74 - SANTA CRUZ COUNTY
LPA80 - STANISLAUS COUNTY
LPA87 - YOLO COUNTY
Statewide
12000
10000
8000
6000
4000
2000
0
Grand Total
Sources Sampled
Sources Total
Sources Sampled
Sources Total

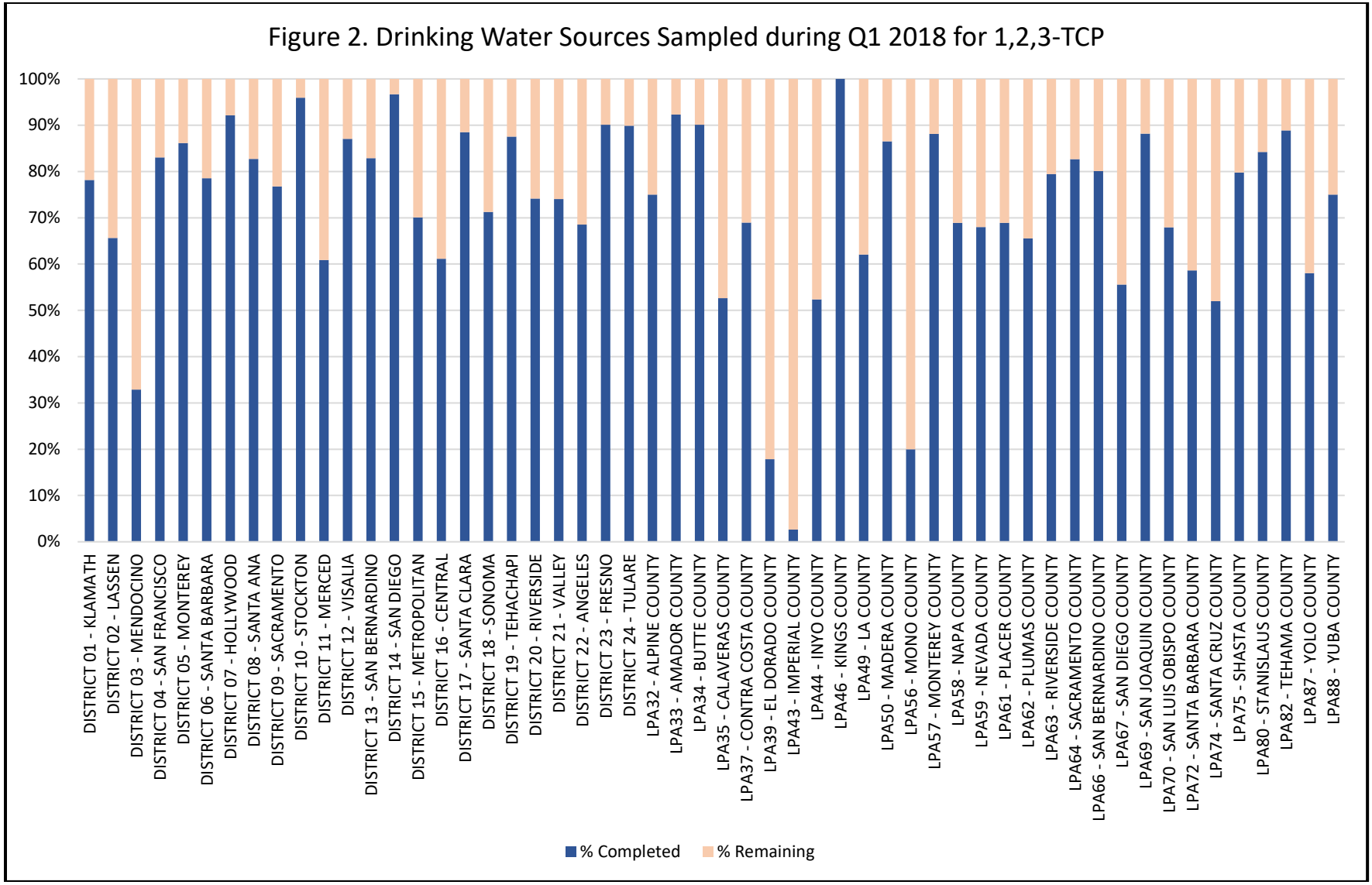


Figure 2. Drinking Water Sources Sampled during Q1 2018 for 1,2,3-TCP
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
DISTRICT 01 - KLAMATH
DISTRICT 02 - LASSEN
DISTRICT 03 - MENDOCINO
DISTRICT 04 - SAN FRANCISCO
DISTRICT 05 - MONTEREY
DISTRICT 06 - SANTA BARBARA
DISTRICT 07 - HOLLYWOOD
DISTRICT 08 - SANTA ANA
DISTRICT 09 - SACRAMENTO
DISTRICT 10 - STOCKTON
DISTRICT 11 - MERCED
DISTRICT 12 - VISALIA
DISTRICT 13 - SAN BERNARDINO
DISTRICT 14 - SAN DIEGO
DISTRICT 15 - METROPOLITAN
DISTRICT 16 - CENTRAL
DISTRICT 17 - SANTA CLARA
DISTRICT 18 - SONOMA
DISTRICT 19 - TEHACHAPI
DISTRICT 20 - RIVERSIDE
DISTRICT 21 - VALLEY
DISTRICT 22 - ANGELES
DISTRICT 23 - FRESNO
DISTRICT 24 - TULARE
LPA32 - ALPINE COUNTY
LPA33 - AMADOR COUNTY
LPA34 - BUTTE COUNTY
LPA35 - CALAVERAS COUNTY
LPA37 - CONTRA COSTA COUNTY
LPA39 - EL DORADO COUNTY
LPA43 - IMPERIAL COUNTY
LPA44 - INYO COUNTY
LPA46 - KINGS COUNTY
LPA49 - LA COUNTY
LPA50 - MADERA COUNTY
LPA56 - MONO COUNTY
LPA57 - MONTEREY COUNTY
LPA58 - NAPA COUNTY
LPA59 - NEVADA COUNTY
LPA61 - PLACER COUNTY
LPA62 - PLUMAS COUNTY
LPA63 - RIVERSIDE COUNTY
LPA64 - SACRAMENTO COUNTY
LPA66 - SAN BERNARDINO COUNTY
LPA67 - SAN DIEGO COUNTY
LPA69 - SAN JOAQUIN COUNTY
LPA70 - SAN LUIS OBISPO COUNTY
LPA72 - SANTA BARBARA COUNTY
LPA74 - SANTA CRUZ COUNTY
LPA75 - SHASTA COUNTY
LPA80 - STANISLAUS COUNTY
LPA82 - TEHAMA COUNTY
LPA87 - YOLO COUNTY
LPA88 - YUBA COUNTY
% Completed
% Remaining

As shown in the figures above, there is a gap between the number of water sources to the number of sources that were sampled. The following bullets list reasons as to why not all of drinking water sources depicted were sampled. [Further information is being gathered from the Districts/LPAs to address this gap.]

- 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. Notices of Violation would have been issued to water systems that failed to sample.
- Water Systems may have requested for 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 item A shows a statewide map of 388 drinking water sources that exceeded the 1,2,3-TCP MCL during the first quarter of 2018.

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 areas. The majority of the impacted drinking water sources are in the Central 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.

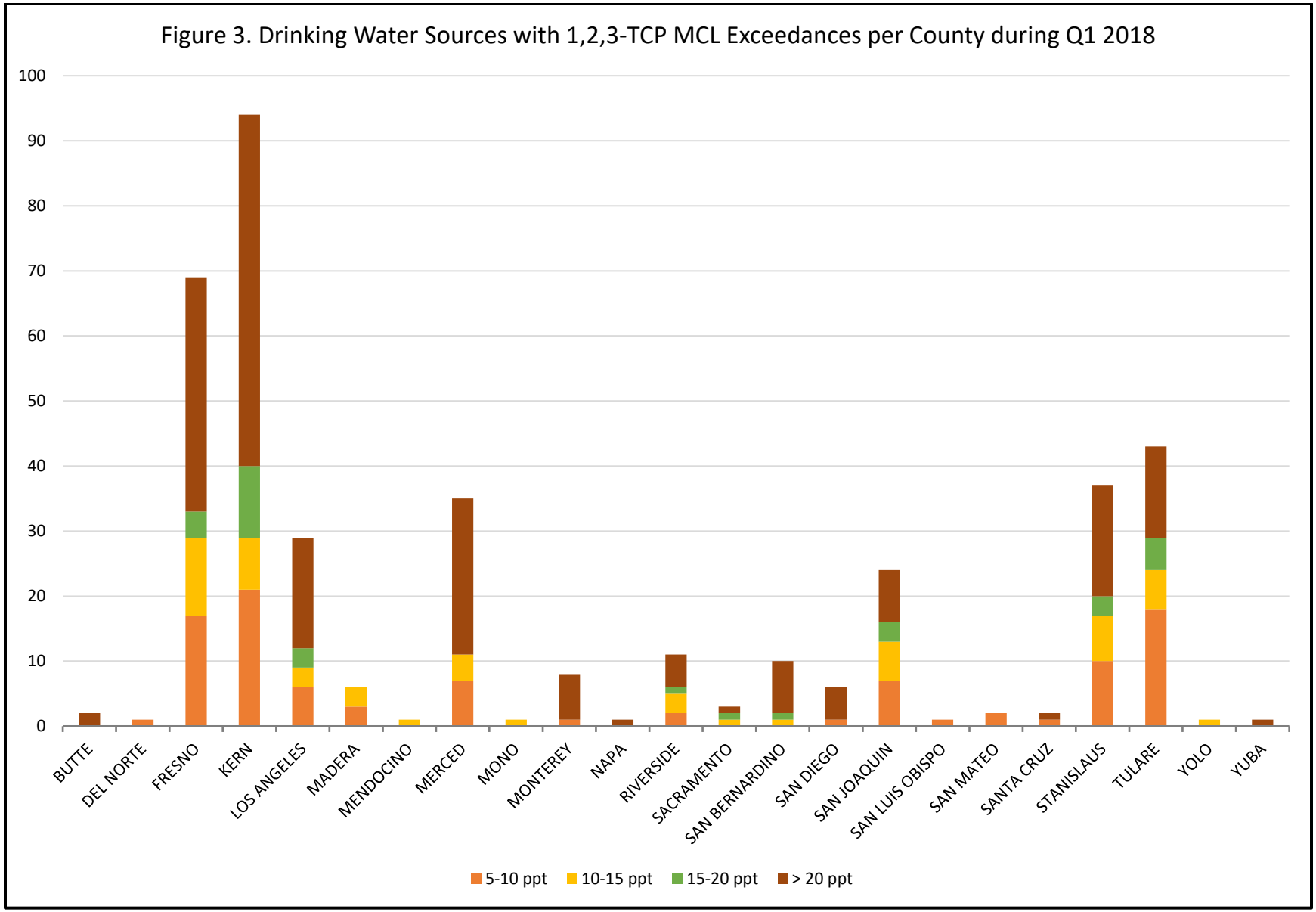
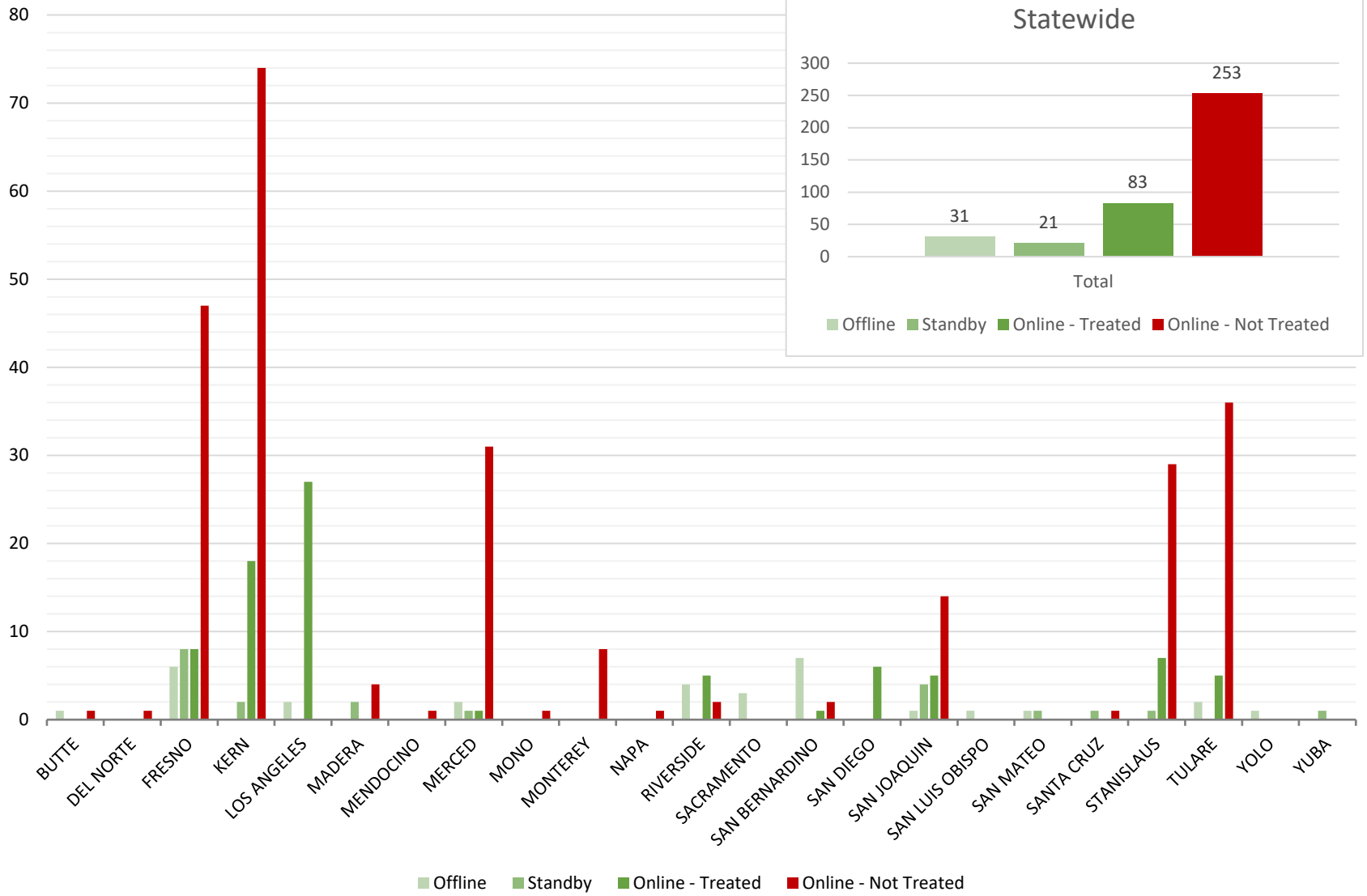


Figure 3. Drinking Water Sources with 1,2,3-TCP MCL Exceedances per County during Q1 2018
100
90
80
70
60
50
40
30
20
10
0
BUTTE
DEL NORTE
FRESNO
KERN
LOS ANGELES
MADERA
MENDOCINO
MERCED
MONO
MONTEREY
NAPA
RIVERSIDE
SACRAMENTO
SAN BERNARDINO
SAN DIEGO
SAN JOAQUIN
SAN LUIS OBISPO
SAN MATEO
SANTA CRUZ
STANISLAUS
TULARE
YOLO
YUBA
5-10 ppt
10-15 ppt
15-20 ppt
> 20 ppt

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 status.

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

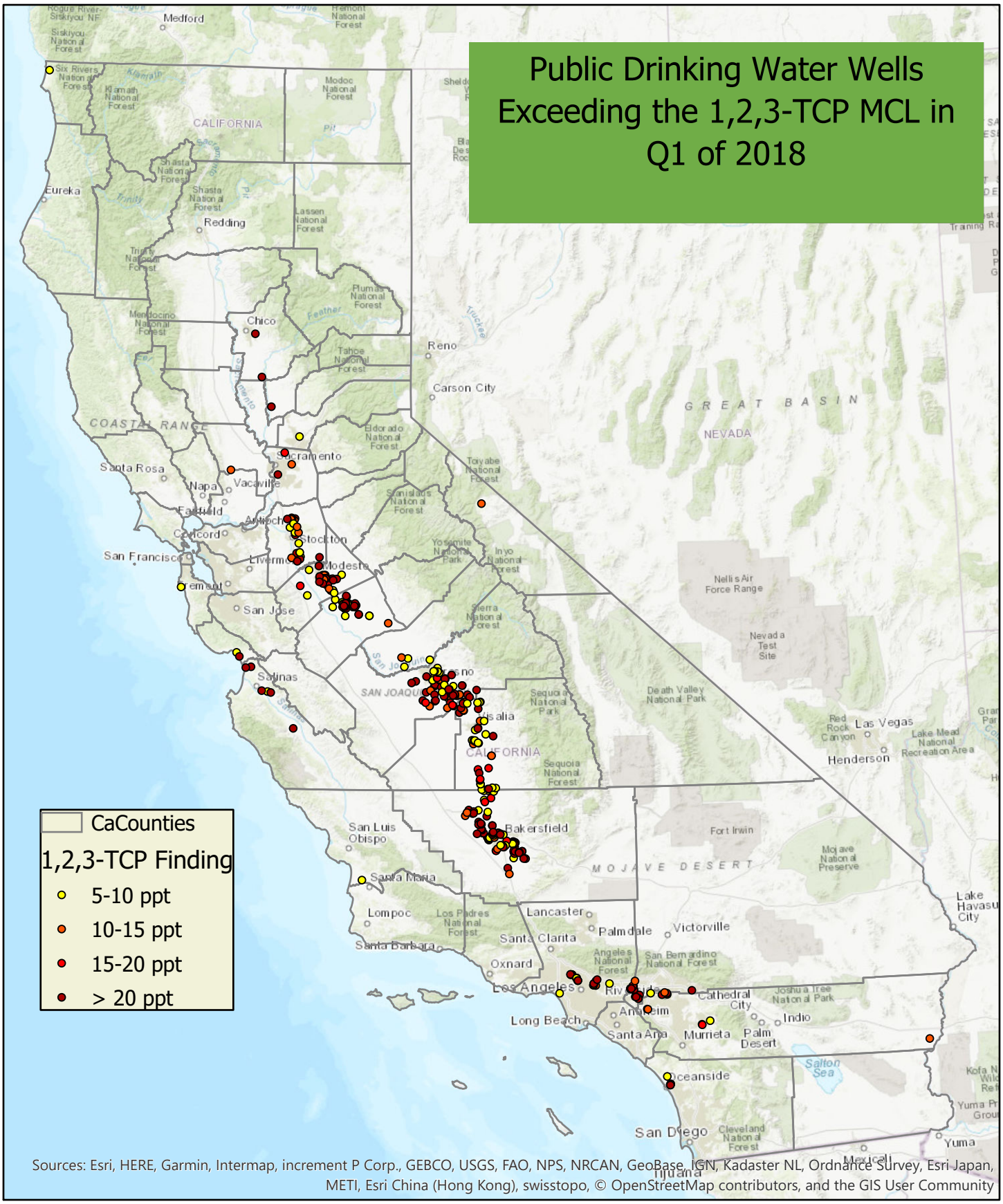


Appendix

Appendix A: Public Drinking Water Wells Exceeding the 1,2,3-TCP MCL in Q1 of 2018

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

Appendix A: Public Drinking Water Wells Exceeding the 1, 2, 3-TCP MCL in Q1 of 2018



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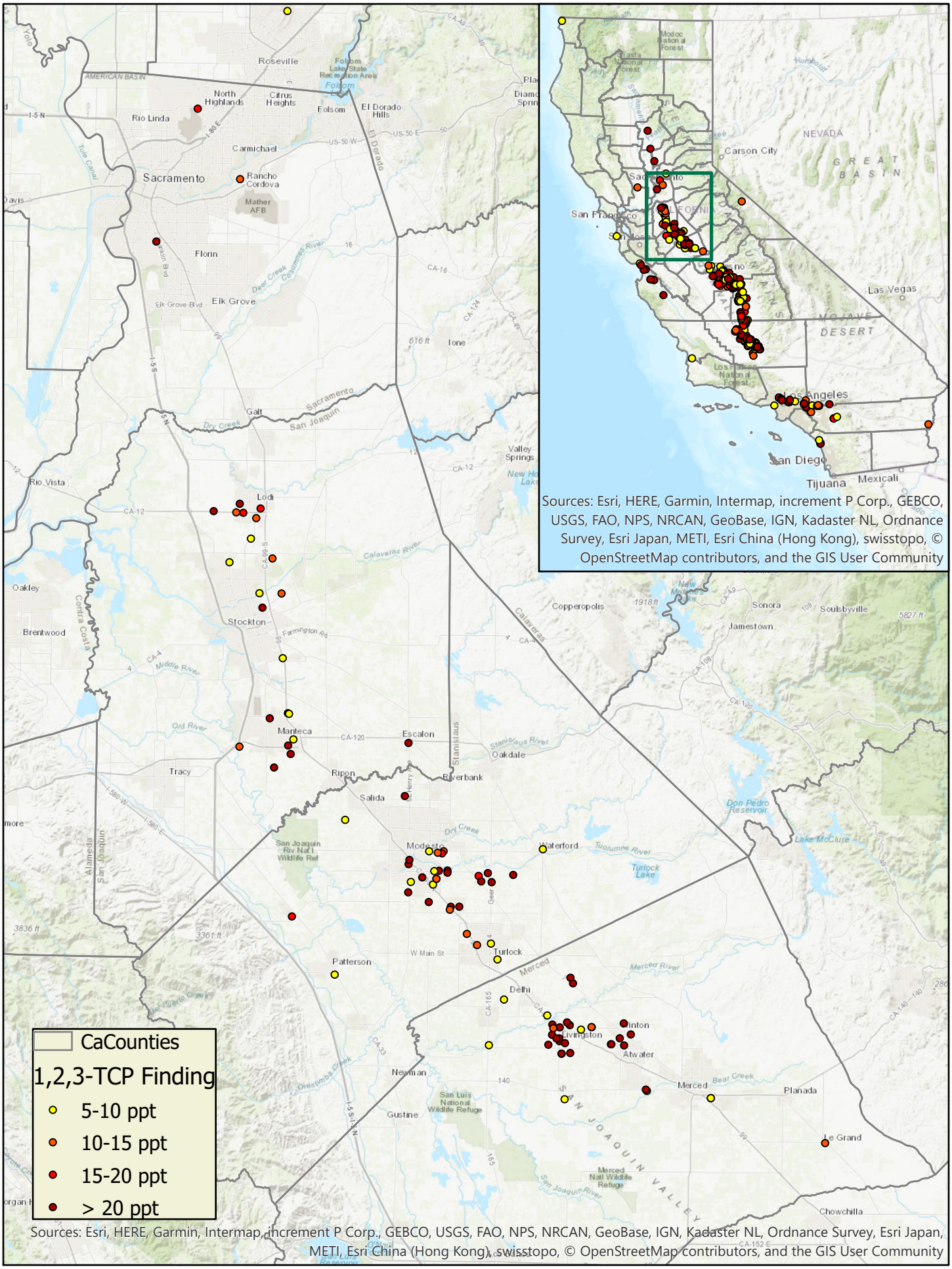

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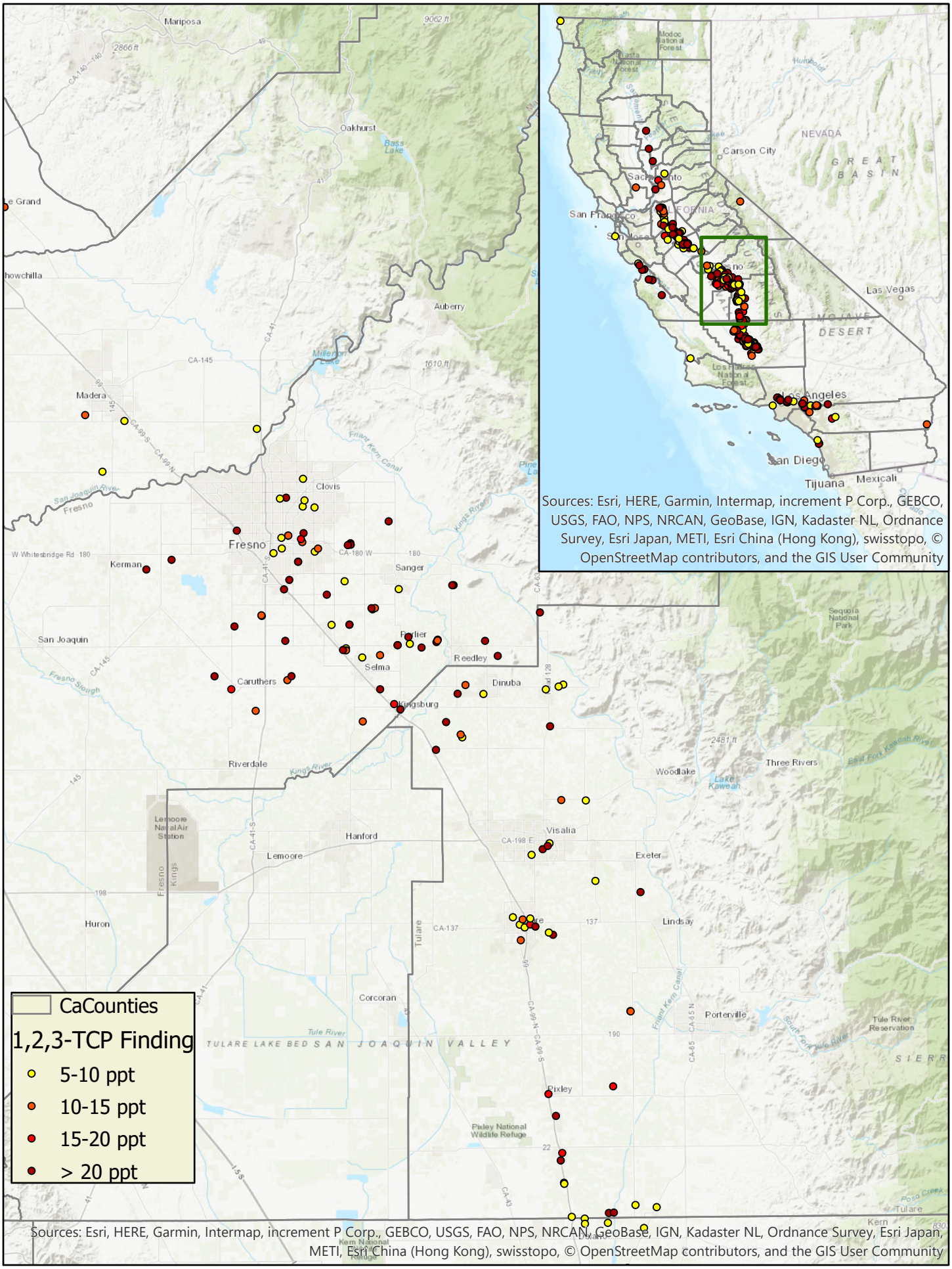

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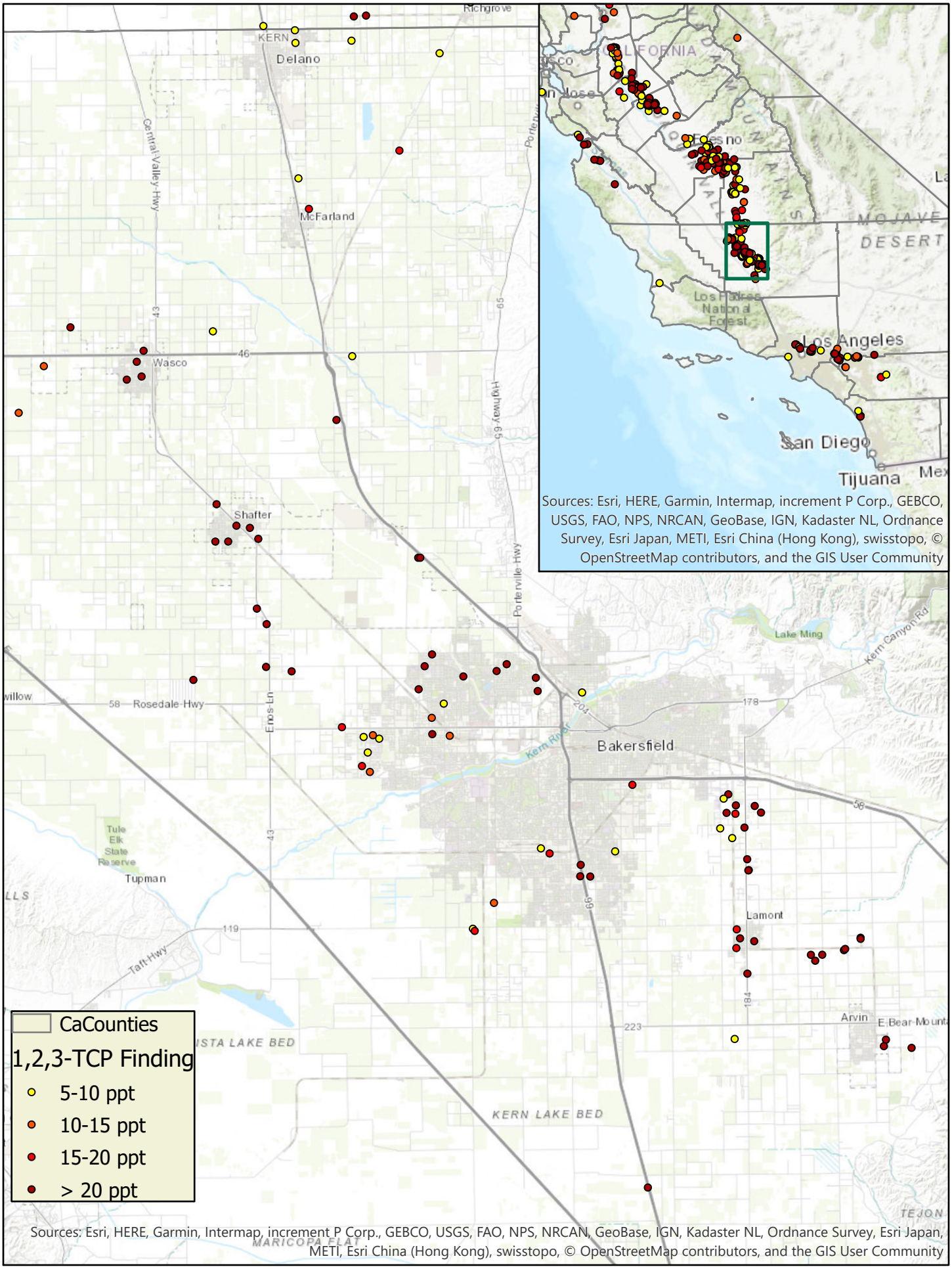

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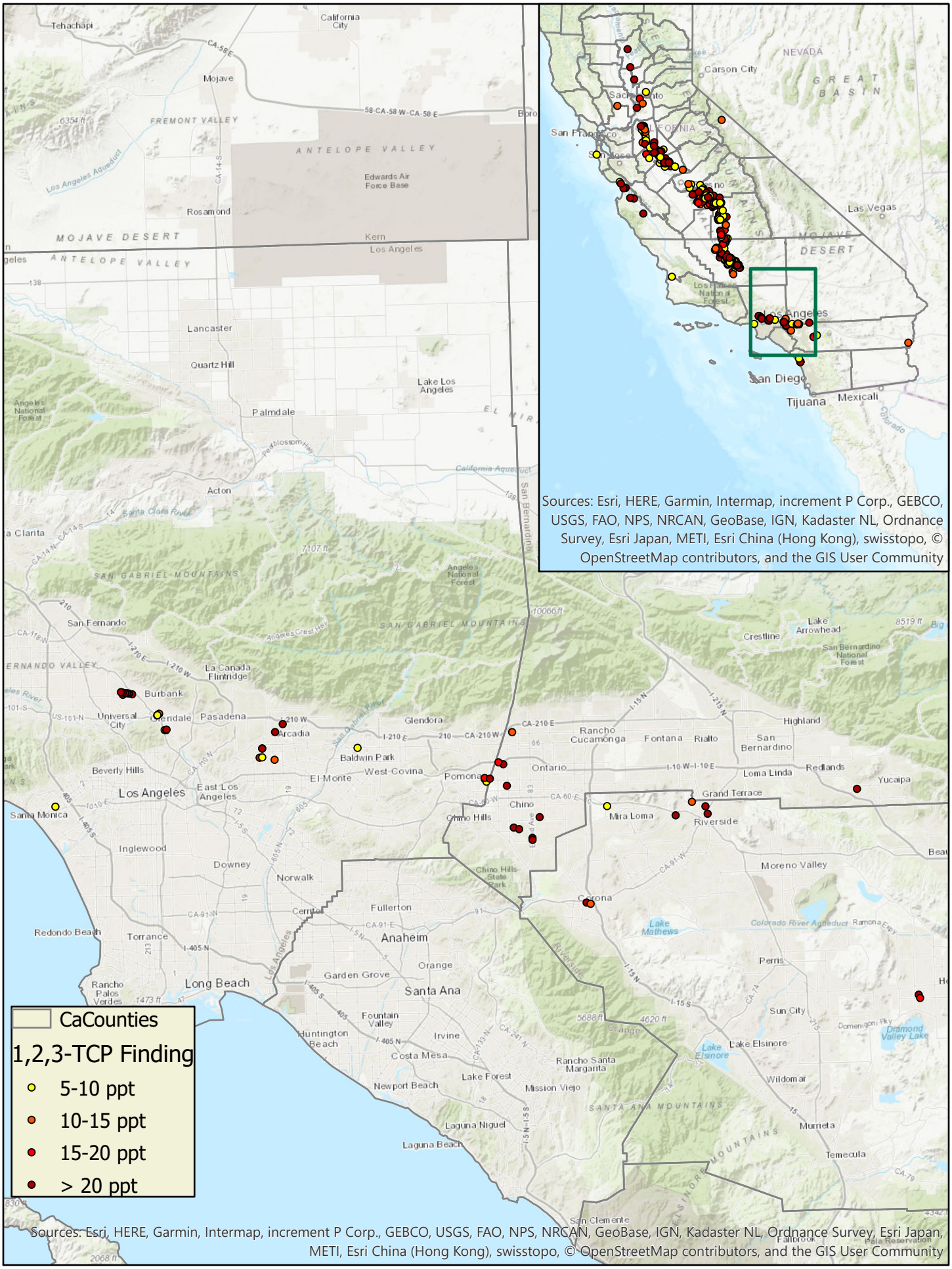
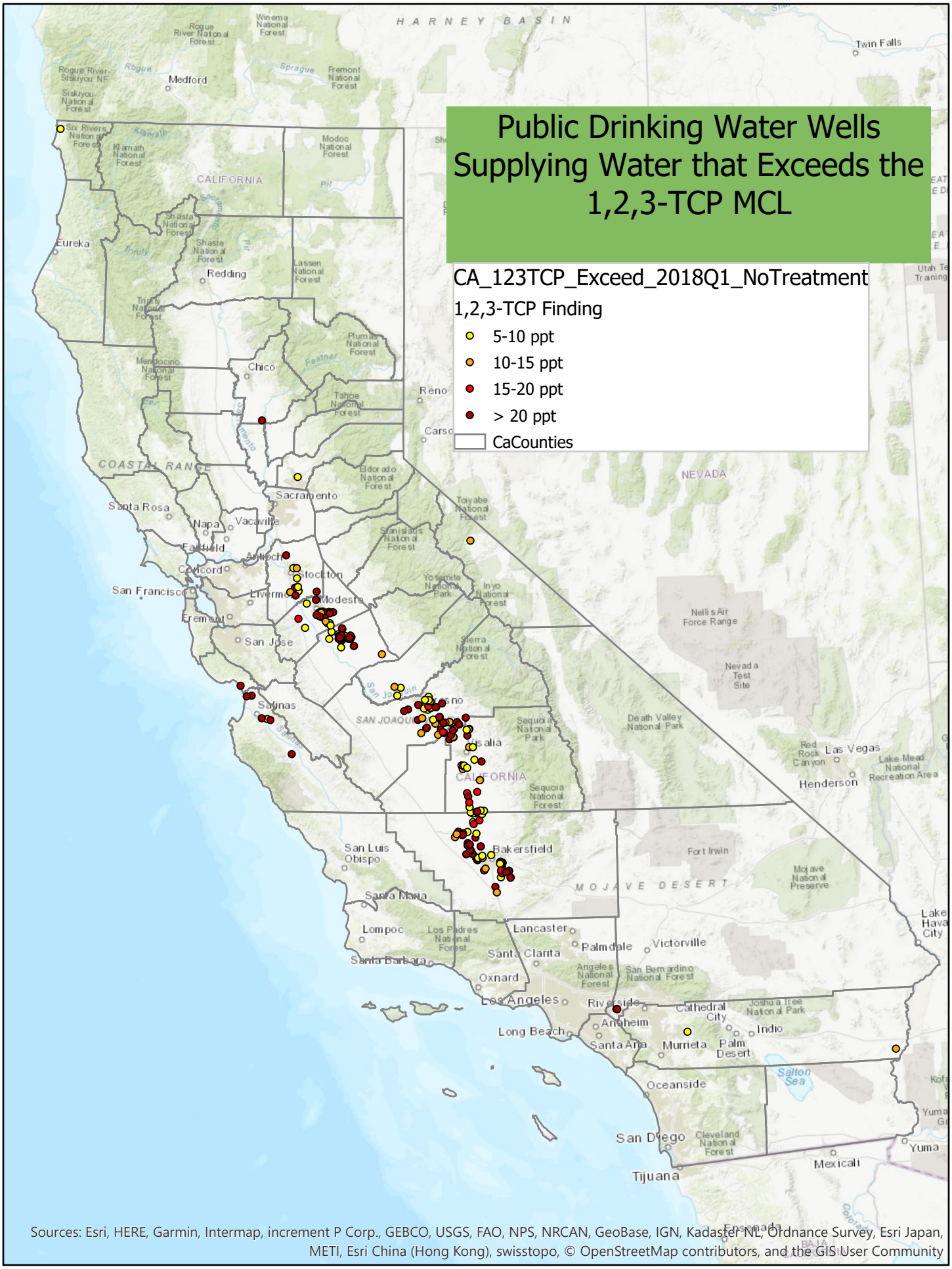


Appendix B: Public Drinking Water Wells Exceeding the 1, 2, 3-TCP MCL without Treatment in Q1 of 2018



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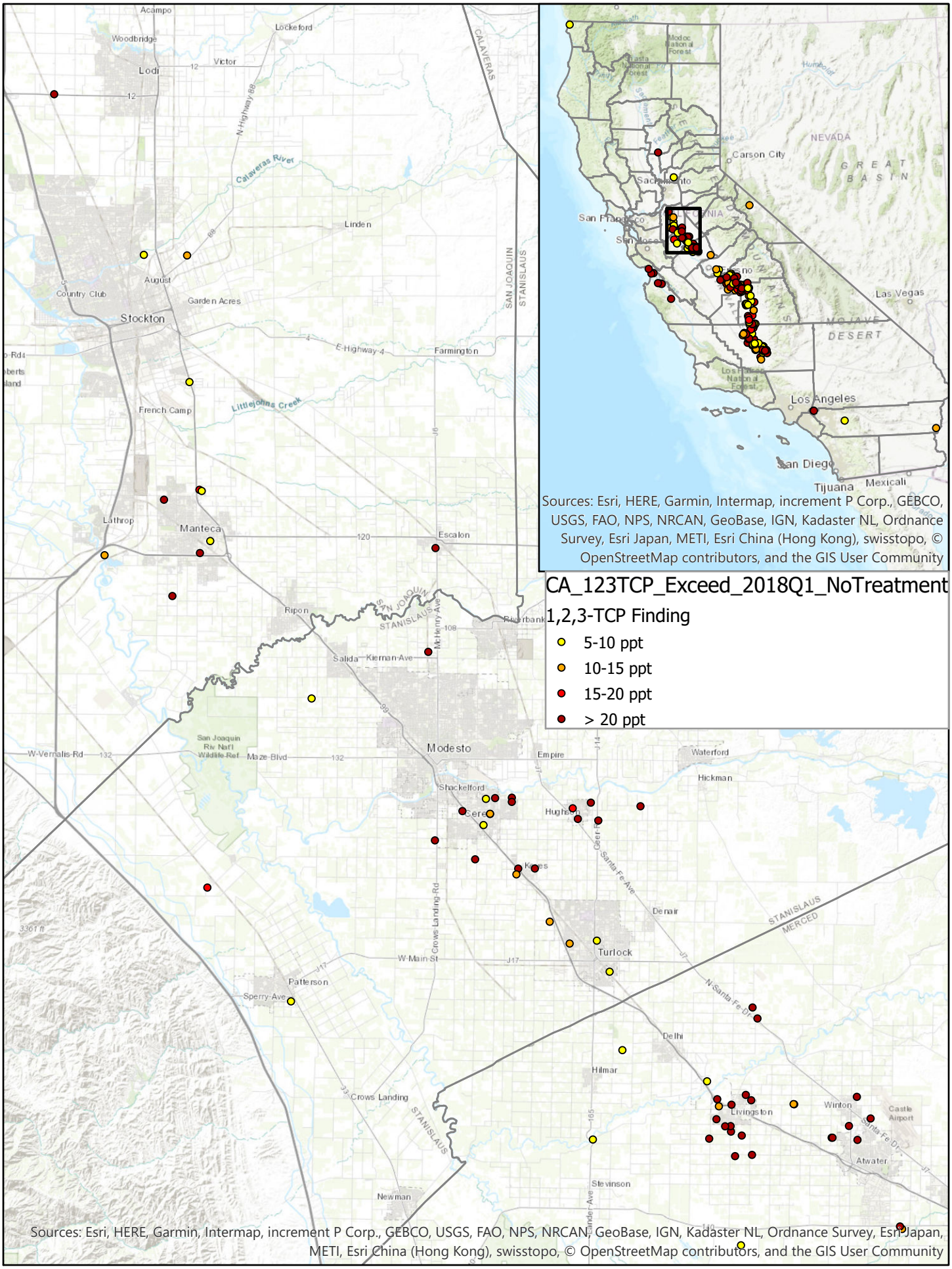

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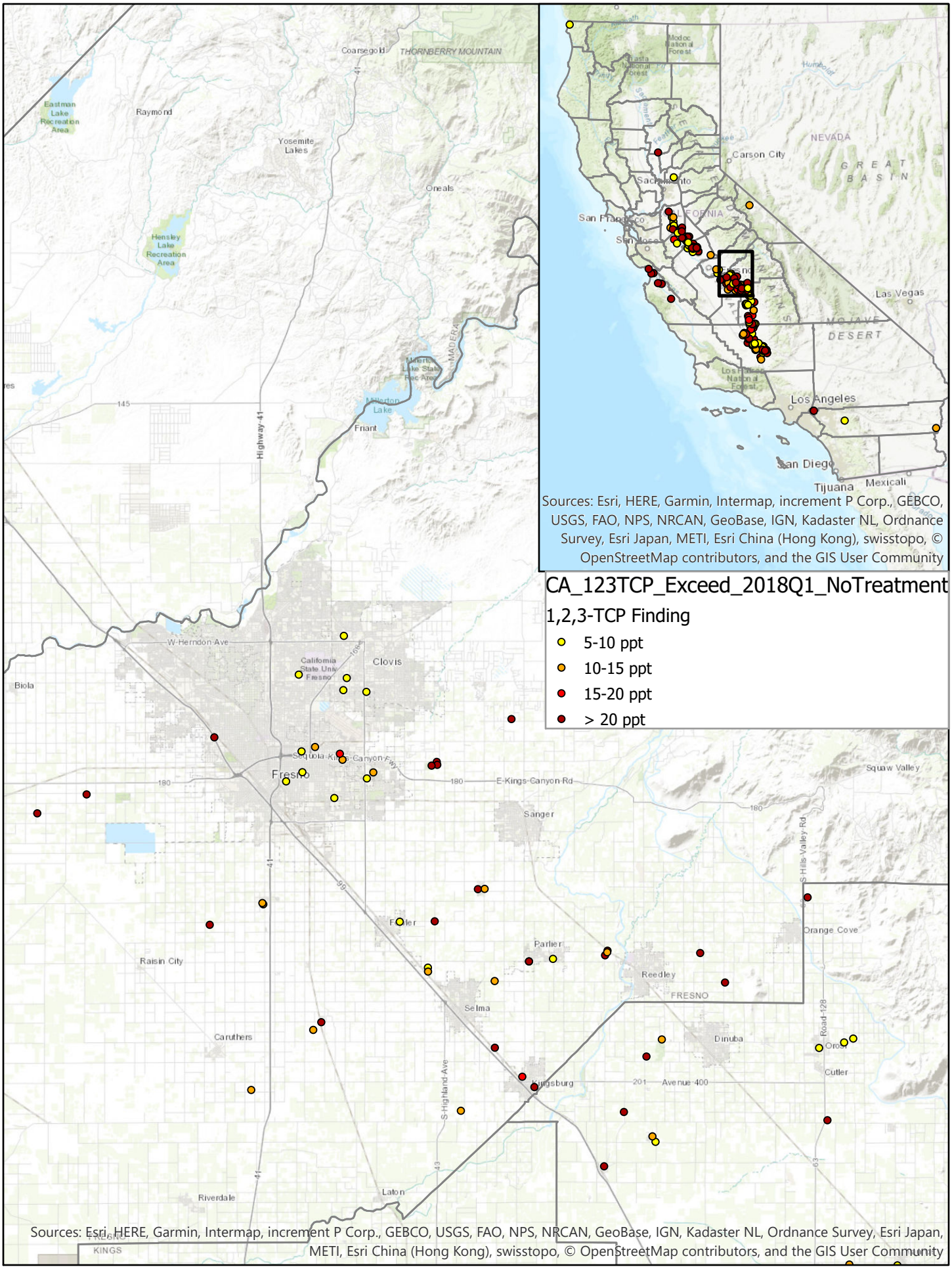

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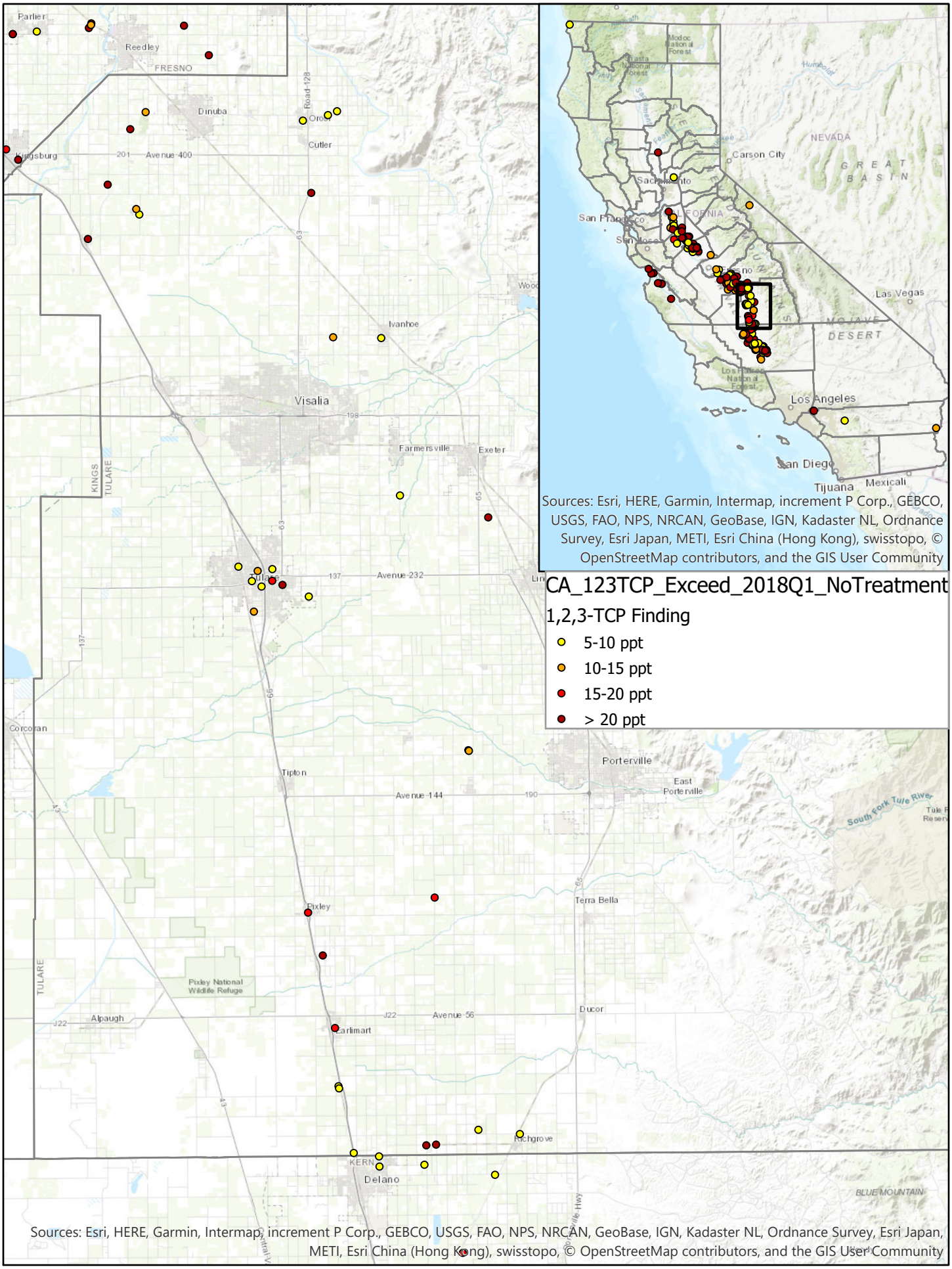

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