California
Department of
Conservation
Division of Land Resource Protection

# California Important Farmland

## Farmland Mapping & Monitoring Program

March 19, 2024

# A Brief History of FMMP

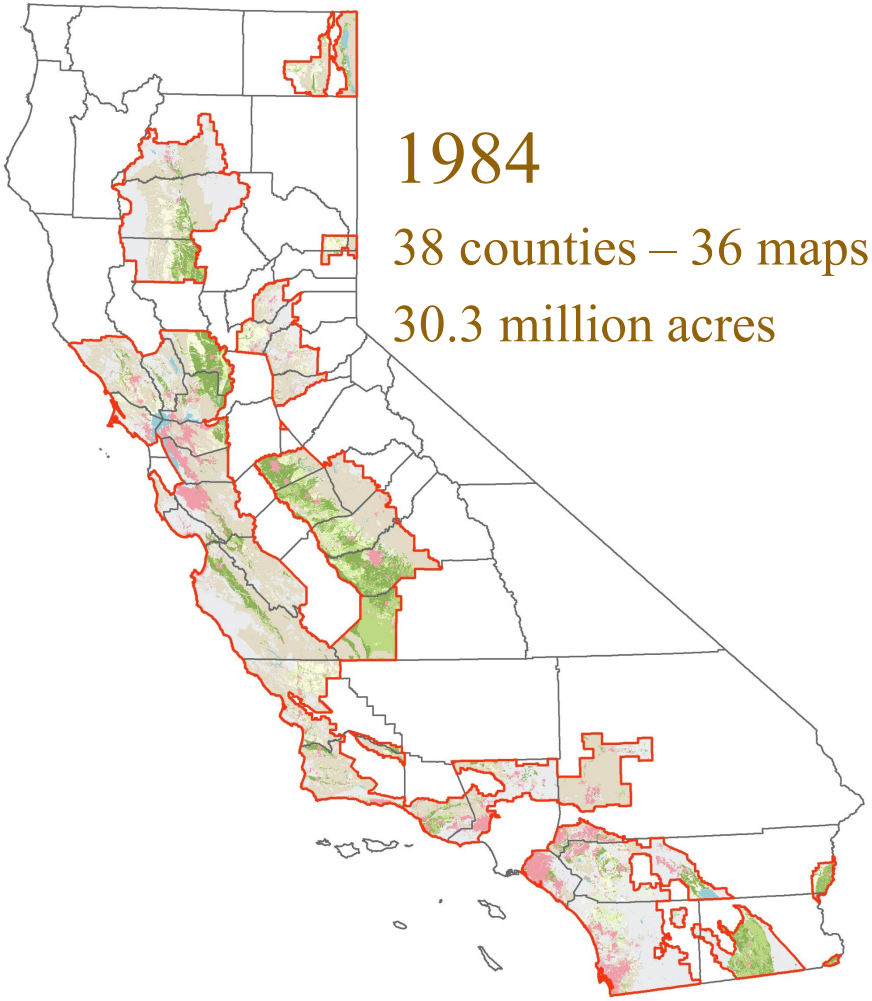
- Established 1982, Gov Code §65570(b)
- Soil Conservation Fund, Gov Code §51283(d)
- Location, Quality, and Quantity
- Conversion over time
- Consistent and Impartial
- Nonregulatory
- First Important Farmland Maps were produced in 1984, covered 30.3 million acres (38 counties)


Photo: R. Yoha

# Mandated Deliverables

- Important Farmland Maps
- Land Use Conversion Statistics
- GIS Data
- Biennial Farmland Conversion Report
- Land Committed to Nonagricultural Uses
- Expert Responsibility in Determining Right to Farm Disclosure

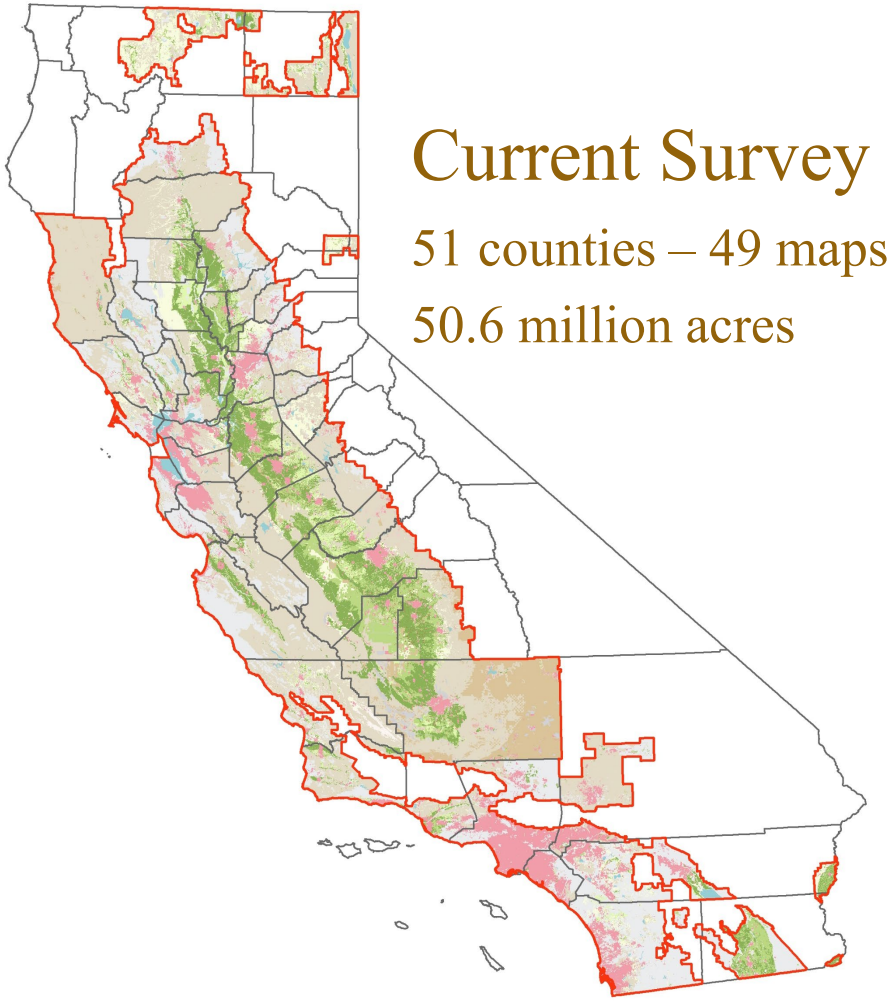
# Survey Area



## 1984

38 counties – 36 maps

30.3 million acres



## Current Survey

51 counties – 49 maps*

50.6 million acres

*Sierra Valley map covers portions of Sierra, Lassen and Plumas.

# California Important Farmland Map

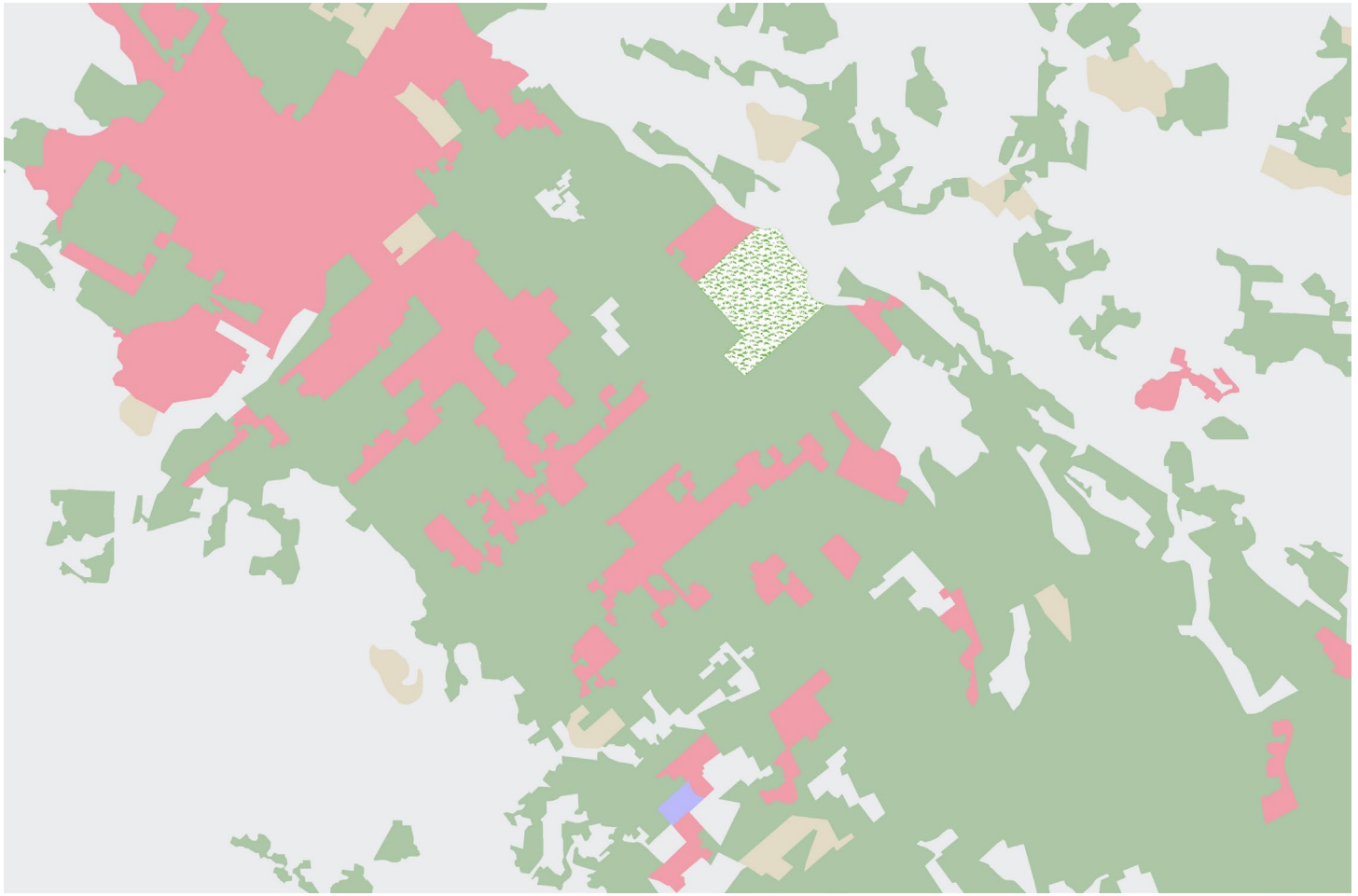
## What is it?

## How is it made?

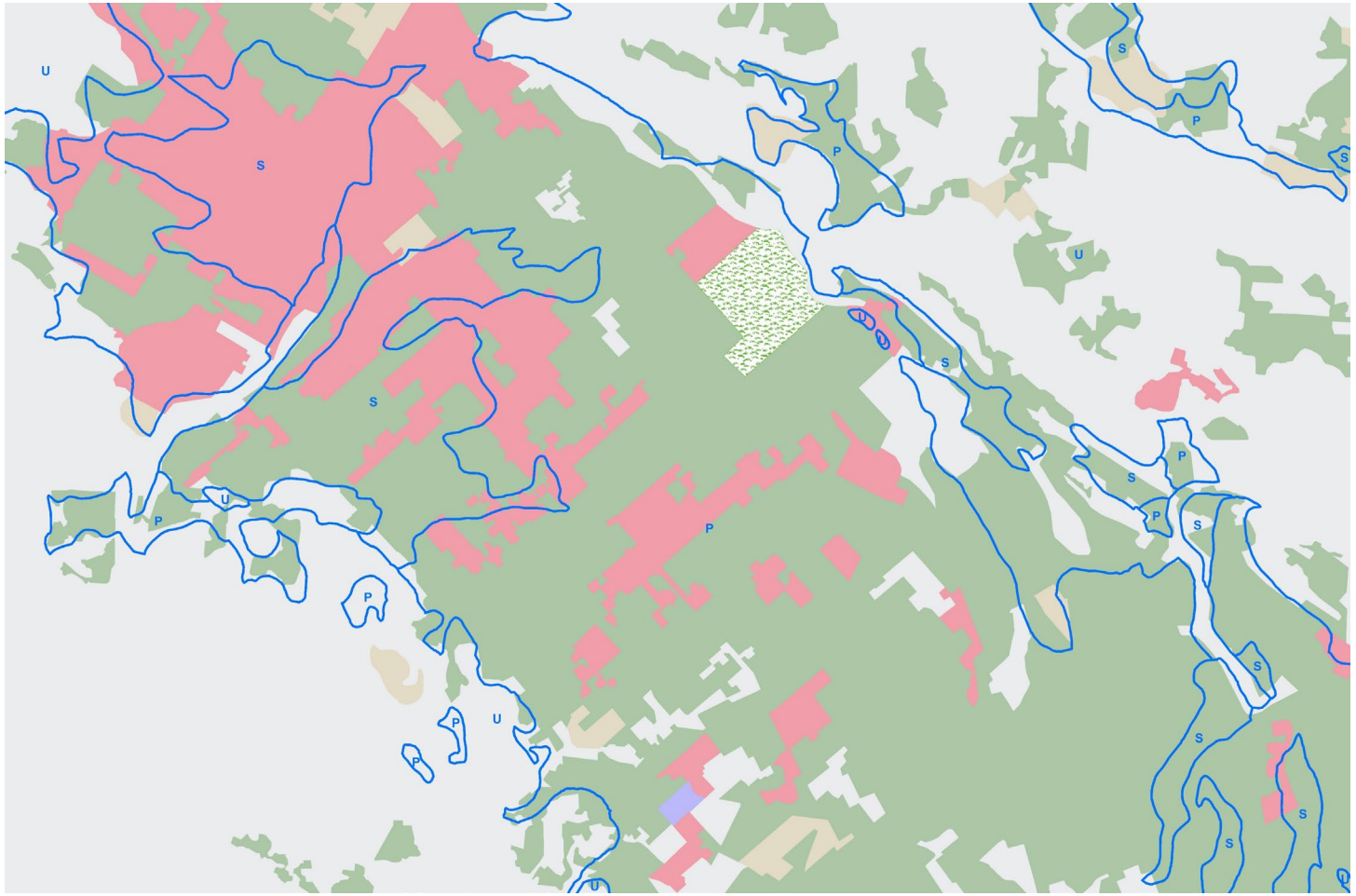
Photo: M. Kisko

# Photo Interpretation

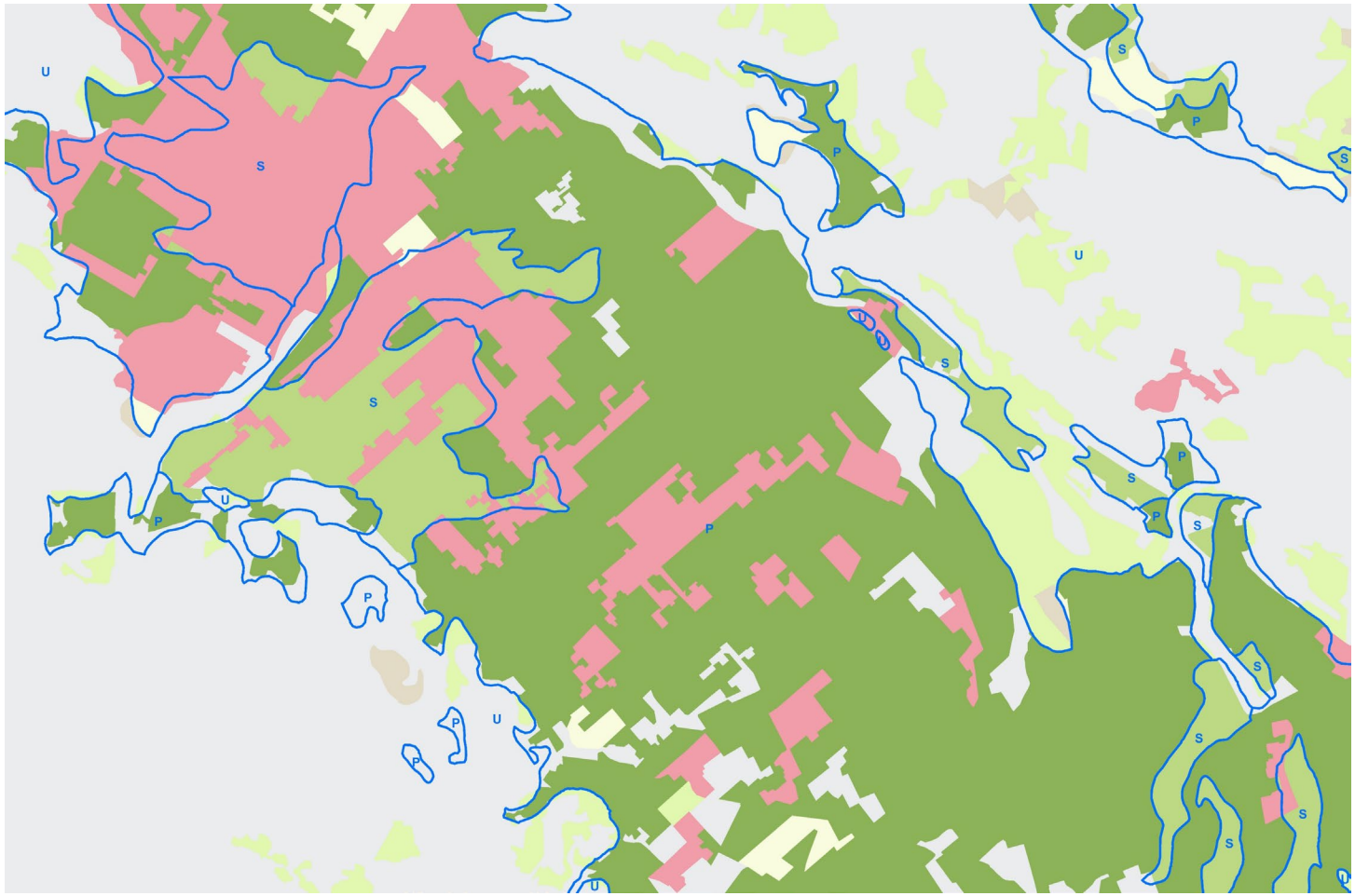
# Land Use Data



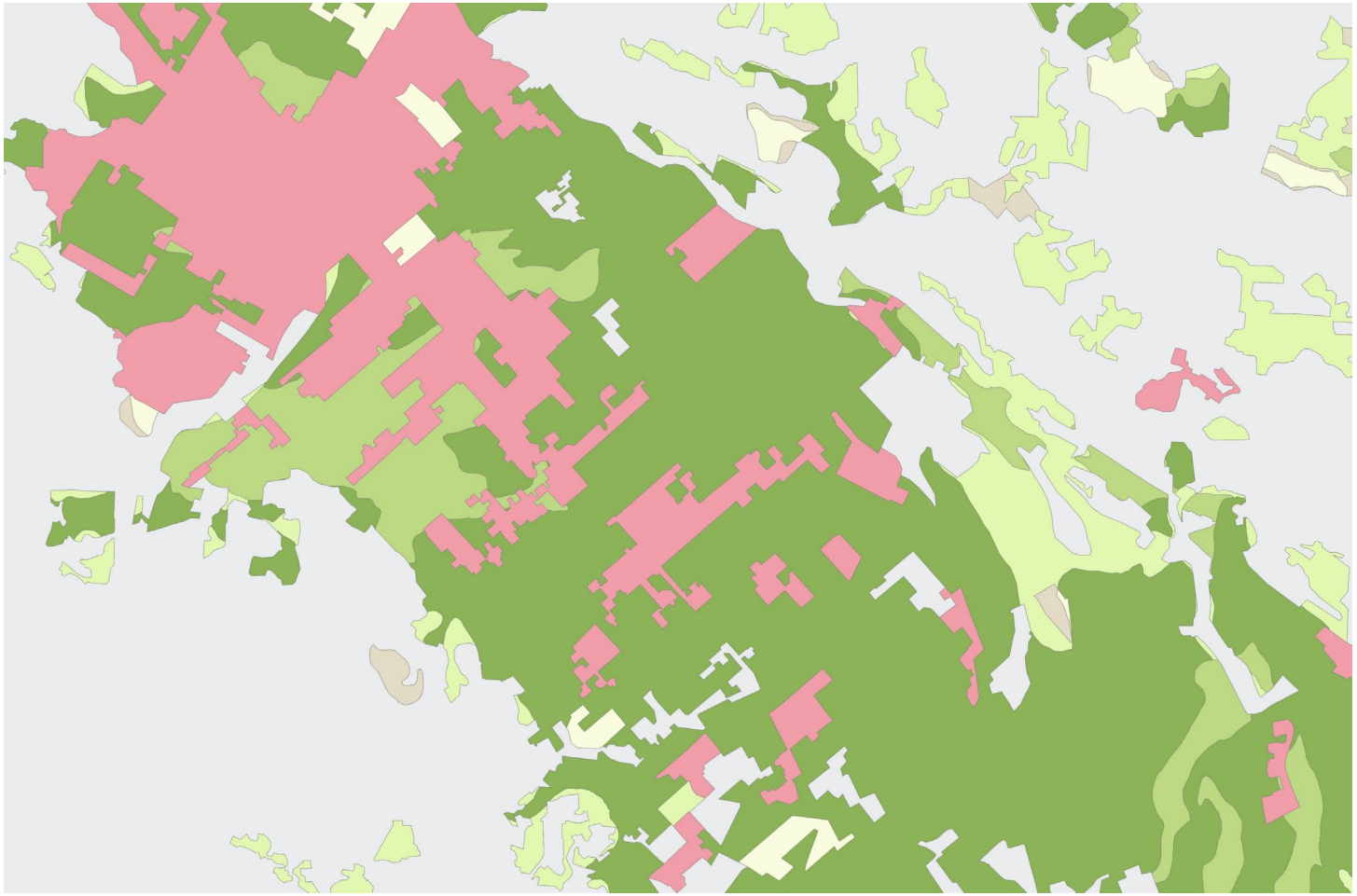
# Land Use combined with the Soil Survey



# Agricultural Categories affected by Soils

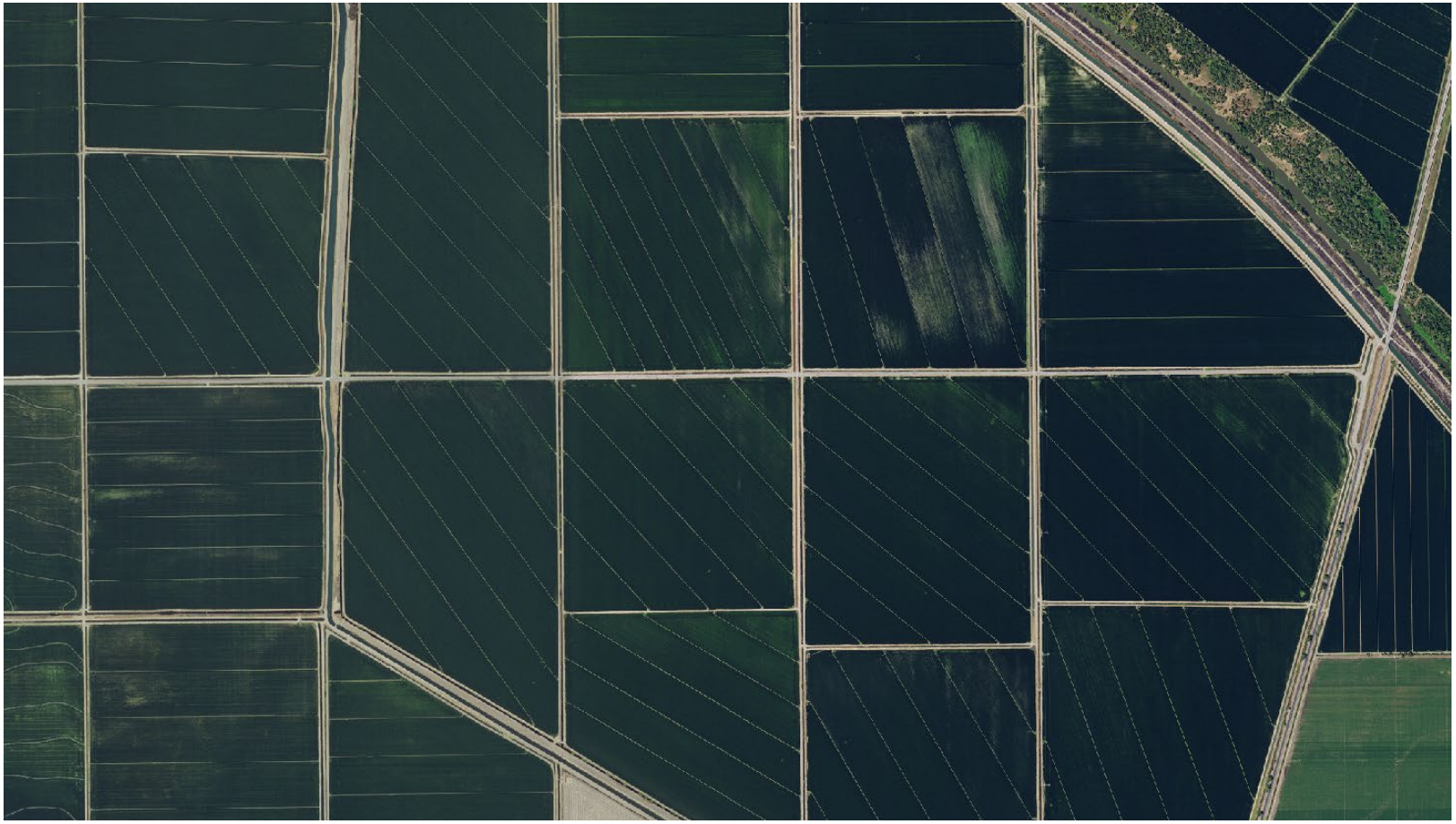


# Important Farmland Data



# Photo Interpretation

# Rice



# Citrus Orchard

# Irrigated Pasture

# Almonds

# Non-irrigated Grains

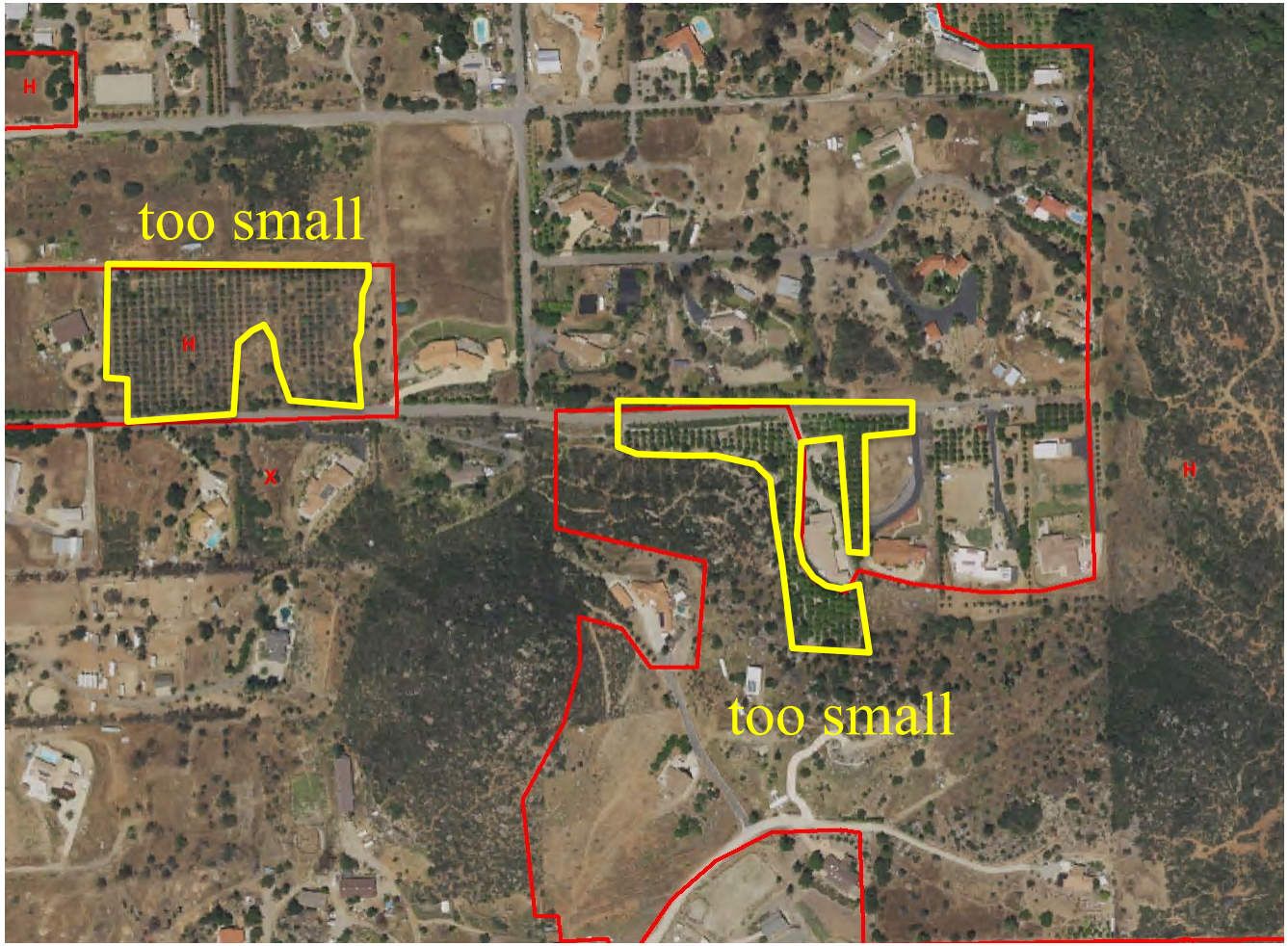
# Solar Photovoltaic Panels

# Landfill

# Polo Fields

# Land Use Data

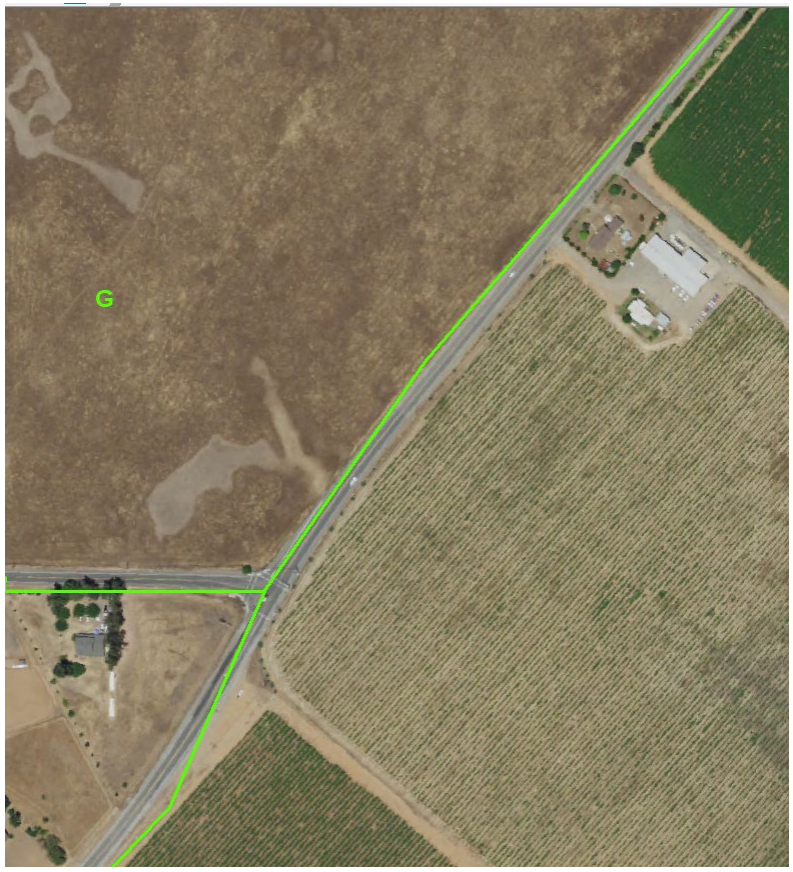
# Minimum Map Unit 10 Acres



# Minimum Map Unit 10 Acres

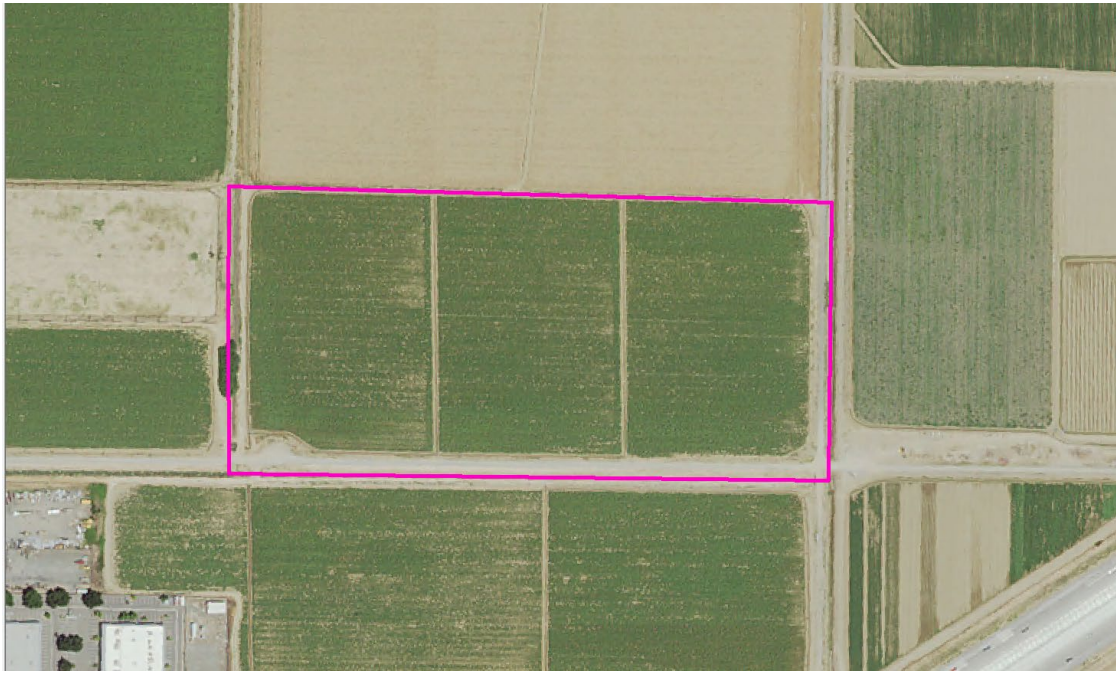
# Looking for land use changes

# Boundary Adjustments




# Internal Notes & Tracking

# Irrigation Status



Irrigated agriculture

# Irrigation Status

Irrigated agriculture
Fallow or non-irrigated grains noted (0 years)

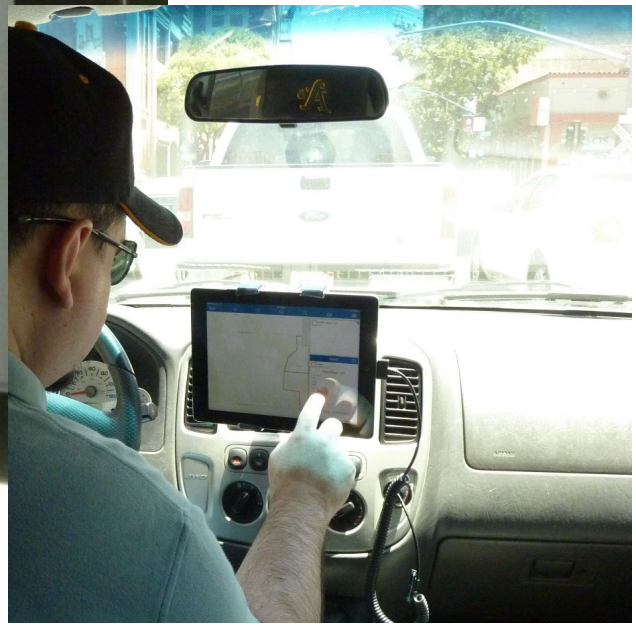
# Irrigation Status

Irrigated agriculture
Fallow or non-irrigated grains noted (2 years)

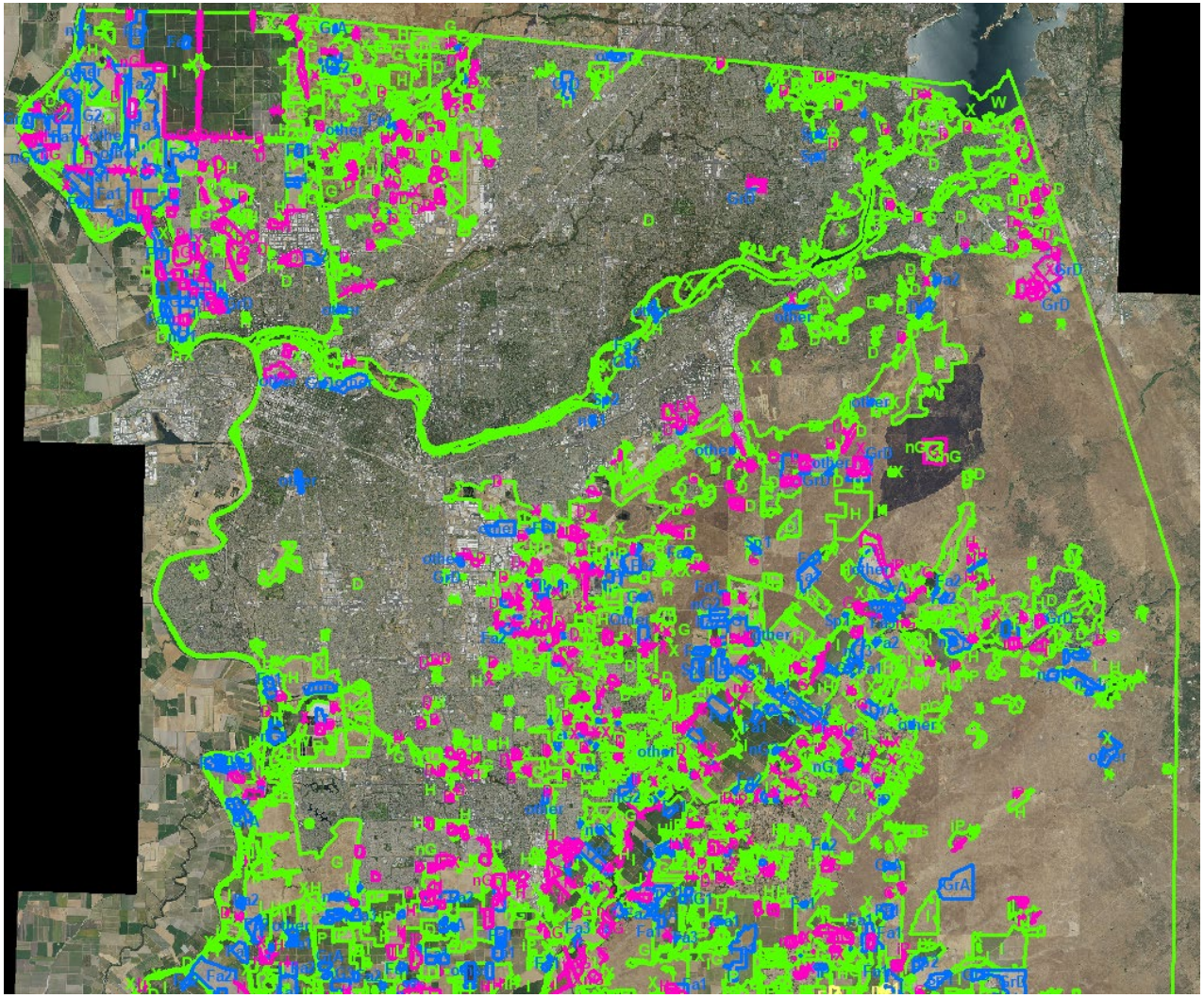
# Irrigation Status

Land use changed from irrigated agriculture
Fallow or non-irrigated grains noted (4 years)

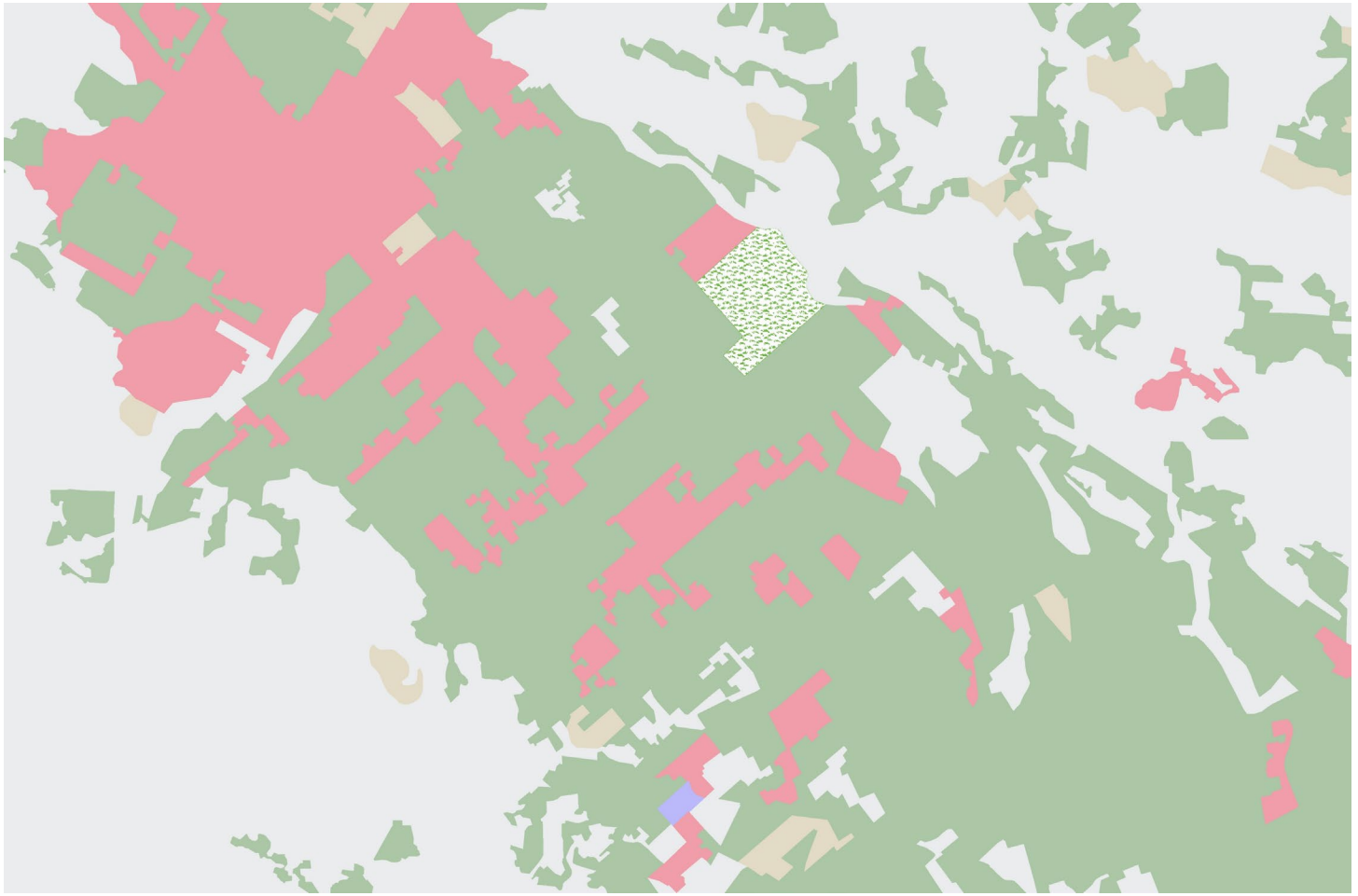
# Field Work on iPads

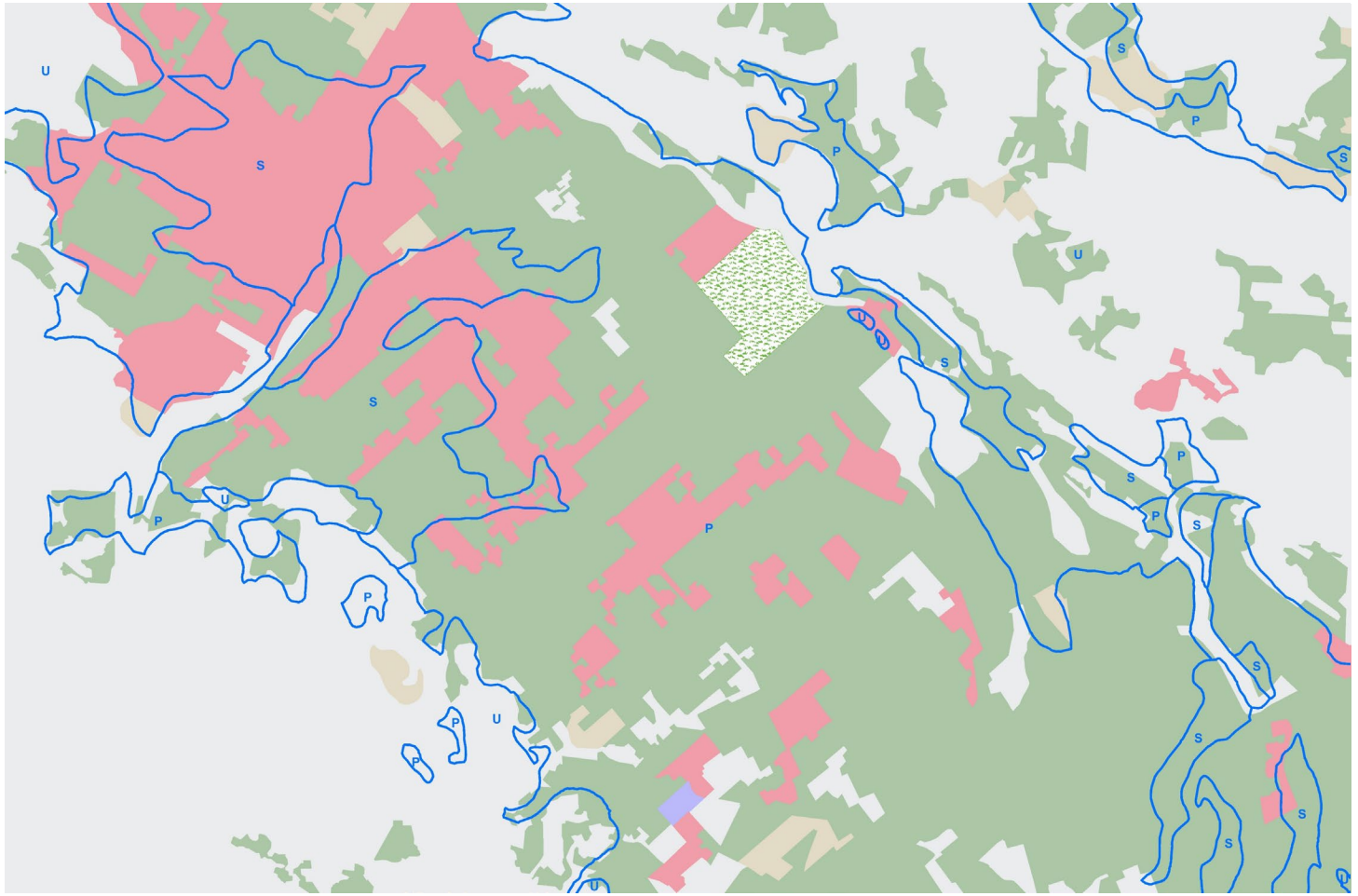
# Managing the Project



# Land Use Data



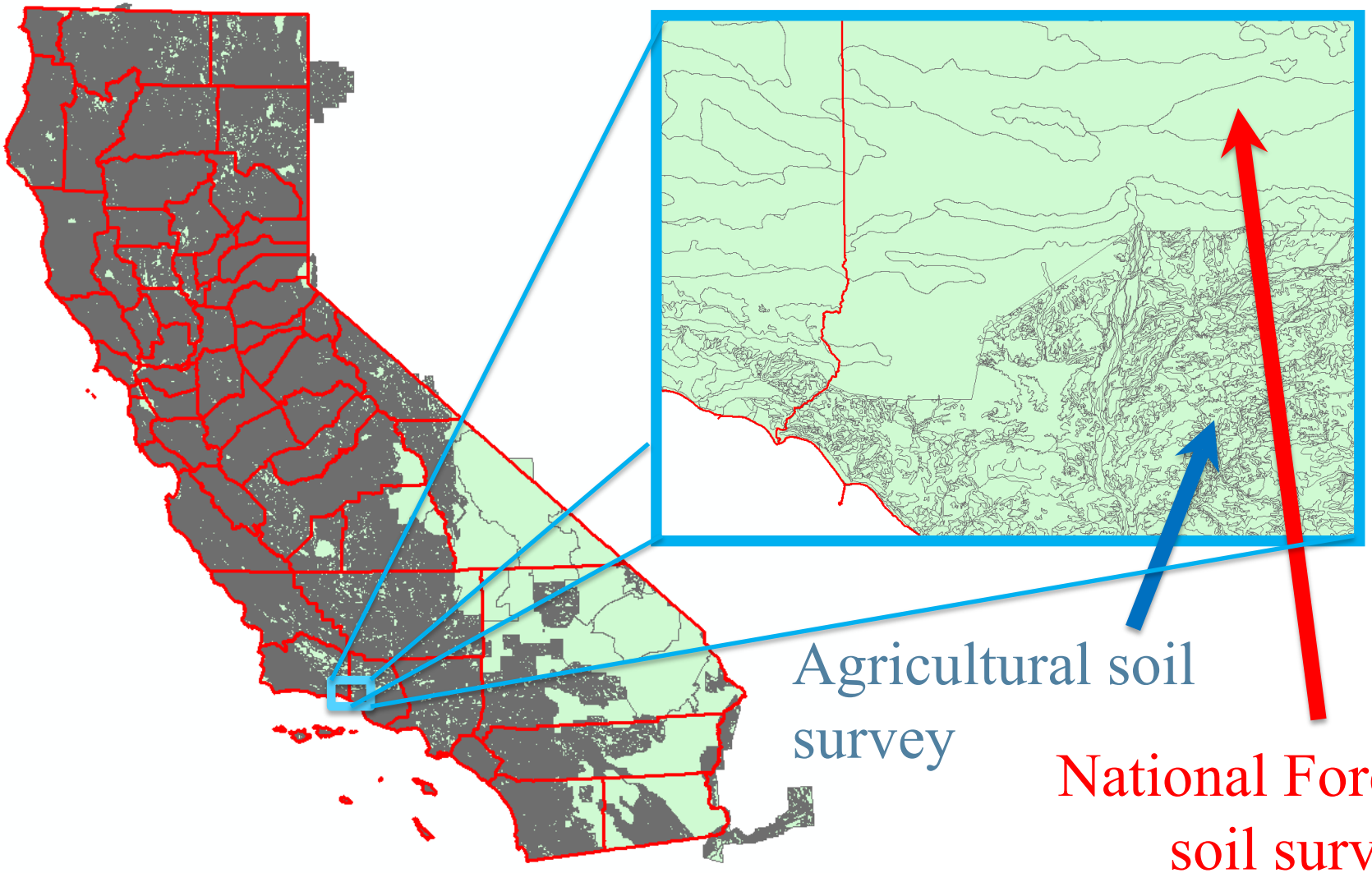
# Land Use combined with the Soil Survey



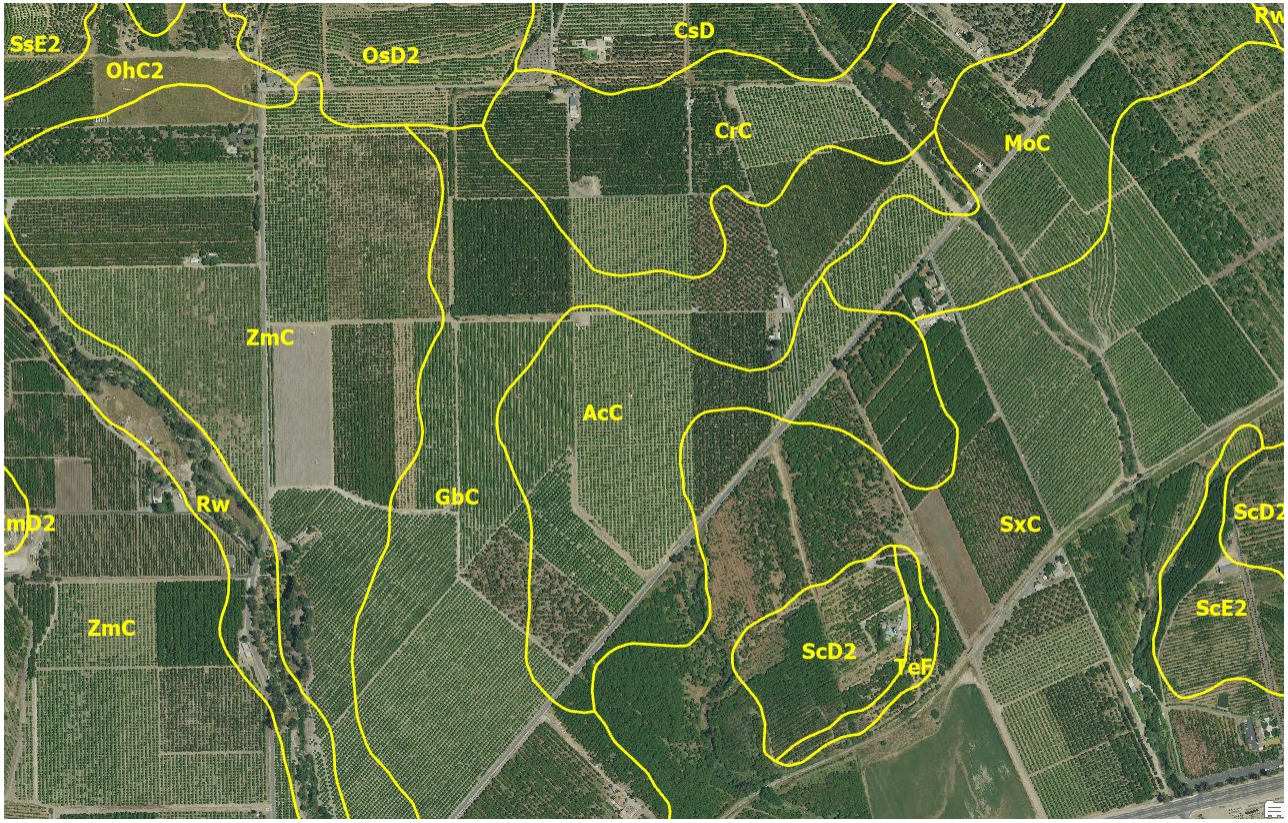
# Soil Quality

Photo: M. Kisko

# USDA-NRCS Soil Survey



# NRCS soil units



# USDA-NRCS determines which soils are Prime and Statewide Importance

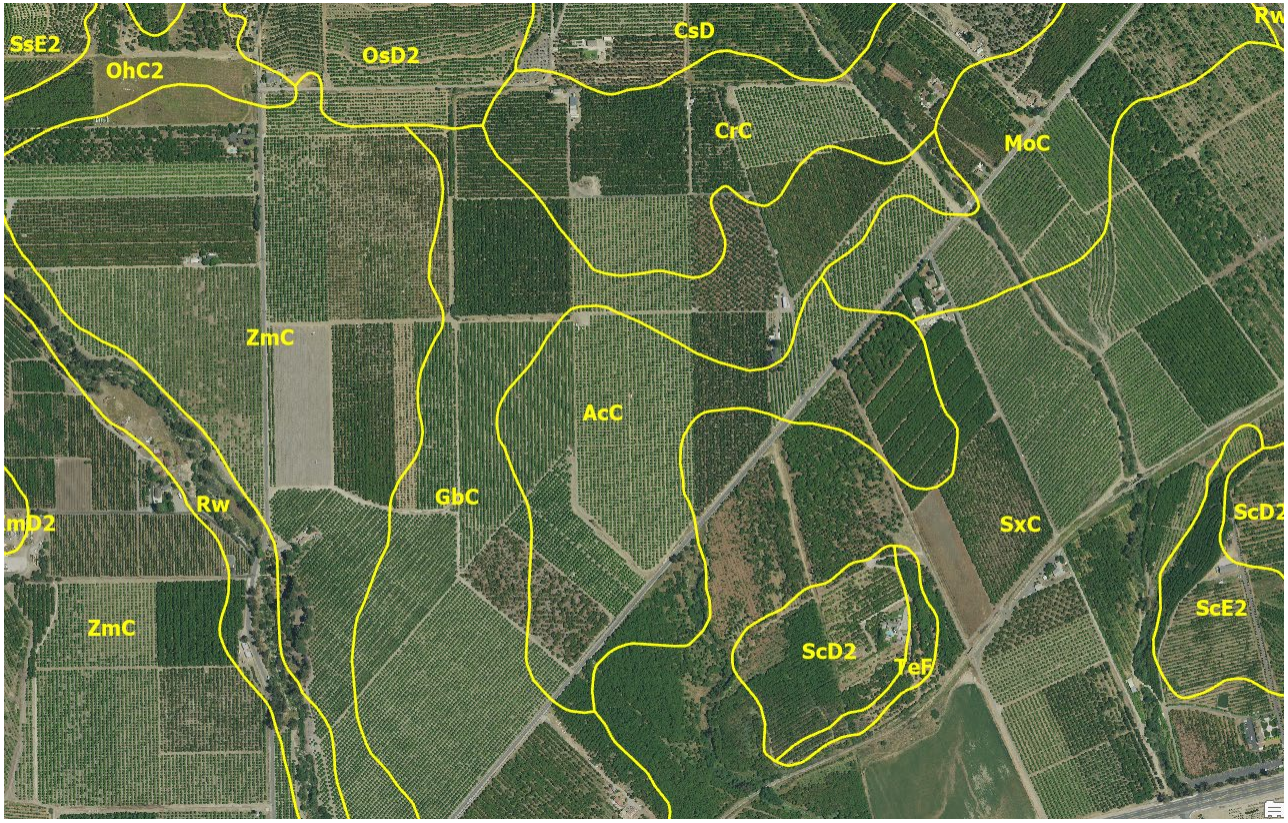
SACRAMENTO COUNTY
PRIME FARMLAND SOILS

THESE SOIL MAPPING UNITS MEET THE CRITERIA FOR PRIME FARMLAND AS OUTLINED IN THE U.S. DEPARTMENT OF AGRICULTURE'S LAND INVENTORY AND MONITORING (LIM) PROJECT FOR THE *SACRAMENTO COUNTY* SOIL SURVEY.

SACRAMENTO COUNTY

| SYMBOL | NAME |
|---|---|
| 111 | Bruella sandy loam, 0 to 2 percent slopes |
| 112 | Bruella sandy loam, 2 to 5 percent slopes |
| 113 | Capay clay loam, 0 to 2 percent slopes, occasionally flooded |
| 114* | Clear Lake clay, partially drained, 0 to 2 percent slopes, frequently flooded |
| 115 | Clear Lake clay, hardpan substratum, drained, 0 to 1 percent slopes |
| 116 | Columbia sandy loam, partially drained, 0 to 2 percent slopes |
| 117 | Columbia sandy loam, drained, 0 to 2 percent slopes |
| 118 | Columbia sandy loam, drained, 0 to 2 percent slopes, occasionally flooded |
| 119 | Columbia sandy loam, clayey substratum, partially drained, 0 to 2 percent slopes |
| 120 | Columbia sandy loam, clayey substratum, drained, 0 to 2 percent slopes |
| 121 | Columbia sandy loam, clayey substratum, drained, 0 to 2 percent slopes, occasionally flooded |
| 122 | Columbia fine sandy loam, partially drained, 0 to 2 percent slopes |
| 123 | Columbia silt loam, drained, 2 to 5 percent slopes |
| 127 | Cosumnes silt loam, partially drained, 0 to 2 percent slopes |
| 128 | Cosumnes silt loam, drained, 0 to 2 percent slopes |
| 129 | Cosumnes silt loam, drained, 0 to 2 percent slopes, occasionally flooded |
| 131 | Coyotecreek silt loam, 0 to 2 percent slopes, occasionally flooded |
| 132 | Creviscreek sandy loam, 0 to 3 percent slopes |
| 135 | Dierssen clay loam, deep, drained, 0 to 2 percent slopes |

# Soil Units Classified as Prime Soils or Soils of Statewide Importance



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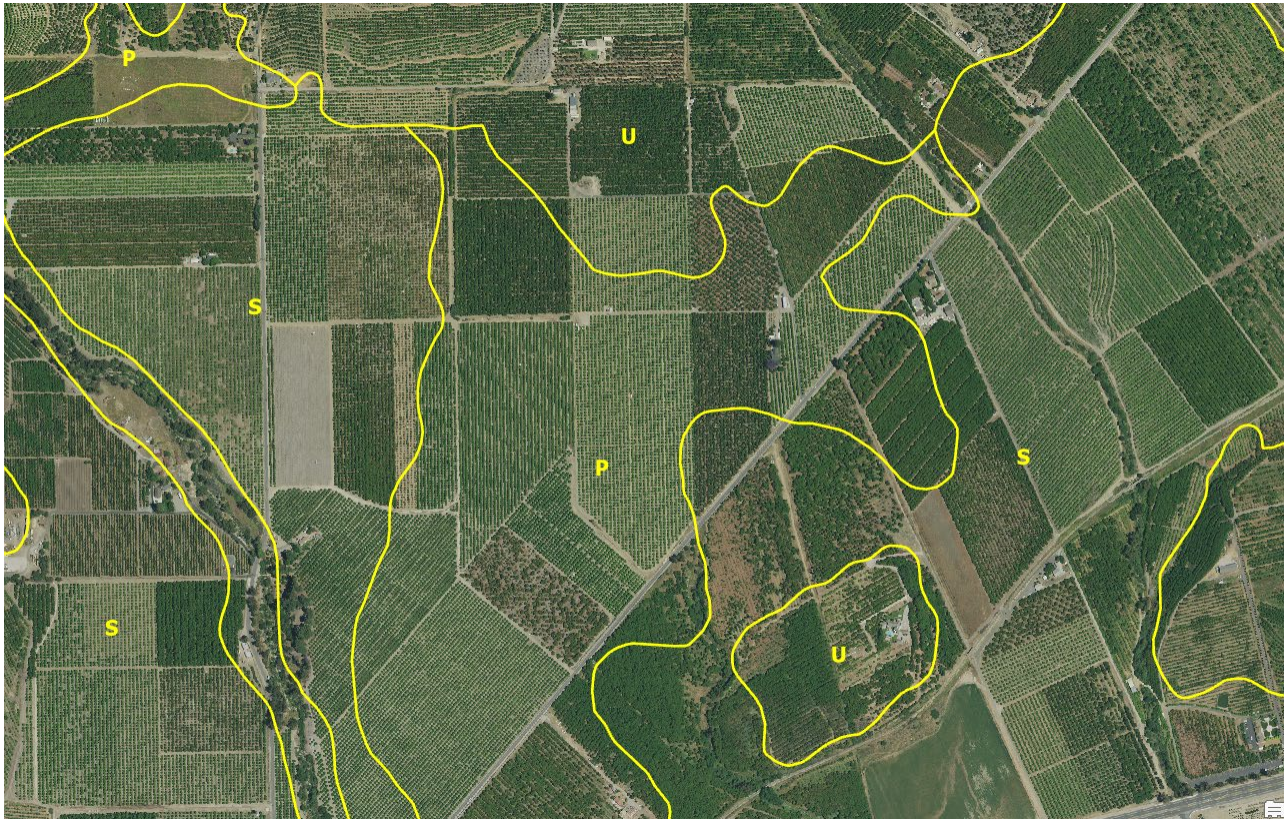

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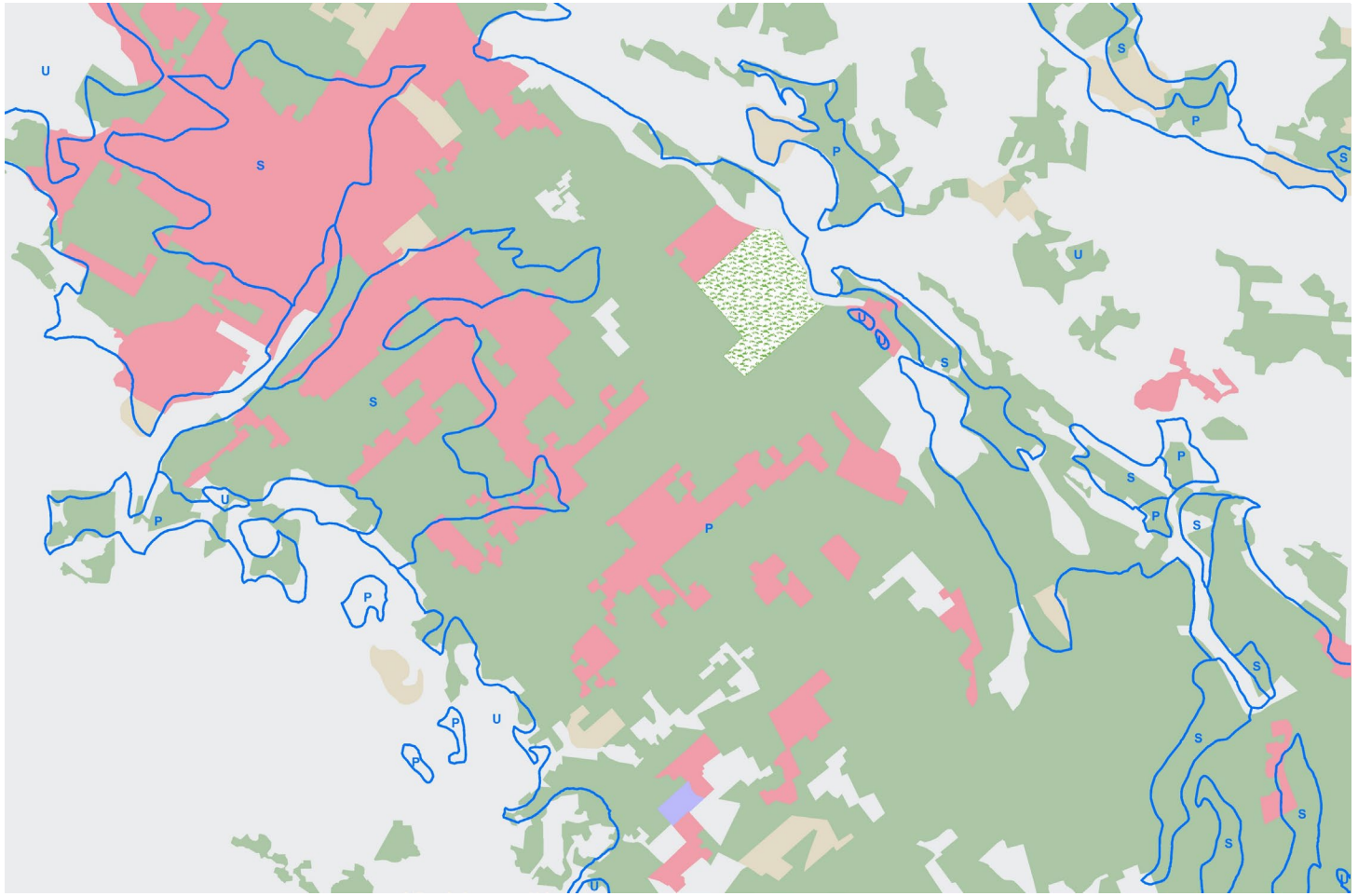
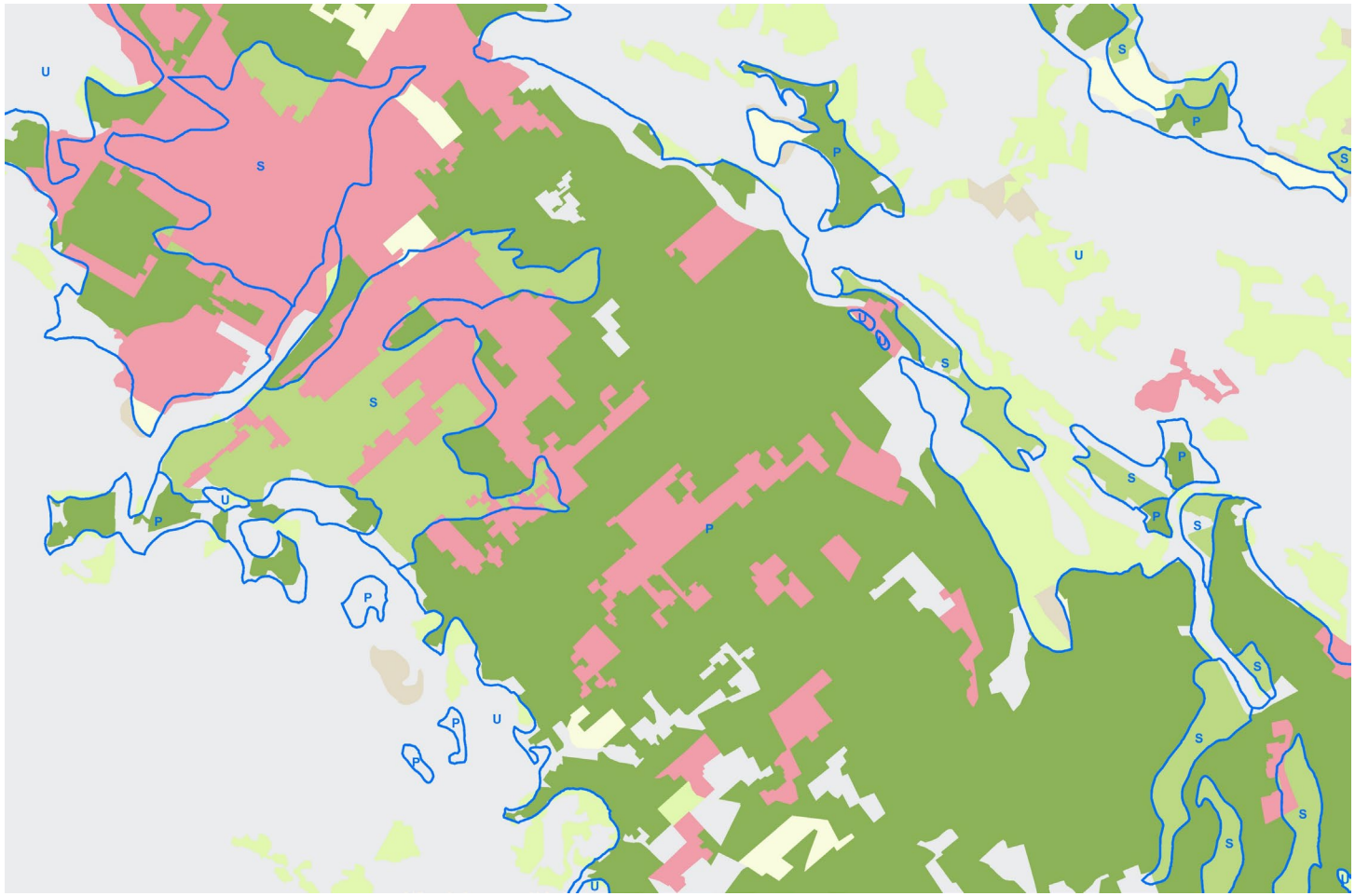
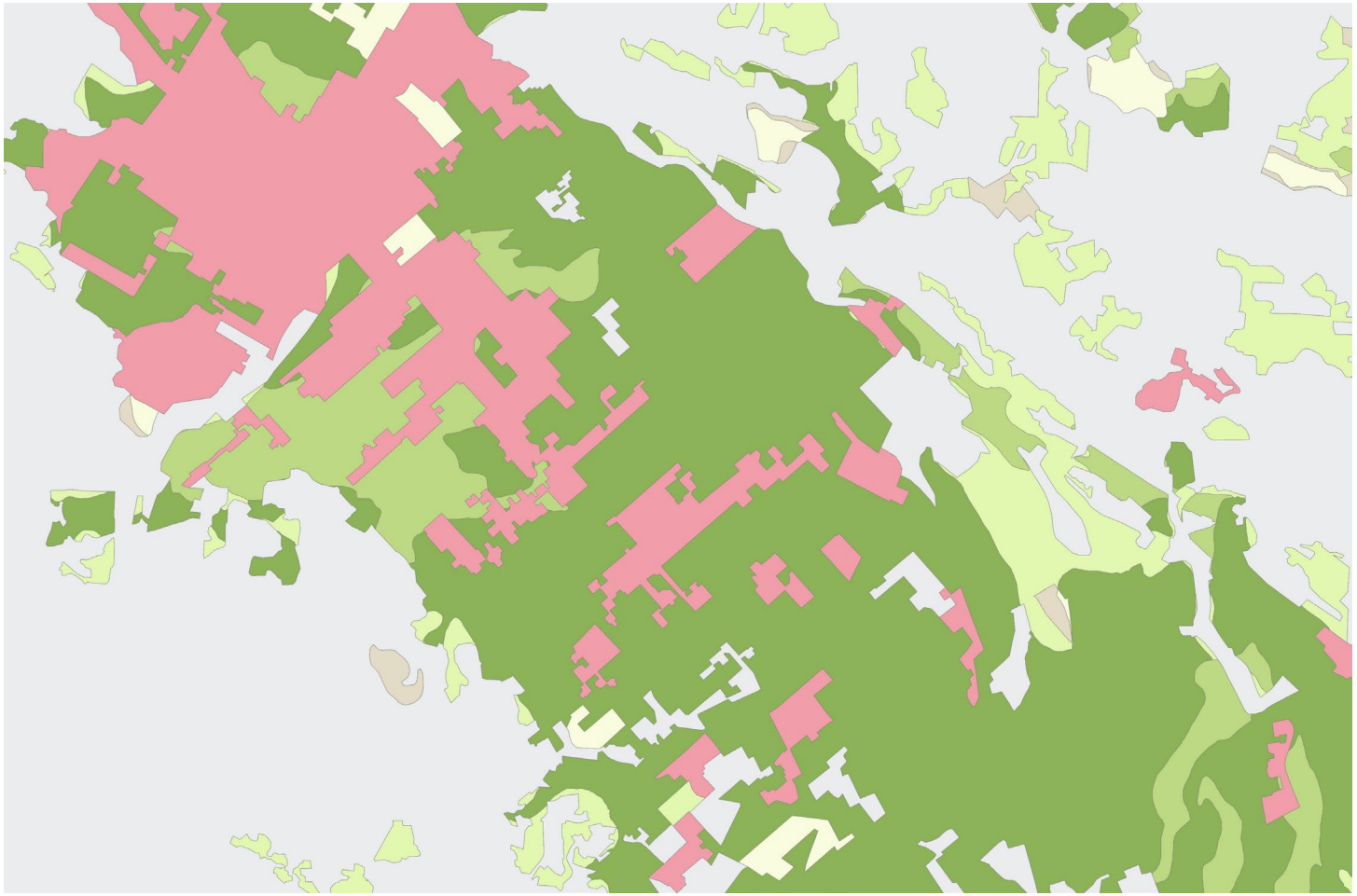


# Agricultural Categories affected by Soils



# Important Farmland Data



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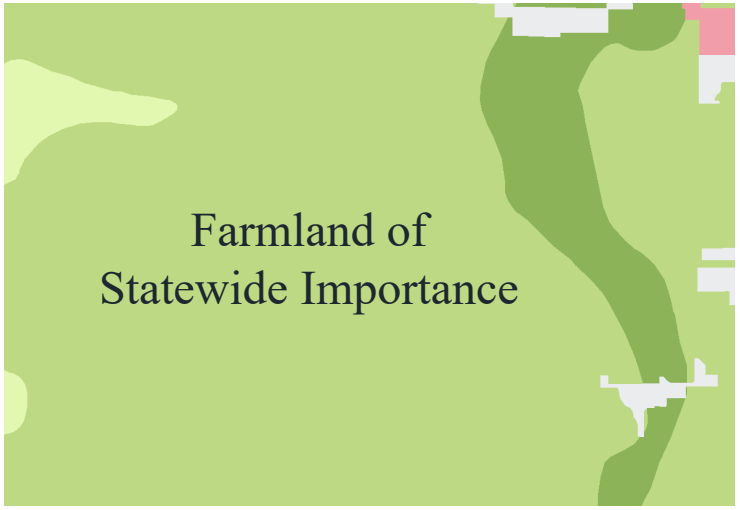
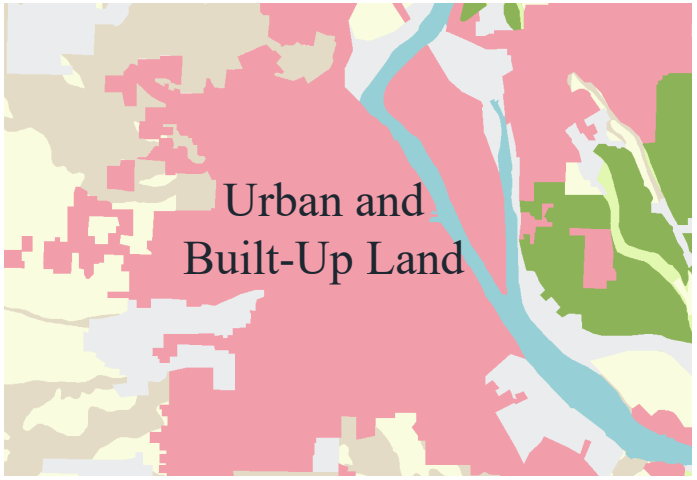
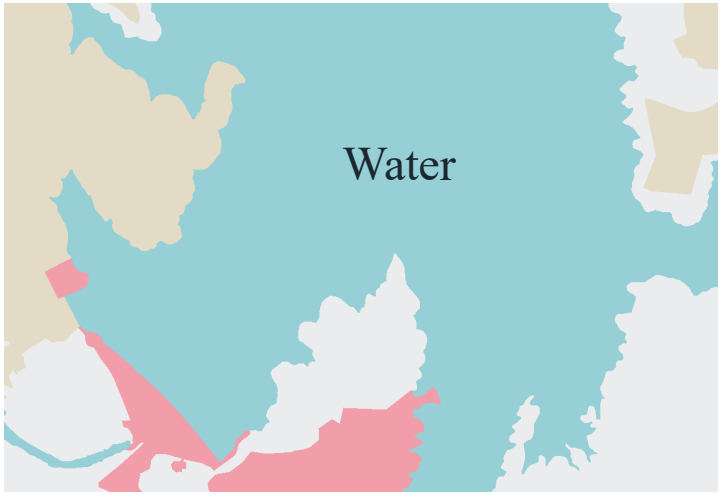
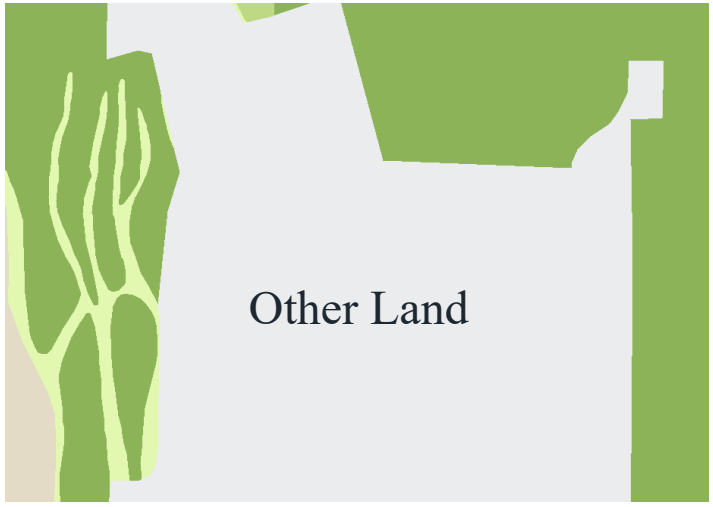




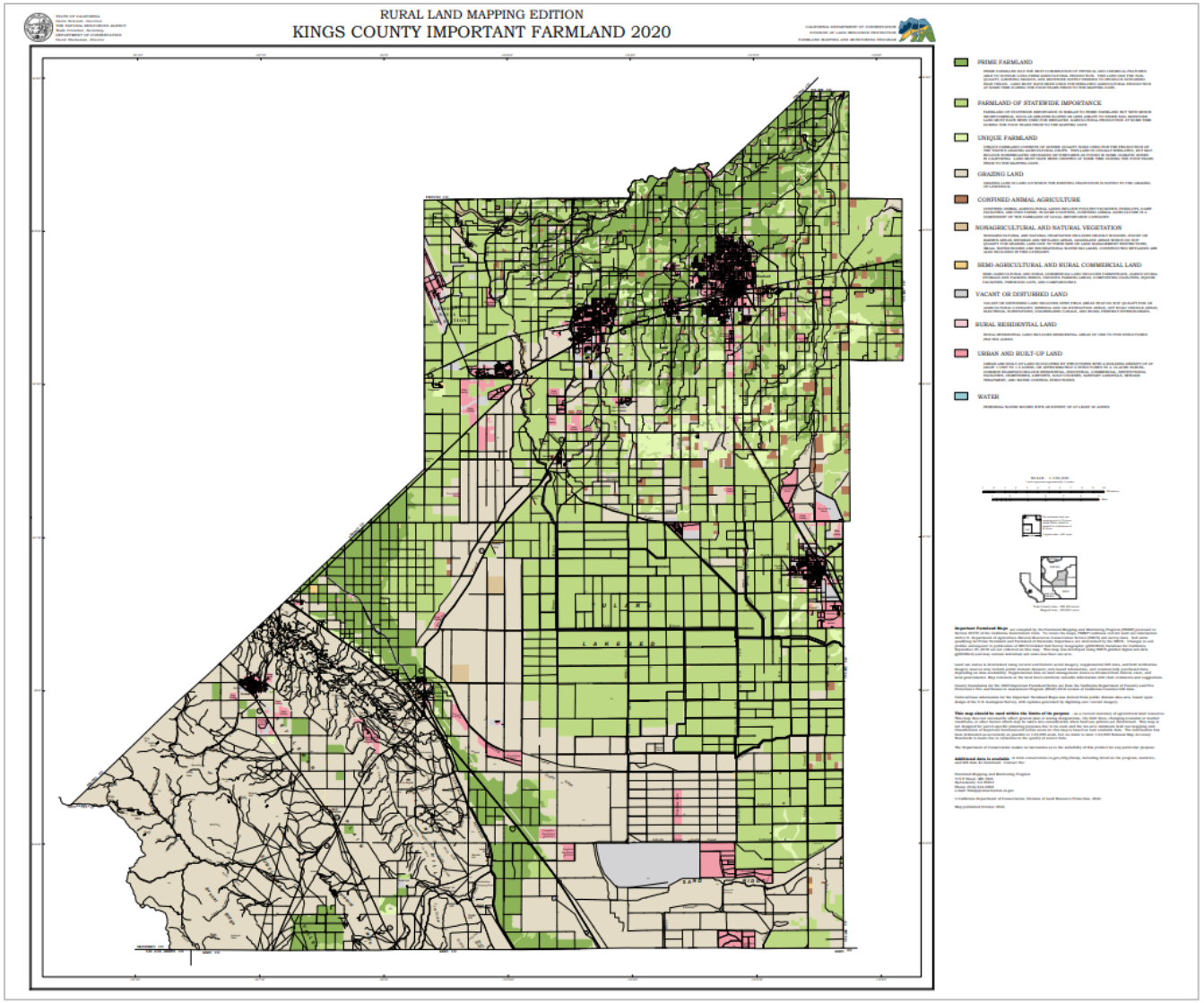
# Additional Map Categories

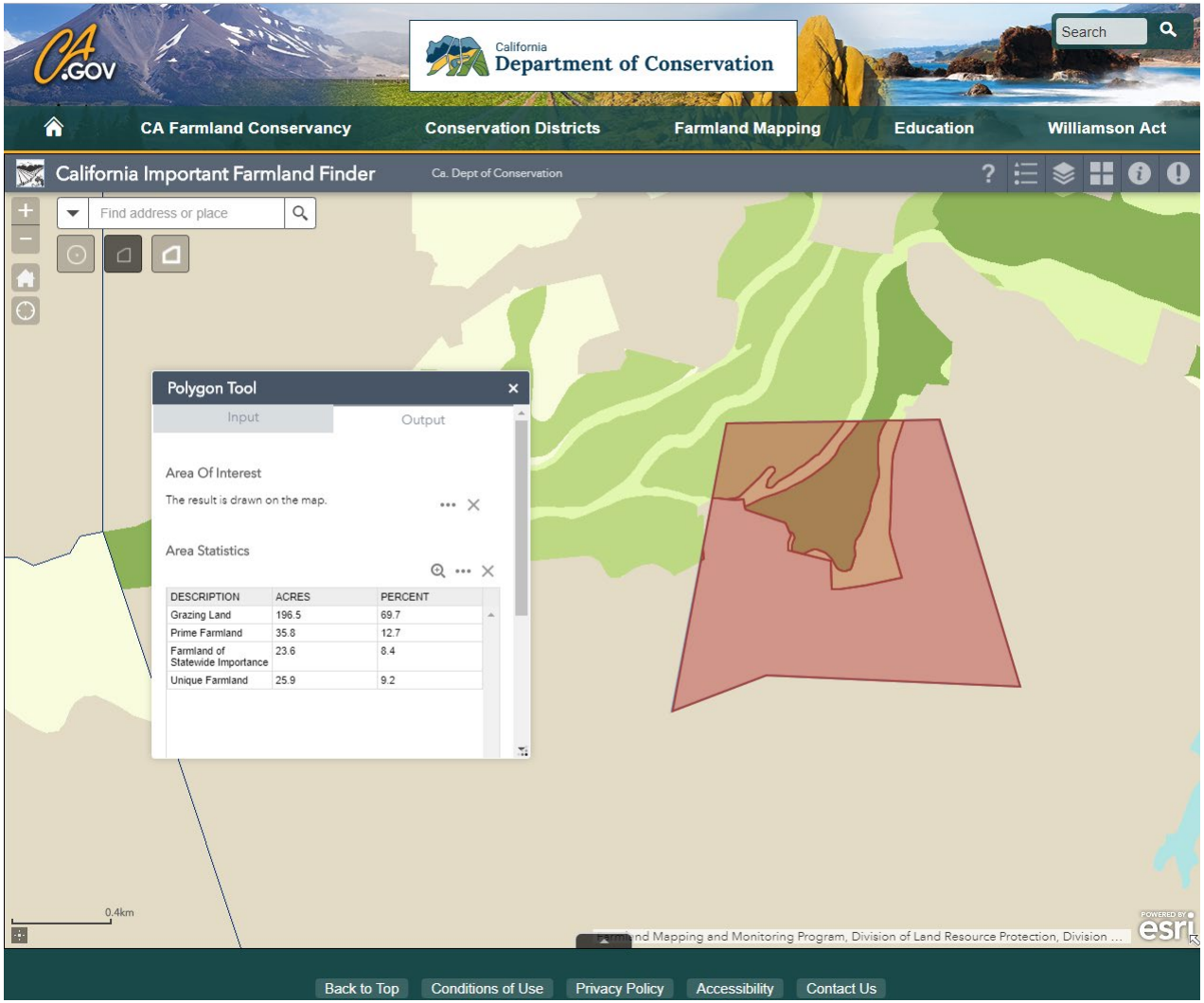



# Important Farmland Map



# California Important Farmland Finder

https://maps.conservation.ca.gov/DLRP/CIFF/



# Land Use Conversion Table

**TABLE A-12**
**KINGS COUNTY**
**2018-2020 Land Use Conversion**

**CALIFORNIA DEPARTMENT OF CONSERVATION**
**Division of Land Resource Protection**

**Farmland Mapping and Monitoring Program**

**PART I**
**County Summary and Change by Land Use Category**

| LAND USE CATEGORY | TOTAL ACREAGE 2018 | TOTAL ACREAGE 2020 | 2018-2020 ACRES LOST (-) | 2018-2020 ACRES GAINED (+) | 2018-2020 TOTAL ACREAGE CHANGED | 2018-2020 NET ACREAGE CHANGED |
|---|---|---|---|---|---|---|
| Prime Farmland | 107,913 | 109,698 | 2,623 | 4,408 | 7,031 | 1,785 |
| Farmland of Statewide Importance | 320,052 | 315,272 | 6,452 | 1,672 | 8,124 | -4,780 |
| Unique Farmland | 20,531 | 20,272 | 274 | 15 | 289 | -259 |
| Farmland of Local Importance | 10,534 | 10,514 | 64 | 44 | 108 | -20 |
| IMPORTANT FARMLAND SUBTOTAL | 459,030 | 455,756 | 9,413 | 6,139 | 15,552 | -3,274 |
| Grazing Land | 358,342 | 359,932 | 6,952 | 8,542 | 15,494 | 1,590 |
| AGRICULTURAL LAND SUBTOTAL | 817,372 | 815,688 | 16,365 | 14,681 | 31,046 | -1,684 |
| Urban and Built-up Land | 39,428 | 40,930 | 125 | 1,627 | 1,752 | 1,502 |
| Other Land | 33,942 | 34,186 | 737 | 981 | 1,718 | 244 |
| Water Area | 62 | 0 | 62 | 0 | 62 | -62 |
| TOTAL AREA INVENTORIED | 890,804 | 890,804 | 17,289 | 17,289 | 34,578 | 0 |

**PART II**
**Land Committed to Nonagricultural Use**

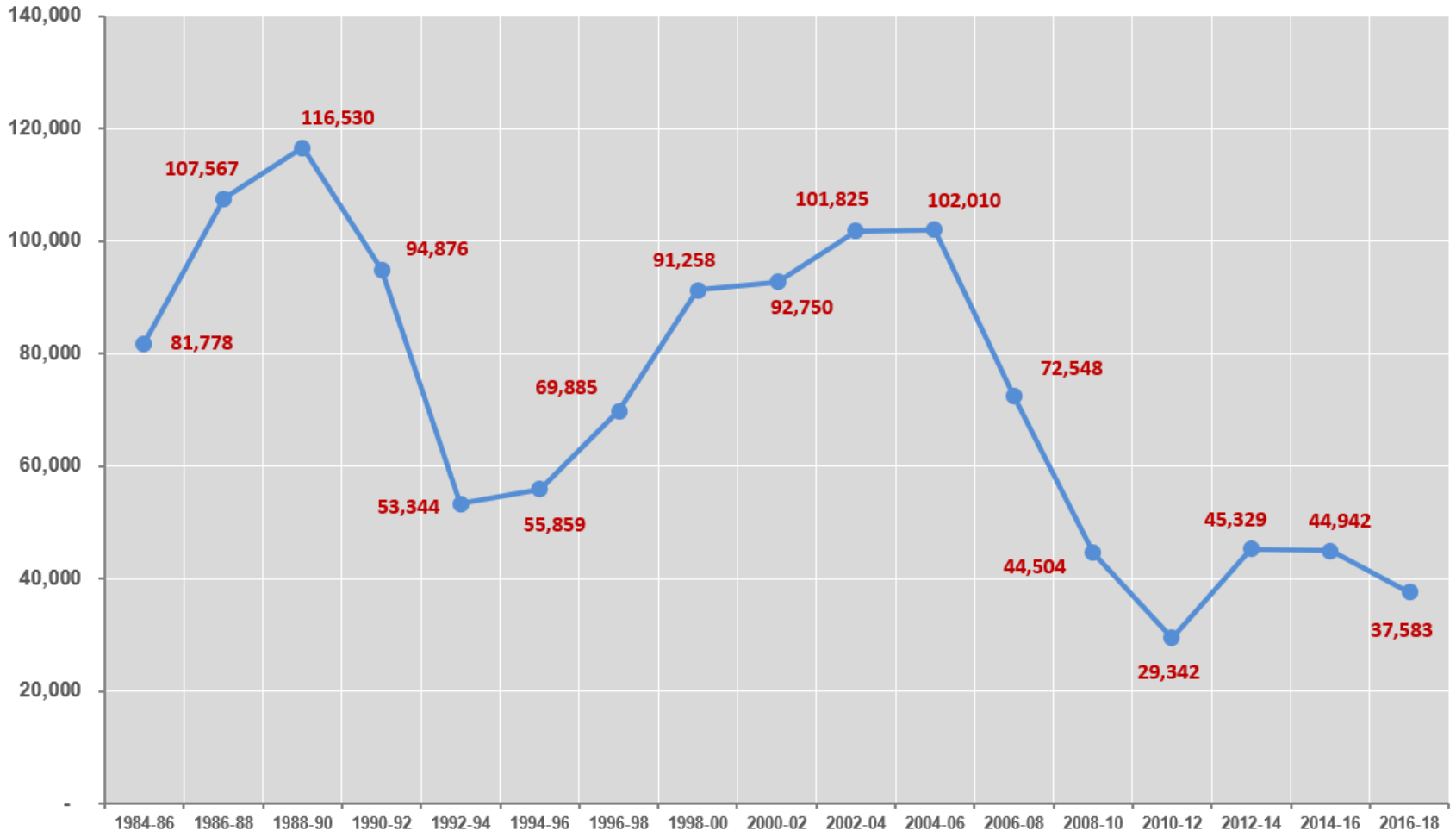
| LAND USE CATEGORY | TOTAL ACREAGE 2020 |
|---|---|
| Prime Farmland | DATA NOT AVAILABLE |
| Farmland of Statewide Importance | |
| Unique Farmland | |
| Farmland of Local Importance | |
| IMPORTANT FARMLAND SUBTOTAL | |
| Grazing Land | |
| AGRICULTURAL LAND SUBTOTAL | |
| Urban and Built-up Land | |
| Other Land | |
| Water Area | |
| TOTAL ACREAGE REPORTED | |

**PART III Land Use Conversion from 2018 to 2020**

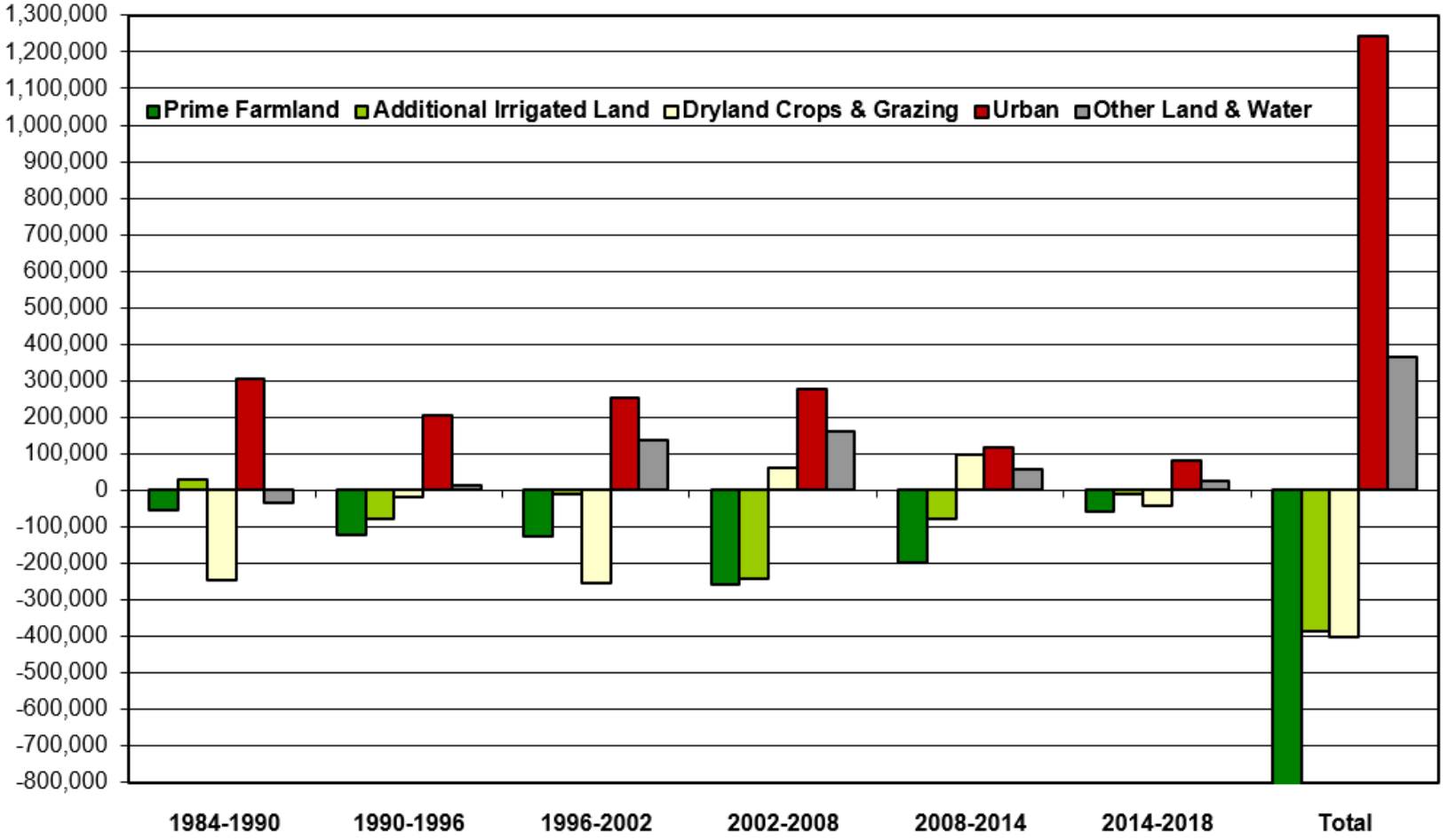
| LAND USE CATEGORY | | Prime Farmland | Farmland of Statewide Importance | Unique Farmland | Farmland of Local Importance | Subtotal Important Farmland | Grazing Land | Total Agricultural Land | Urban and Built-up Land | Other Land | Water Area | Total Converted To Another Use |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Prime Farmland (1) | to: | -- | 0 | 0 | 7 | 7 | 2,319 | 2,326 | 133 | 164 | 0 | 2,623 |
| Farmland of Statewide Importance | to: | 0 | -- | 0 | 25 | 25 | 5,564 | 5,589 | 333 | 530 | 0 | 6,452 |
| Unique Farmland | to: | 0 | 0 | -- | 0 | 0 | 252 | 252 | 13 | 9 | 0 | 274 |
| Farmland of Local Importance | to: | 7 | 13 | 2 | -- | 22 | 4 | 26 | 0 | 38 | 0 | 64 |
| IMPORTANT FARMLAND SUBTOTAL | | 7 | 13 | 2 | 32 | 54 | 8,139 | 8,193 | 479 | 741 | 0 | 9,413 |
| Grazing Land (2) | to: | 4,291 | 1,624 | 12 | 12 | 5,939 | -- | 5,939 | 875 | 138 | 0 | 6,952 |
| AGRICULTURAL LAND SUBTOTAL | | 4,298 | 1,637 | 14 | 44 | 5,993 | 8,139 | 14,132 | 1,354 | 879 | 0 | 16,365 |
| Urban and Built-up Land (3) | to: | 11 | 0 | 0 | 0 | 11 | 12 | 23 | -- | 102 | 0 | 125 |
| Other Land | to: | 99 | 35 | 1 | 0 | 135 | 329 | 464 | 273 | -- | 0 | 737 |
| Water Area (4) | to: | 0 | 0 | 0 | 0 | 0 | 62 | 62 | 0 | 0 | -- | 62 |
| TOTAL ACREAGE CONVERTED | to: | 4,408 | 1,672 | 15 | 44 | 6,139 | 8,542 | 14,681 | 1,627 | 981 | 0 | 17,289 |

(1) Conversion to Grazing Land is primarily due to land left idle or land used for dryland grain production for three or more update cycles.
(2) Conversion to irrigated farmland is primarily due to the addition of irrigated orchards, row crops and field crops.
(3) Conversion from Urban and Built-up Land is primarily the result of a defunct golf course, land lacking sufficient infrastructure, and the use of detailed digital imagery to delineate more distinct urban boundaries.
(4) Conversion from Water due to a water body northeast of Lemoore Naval Air Station that had been dry for multiple updates.

# Net Urban Acreage Change 1984-2018



# Net Acreage Change 1984-2018




Total irrigated farmland loss – 1,203,340 acres

Prime Farmland loss – 816,123 acres - 68% of total

# #1 Urbanizing Region

1984-1986
Southern California

1986-1988
Southern California

1988-1990
Southern California

1990-1992
Southern California

1992-1994
Southern California

1994-1996
Southern California

1996-1998
Southern California

1998-2000
Southern California

2000-2002
Southern California

2002-2004
Southern California

2004-2006
Southern California

2006-2008
Southern California

2008-2010
Southern California

2010-2012
Southern California

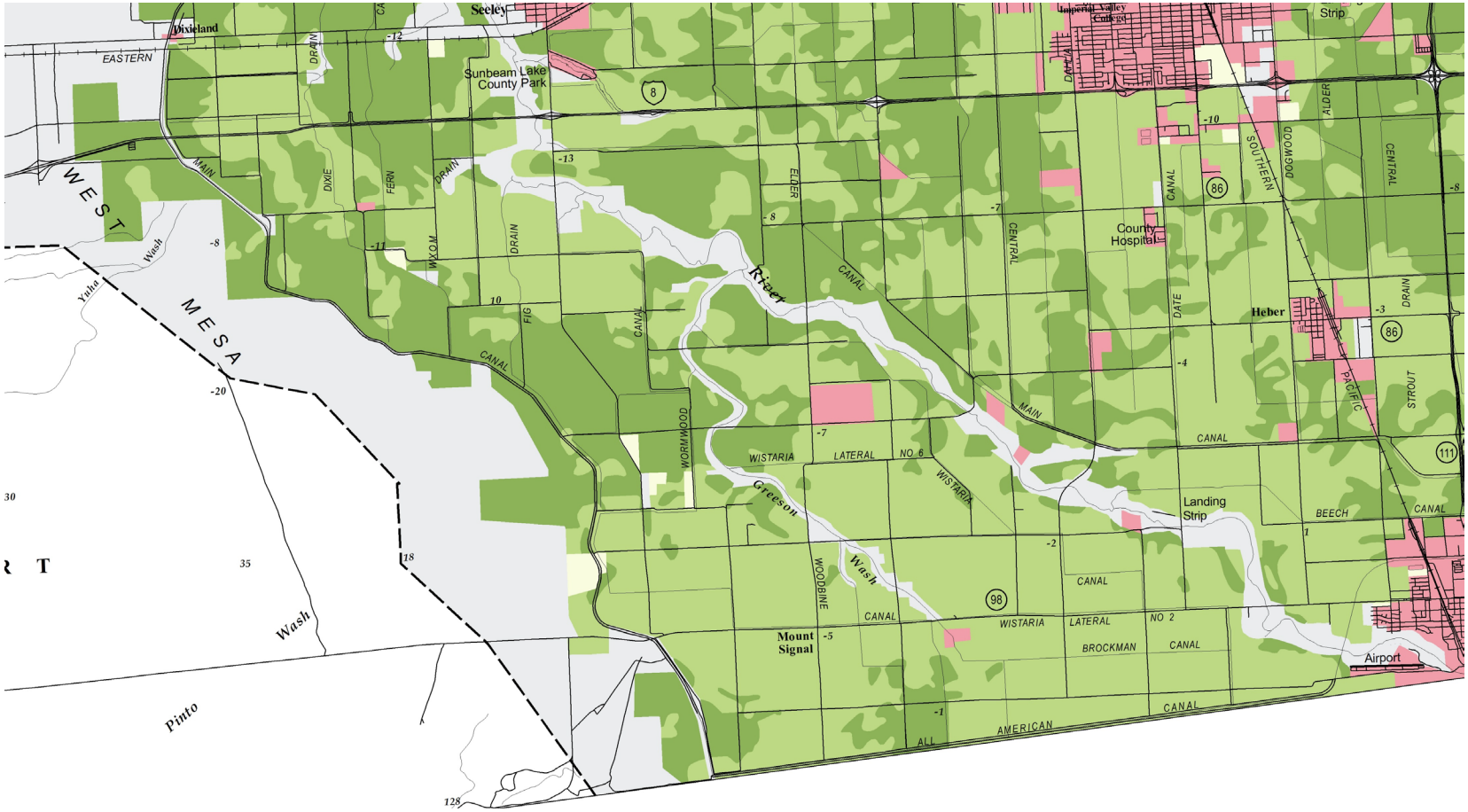
2012-2014
Southern California

**2014-2016**
**San Joaquin Valley**

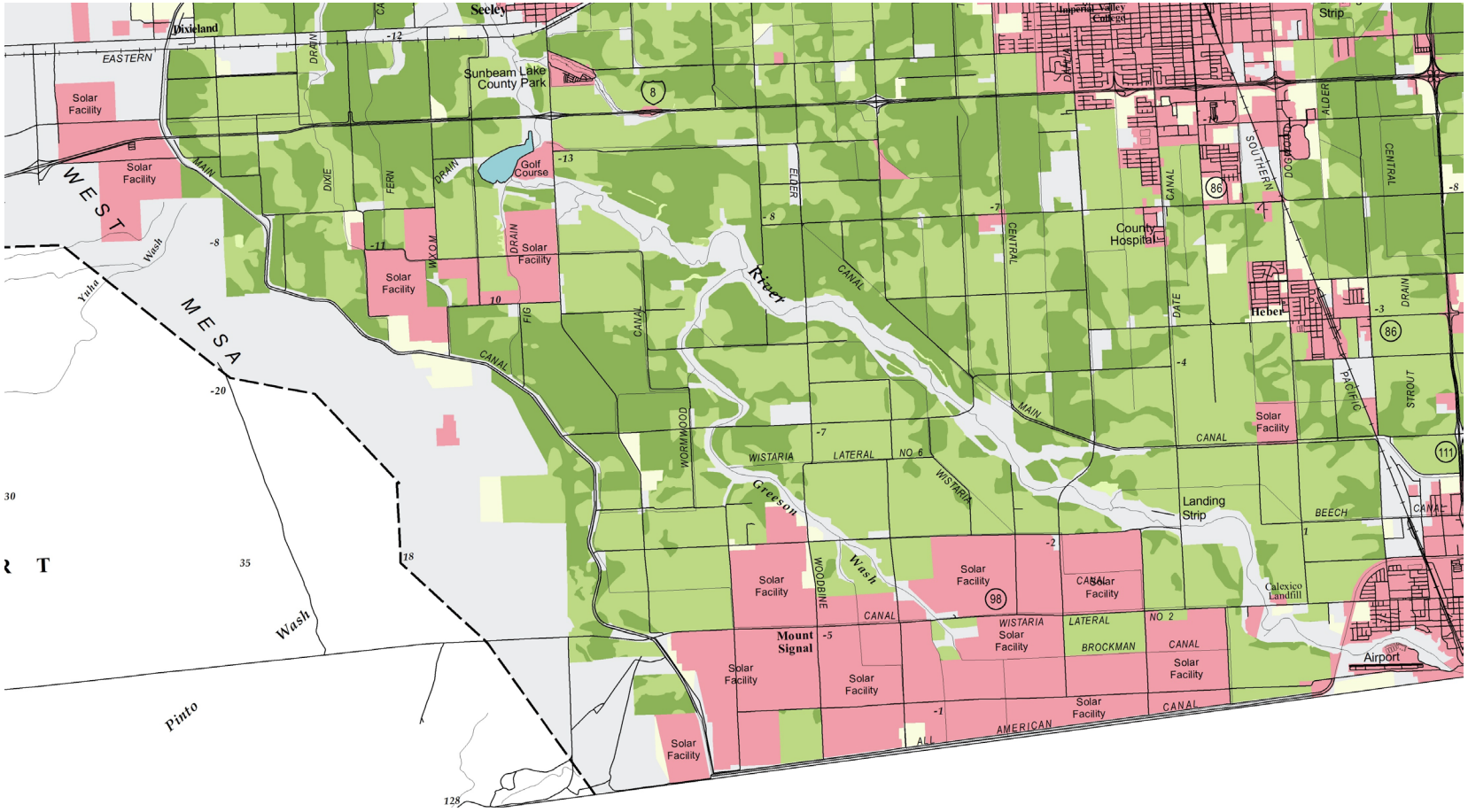
2016-2018
Southern California

# New Urban Due to Solar (within FMMP survey area)

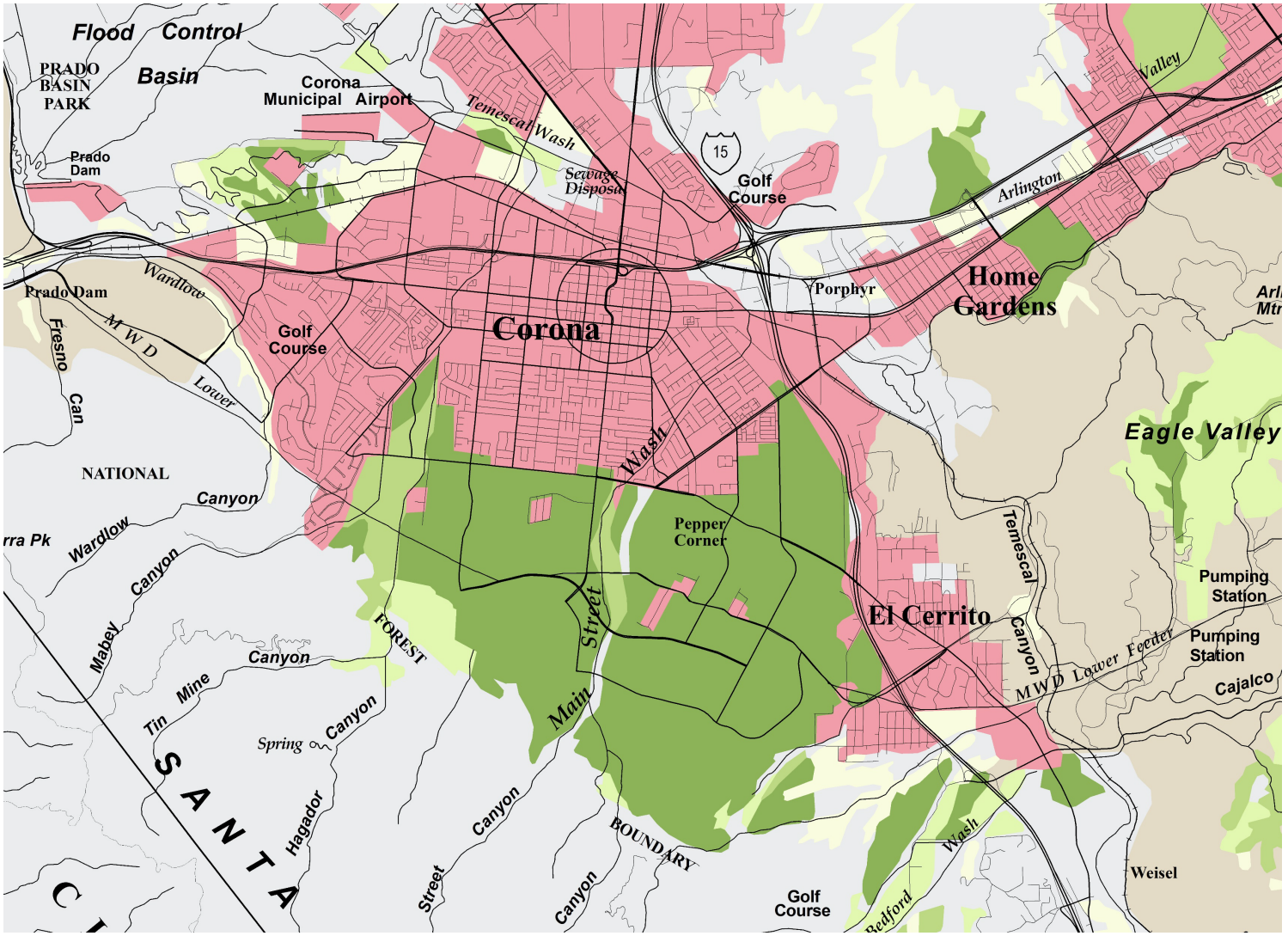
# Solar, Imperial County
# 1984



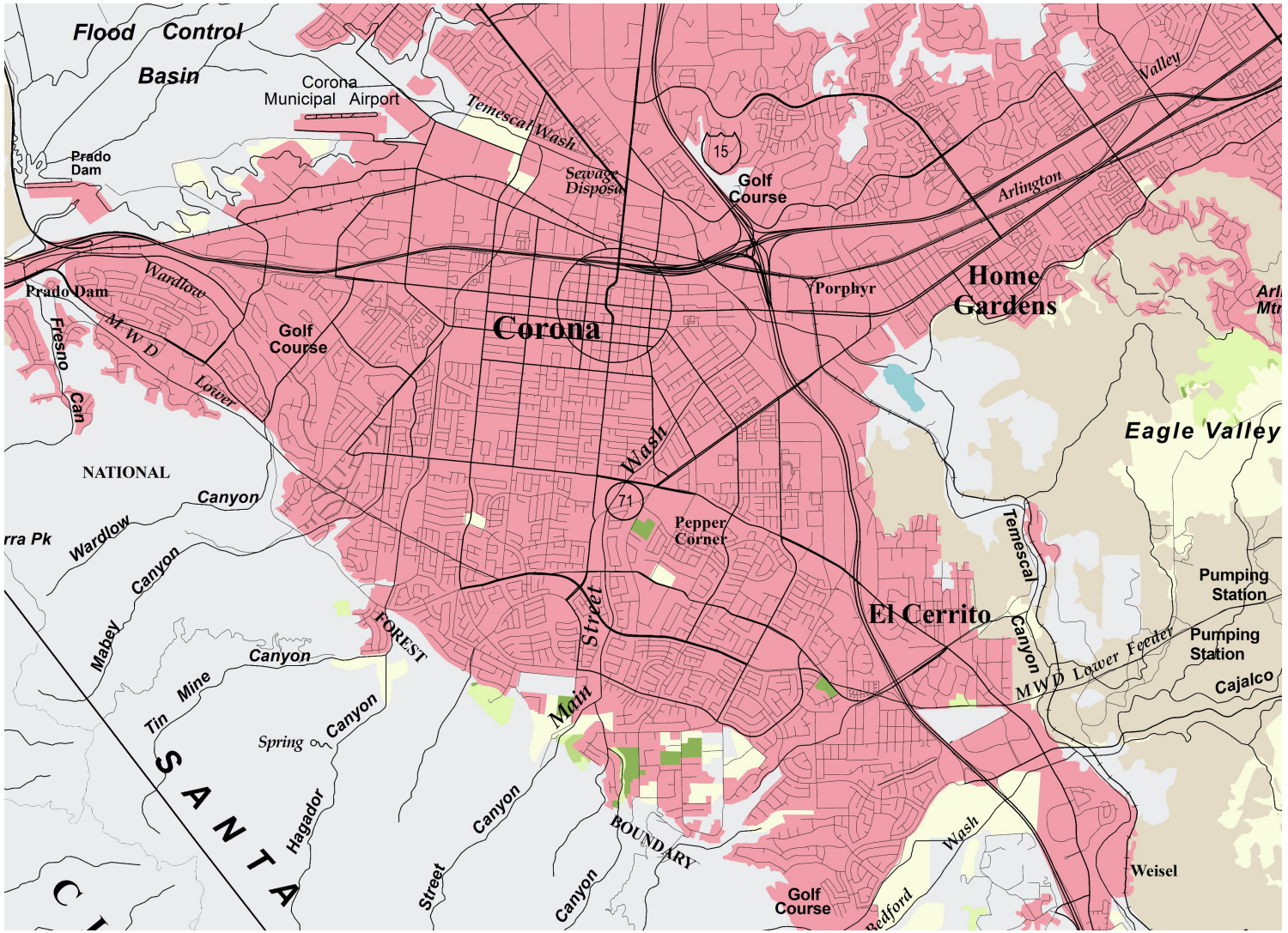
# Solar, Imperial County 2020



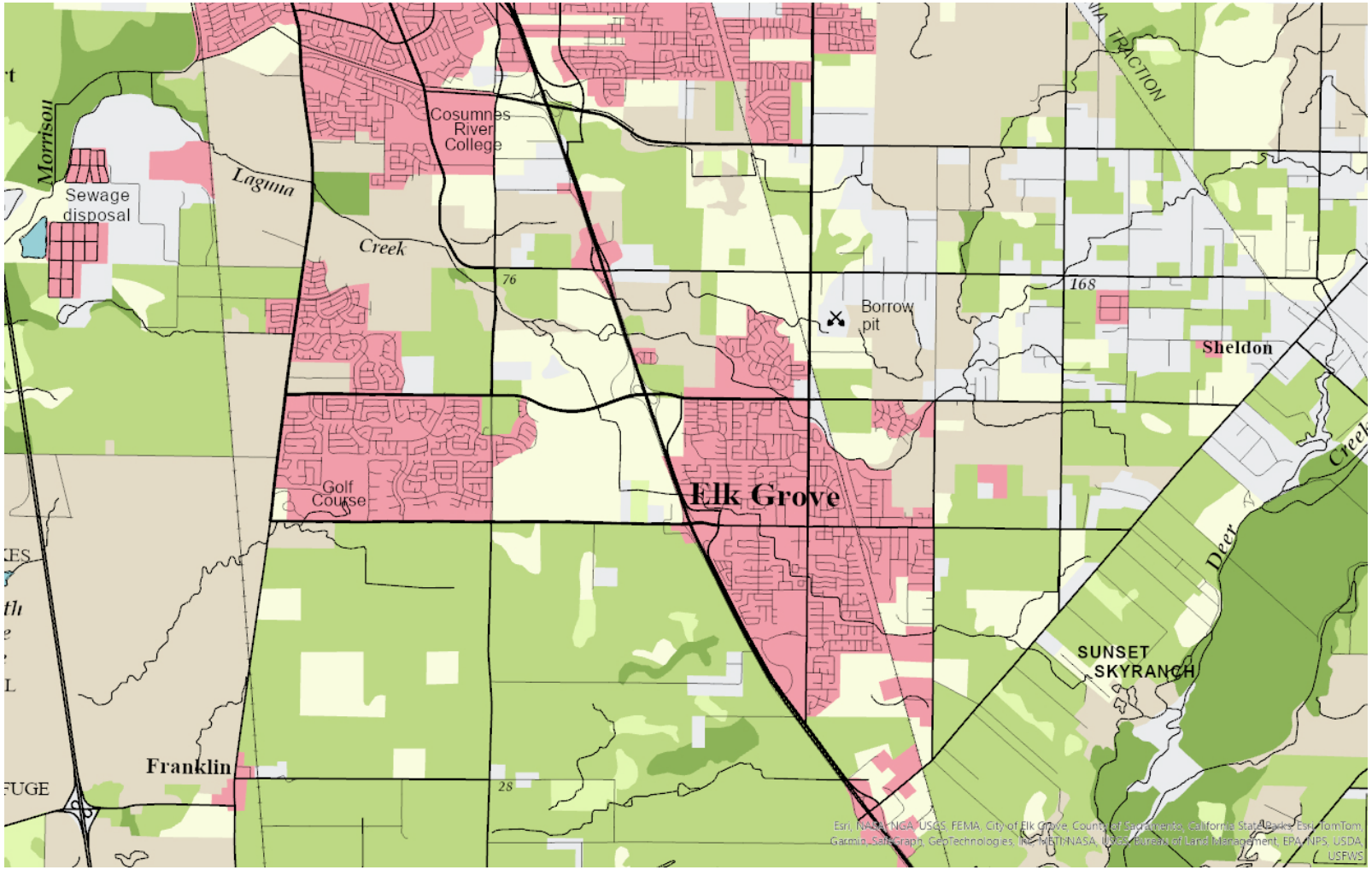
# Corona, Riverside County
# 1984



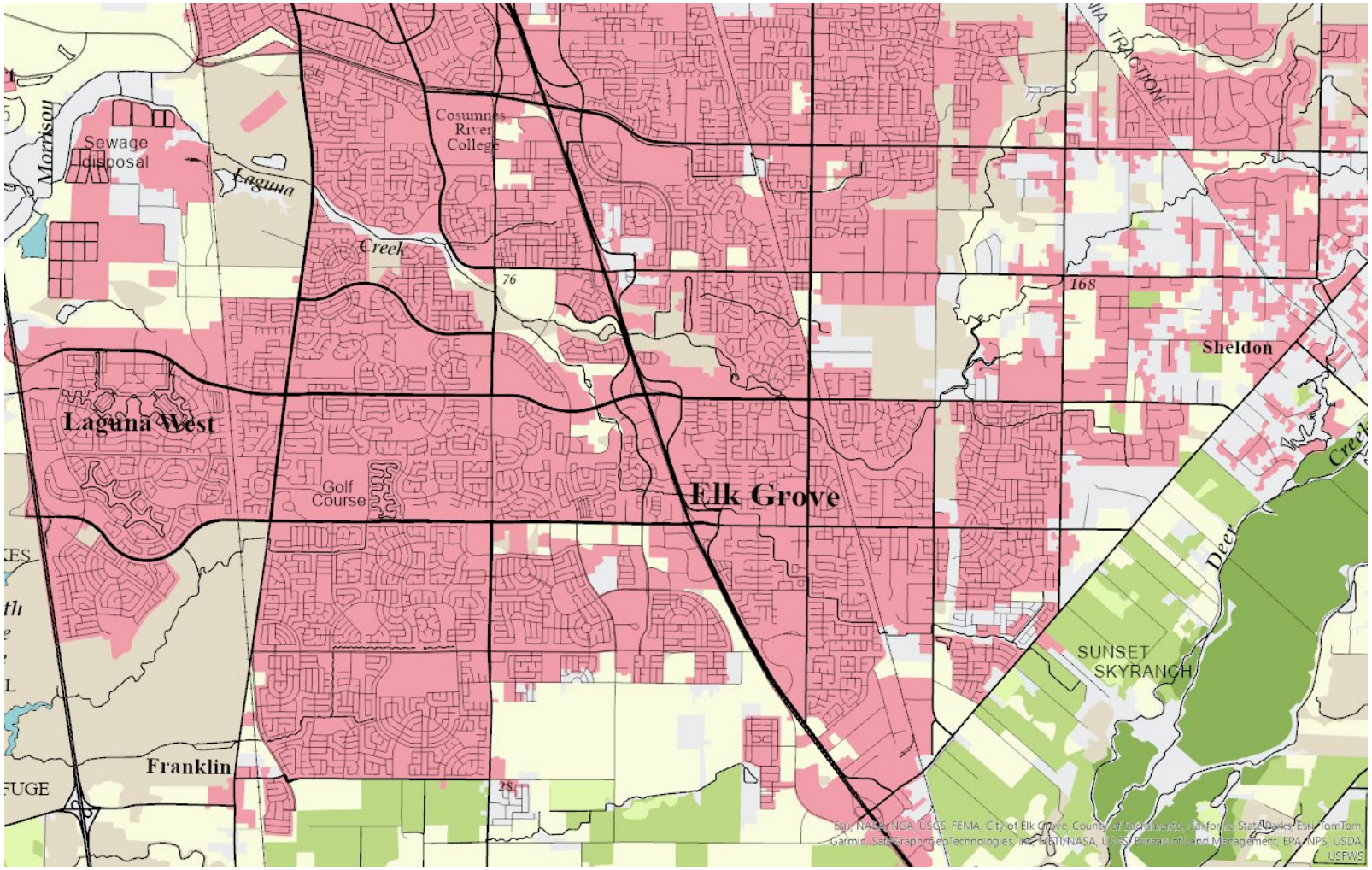
# Corona, Riverside County
# 2018



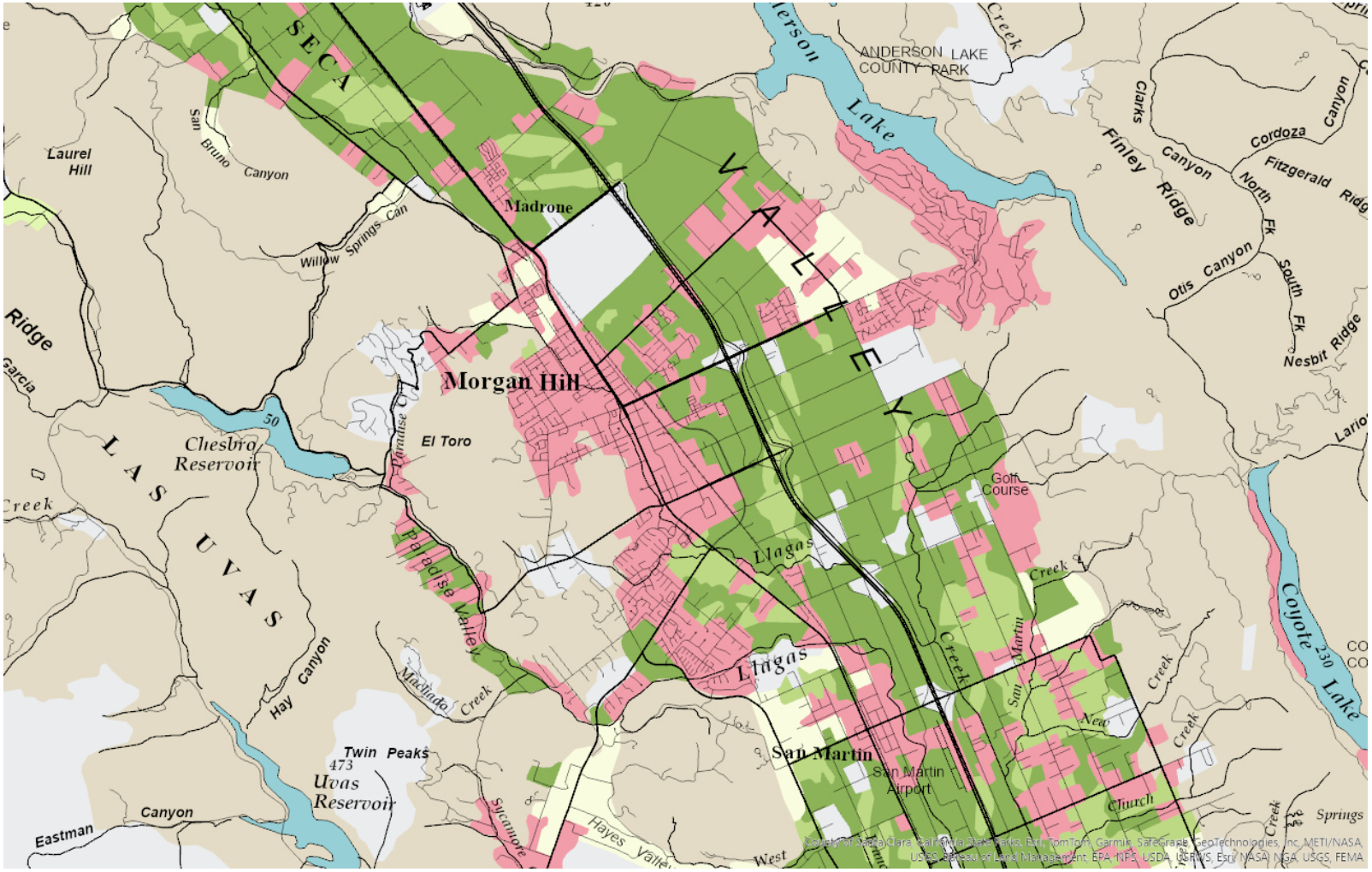
# Elk Grove, Sacramento County 1988



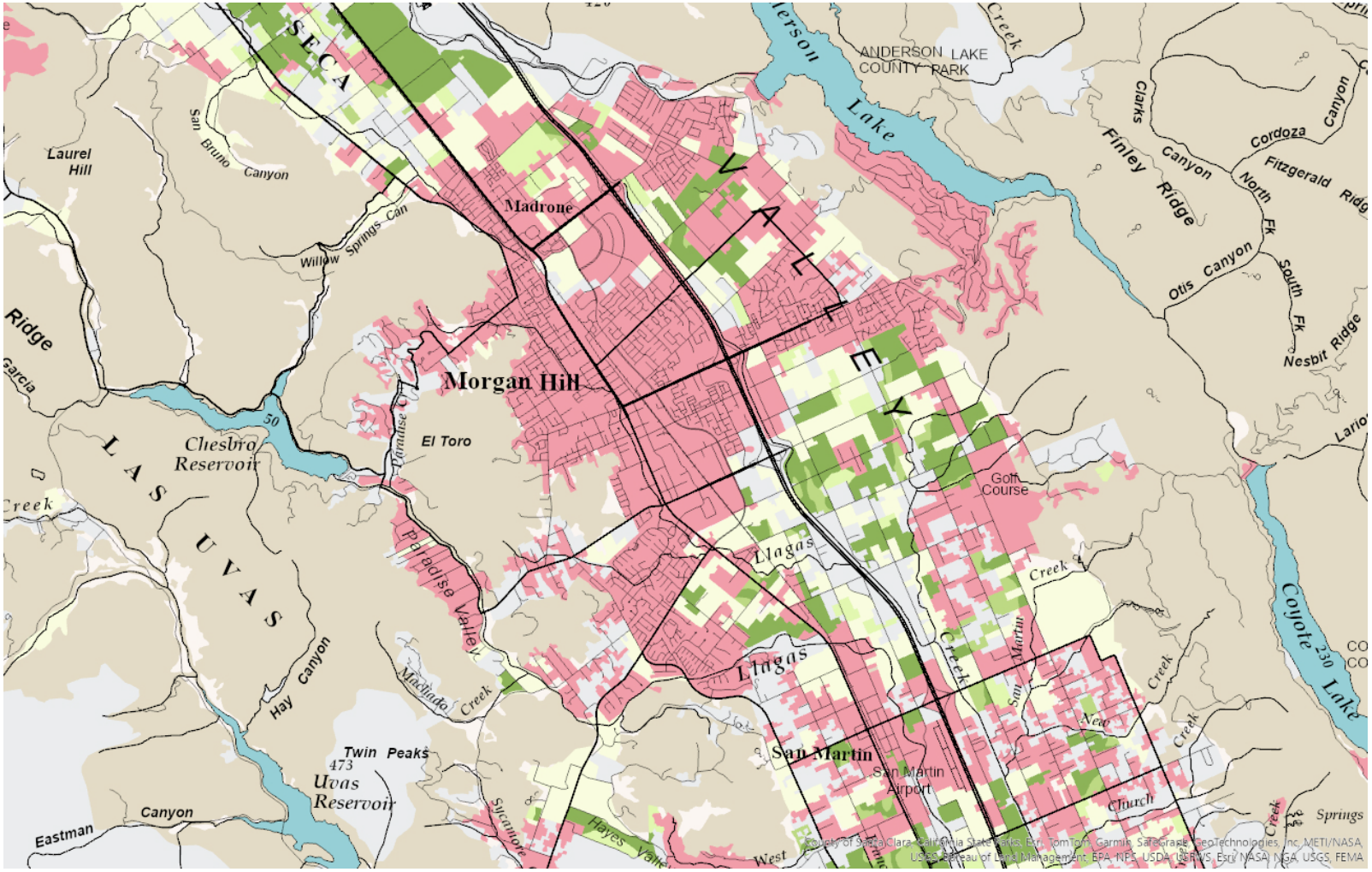
# Elk Grove, Sacramento County 2020



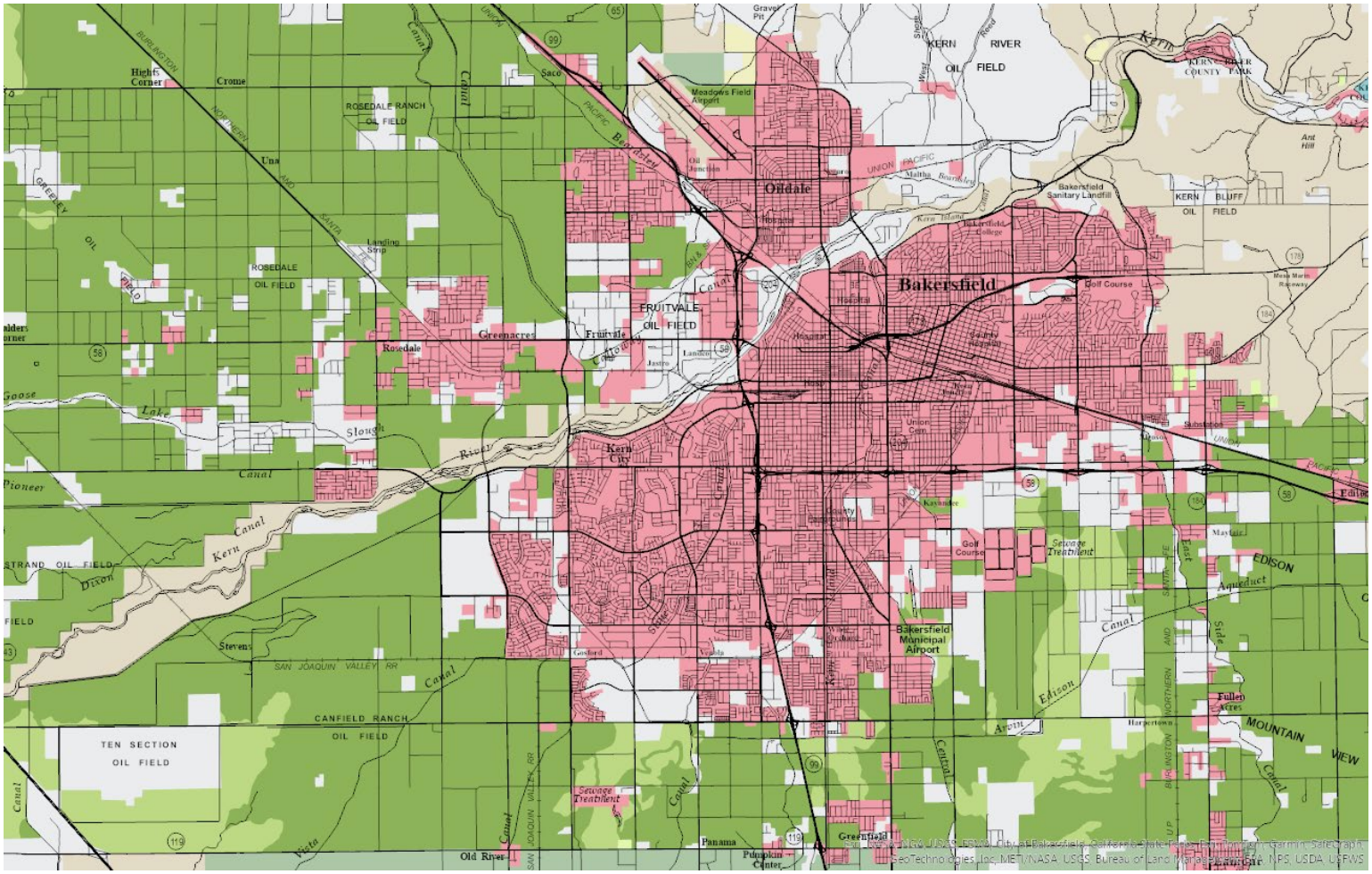
# Morgan Hill, Santa Clara County 1988



# Morgan Hill, Santa Clara County 2020



# Bakersfield, Kern County
# 1988



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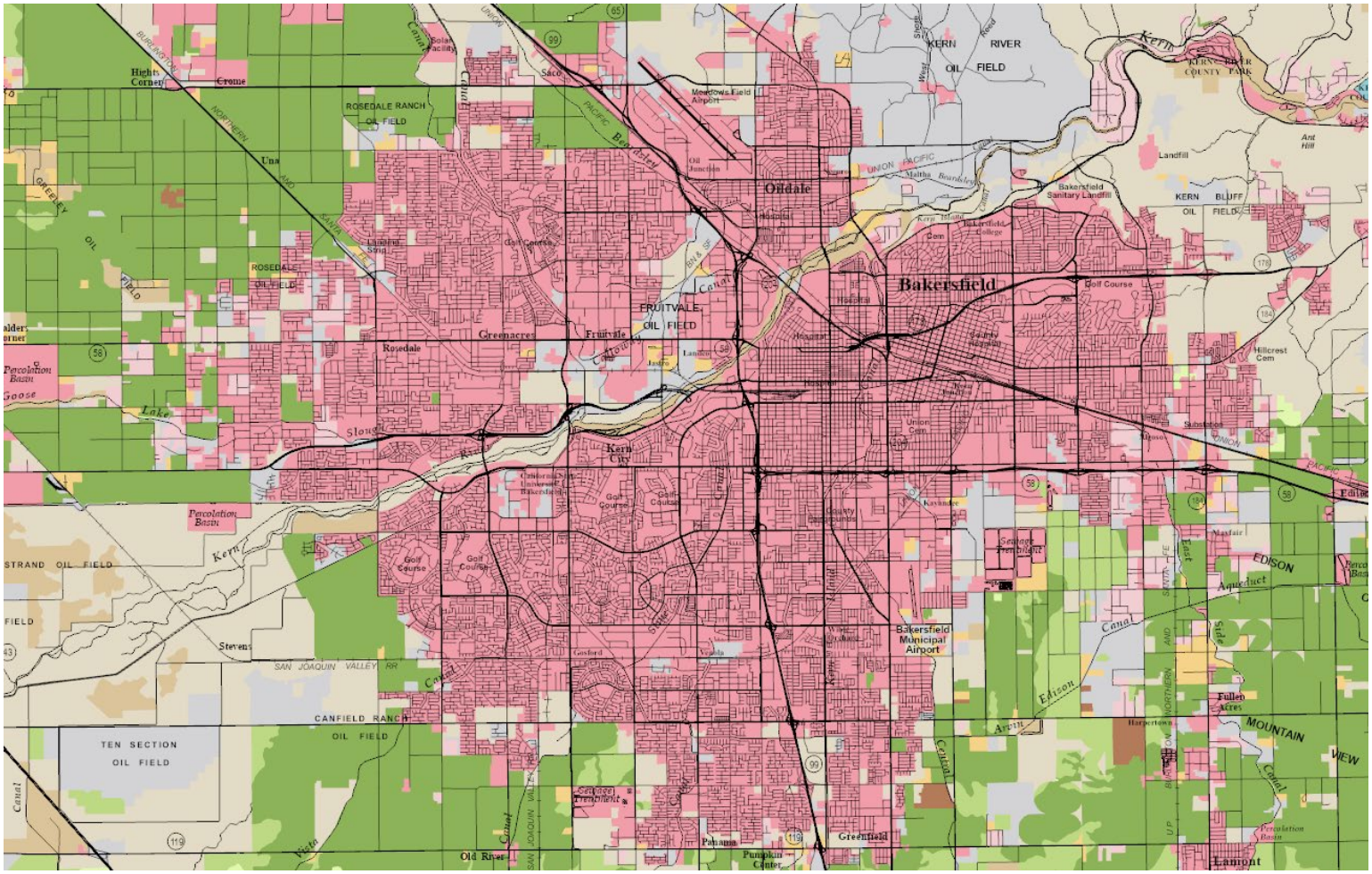
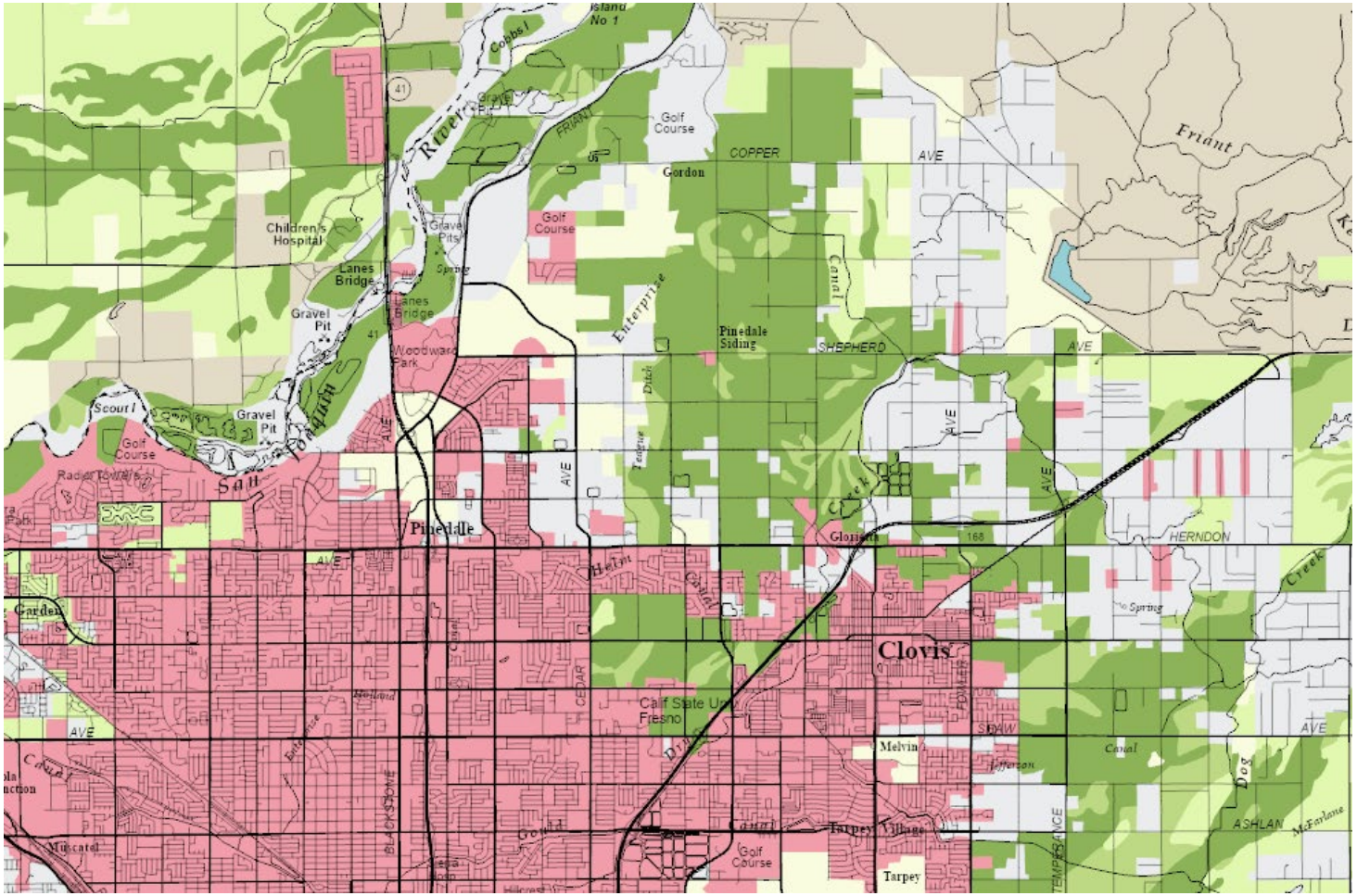
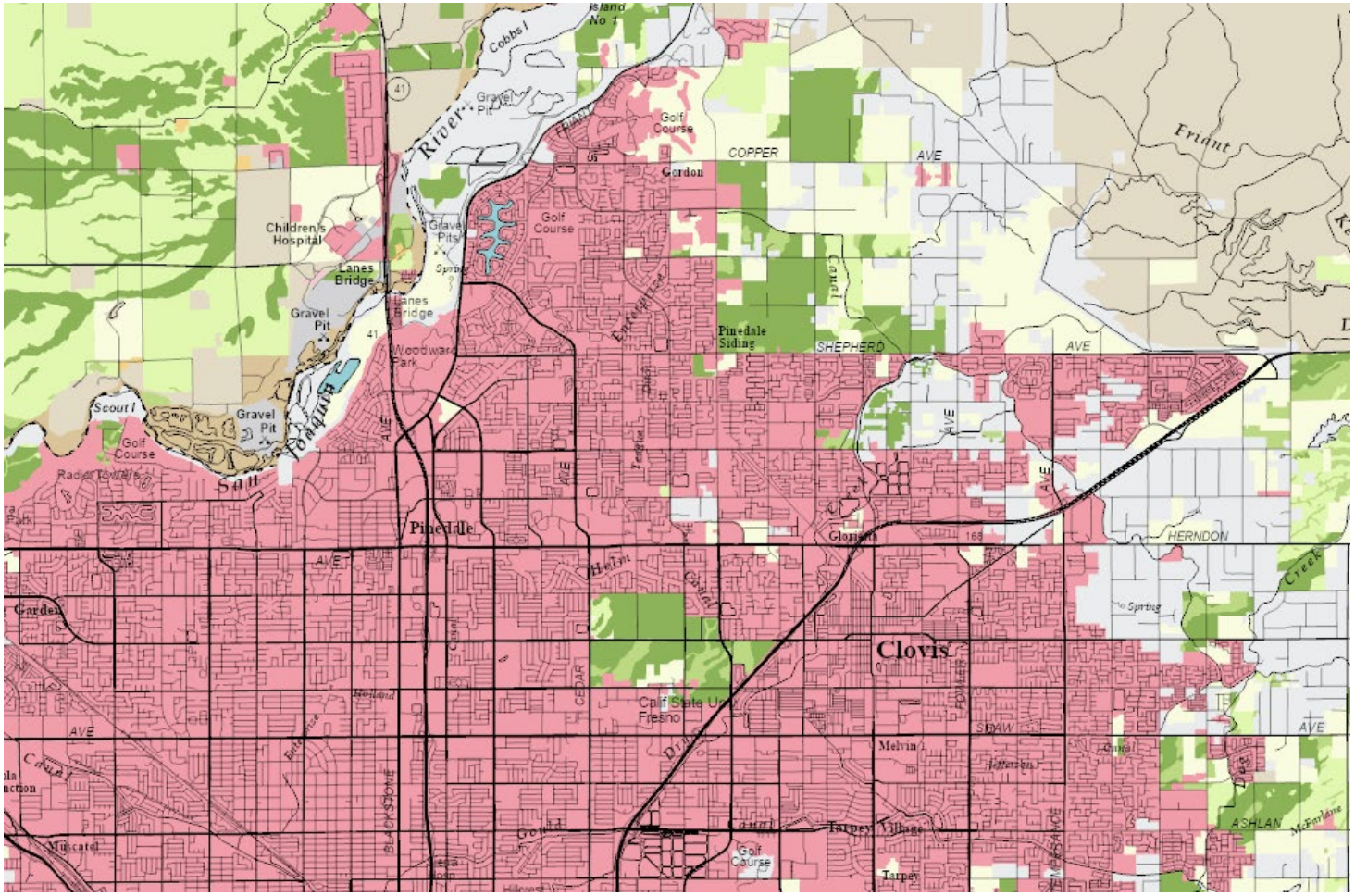


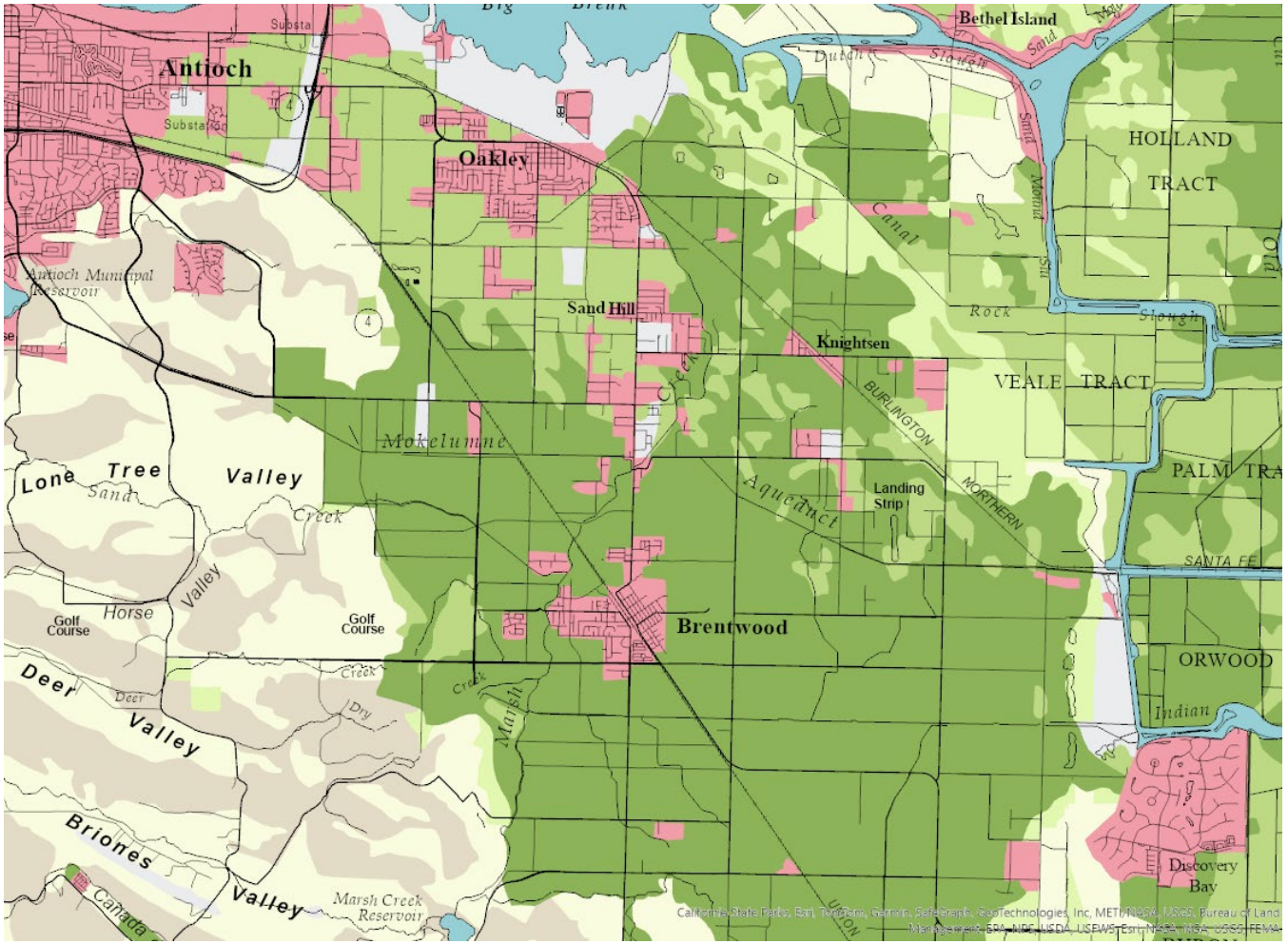
# Clovis, Fresno County
# 1984



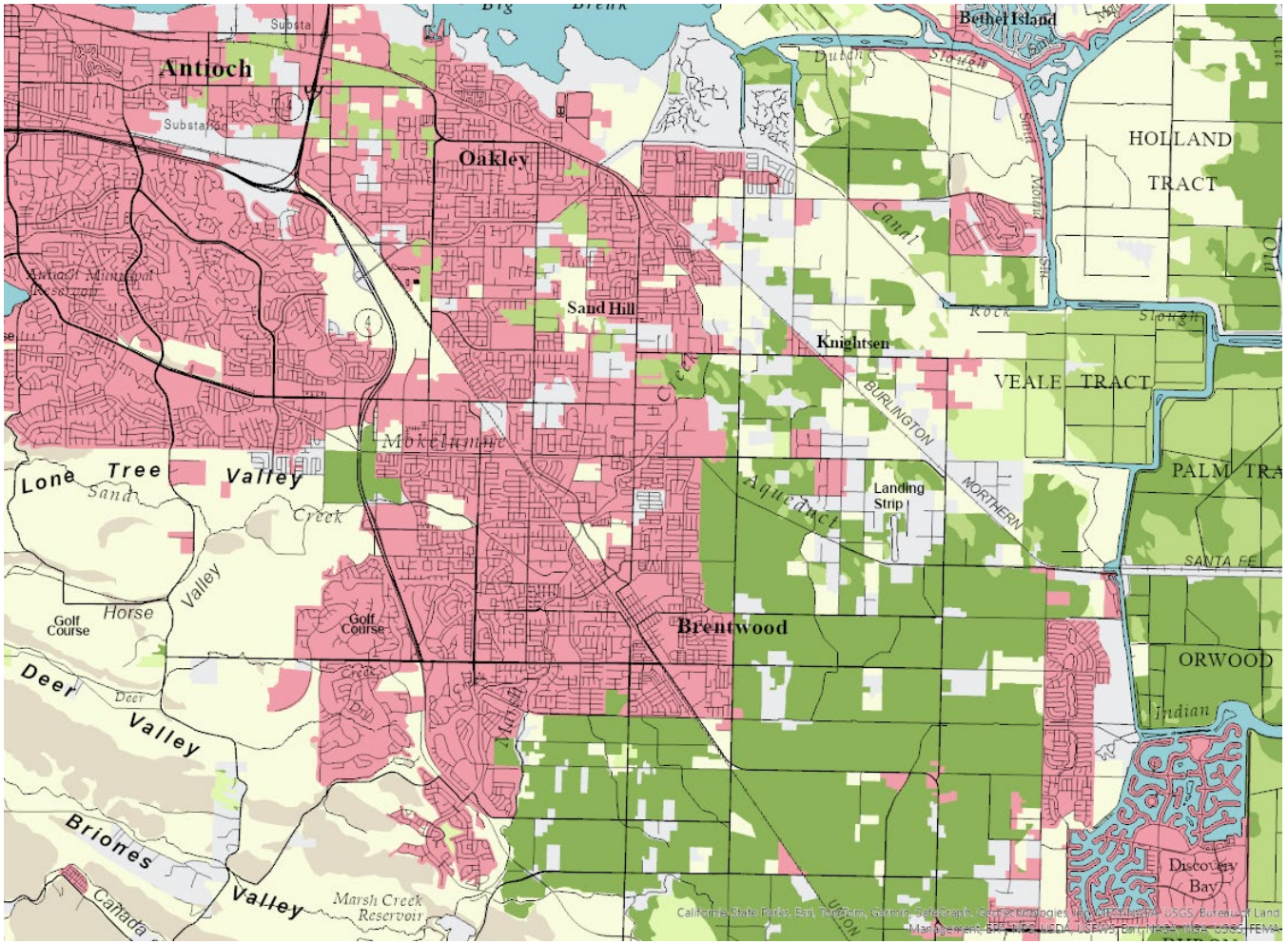
# Clovis, Fresno County
# 2020



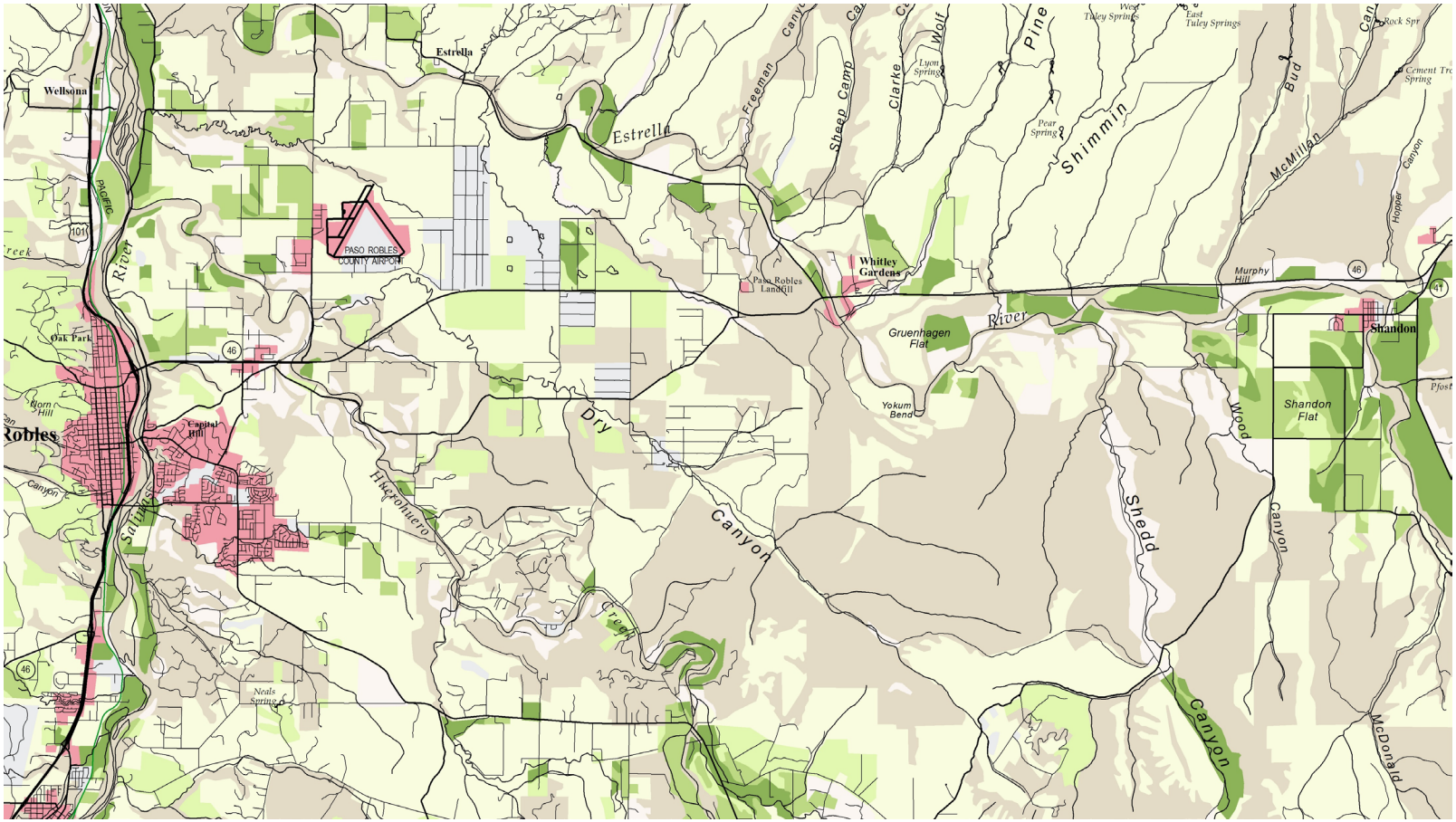
# Brentwood, Contra Costa County 1984



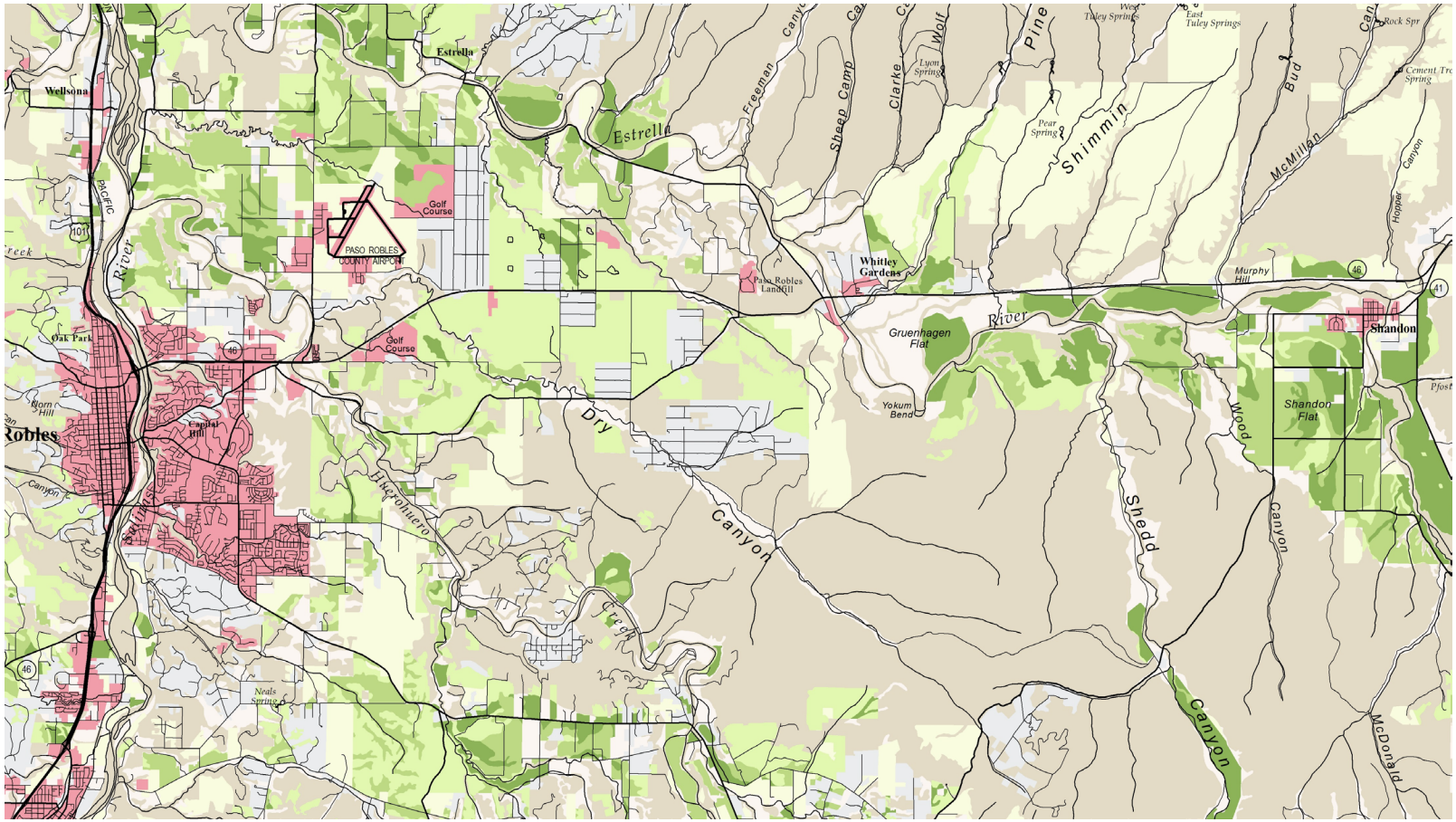
# Brentwood, Contra Costa County 2020



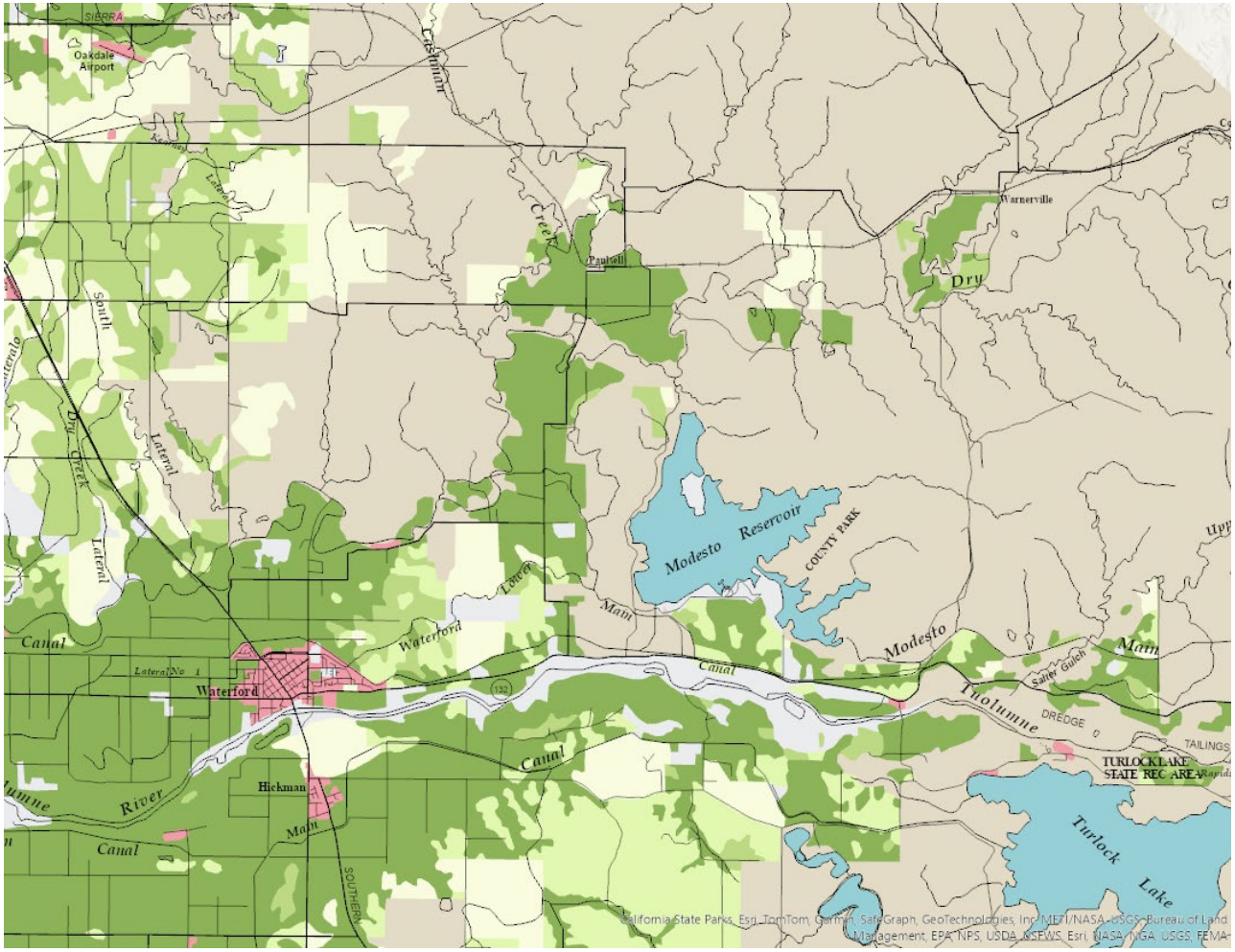
# Paso Robles, San Luis Obispo County 1988



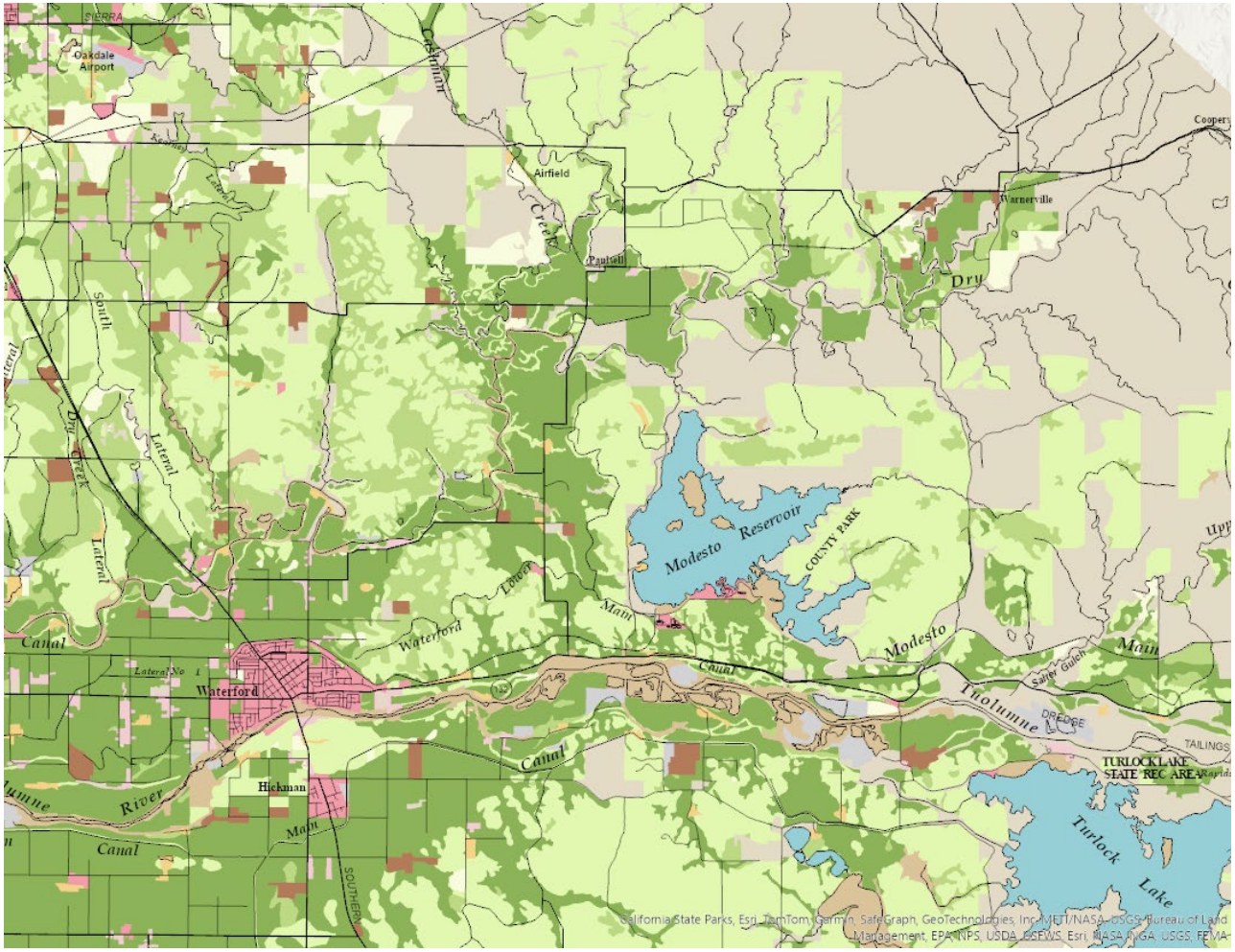
# Paso Robles, San Luis Obispo County 2018



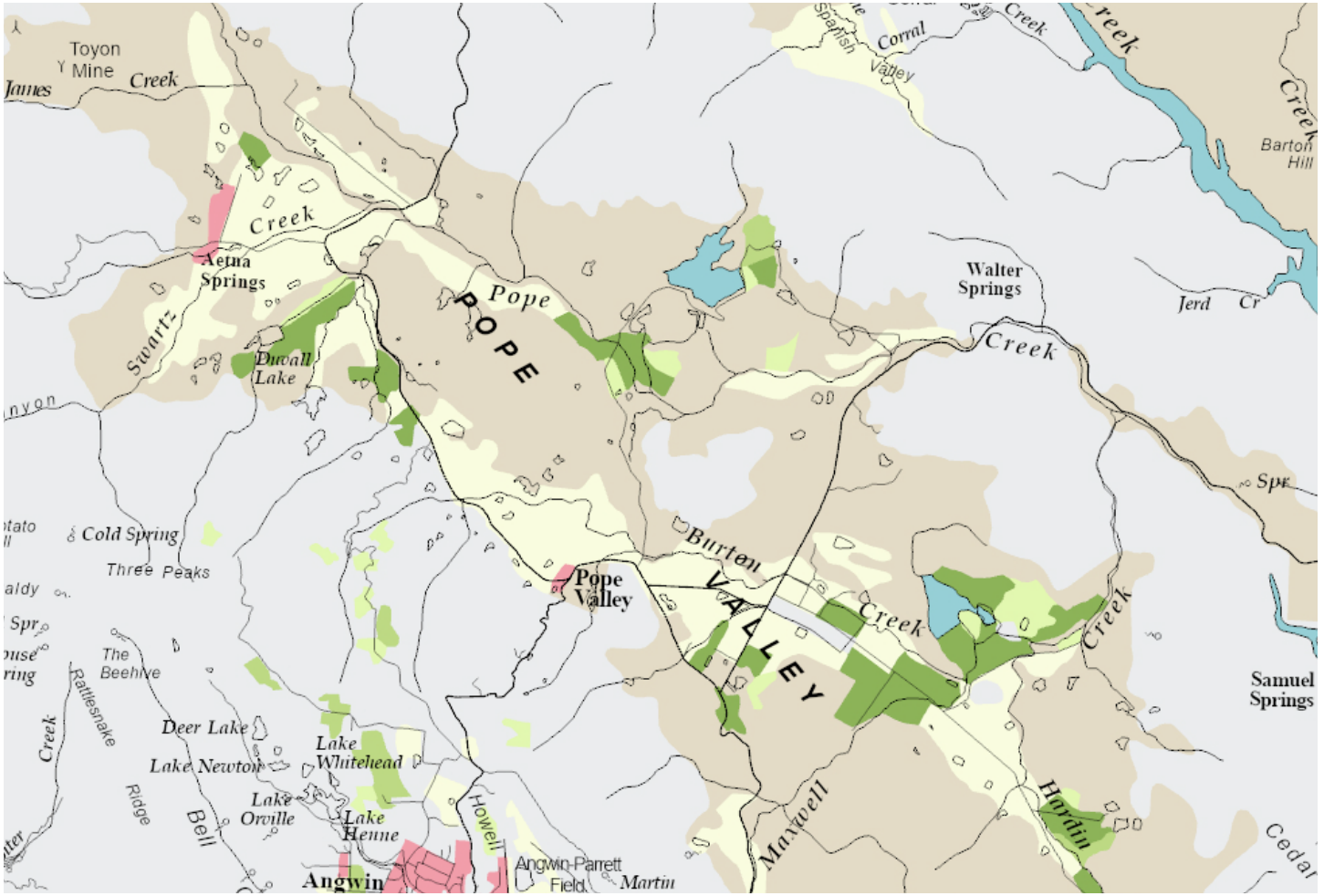
# Eastern Stanislaus County
# 1984



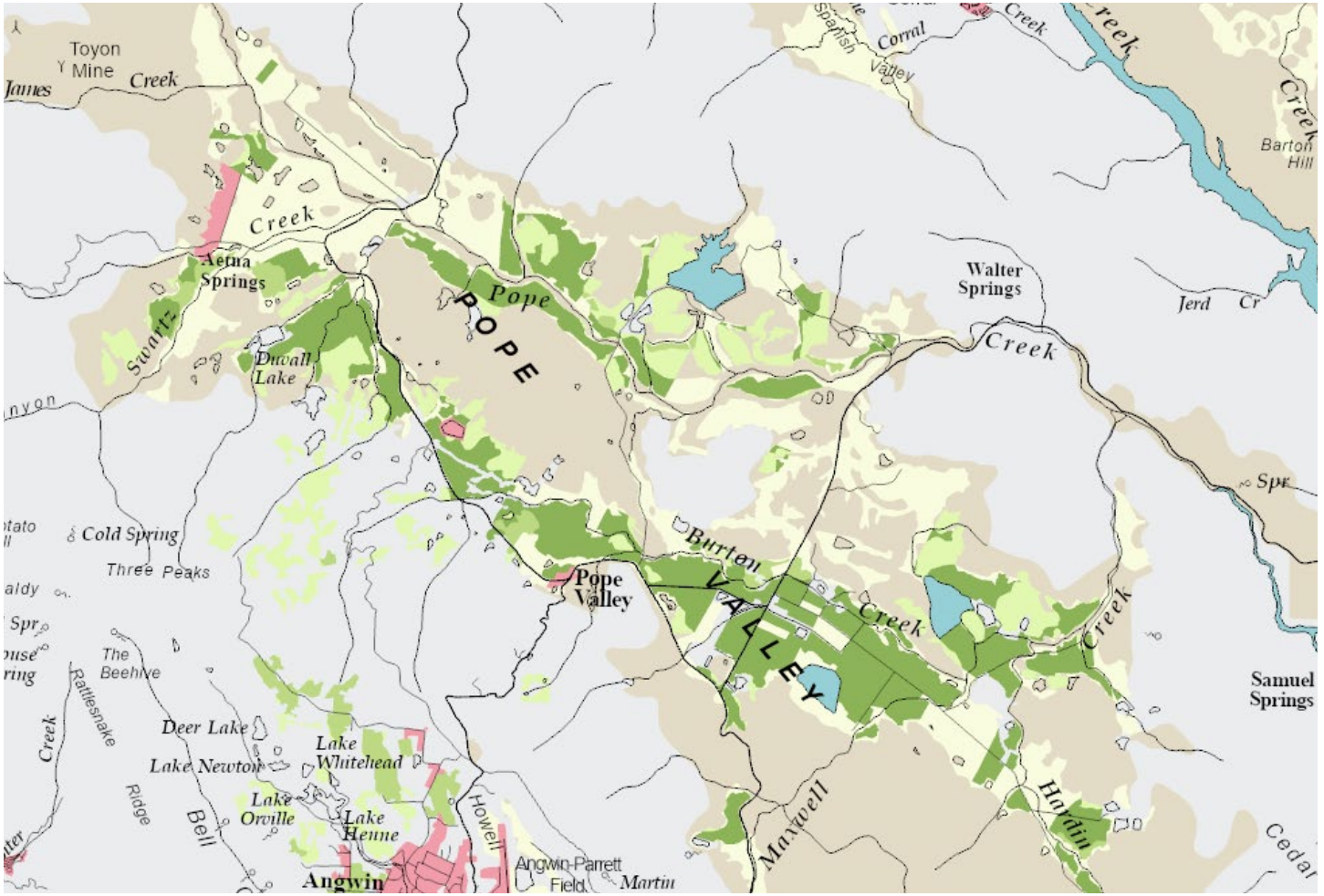
# Eastern Stanislaus County 2020



# Pope Valley, Napa County
# 1984



# Pope Valley, Napa County
# 2020



# Farmland Mapping & Monitoring Program

https://www.conservation.ca.gov/dlrp/fmmp
fmmp@conservation.ca.gov

Photo: M. Kisko

# References

U.S. Department of Agriculture, Natural Resources Conservation Service, Gridded Soil Survey Geographic (gSSURGO) Database.

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Photo: M. Kisko