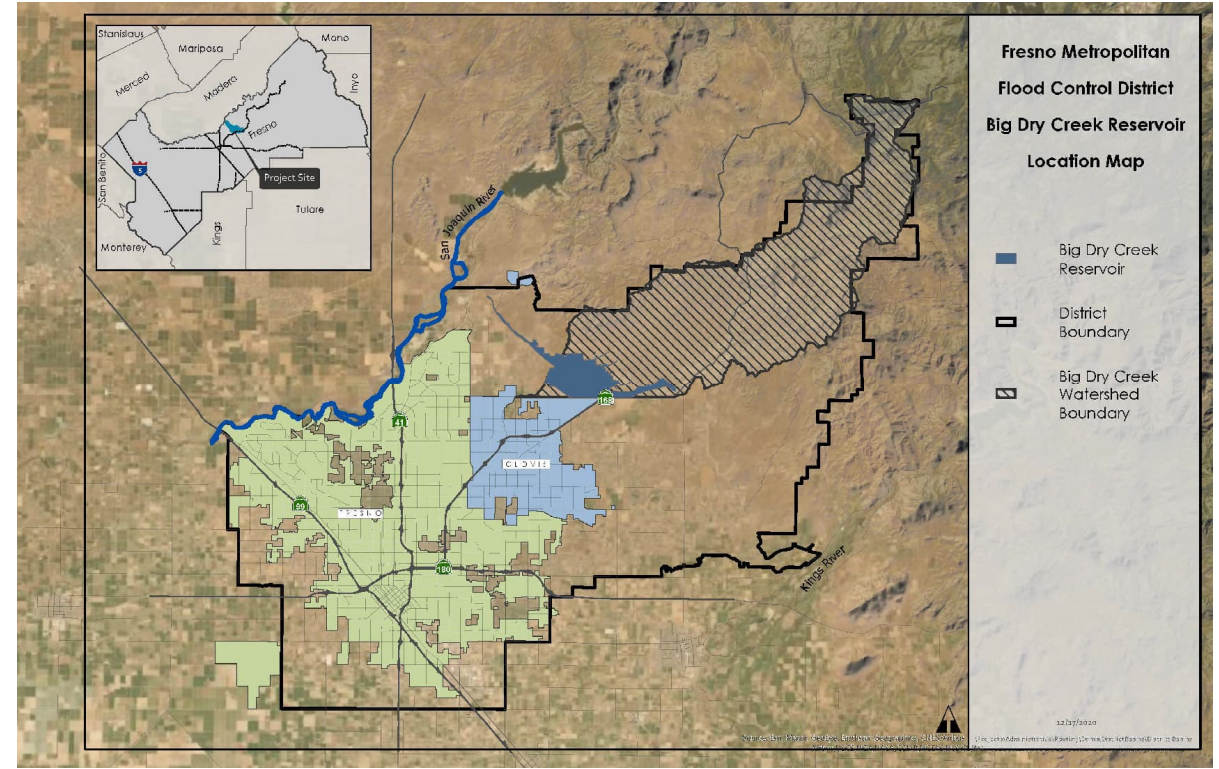




REDBANK AND FANCHER CREEK, CALIFORNIA- FEASIBILITY STUDY



Sacramento District
23 April 2024



U.S. ARMY



US Army Corps
of Engineers



TOPICS FOR DISCUSSION



- What is a Feasibility Study?
- Who is working on the Feasibility Study?
- When would the Study be completed?
- Where would actions be taken?
- Known Environmental Justice Issues
- Upcoming opportunities for involvement
- How to stay in the loop
- Discussion- What is important to you? What would you like the study team to know?



WHAT IS A FEASIBILITY STUDY?

A feasibility study is a planning process that:

- Identifies water resource problems and opportunities
- Develops potential solutions to those problems while maximizing opportunities
- Compares solutions to each other
- Recommends the solution that makes the most sense



THE STUDY TEAM

Name	Agency	Study Role
Brent Sunamoto	FMFCD	Assistant GM/District Engineer
Kassy Chauhan	FID	Special Project Manager
Dylan VanDyne	USACE	Project Manager
Ashley Labass	USACE	Support Project Manager
Jessica McCaffrey	USACE	Lead Planner
Lindsay Floyd	USACE	Support Planner
Jesse Schlunegger	USACE	Lead Hydraulics and Hydrology
Shyamal Chowdhury	USACE	Engineering Lead
Steven Mclemore	USACE	Environmental Support
Lorena Guerrero	USACE	Environmental Lead





WHAT IS THE FOCUS OF THIS FEASIBILITY STUDY?



A study to determine cost effective measures of increasing water supply and conservation

- Capturing more storm water
- Drought resiliency
- Groundwater recharge
- Life safety- residual flood risk
- Nature-based water storage solutions
- Resilience for existing infrastructure
- Storing more water
- Benefits to the environment
- Benefits to human health
- Benefits for recreation, scenery, and greenspace



WHEN WILL THE STUDY BE COMPLETED?

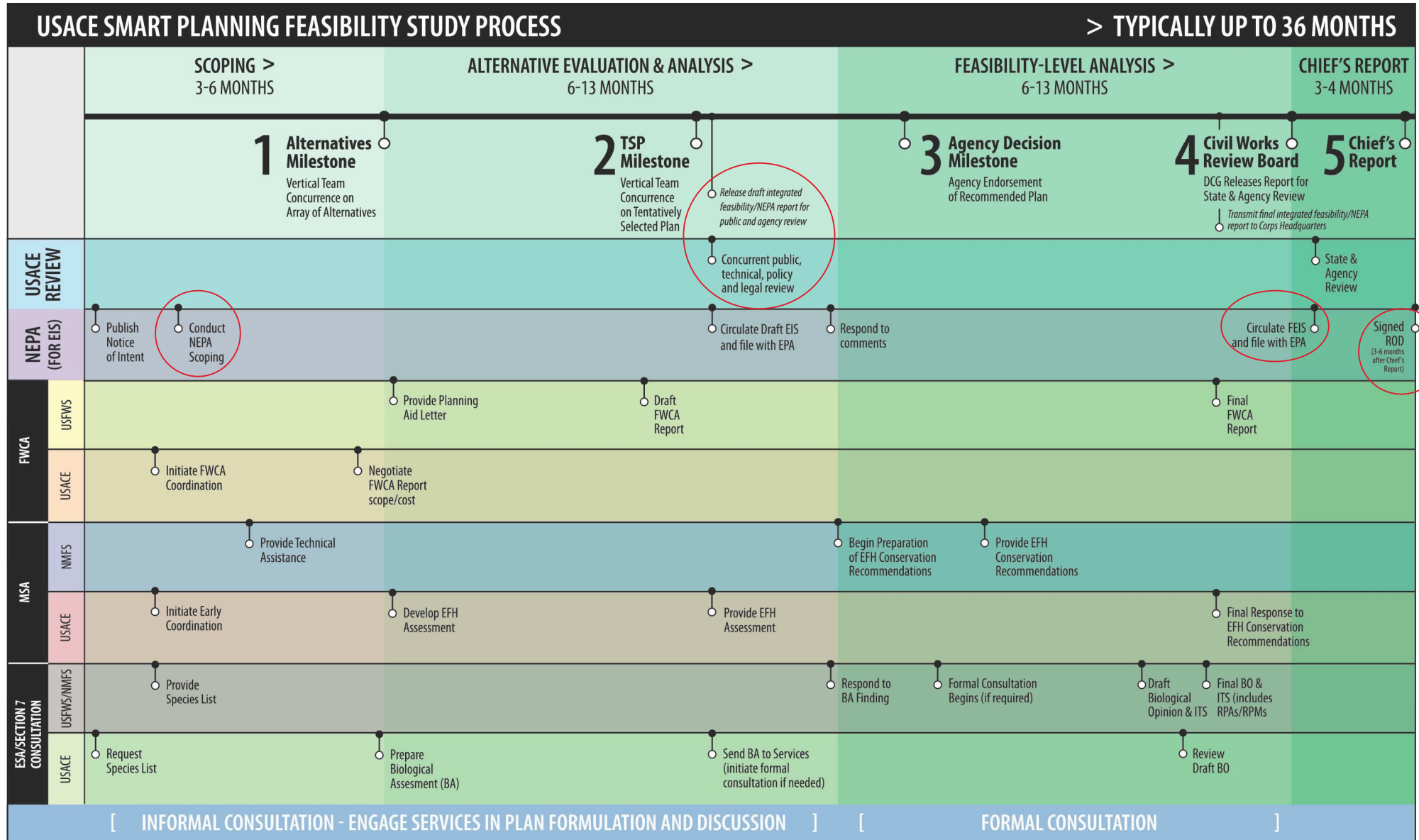


Milestone	Schedule
Study Began	February 7, 2024
Decision on Alternatives	August 30, 2024
Release National Environmental Policy Act (NEPA) for Public Review	30 days for public to review and make comments
Agency makes decision	Late 2026
Study sent to Congress for Approval and Authorization	Early 2027
Project Construction	? Dependent on congressional funding



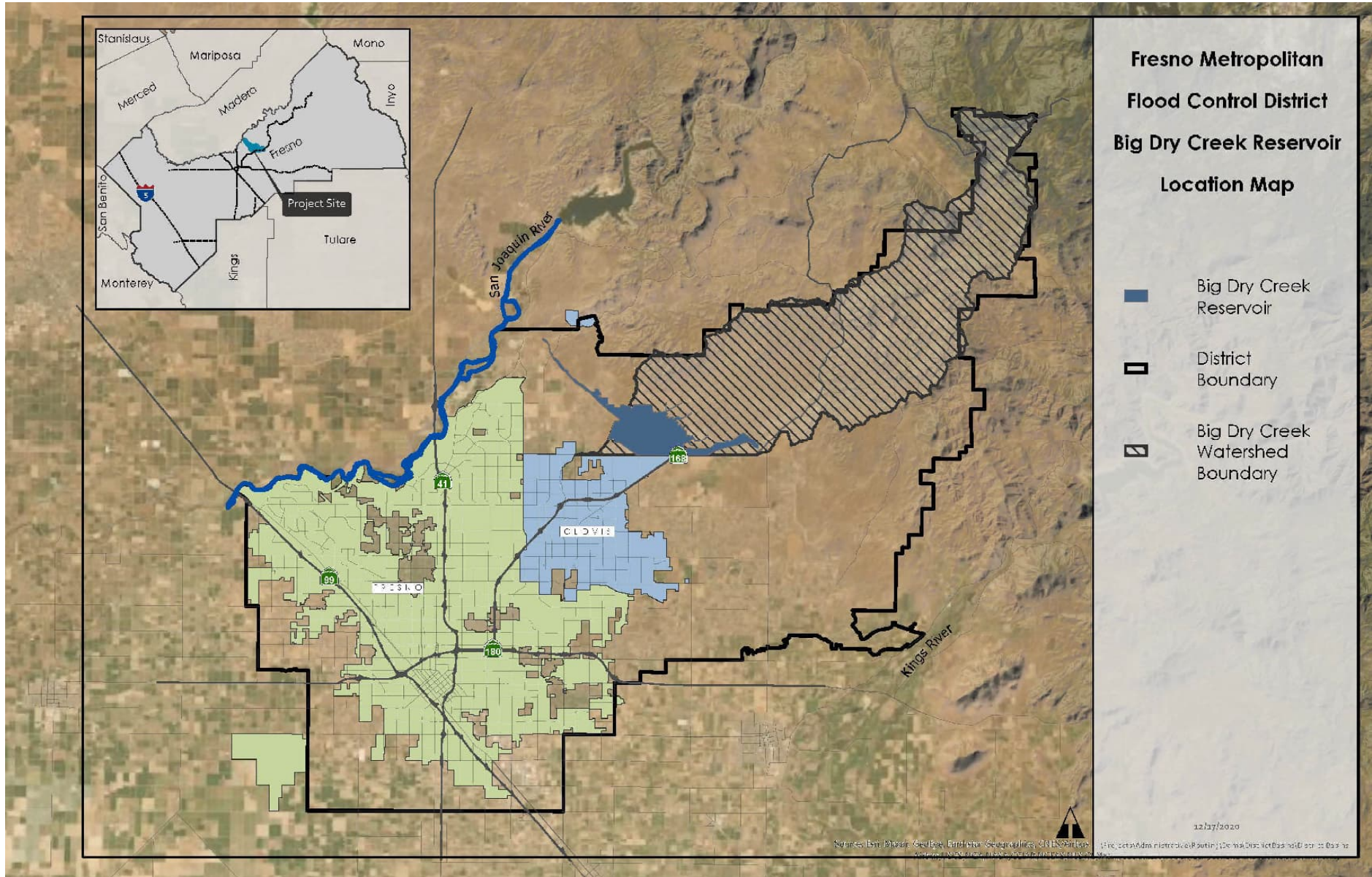


THE FEASIBILITY STUDY PROCESS AND NEPA/CEQA





WHERE WOULD ACTION BE TAKEN?





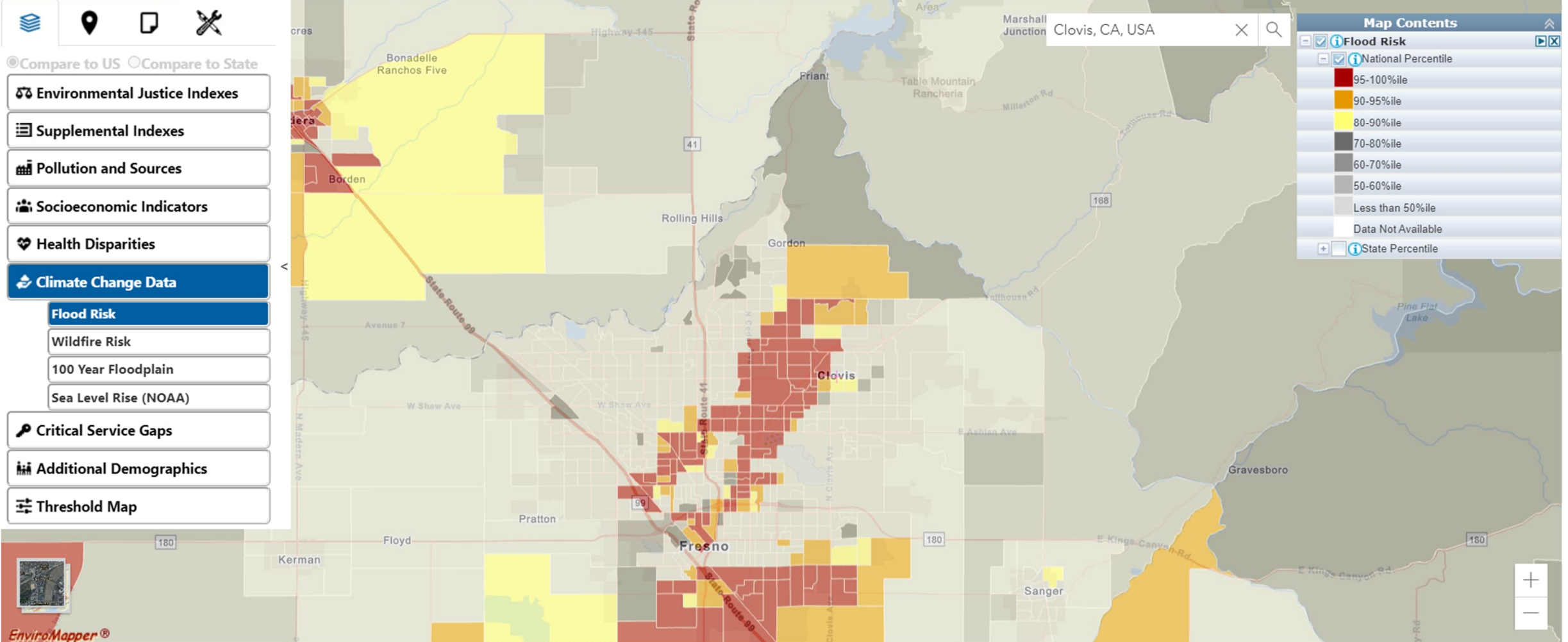
KNOWN ENVIRONMENTAL JUSTICE ISSUES



EPA EJScreen EPA's Environmental Justice Screening and Mapping Tool (Version 2.2)

[EJScreen Website](#) | [Mobile](#) | [Glossary](#) | [Help](#)

Please note: Territory data (except Puerto Rico) is not available as comparable to the US. It is only comparable to the territory itself by using the 'Compare to State' functionality. Likewise, some of the indicators may not be available for territories.



- Compare to US Compare to State
- Environmental Justice Indexes
- Supplemental Indexes
- Pollution and Sources
- Socioeconomic Indicators
- Health Disparities
- Climate Change Data**
 - Flood Risk**
 - Wildfire Risk
 - 100 Year Floodplain
 - Sea Level Rise (NOAA)
- Critical Service Gaps
- Additional Demographics
- Threshold Map



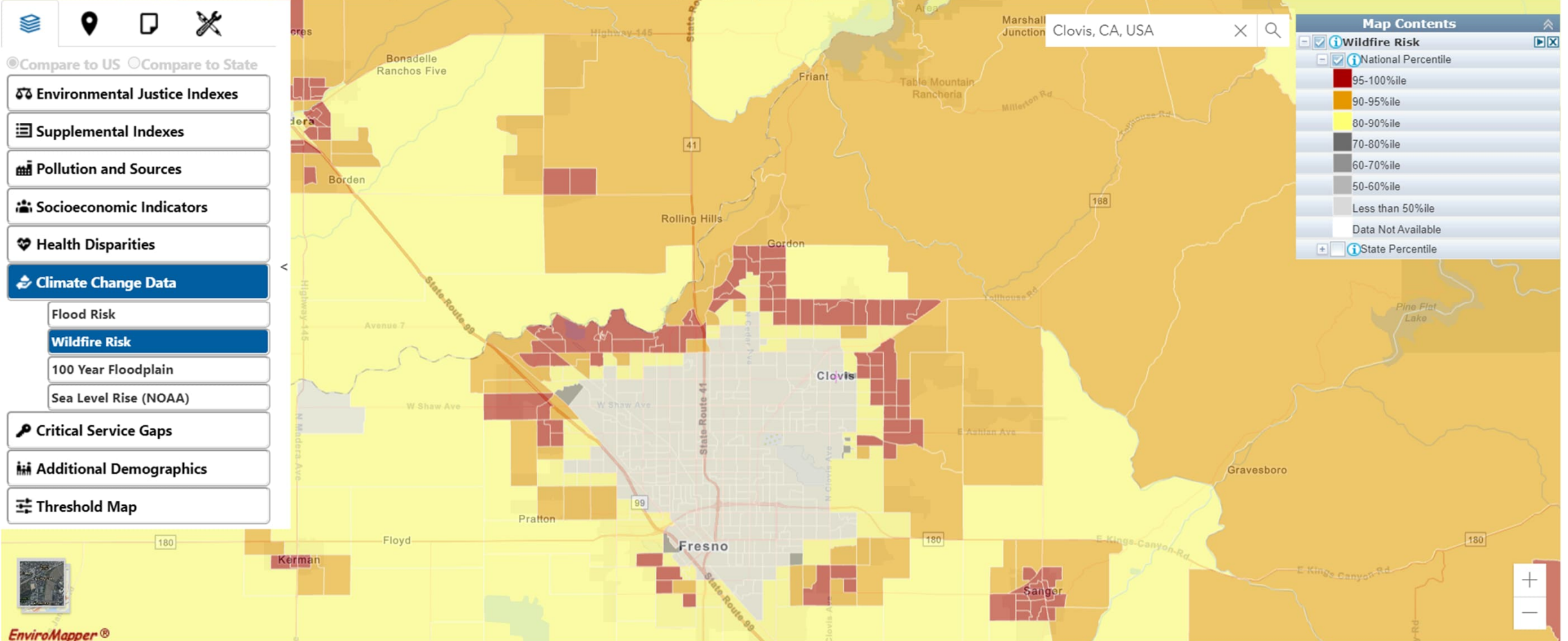
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EnviroMapper®



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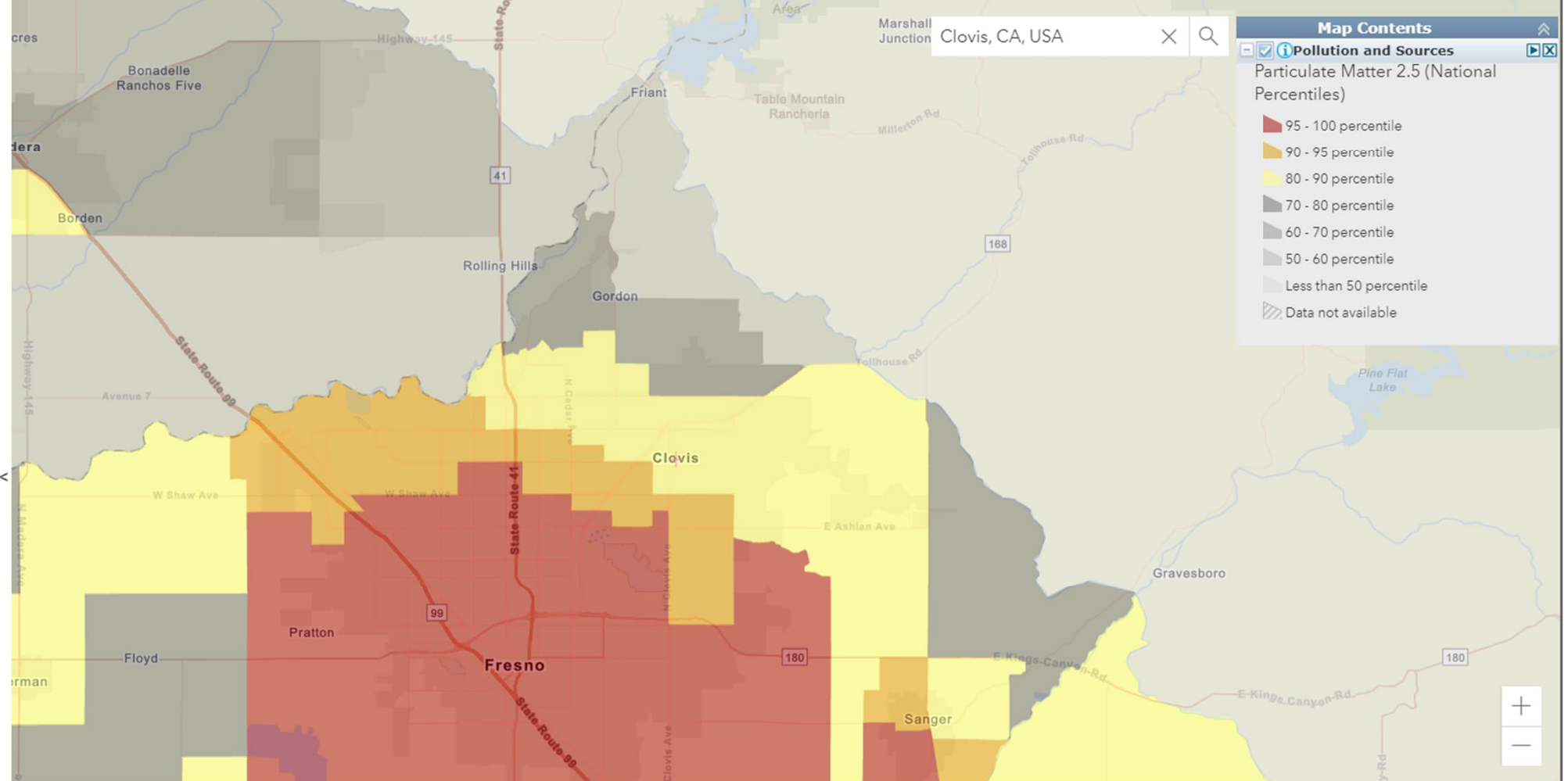
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Compare to US
 Compare to State

- Environmental Justice Indexes
- Supplemental Indexes
- Pollution and Sources**
 - Particulate Matter 2.5**
 - Ozone
 - Diesel Particulate Matter
 - Air Toxics Cancer Risk
 - Air Toxics Respiratory HI
 - Toxic Releases to Air
 - Traffic Proximity
 - Lead Paint
 - Superfund Proximity
 - RMP Facility Proximity
 - Hazardous Waste Proximity
 - Underground Storage Tanks
 - Wastewater Discharge
- Socioeconomic Indicators
 - Health Disparities
 - Climate Change Data



Map Contents

- Particulate Matter 2.5 (National Percentiles)**
 - 95 - 100 percentile
 - 90 - 95 percentile
 - 80 - 90 percentile
 - 70 - 80 percentile
 - 60 - 70 percentile
 - 50 - 60 percentile
 - Less than 50 percentile
 - Data not available



KNOWN ENVIRONMENTAL JUSTICE ISSUES



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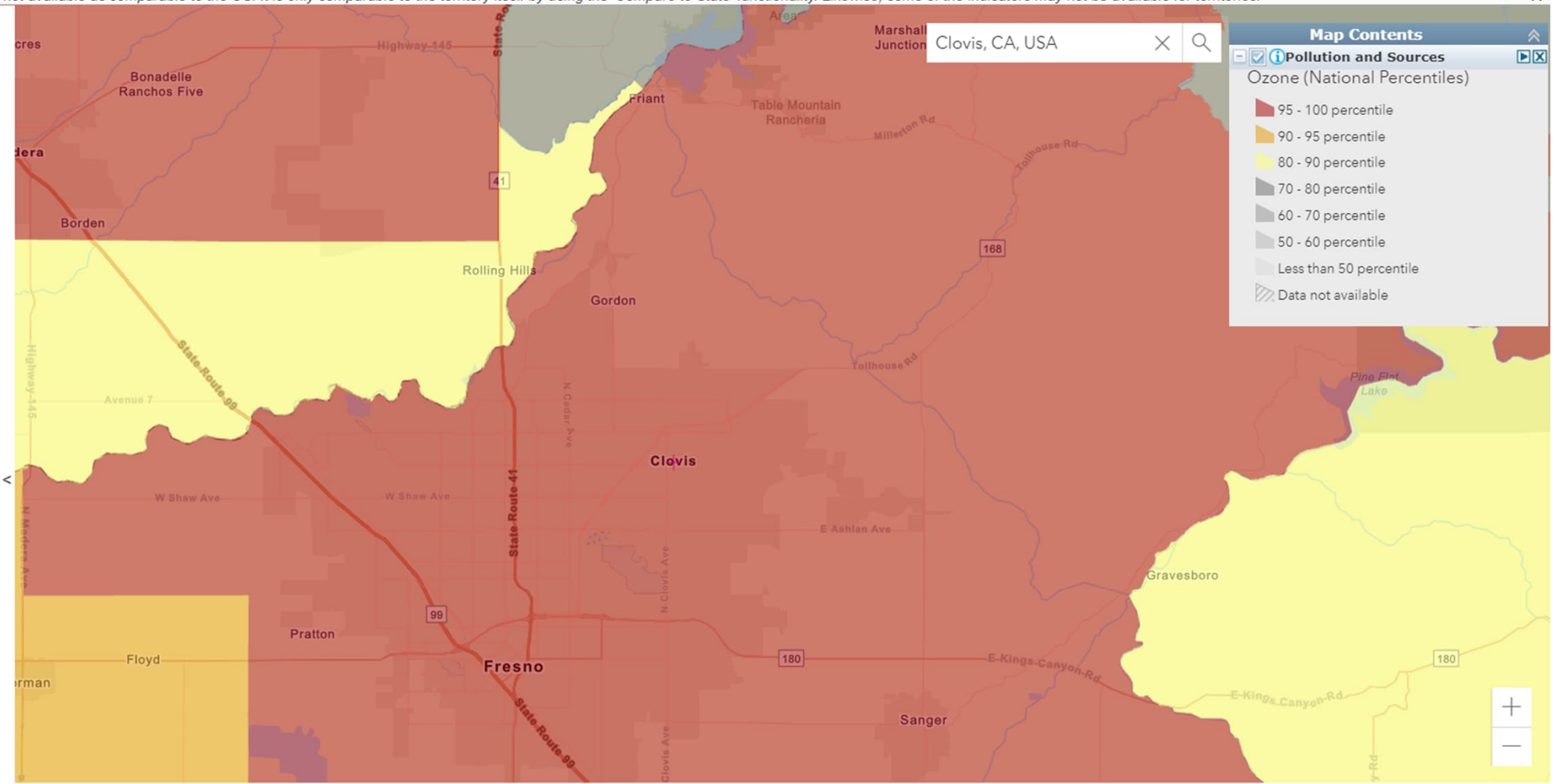
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Socioeconomic Indicators
 Health Disparities
 Climate Change Data



Map Contents

Pollution and Sources

Ozone (National Percentiles)

- 95 - 100 percentile
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Compare to US Compare to State

Environmental Justice Indexes

Supplemental Indexes

Pollution and Sources

Socioeconomic Indicators

Health Disparities

Low Life Expectancy

Heart Disease

Asthma

Cancer

Persons with Disabilities

Climate Change Data

Critical Service Gaps

Additional Demographics

Threshold Map

Clovis, CA, USA

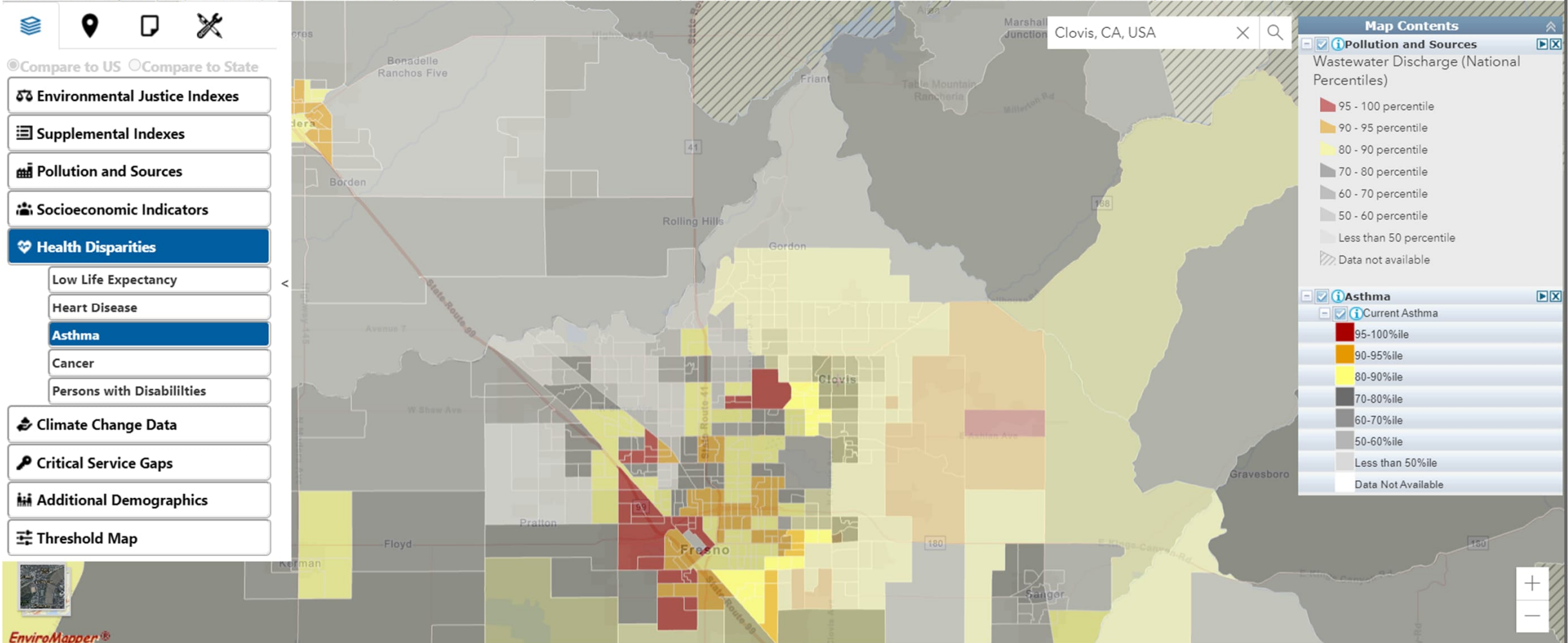
Map Contents

Pollution and Sources
Wastewater Discharge (National Percentiles)

- 95 - 100 percentile
- 90 - 95 percentile
- 80 - 90 percentile
- 70 - 80 percentile
- 60 - 70 percentile
- 50 - 60 percentile
- Less than 50 percentile
- Data not available

Asthma

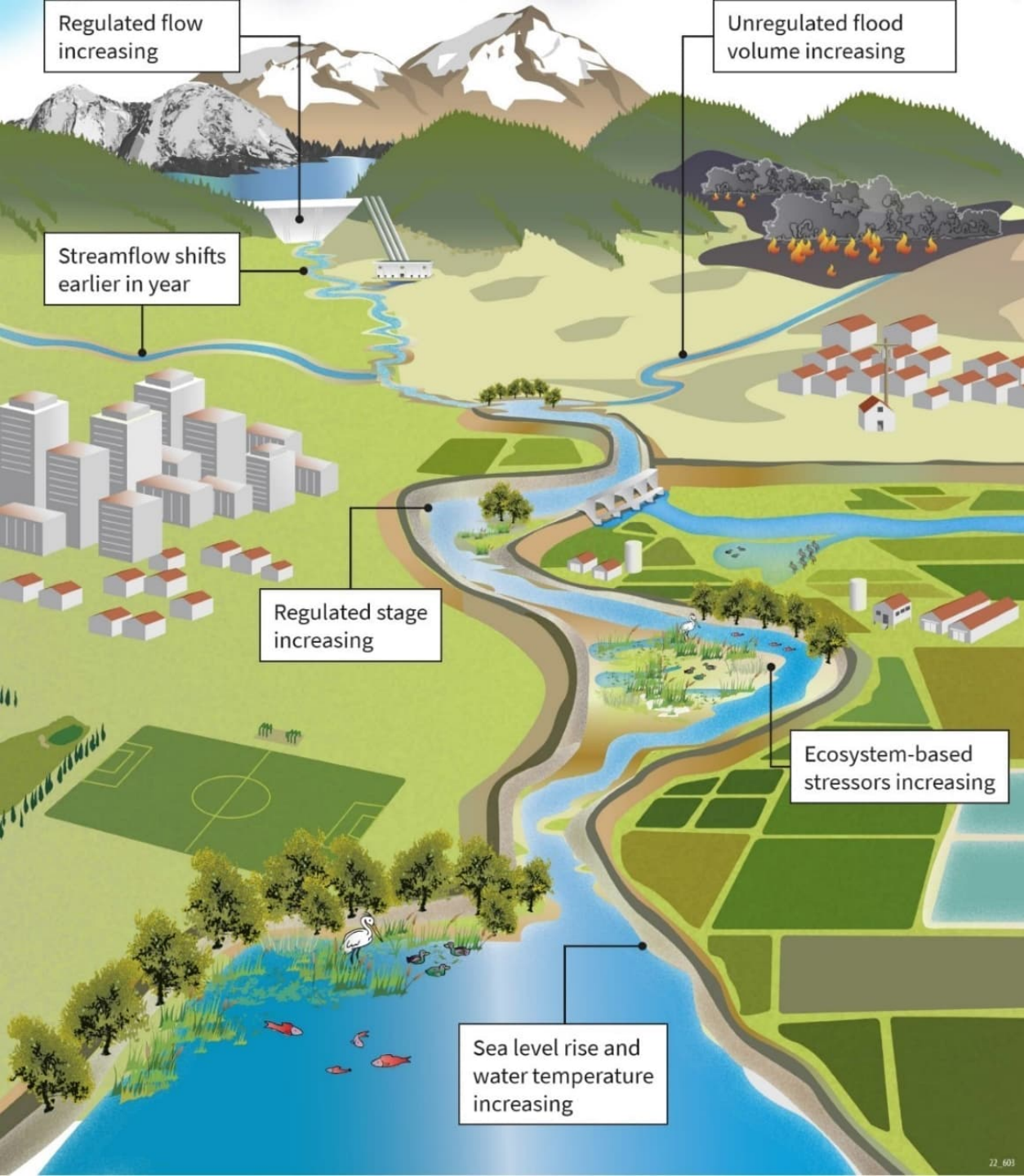
- Current Asthma**
- 95-100%ile
- 90-95%ile
- 80-90%ile
- 70-80%ile
- 60-70%ile
- 50-60%ile
- Less than 50%ile
- Data Not Available



EnviroMapper®

City Of Fresno, Fresno County Dept. PWP, California State Parks, Esri, TomTom, Garmin, SafeGraph, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS

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CLIMATE CHANGE IMPACTS



CLIMATE CHANGE IMPACTS



Increase in frequency and severity of extreme weather events

- More frequent and severe heatwaves
- More frequent and severe droughts
- More frequent and severe wildfires
- More precipitation extremes (flashier system)
- Losses to habitat and ecosystems

Follow on economic effects

- Difficulty in obtaining homeowners/hazard insurance
- Uncertainty of water supply for M&I and Agricultural uses
- Crop losses

Follow on impacts to public health

- Hotter temperatures result in more smog
- Higher temperatures result in more extreme heat events



EXISTING CONDITIONS – BIG DRY CREEK RESERVOIR



Slide 16

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I will insert pictures from the site visit here

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EXISTING CONDITIONS – BASINS





EXISTING CONDITIONS – FANCHER AND REDBANK CREEK





UPCOMING OPPORTUNITIES FOR INVOLVEMENT



- Additional official NEPA scoping meeting may be held after alternatives are developed

We will largely request the same type of information, but will have more targeted measures and locations

- Public Meeting to Support NEPA/CEQA process

Usually held just before or during the public review period

- Review Study Materials and NEPA/CEQA documents during public review

All documentation will be released for review during the public review period



HOW TO STAY IN THE LOOP



Sign up for study updates
(Check yes on sign-in sheet or let us know in the chat)

Send us an email:

RedbankandFancher@usace.army.mil

Visit our websites:

<https://www.spk.usace.army.mil/Missions/Civil-Works/Redbank-and-Fancher-Creek/>

www.Fresnostreamgroup.com



OPEN DISCUSSION-



What is important to you?

What would you like the study team to know?

Do you have any information or resources that you would like to share for our consideration during the study?