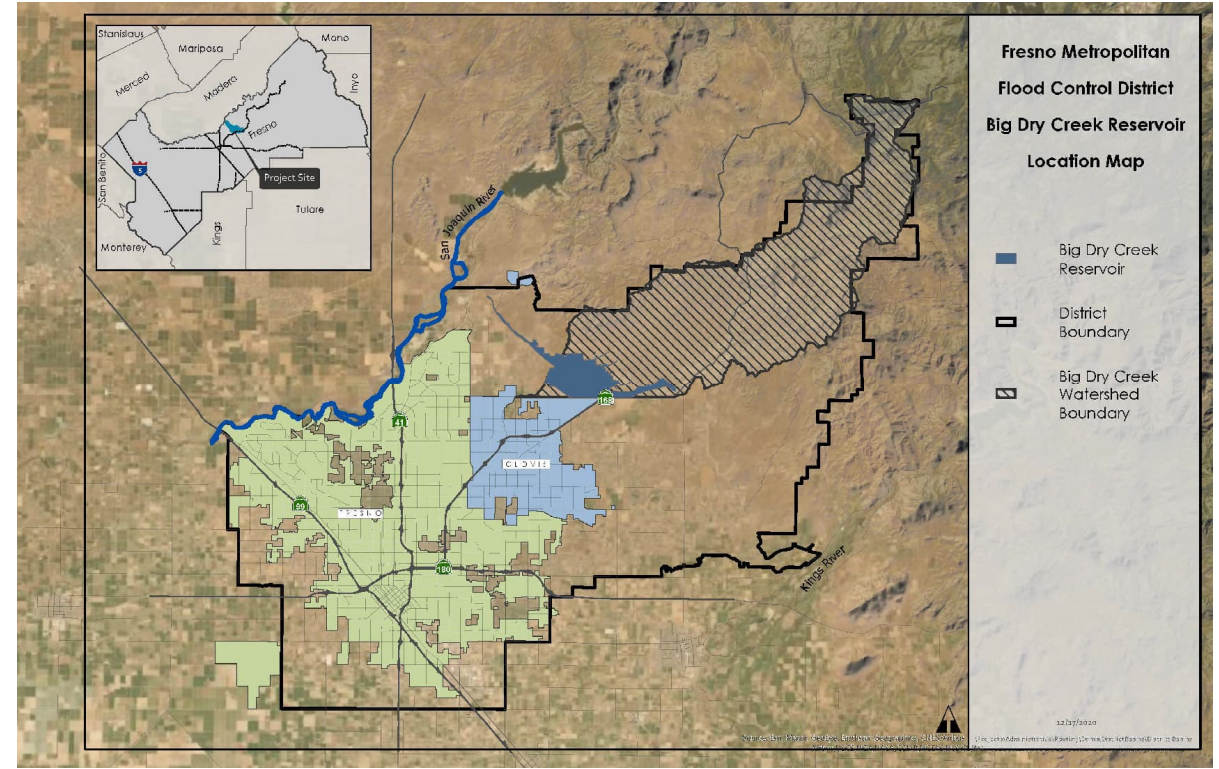




REDBANK AND FANCHER CREEK, CALIFORNIA- FEASIBILITY STUDY



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 biological resources
- 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



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





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?

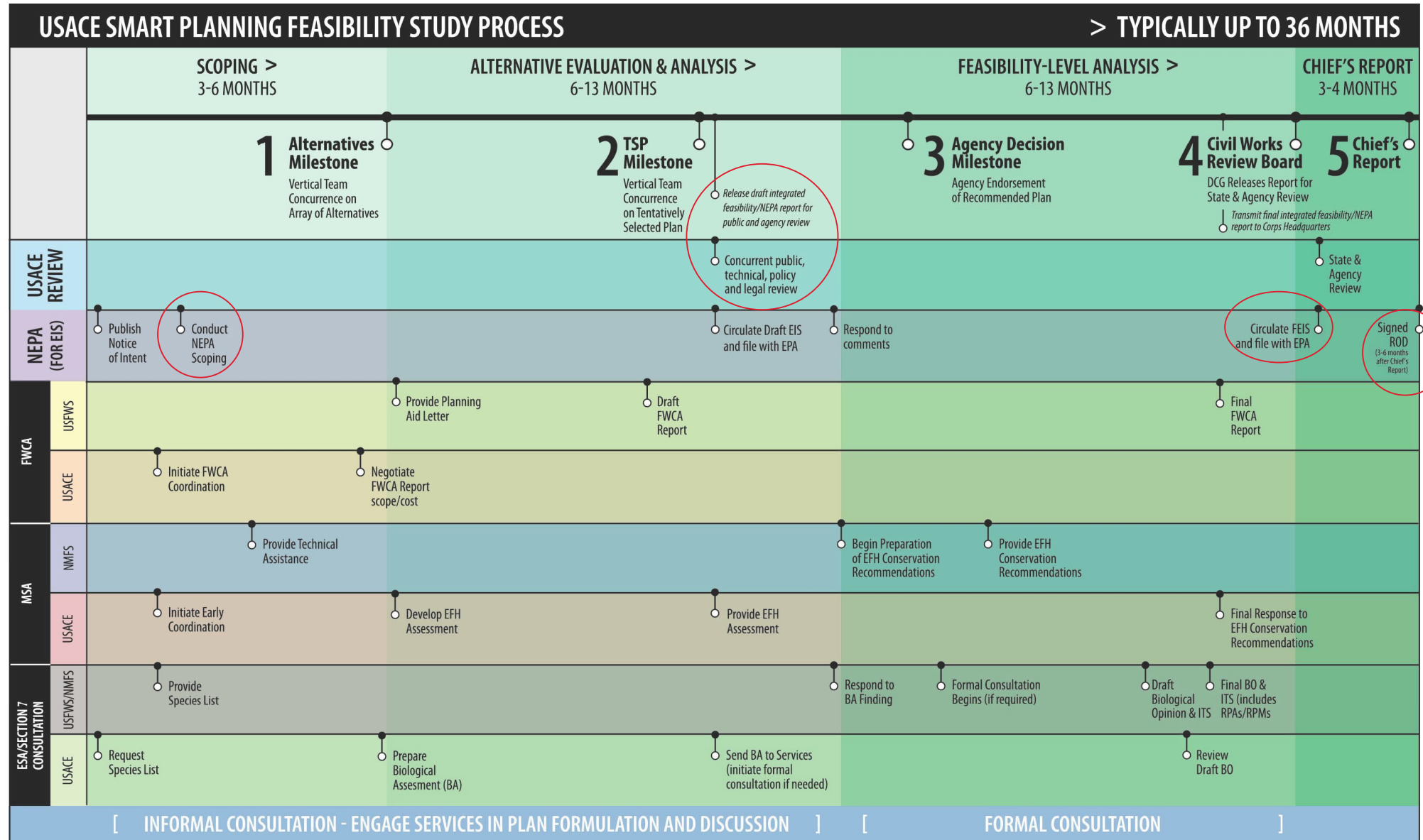


Milestone	Schedule
Study Began	February 21, 2024
Decision on Alternatives	August 30, 2024
Release National Environmental Policy Act (NEPA) for Public Review	30 days for public to review and make comments
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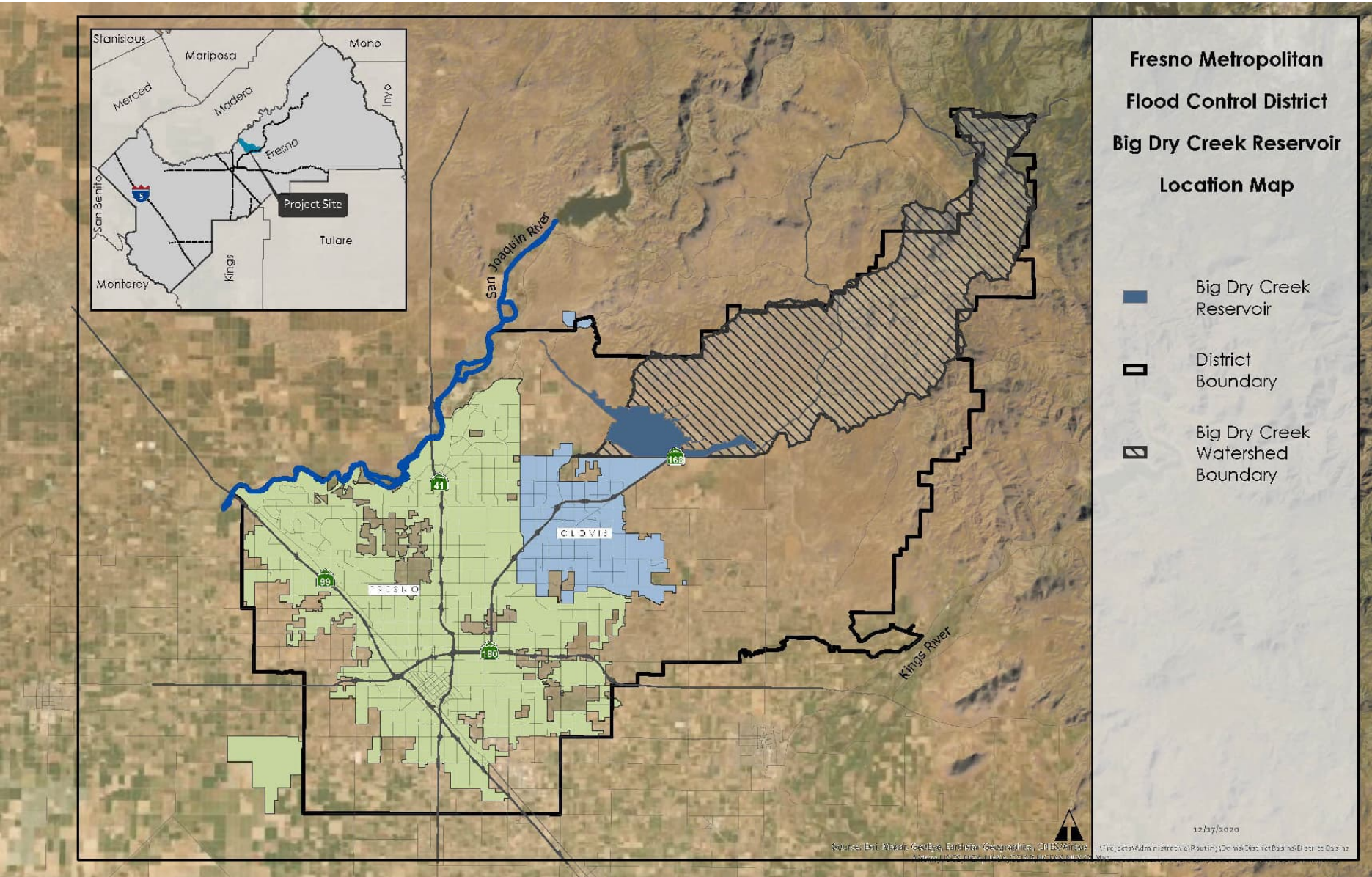


THE FEASIBILITY STUDY PROCESS AND NEPA/CEQA



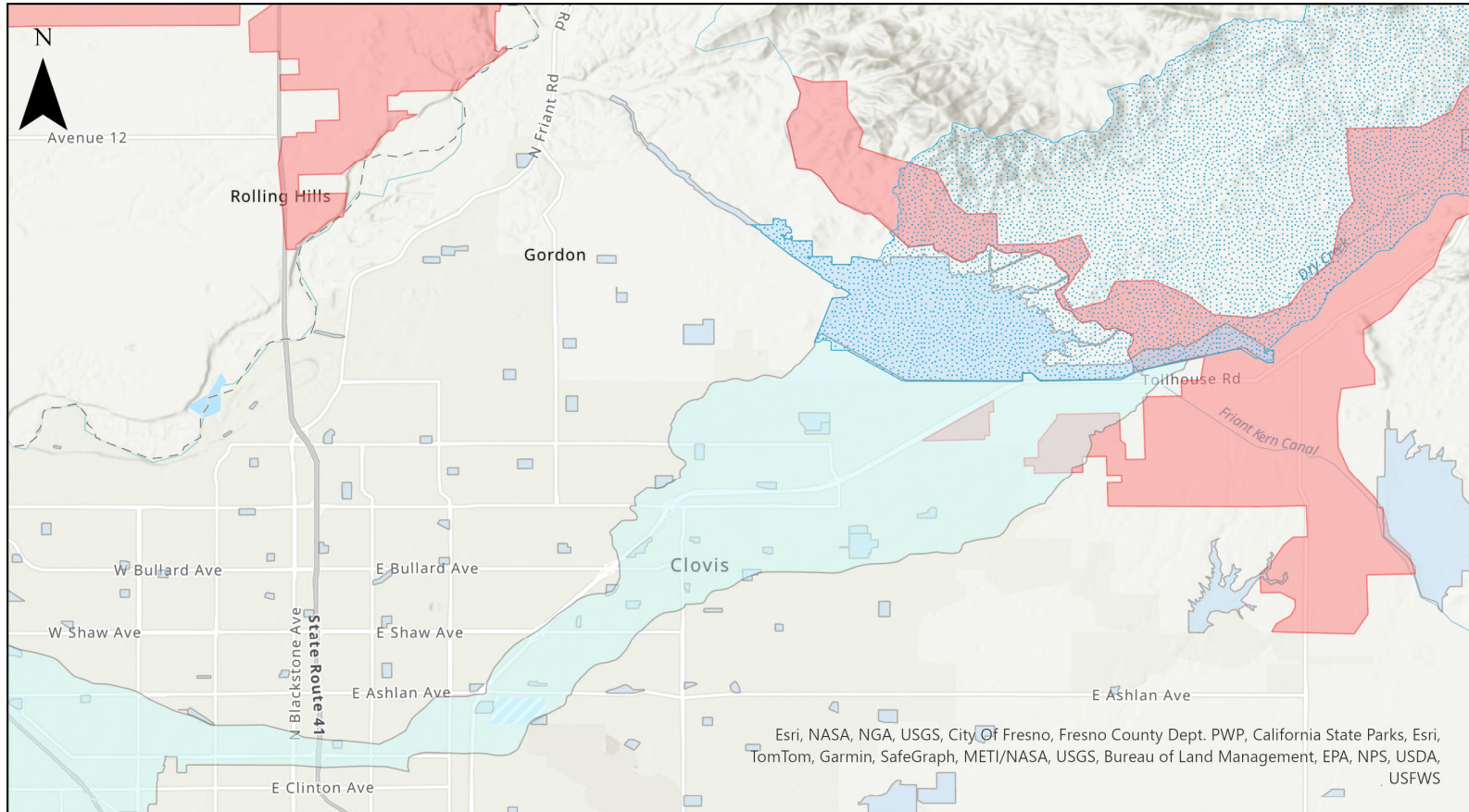


WHERE WOULD ACTION BE TAKEN?



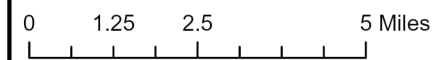


KNOWN BIOLOGICAL RESOURCES



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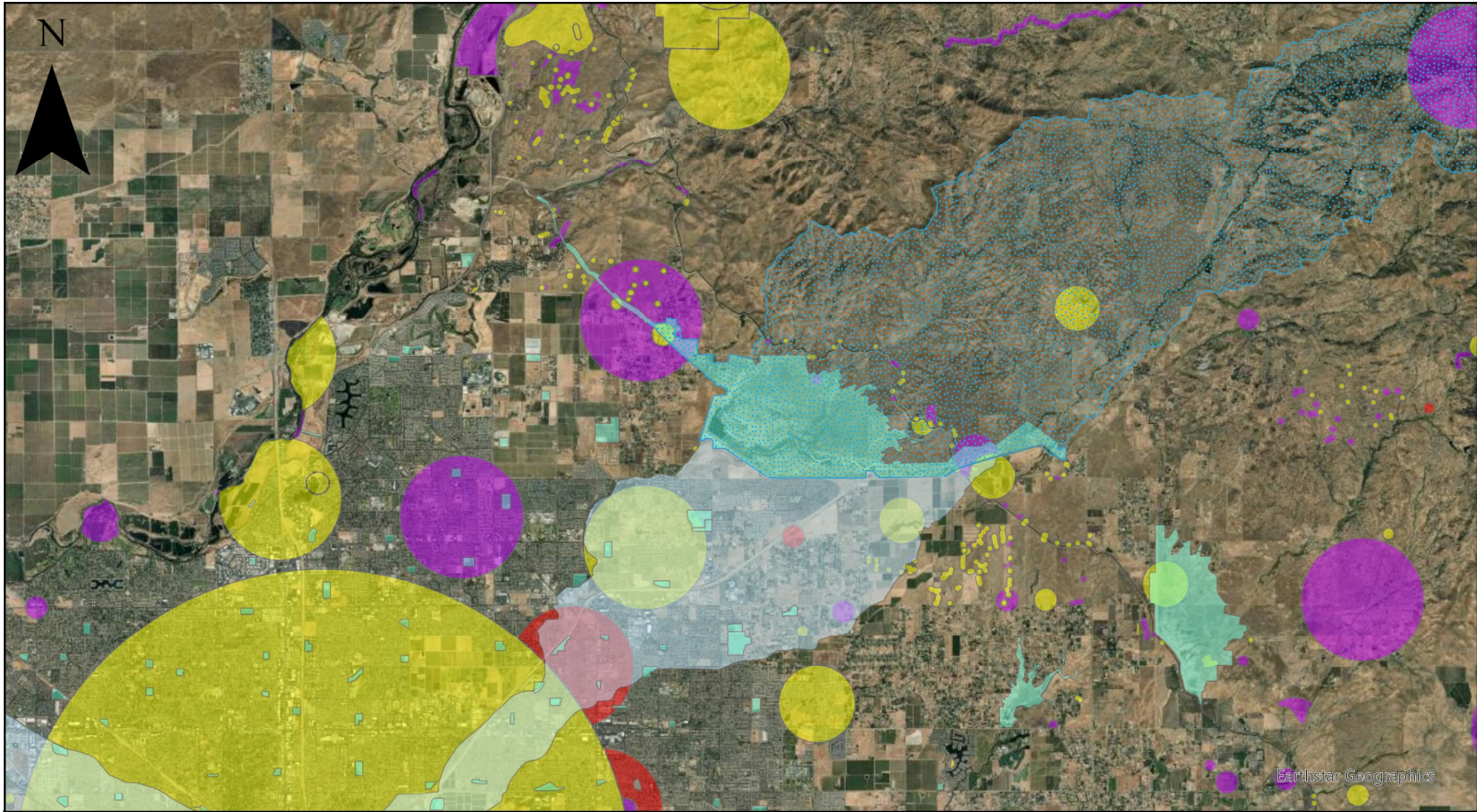
Redbank and Fancher Creek, CA Feasibility Study Designated Critical Habitats



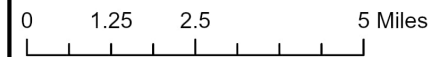
- Reservoir watershed area
- Big Dry Creek Floodway
- FMFCD Basins
- Designated Critical Habitat Fleshy Owl's Clover



KNOWN BIOLOGICAL RESOURCES



Redbank and Fancher Creek, CA Feasibility Study Federally and State Listed Species



- | | |
|--------------------------|---------------------|
| Reservoir watershed area | Endangered |
| FMFCD Basins | Proposed Endangered |
| Big Dry Creek Floodway | Threatened |
| | State Protected |
| | Delisted |



EXISTING CONDITIONS - SPECIES



Federally Listed Species- USFWS

- Fisher
- Fresno Kangaroo Rat
- San Joaquin Kit Fox
- California Condor
- Yellow-billed cuckoo
- Blunt-nosed Leopard Lizard
- Northwestern Pond Turtle
- California Tiger Salamander
- Foothill Yellow-legged Frog
- Western spadefoot
- Monarch Butterfly
- Conservancy Fairy Shrimp
- Vernal Pool Fairy Shrimp
- Vernal Pool Tadpole Shrimp
- Fleshy Owl's-clover
- Greene's Tuctoria
- Hartweg's Golden Sunburst
- San Joaquin adobe sunburst
- San Joaquin Valley Orcutt Grass

Federally Listed Species- NMFS

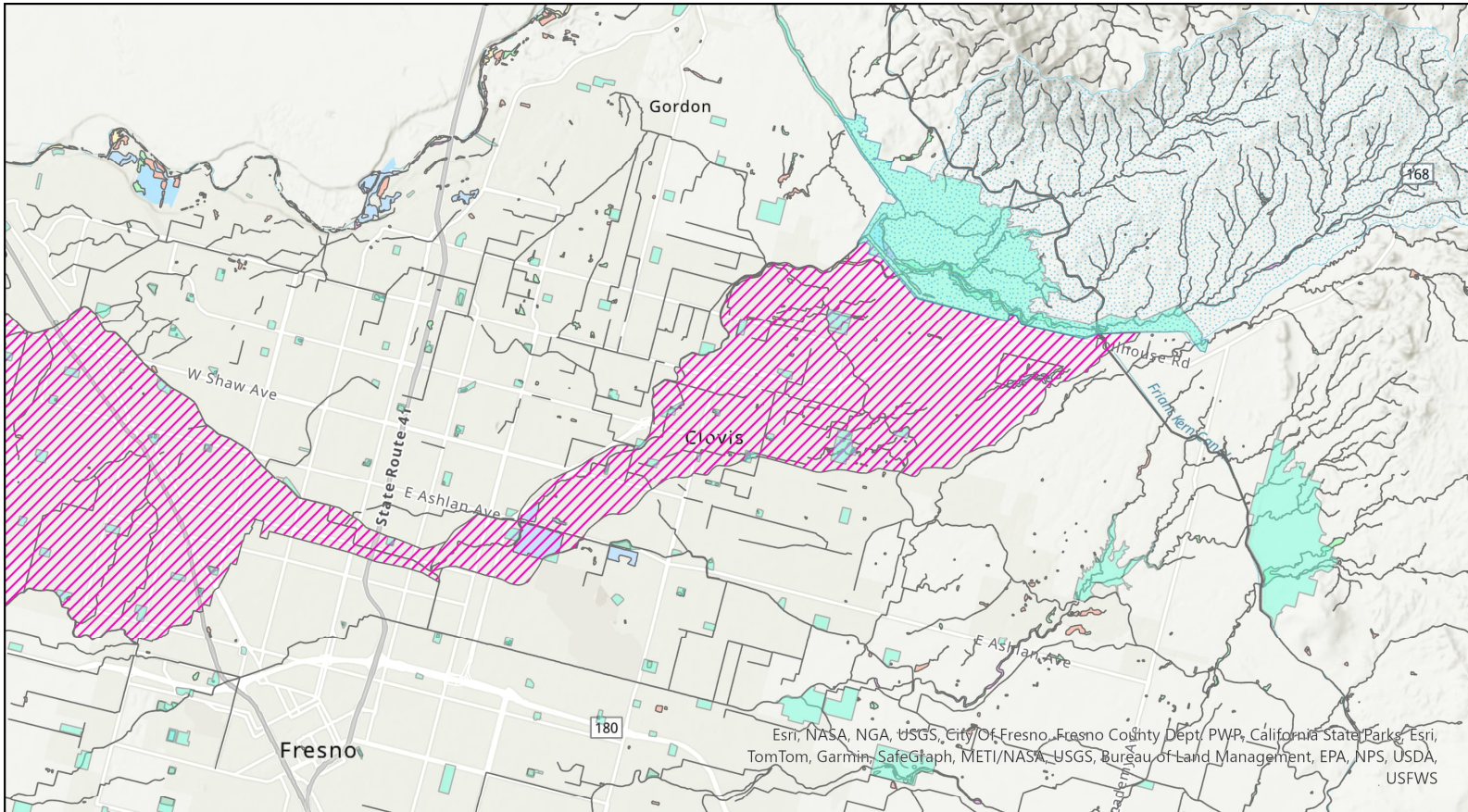
None

State Listed Species- CDFW

- Tricolored blackbird
- Western Spadefoot
- Spiny sepaed button celery
- Northern legless lizard
- Crotch's Bumblebee
- Swainson's Hawk
- Tompkins sedge
- Molestan blister beetle
- California Jewelflower
- Palmate bracted birds beak
- San Joaquin pocket mouse
- Coast horned lizard
- California satintail
- Antioch efferian robberfly
- Sanford's arrowhead
- Willow flycatcher
- California linderiella
- Midvalley fairy shrimp
- Western mastiff bat
- Black crowned night heron



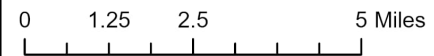
WETLANDS



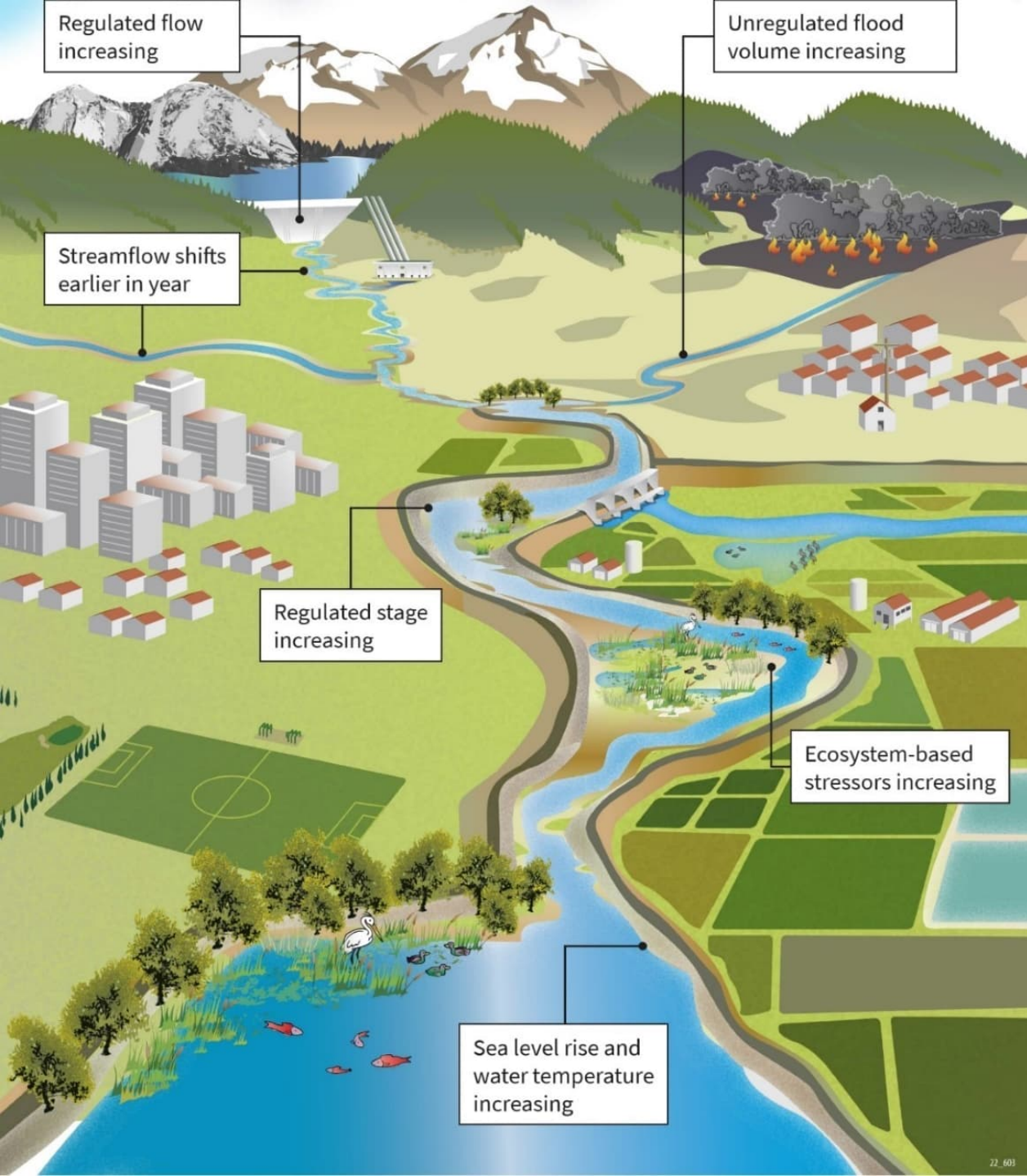
Esri, NASA, NGA, USGS, City Of Fresno, Fresno County Dept/ PWP, California State Parks, Esri, TomTom, Garmin, SafeGraph, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS



Redbank and Fancher Creek, CA Feasibility Study Wetlands



- Reservoir watershed area
- FMFCD Basins
- Big Dry Creek Floodway
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Riverine



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

Sources: <https://oag.ca.gov/environment/impact>

<https://climateresilience.ca.gov/overview/impacts.html#:~:text=California%20is%20already%20experiencing%20the,have%20increased%20as%20temperatures%20warm>



EXISTING CONDITIONS – BIG DRY CREEK RESERVOIR





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 and your organization?

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?