

Update for the East Fork Flood Study

December 8, 2021

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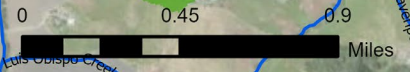
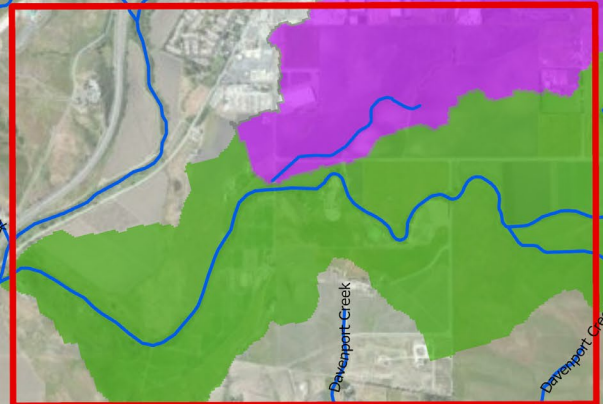
Project Overview

- Data Collection
- Surveying
- Hydrology (Rainfall-Runoff)
- Hydraulic Modeling – Existing Conditions
 - Movement thru Channels
 - Avila Ranch, Buckley Extension (next)
- Improvement Concepts
- Project Schedule



East Fork Watershed

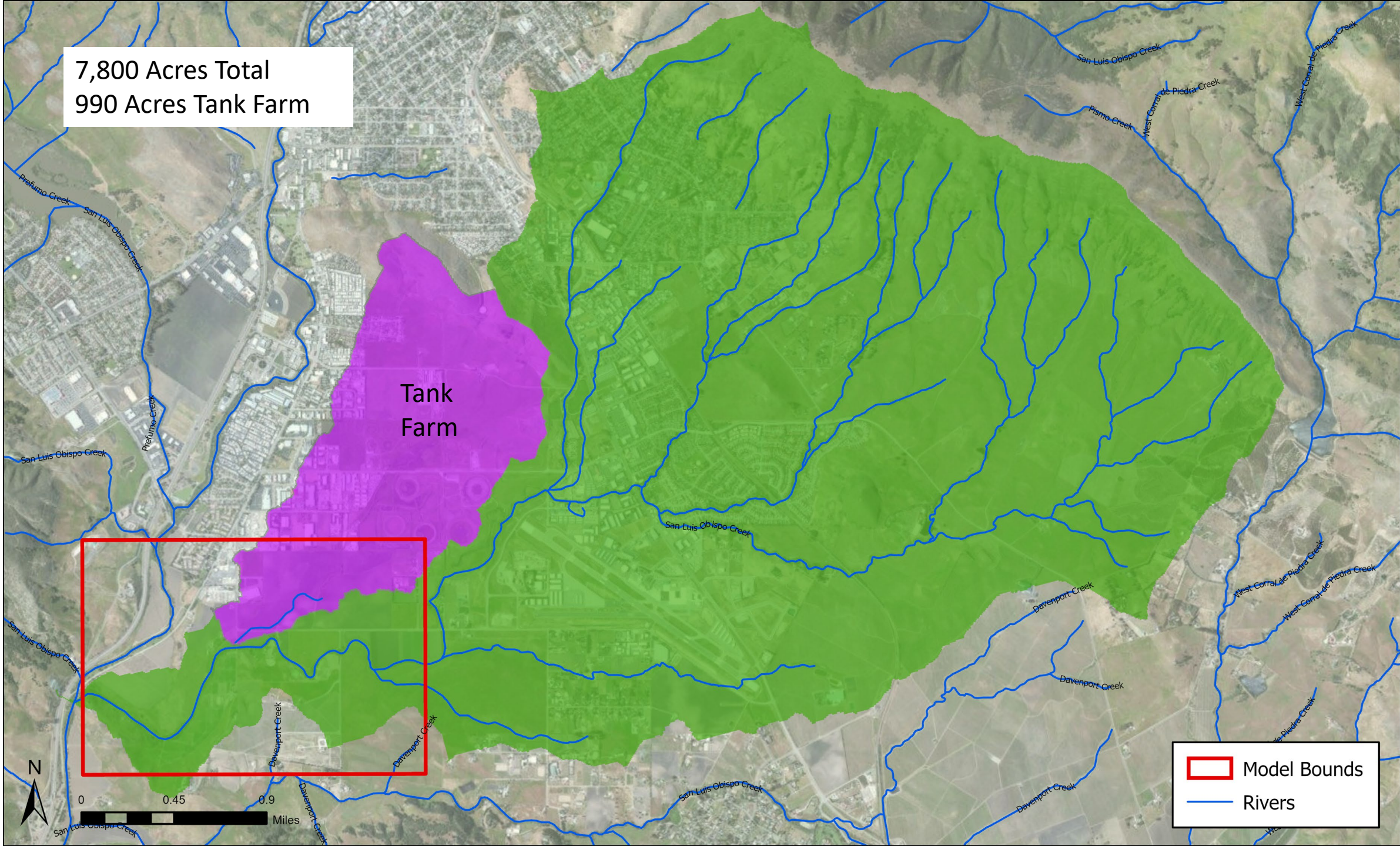
7,800 Acres Total
990 Acres Tank Farm

Tank Farm

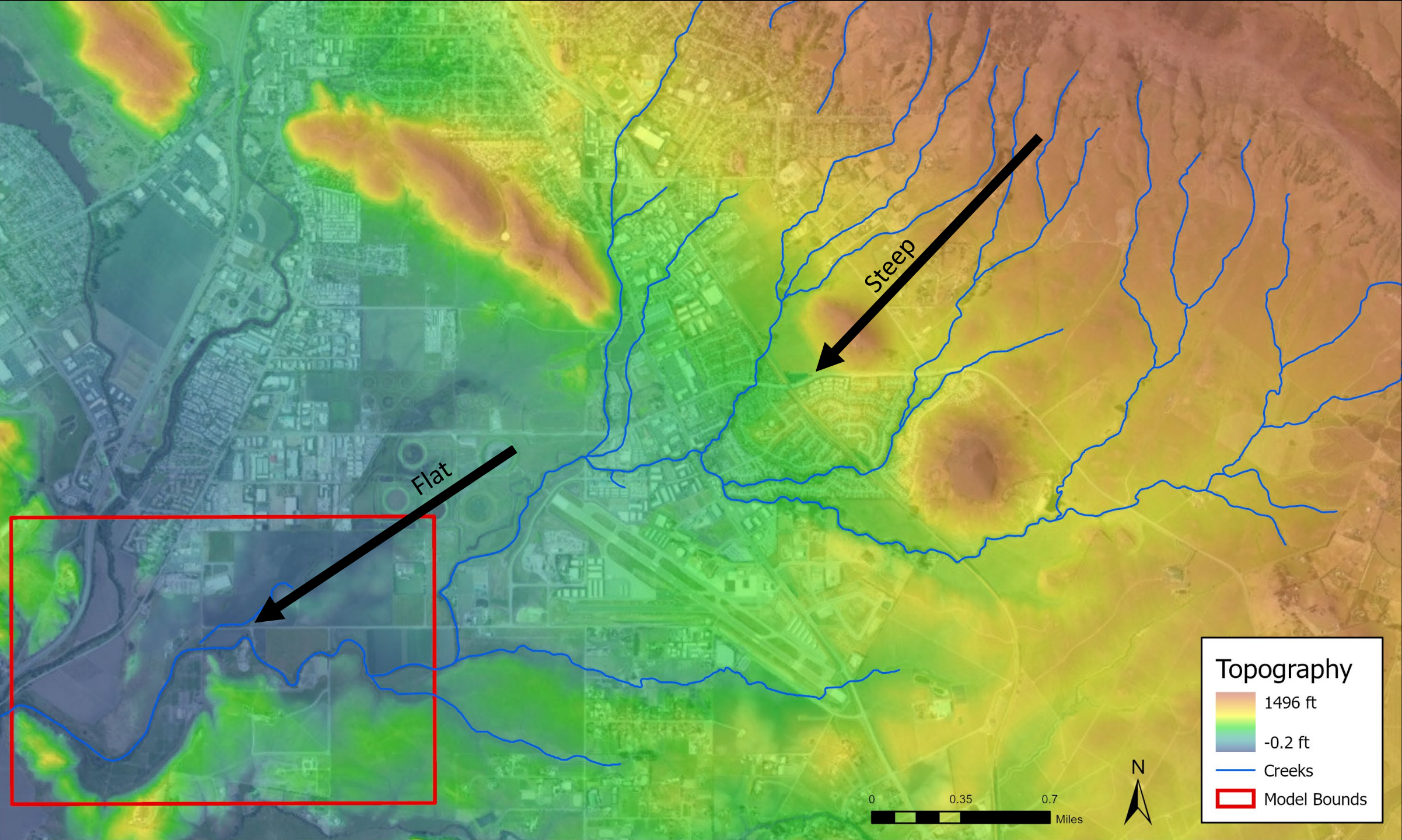


Legend:

-  Model Bounds
-  Rivers



Topography

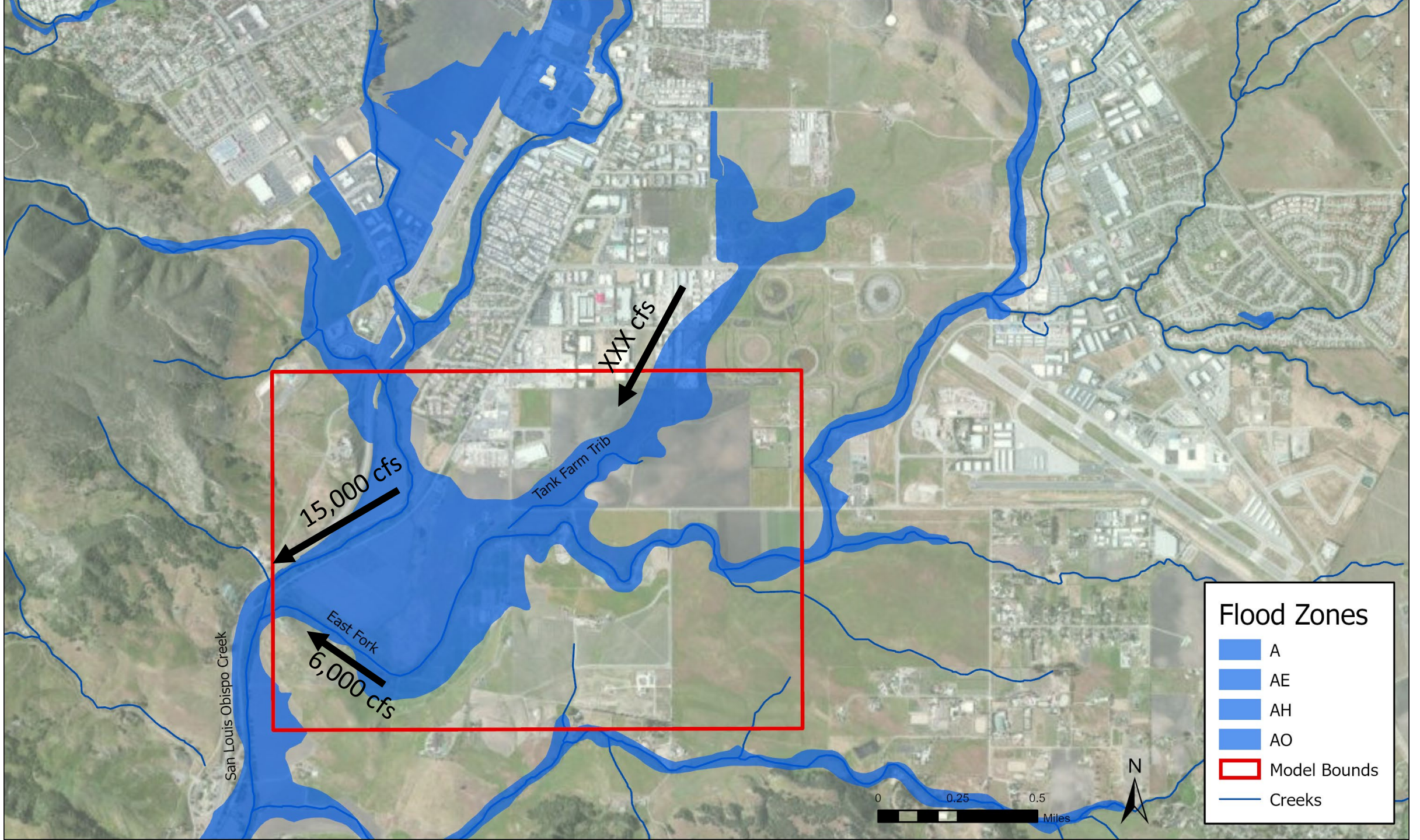


Topography

- 1496 ft
- 0.2 ft
- Creeks
- Model Bounds

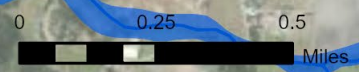


Flood Sources



Flood Zones

- A
- AE
- AH
- AO
- Model Bounds
- Creeks



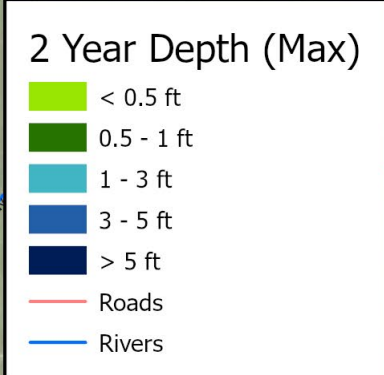
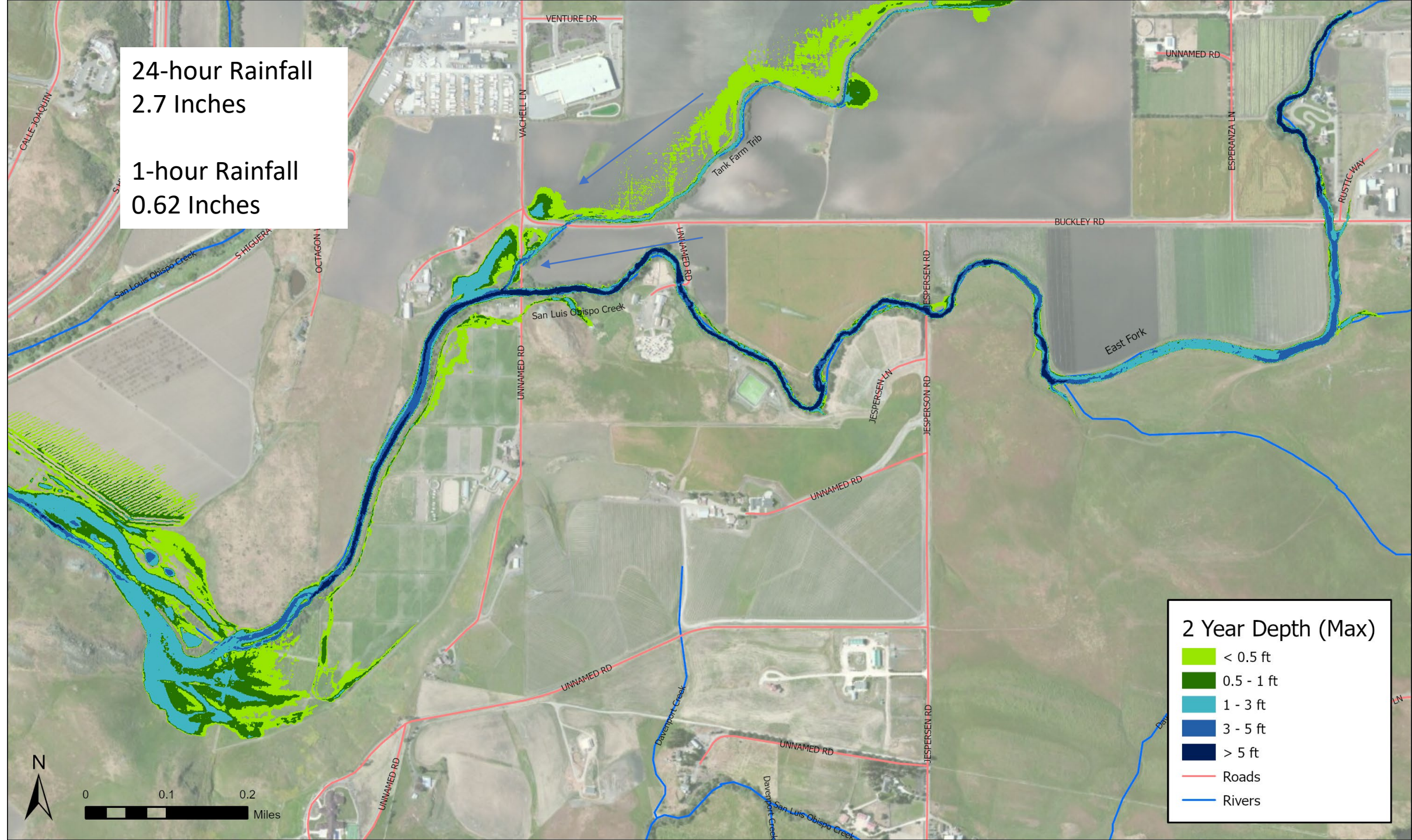
Modeling Approach

- Build Off Waterway Management Plan
- Rainfall-Runoff (24-hour) HEC-HMS
 - Calibrated to FEMA
- Hydraulics HEC-RAS 2D
 - Topography
 - Regional
 - Field Observation
 - Survey
 - Results Effective in Identifying Issues

2-Year Flooding

24-hour Rainfall
2.7 Inches

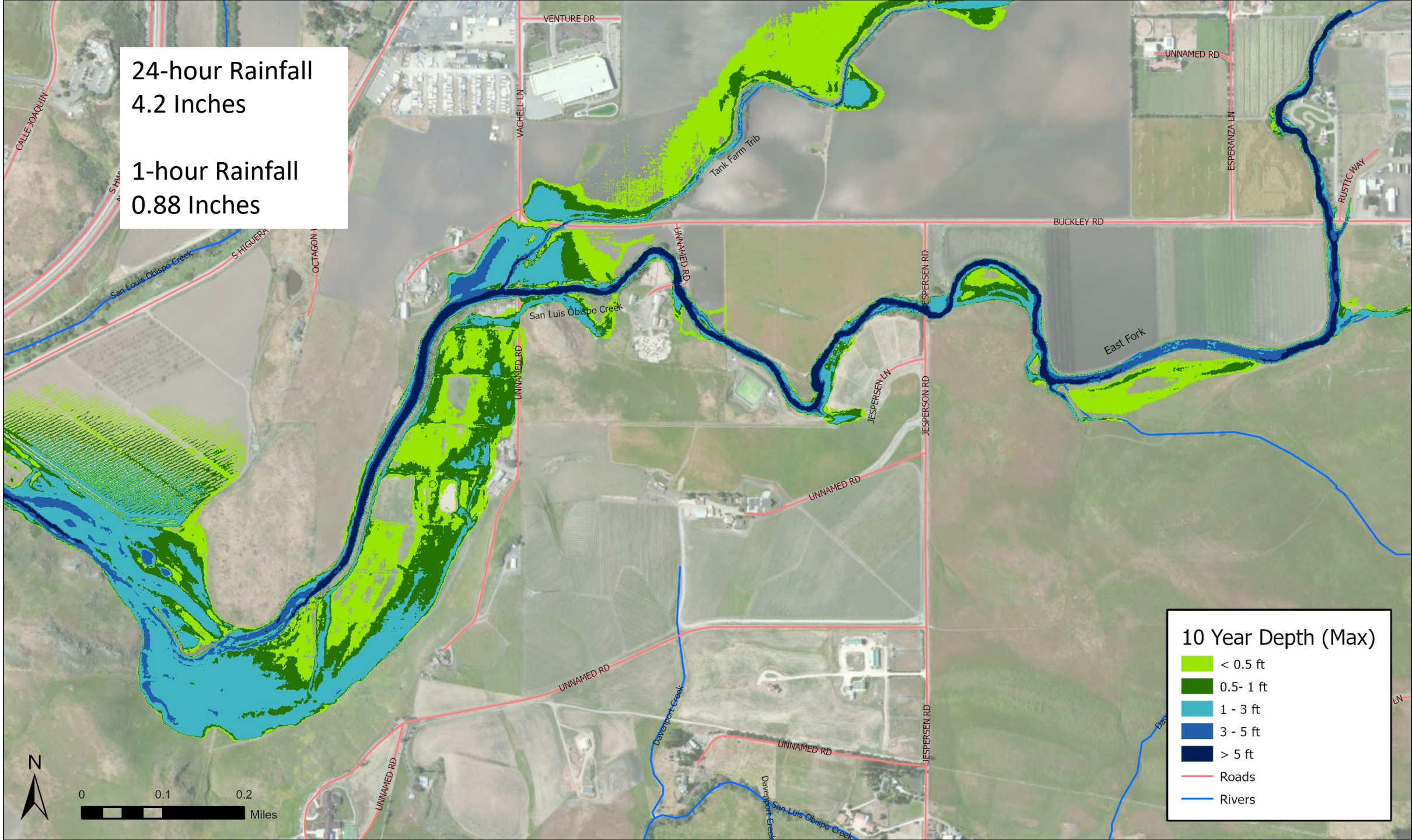
1-hour Rainfall
0.62 Inches



10-Year Flooding

24-hour Rainfall
4.2 Inches

1-hour Rainfall
0.88 Inches



10 Year Depth (Max)

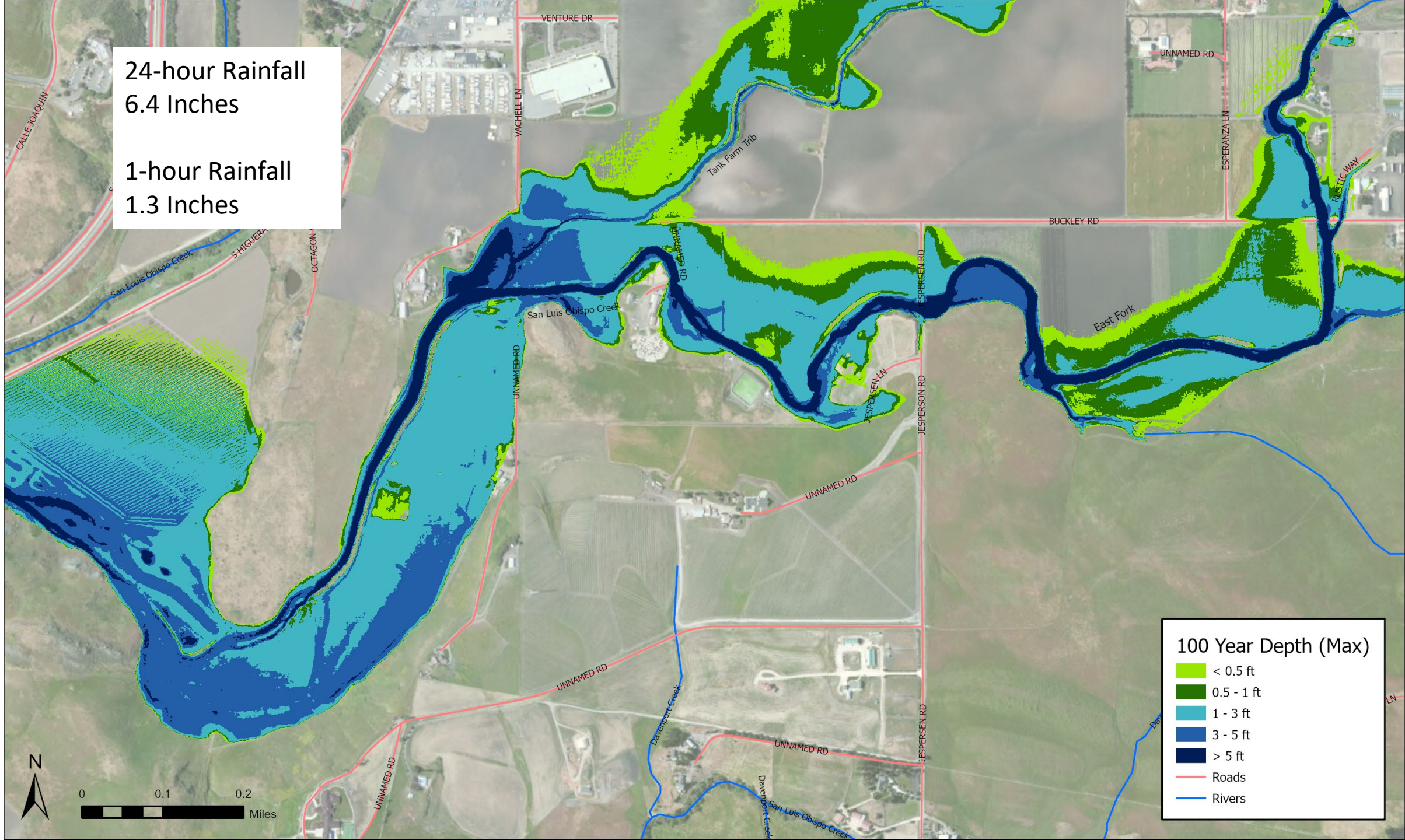
- < 0.5 ft
- 0.5- 1 ft
- 1 - 3 ft
- 3 - 5 ft
- > 5 ft
- Roads
- Rivers



100-Year Flooding

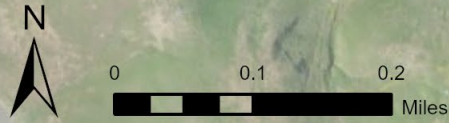
24-hour Rainfall
6.4 Inches

1-hour Rainfall
1.3 Inches

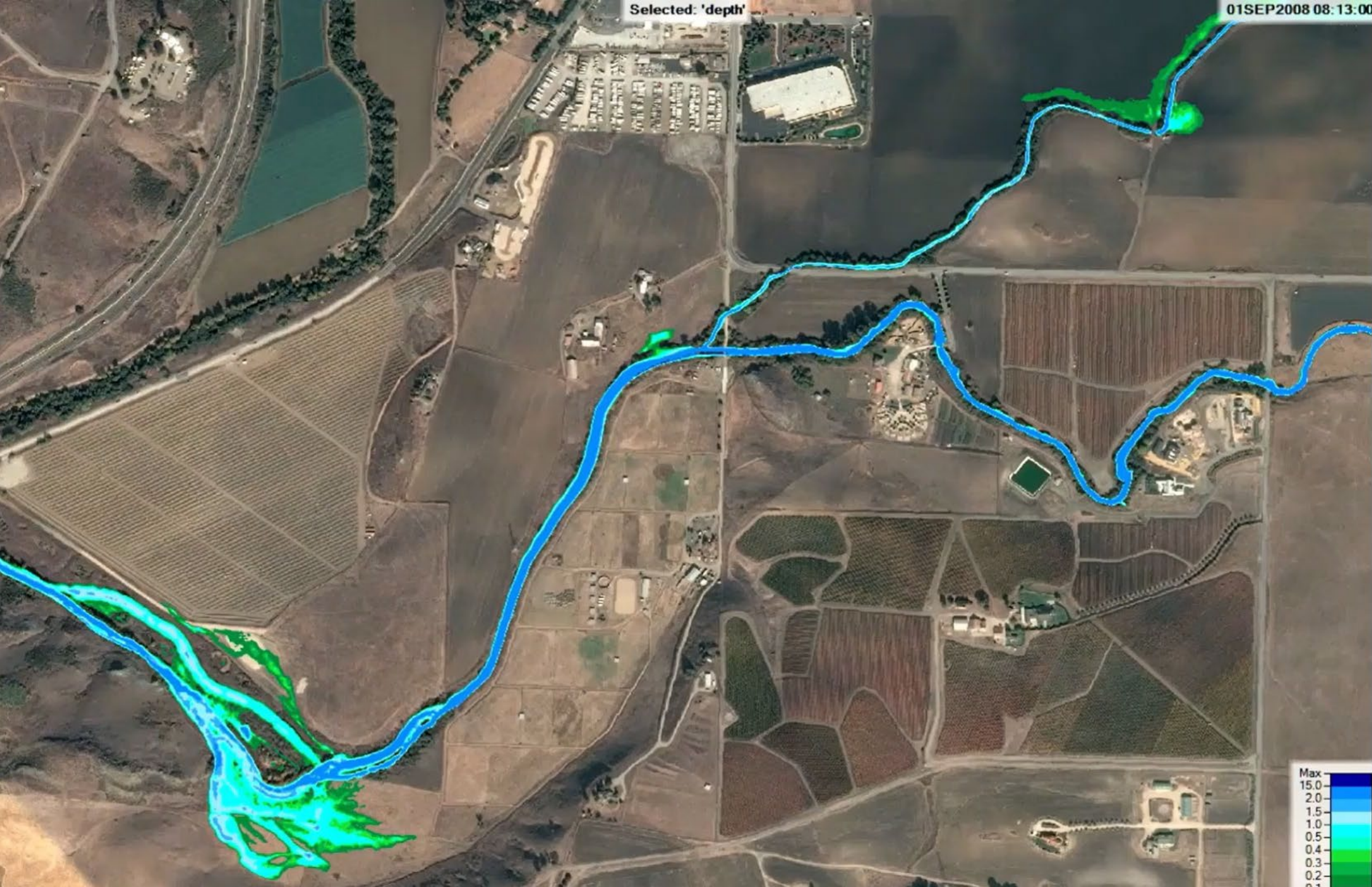


100 Year Depth (Max)

- < 0.5 ft
- 0.5 - 1 ft
- 1 - 3 ft
- 3 - 5 ft
- > 5 ft
- Roads
- Rivers



100-Year Flooding Animation



Improvement Concepts to Study

- Improved Conditions (Avila Ranch, Buckley Extension)
- Storage
 - Upstream – Reduce Peaks
 - Downstream – Reduce Backwater
- Conveyance
 - Clean Channels
 - Open Culverts
 - Widen Channels
 - Create Bypass
- Protection
 - Levees
 - Floodwalls
- Community Input

Project Schedule

- December
 - Improvement Modeling
 - Additional Data Collection
- January
 - Improvement Plans
 - Cost Estimates
 - Develop Project Priorities
 - Report