

City of Petaluma Flood History

Floodplain Overview

SONOMA WATER ZONE 2A

APRIL 17, 2025



Discussion

- Introductions:
Public Works &
Utilities
Reorganization
- The Bathtub: Basin
and Watershed
- Flood History Photos





Public Works & Utilities Organizational Update

- Now Two Departments:
Public Works
Water Resources & Utilities
- Both Departments Perform
Flood Work

PUBLIC WORKS DEPARTMENT



Paul Kaushal
Director



Kent Corothers
City Engineer



Gina Benedetti-Petnic
Assistant Director

Development Engineering & Floodplain
Management

WATER RESOURCES & UTILITIES DEPARTMENT



Chelsea Thompson
Director



Dan Herrera, Deputy
Director of Operations



Steve Worrell, Deputy
Director of
Environmental Services



Oriana Hart, Water
Resources and
Conservation Manager

PETALUMA RIVER BASIN: AN OVERVIEW





Where does flood water come from?



Water comes down the land, creeks and river from rain



Water also comes up the River from the Bay

Floodplain Management in Petaluma



Updated models will inform General Plan policies and zoning ordinance.



Critical information for flood management projects.



Improve current Class 6 standing in the FEMA NFIP Community Rating System (CRS)

Utilize higher regulatory standards

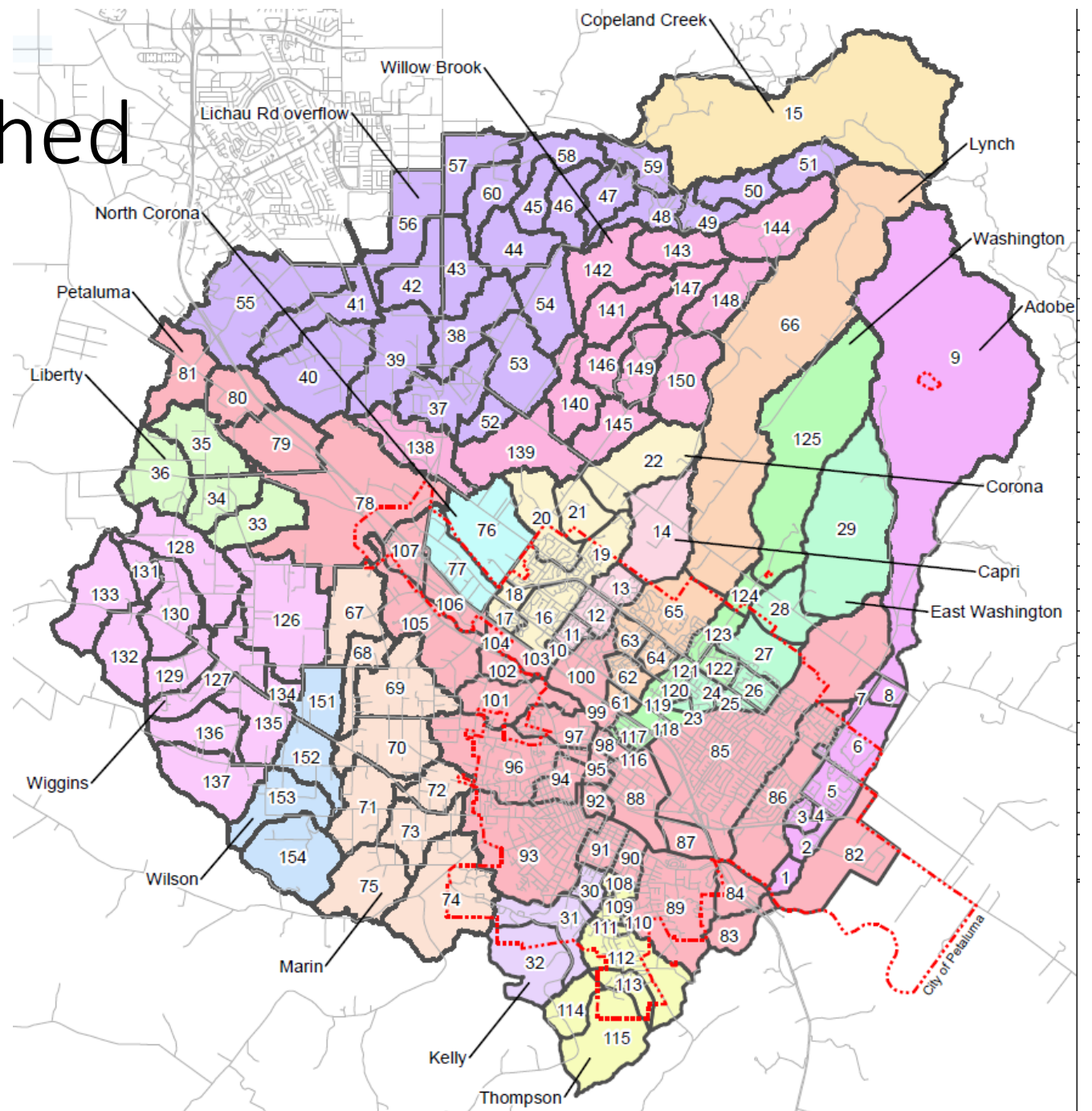
Enhance natural flood management & maintenance solutions

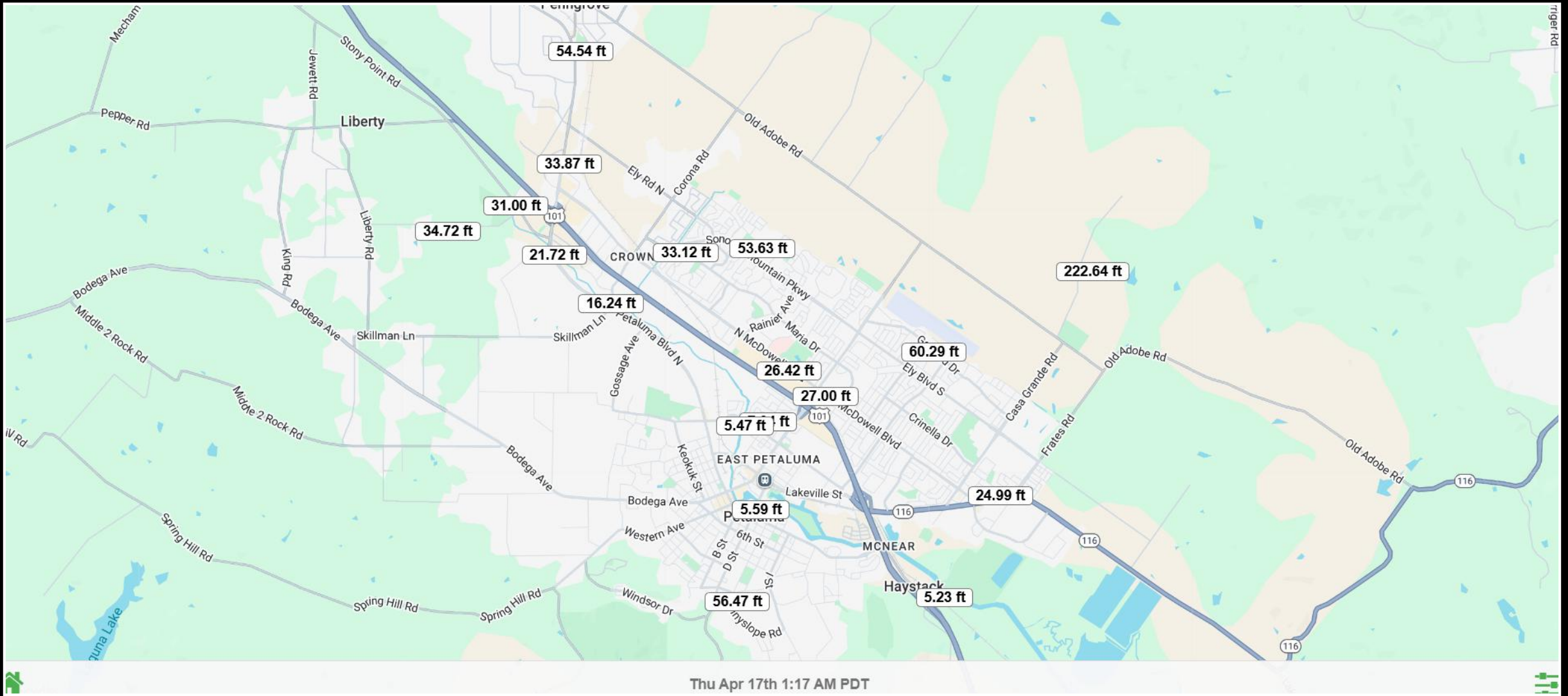
Identify priority parcels for mitigation



Petaluma River Watershed

- This is the Petaluma River watershed
- Flow estimated in each drainage area for HEC-HMS Flood Model
- 154 subbasins

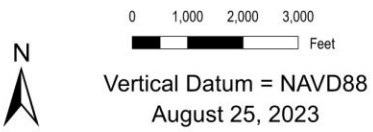




Petaluma Stream Gauges Map

<https://mobileweatherdata.com/coppwd/>

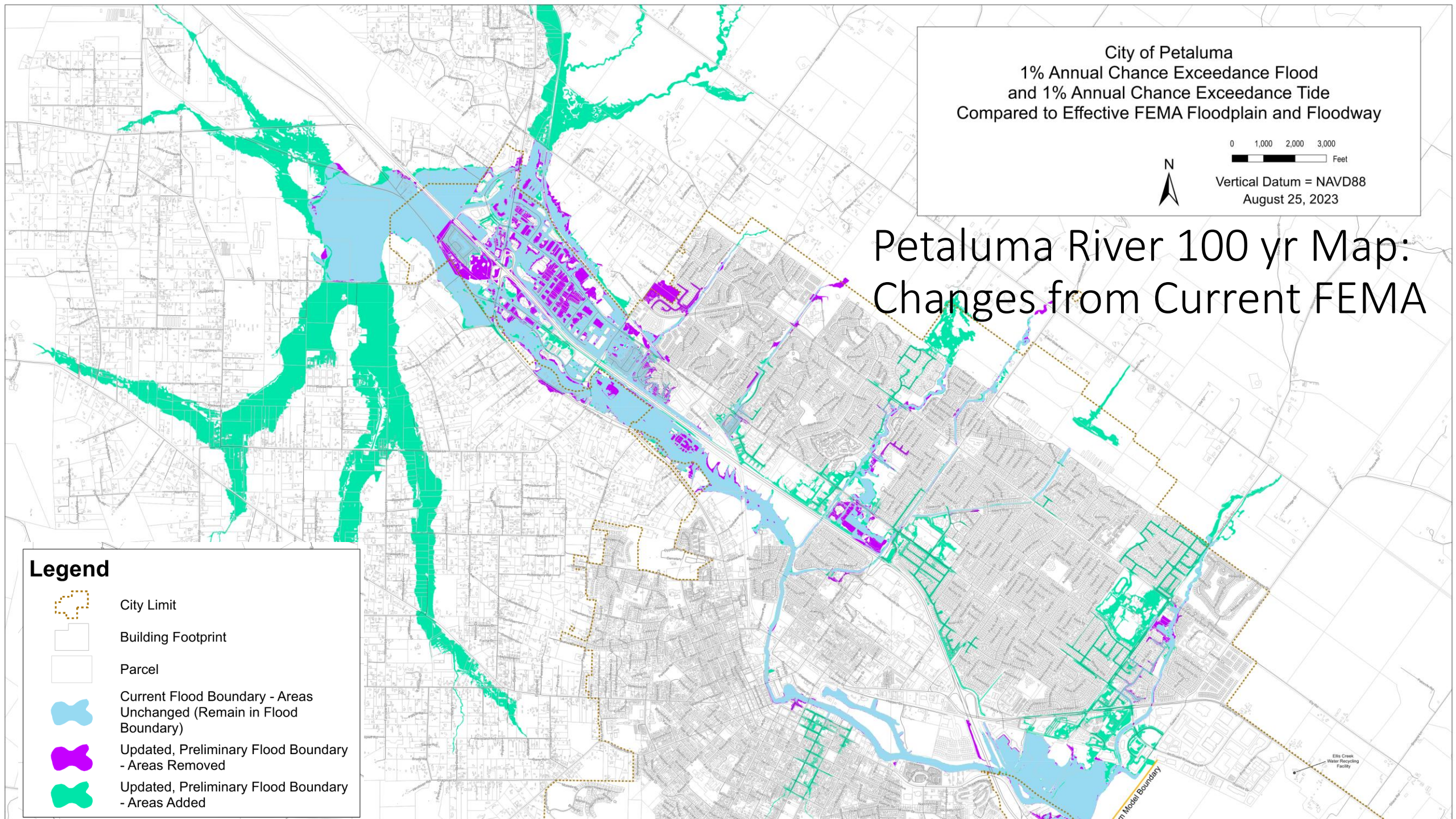
City of Petaluma
1% Annual Chance Exceedance Flood
and 1% Annual Chance Exceedance Tide
Compared to Effective FEMA Floodplain and Floodway



Petaluma River 100 yr Map: Changes from Current FEMA

Legend

- City Limit
- Building Footprint
- Parcel
- Current Flood Boundary - Areas Unchanged (Remain in Flood Boundary)
- Updated, Preliminary Flood Boundary - Areas Removed
- Updated, Preliminary Flood Boundary - Areas Added





Petaluma - The City Under Water

150+ Years of Flooding



Historic Flood Images
1982 - 2023



Petaluma Blvd. North at Sonty Point Road
1982



Youngstown Mobile Home Park
North McDowell Blvd near Corona
December 31, 2005



Holm Road – Auto Row and Denman Reach
December 31, 2005



Petaluma Blvd. North – North of Corona Road
December 31, 2005

Hummel Property December 31, 2005



Payran and Washington Creek December 31, 2005



Confluence of Washington Creek into River just upstream of Payran Bridge



From Payran Bridge looking upstream at floodwall



Laugnitaz Brewery, North McDowell Blvd.
December, 2014



Magnolia Avenue
December 11, 2014



Lindberg Lane and Lakeville Street
December, 2014

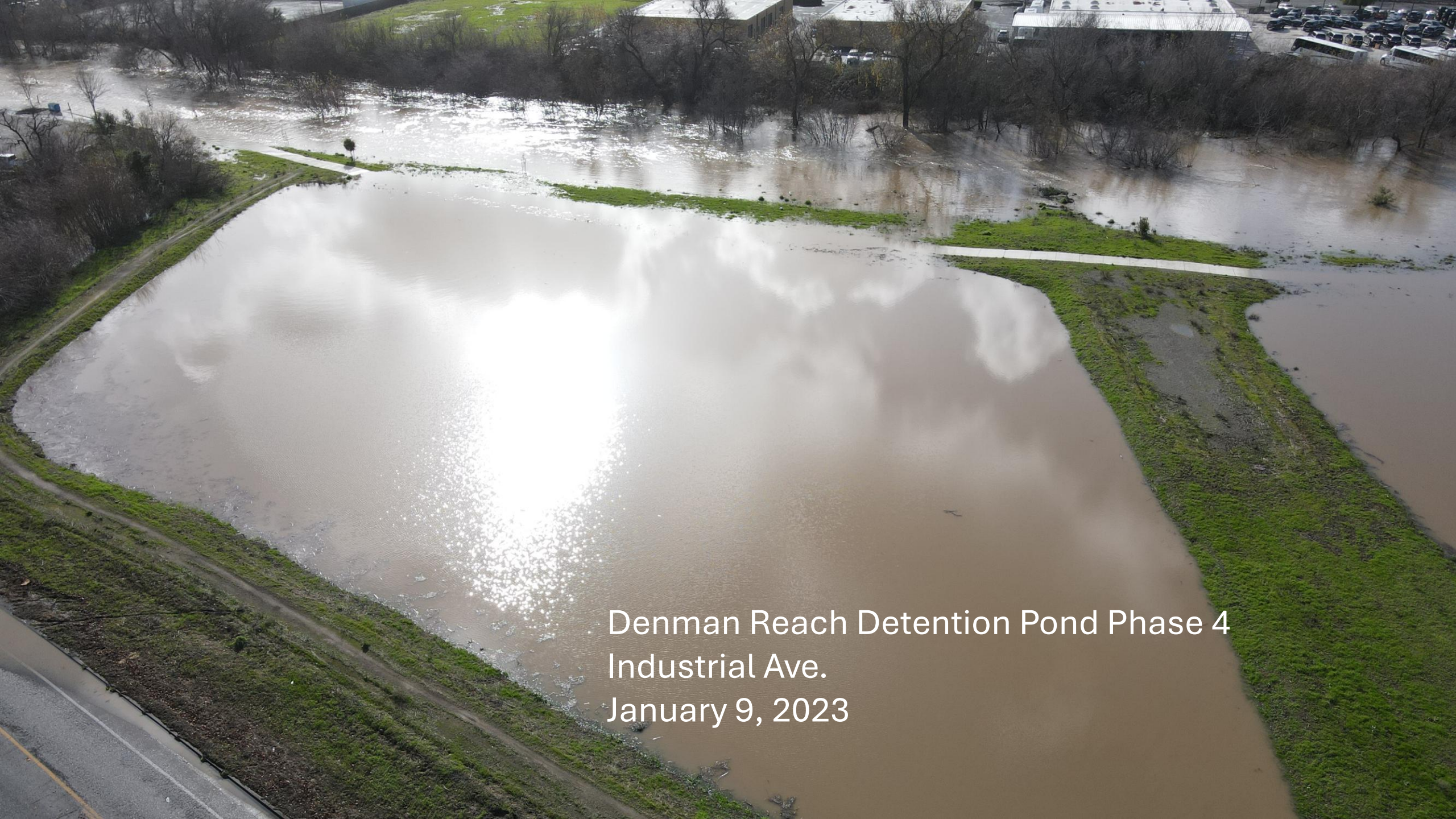


Payran Flood Control Project Constrution
August, 2015



Atmospheric River January 9, 2023

Stony Point Road at Twin Bridges



Denman Reach Detention Pond Phase 4
Industrial Ave.
January 9, 2023



Denman Reach Detention Pond Phase 4
Industrial Ave.
January 9, 2023



Petaluma Blvd. North



- January 9, 2023

Stony Point Road



NW Stony Point Road at Twin Bridges
January 9, 2023

Thank You!

Pamela Tuft

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Past Planning Director, Past Interim
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cityofpetaluma.org/flood-management/

