

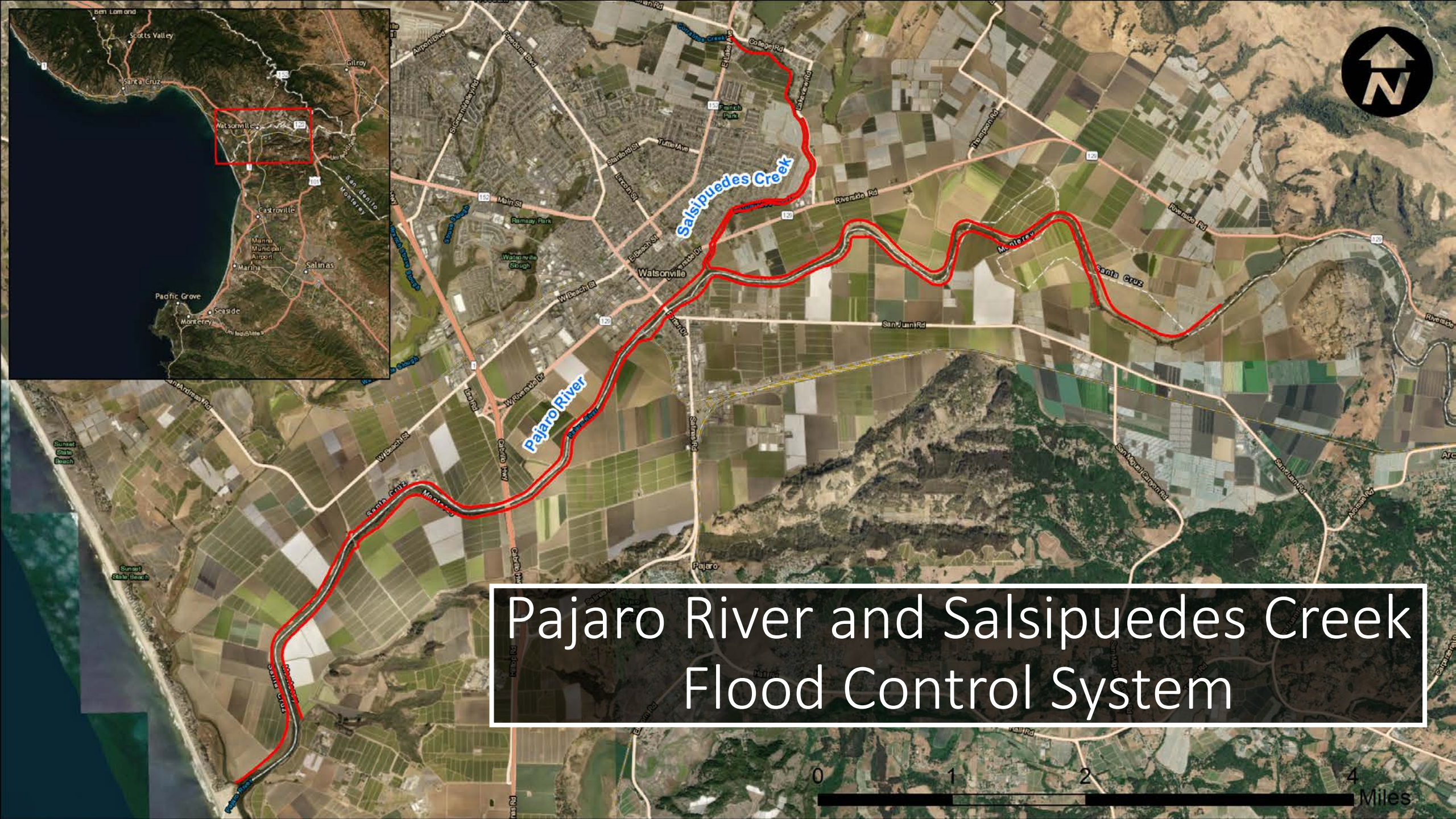
# Pajaro River Vegetation Maintenance 2021

Santa Cruz County Zone 7 Flood Control District

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# Pajaro River and Salsipuedes Creek Flood Control System



# Flood System Design Requirements

## O&M Requirements:

- ▶ 19,000 cfs above the confluence with Salsipuedes Creek
- ▶ 22,000 cfs below the confluence
  - ▶ These discharges equate to roughly 12-year storm
- ▶ Assumed roughness (Mannings n-value) used for system design was between 0.035 and 0.045

1-03. Protection Provided. The Pajaro River and Corralitos Creek Levees will afford protection against flood damages to approximately 8,000 acres of land in the Pajaro Valley, including the city of Watsonville. The project is designed to provide protection against all floods on the Pajaro River up to a discharge of 22,000 c.f.s. below the confluence with Corralitos Creek and 19,000 c.f.s. above that point and on Corralitos Creek for discharges up to 3,400 c.f.s.

USACE, 1949, PAJARO RIVER LEVEE PROJECT – OPERATION AND MAINTENANCE MANUAL

# Relevant History of the Pajaro River Levee Project

- 1949 -Levees constructed
- Flooding events in 1955, 1958, 1982, 1986, 1995, 1998, 2017
- Extensive vegetation removal following 1995 flood
- 2002 –Final EIR Pajaro, Salsipuedes, and Corralitos Management and Restoration Plan
- 2012 –Bench Excavation Project
- 2018 –Vegetation management project

# Hydraulic Analysis

- Capacity Analysis (NHC, 2020)
  - The system currently does not meet design requirements.
  - Channel Roughness is too high
- Vegetation Management Alternatives (Zone 7, 2021)
  - Modeled different roughness reduction alternatives
    1. Targeted
    2. Uniform
    3. Variable
    4. Phased *\*Selected approach\**

# 2021 Vegetation Maintenance

- Project area was 1.8 miles in length
- Alternating from left to right bank
- Area was selected as the first phase to help reduce overtopping risk
- Area was surveyed before and after with UAV
- All trees marked for retention were surveyed
  - Lat/Long, species, and DBH