



October 24 Storm Event System Performance and Staff Response

Napa Sanitation District
Board of Directors Meeting
November 3, 2021



System Flow Rates

- 7.5 inches of rain in 24 hours
- 10/17 5.6 mgd (day) 8.3 mgd (peak)
- 10/24 34 mgd (day) 58 mgd (peak)



Staff Response

- Collection system staff
 - System monitoring (4am-10pm) on Sunday
 - Bypass trucking to decrease overflow volume
- Plant operations staff
 - Management of increased flow rates at plant
 - WNPS operations, including manual operation of new pump station

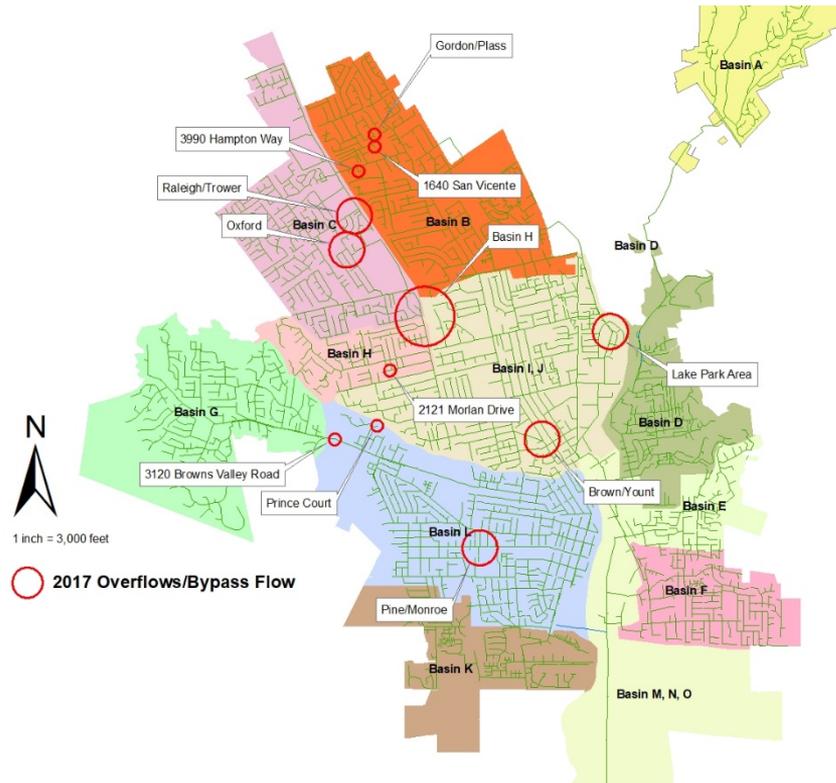


System Performance

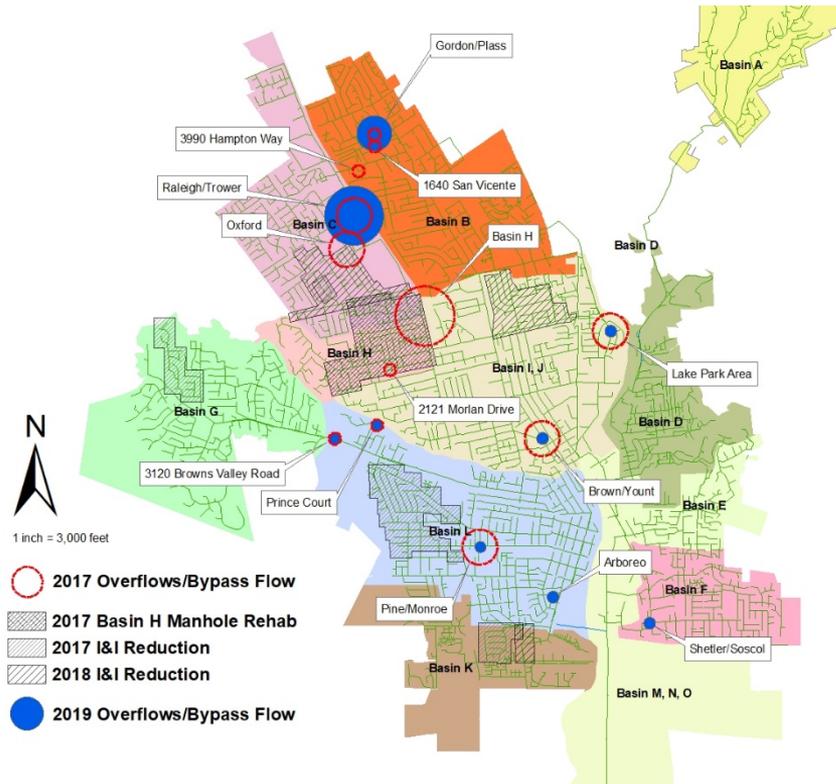
- Raleigh St – Overflow and bypass
 - 9,175 gallons spilled
 - 218,000 gallons trucked
- Brown St – Bypass location
 - 11,000 gallons trucked
- West Napa Pump Station
 - Increased pumping rates (18.5 mgd) avoided overflows



2017 SSO Locations

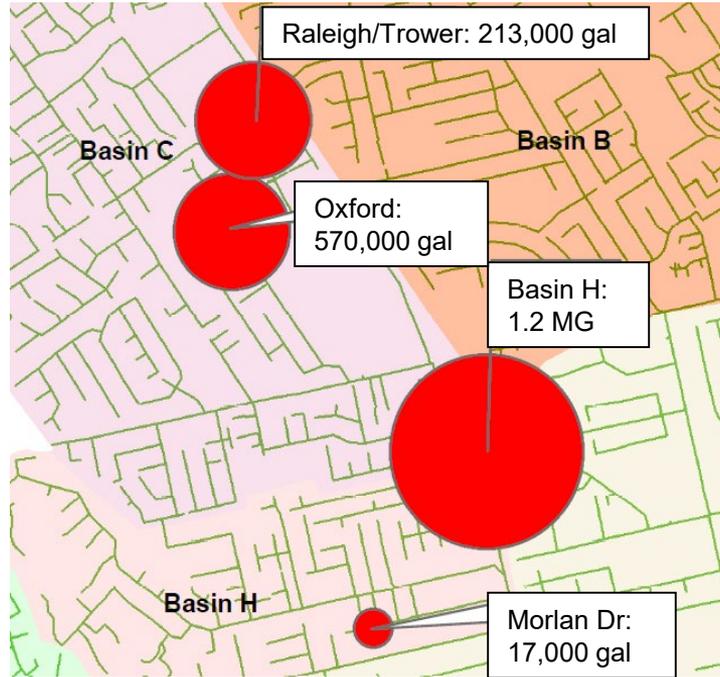


2019 SSO Locations

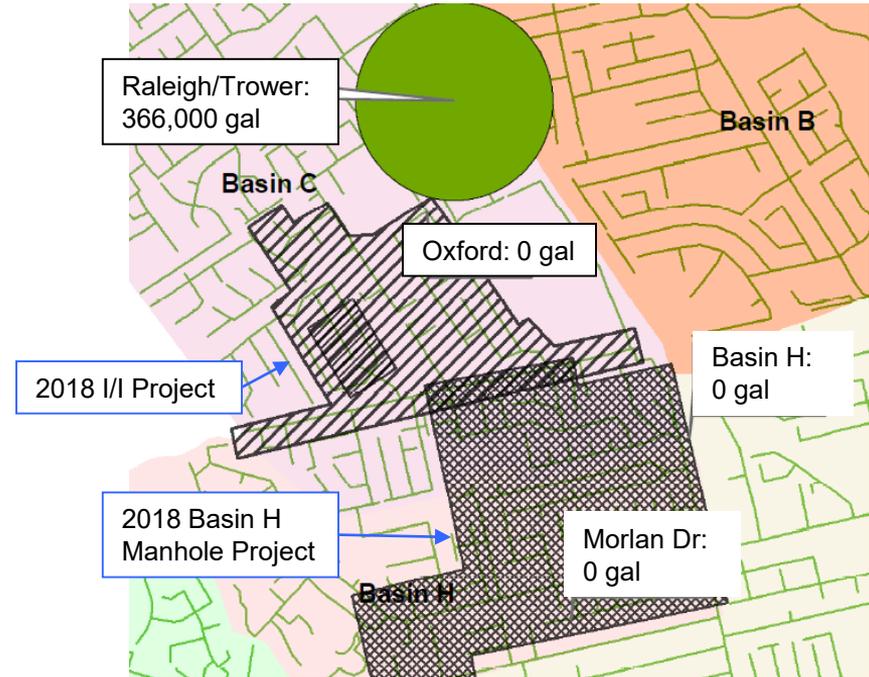


2017 vs 2019 (example)

Winter 2017 SSO+Bypass Volumes

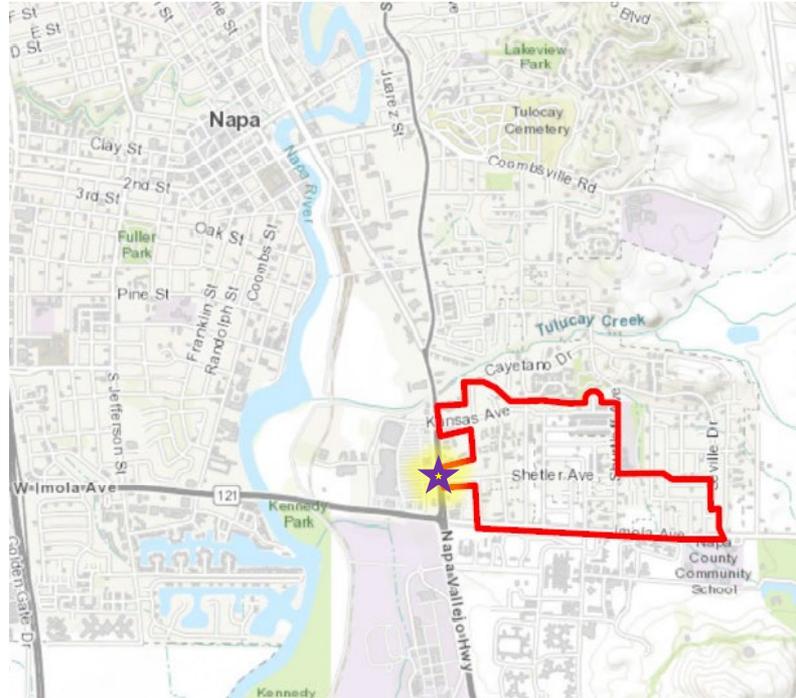


Winter 2019 SSO+Bypass Volumes

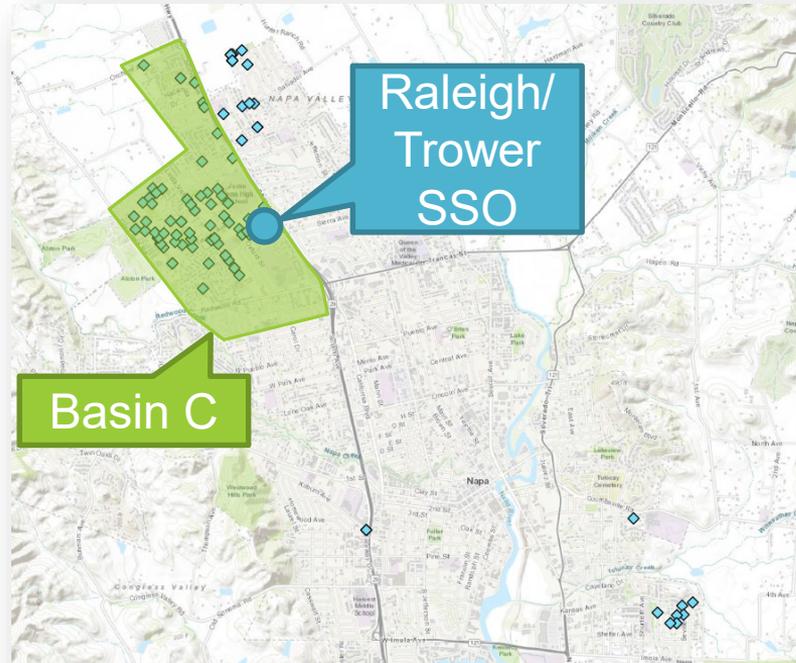




2019 Project Map



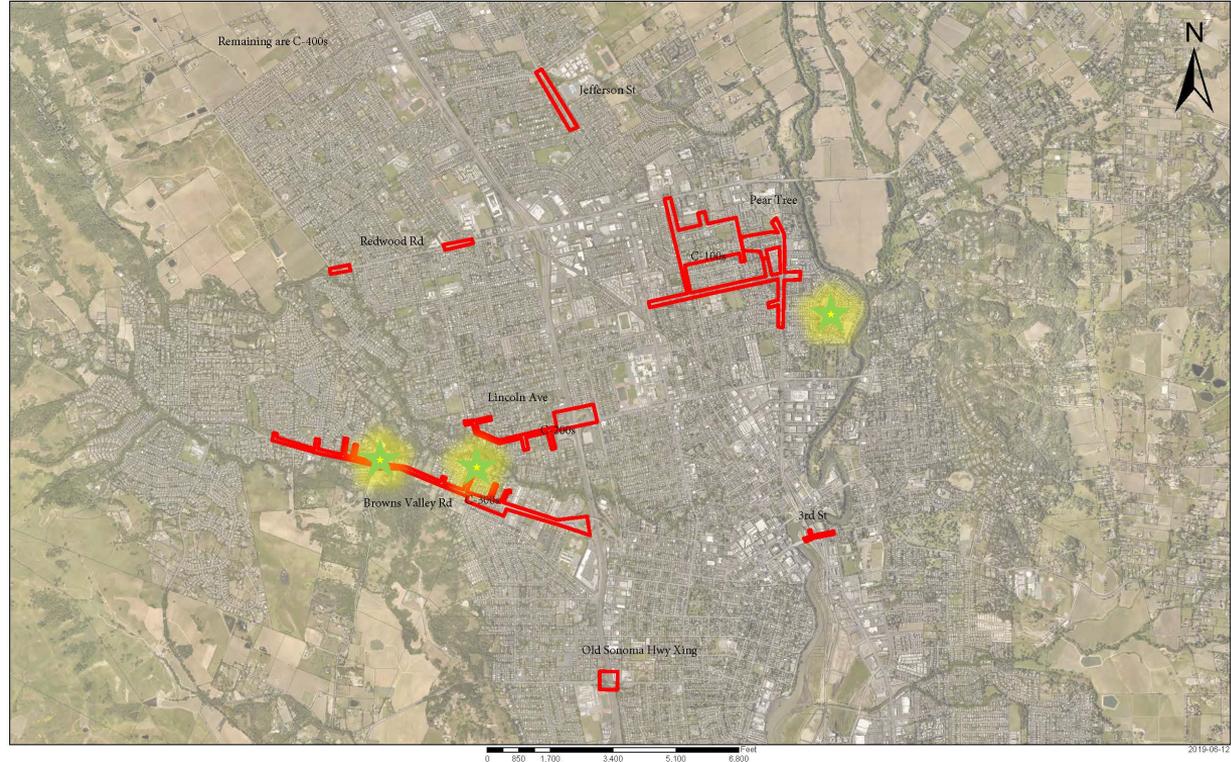
2019 Manhole Project





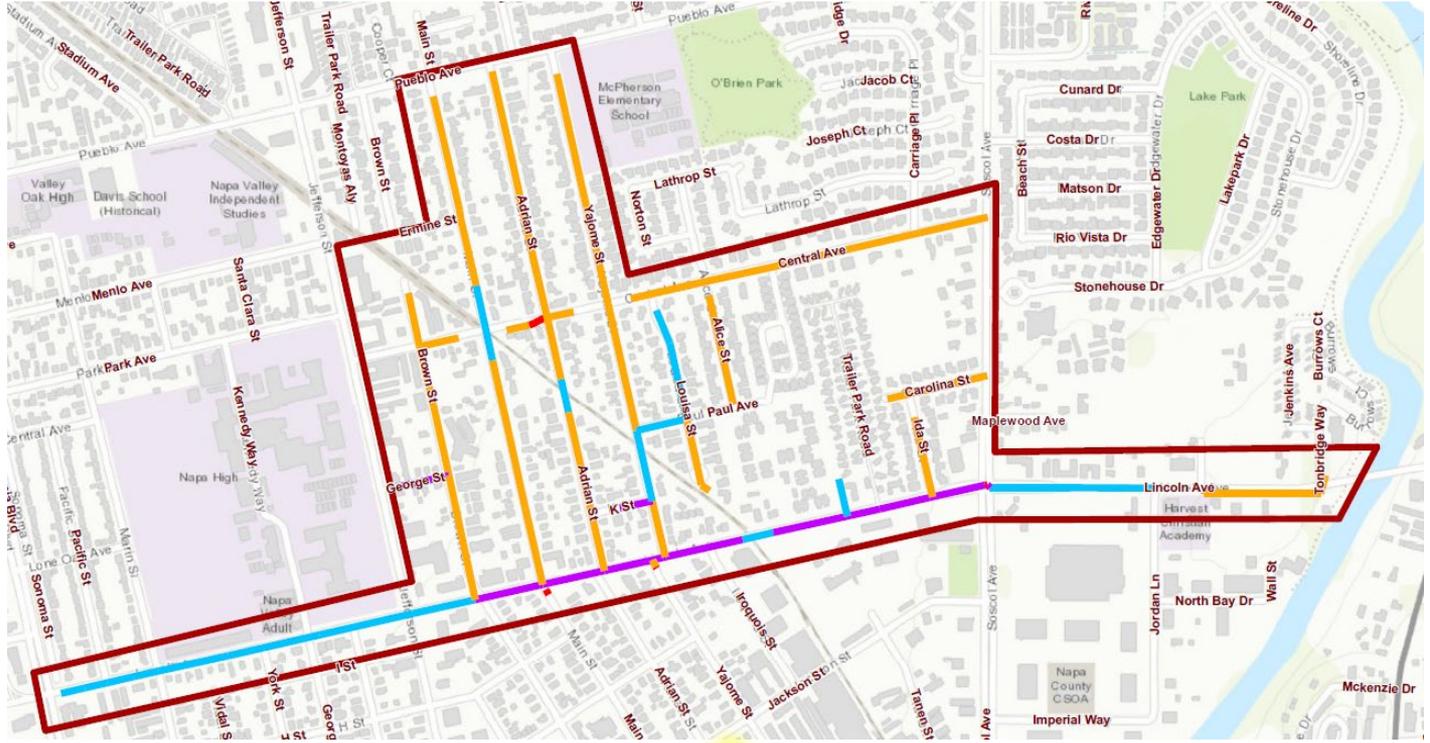
2020 Project Map

NapaSan - 2020 I/I Rehab Project Areas

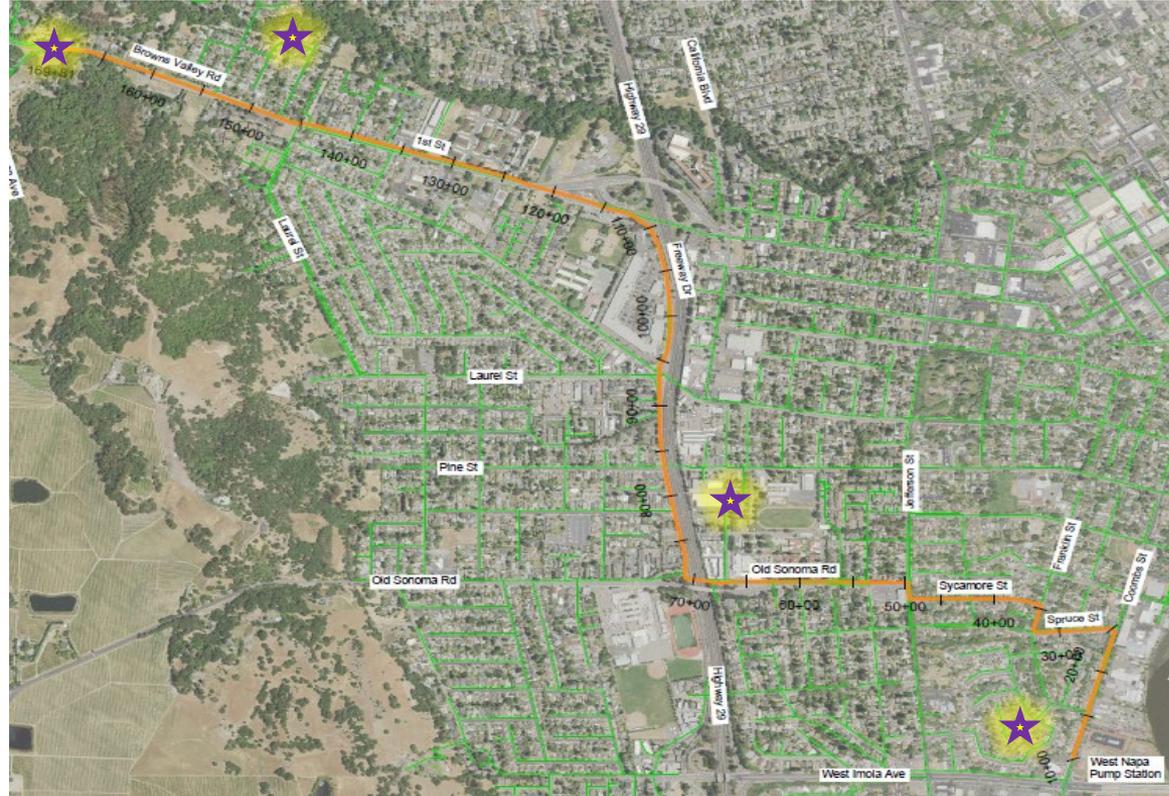




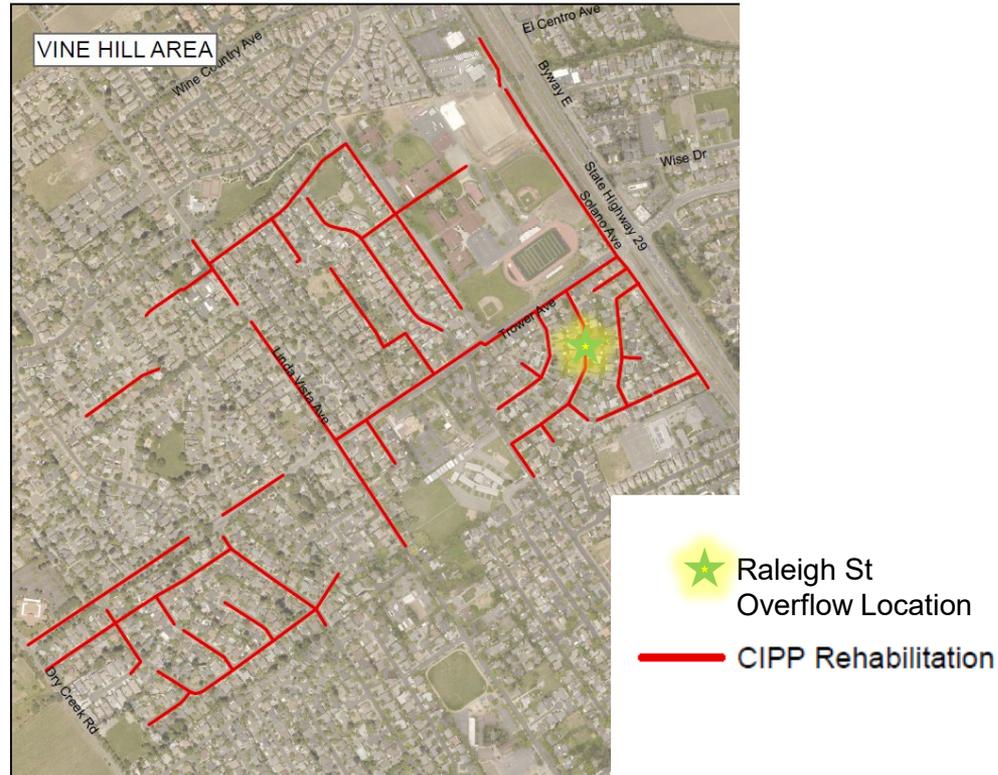
2021 Project Map



Browns Valley Trunk



2022 Project Map





Lessons Learned

1. Browns Valley Trunk performed as designed
2. West Napa Pump Station – additional flow rates consistent with predictions by modeling
3. Collection system rehabilitation projects reduce wet-weather flows (and overflows)
4. Work still needs to be done



Questions?