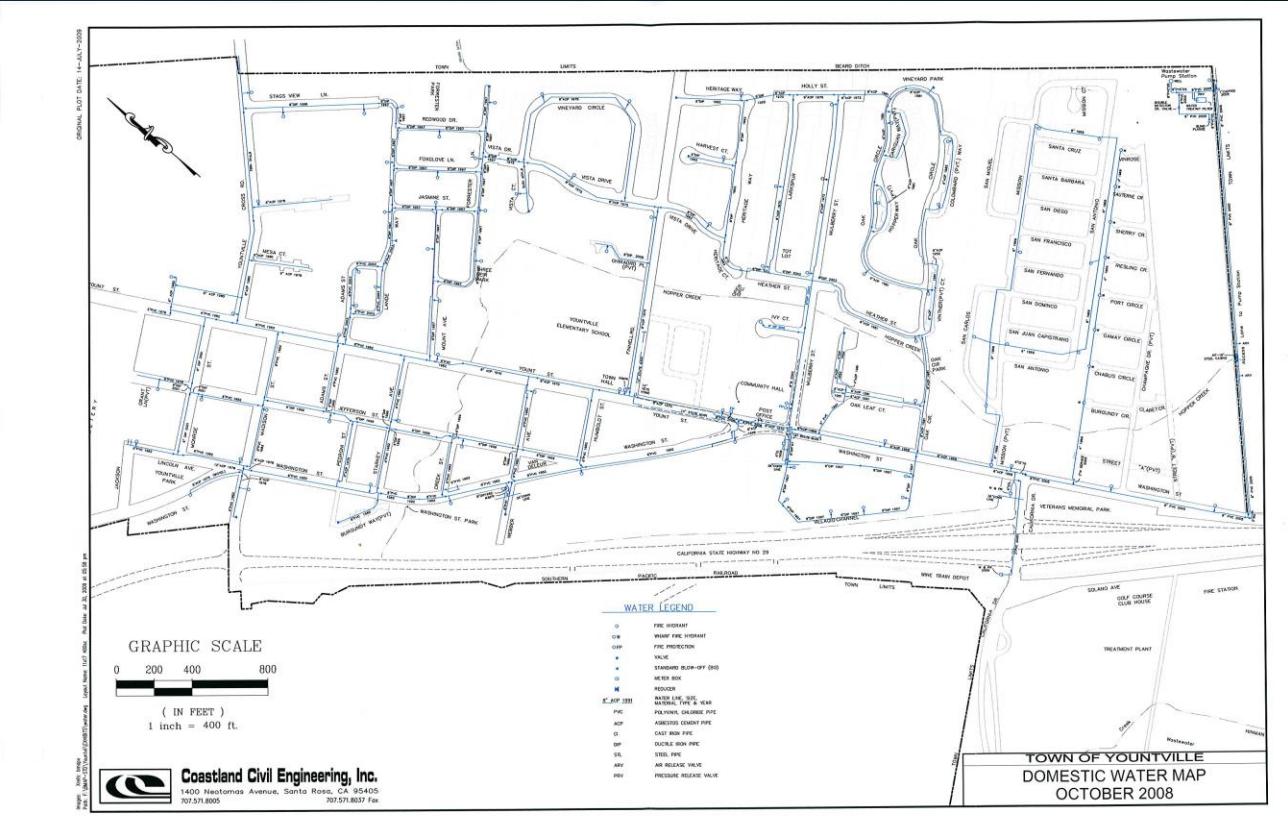




Planning for  
the Future

# Water Distribution

- Operation & maintenance of 10.7 miles of water distribution system including:
  - 831 metered connections
  - 35 fire protection services
  - 100 fire hydrants
  - 15 “dead-end” blow offs
  - 500 isolation valves
  - 4 dedicated sample stations
  - 27 Town owned backflow prevention devices
  - 2 pressure regulated valves (PRV) tied to the Rector Water Treatment Plant
  - 1 active PRV tied to City of Napa transmission main
  - 1 emergency well





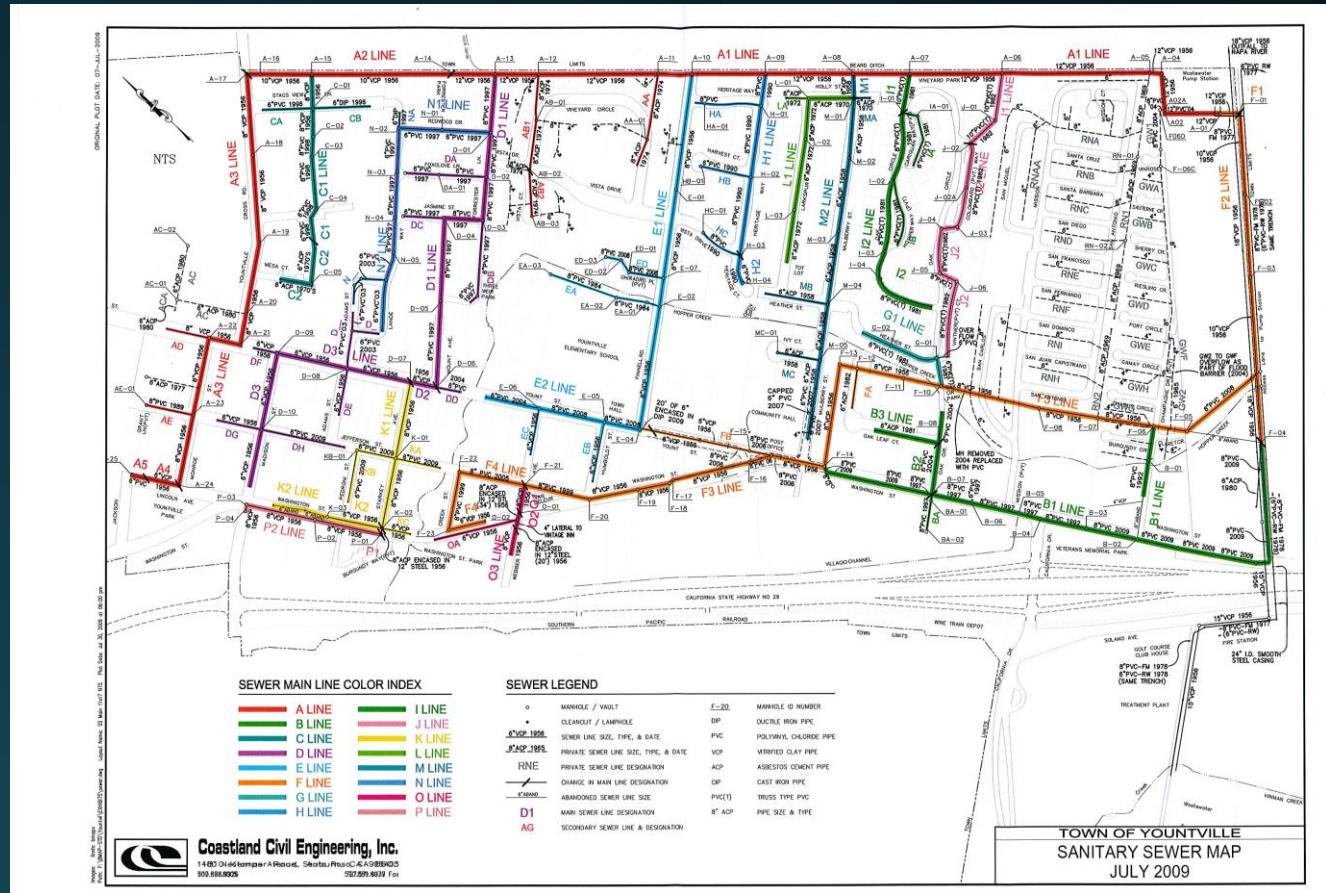
# What keeps us up at night

- 5 main breaks since 2010 in Washington Park neighborhood
- Pipes originally installed in 1997
- Several other contributors:
  - Ductile iron material
  - Corrosive soils
  - Volcanic gravel used for backfill



# Sanitary Sewer Collection System

- Approximately 9 miles of gravity pipelines
- 200 sewer manholes
- 6 “system loops” to help reduce SSO’s
- 1 wastewater pump station including:
  - 2 duty pumpus
  - 1 standby various electronic/air actuated instrumentation
  - Variable frequency drives (VFD’s)
  - SCADA control system and an emergency generator
- $\frac{1}{4}$  mile of sewer force main
- 1 flow meter
- Sewer cleaning vehicle for maintenance of pipelines and for emergency response



# Responding to Issues

- The Town's sewer collection system was originally constructed in 1956
- Materials with long service life using modern technology and construction practices are considered the best solution for long-term reliability and cost control
- Heavy rain events contribute to additional flow to the collection system, as do inflow and infiltration (I/I)



# Wastewater Reclamation Facility

- 100+ pumps, motors & blowers
- 5 flow meters
- 2 trickling filters
- 6 clarification tanks
- 2 chlorine contact chambers
- 1 “Fuzzy Filter”
- 1 two-stage sludge digestion system
- 1 effluent holding pond
- 2 sludge lagoons
- 1.5 miles of gravity outfall pipeline
- 1 emergency generator



# Recycled Water Distribution System

- 2 designated recycled water pumps
- 5 pressure regulated valves
- 8 flow meters
- 5.5 miles of distribution piping
- 15 air release valves
- 23 manual isolation valves
- 5 vineyard sites that utilize recycled water for irrigation
- 1 golf course customer

