



Collection System Master Plan (CSMP)

Phase 2 Task Order

2007 CSMP



- ▶ 2007 CSMP was the first update since the 1988 CSMP
- ▶ Developed a collection system model to evaluate system capacity
- ▶ Recommended \$120M+ (2007 dollars) in collection system capacity improvements OR:
- ▶ A 5-year I/I program followed by a performance assessment
 - ▶ Stated that some capacity upgrades may not be necessary if the I/I program is successful

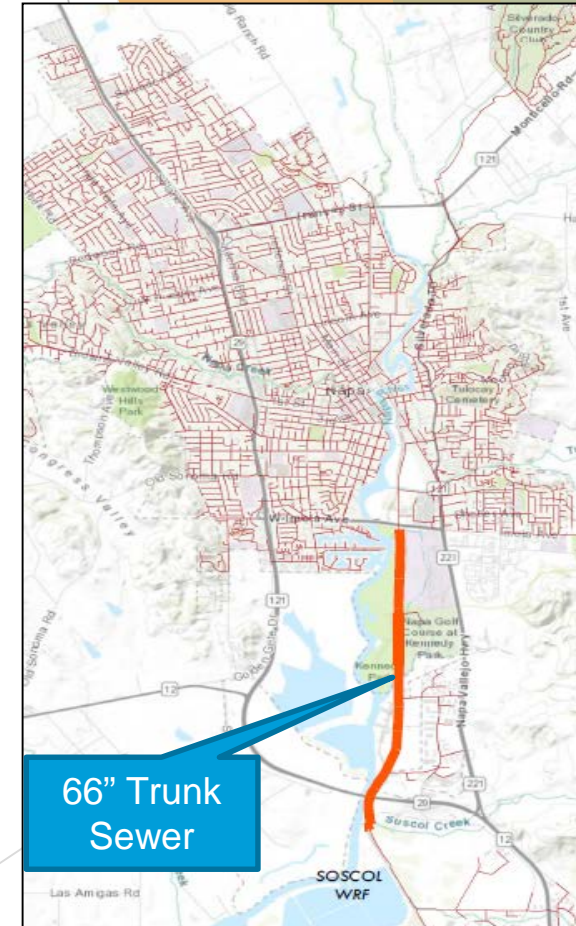
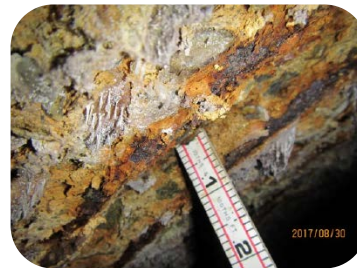
Why the CSMP Needs Updating



- ▶ Assess the performance of the I/I Program vs. the need for capacity improvements
- ▶ 2007 CSMP was developed based on a static model with only large diameter pipes (old technology)
 - ▶ Design storm used in 2007 is now outdated
 - ▶ The new CSMP will produce a more accurate analysis of how our collection system will react during a peak wet weather event
- ▶ 2007 growth projections are outdated (Napa Pipe, Gasser, Downtown development, General Plan updates, etc.)
- ▶ Water conservation due to drought conditions (dry weather sewer flows have decreased statewide)

Phase 1 of the CSMP - Complete

- ▶ Wet Weather Flow monitoring
- ▶ Evaluate the capacity of the 66" trunk main
 - ▶ Preliminary result: The 66" trunk main has adequate capacity if we can meet certain I/I reduction and system performance criteria
 - ▶ The all-pipes model from Phase 2 will provide validation



Phase 2 of the CSMP



- ▶ Evaluate current and future buildout conditions
 - ▶ Coordination with City and County General Plan updates
- ▶ Establish design criteria and service levels
- ▶ Complete the all-pipes hydraulic model
- ▶ Evaluate the performance of the I/I pilot program
- ▶ Recommend a capital program for capacity improvements and I/I reduction projects

Schedule



- ▶ May 2019: Award task order
- ▶ Summer 2019: Model build, dry weather flow monitoring, meetings with stakeholders
- ▶ Fall 2019: CIP planning and report generation
- ▶ Winter 2019/2020: Adopt Master Plan

Staff Recommendation



- ▶ Authorize the Purchasing Agent to execute Task Order 71 with GHD to provide engineering services for Phase 2 of the Collection System Master Plan (CIP 19727) in the amount of \$563,461.