



Collection System Master Plan (CSMP)

Phase 1 Task Order

Outline

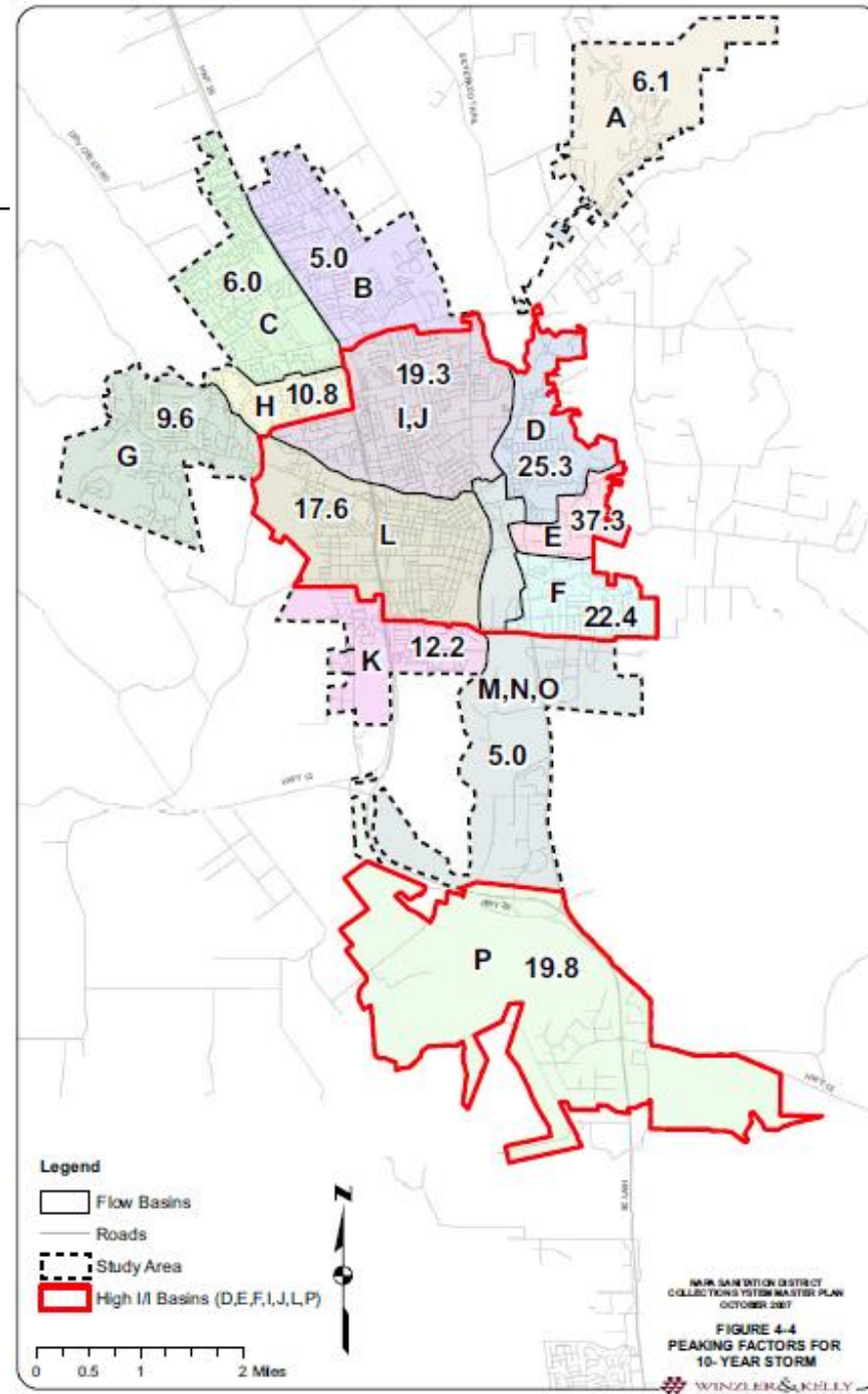
- ▶ 2007 CSMP
- ▶ I/I Program Overview
- ▶ Why the CSMP needs updating
- ▶ Phase 1 of the CSMP
- ▶ Phase 2 of the CSMP
- ▶ Schedule
- ▶ Staff recommendation



2007 CSMP



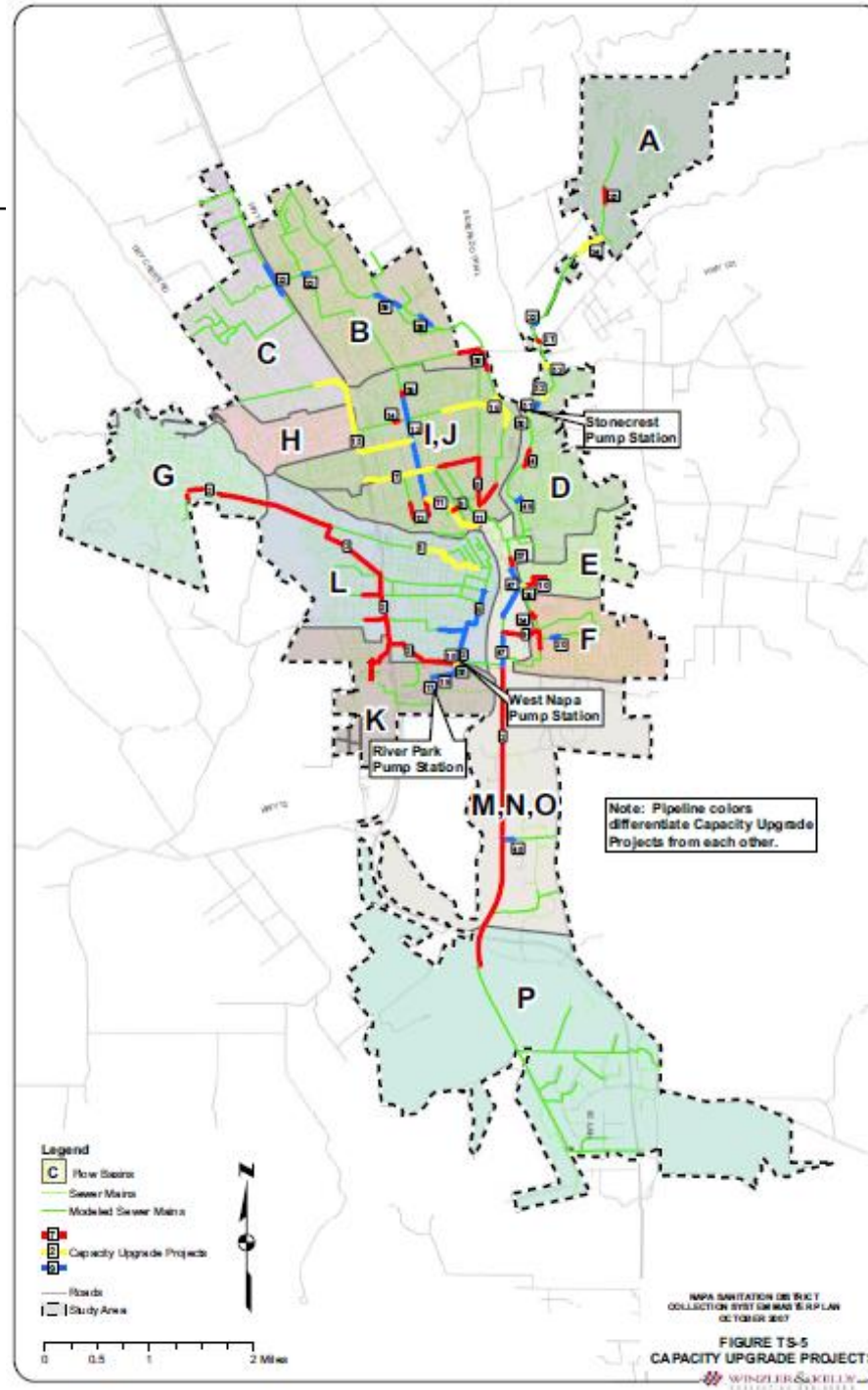
NapaSan Board of Directors Meeting



2007 CSMP



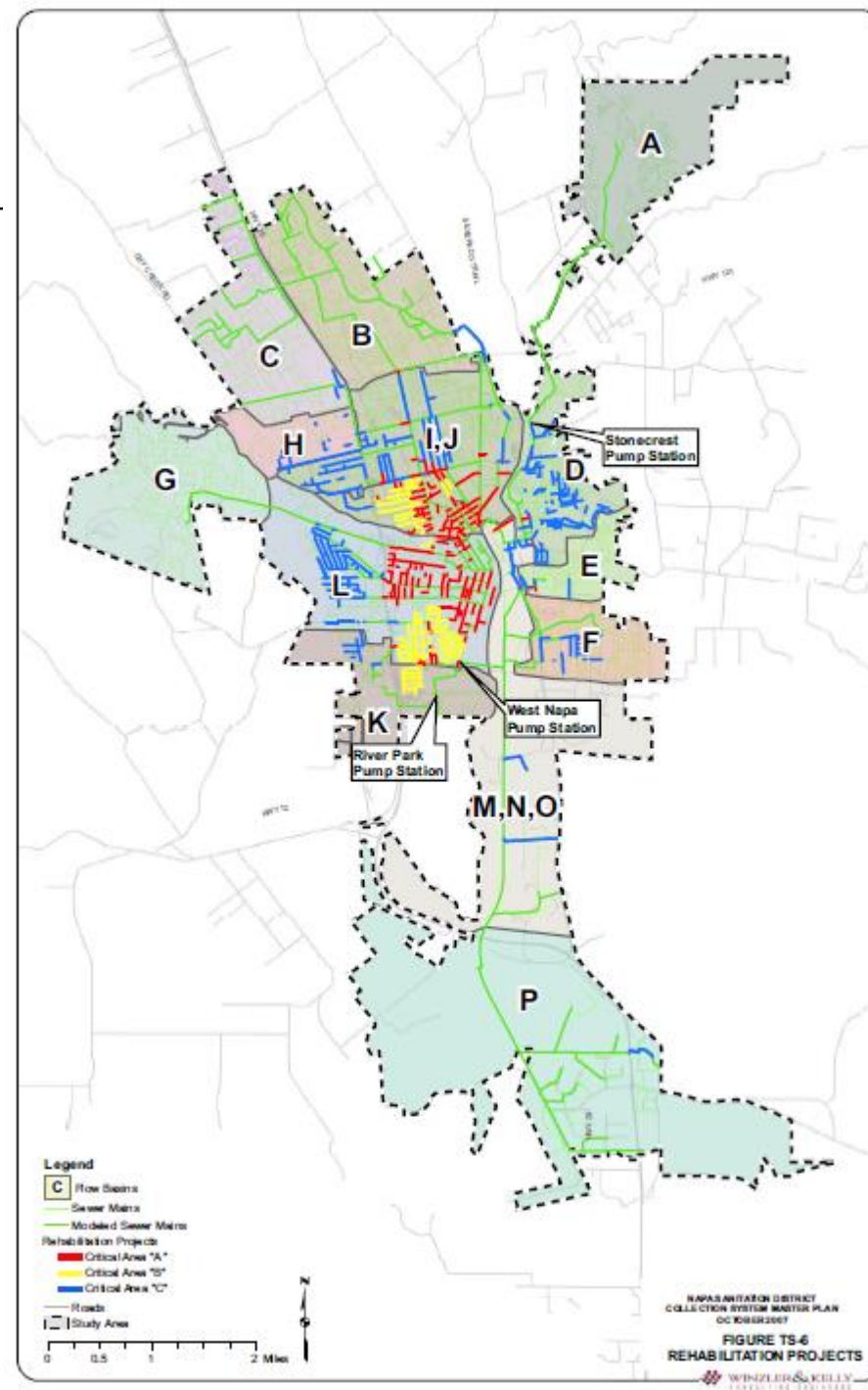
NapaSan Board of Directors Meeting



2007 CSMP



NapaSan Board of Directors Meeting



2007 CSMP



Table TS-3: Capacity and Rehabilitation Project Costs (x 1000) (2007 dollars, collection system only)

Project Type	Project Priority			Total
	High	Medium	Low	
Capacity	\$71,068	\$1,446	\$7,643	\$80,156
Rehabilitation	\$882	\$39,007	\$0	\$39,889
Total	\$71,949	\$40,453	\$7,643	\$120,045

- ▶ The 2007 CSMP recommended a 5-year I/I program followed by a performance assessment
- ▶ Some capacity upgrades may not be necessary if the I/I program is successful

I/I Program

- ▶ 7 major projects completed
- ▶ 19 miles of pipe rehabilitated/replaced
- ▶ 7% of system
- ▶ 12 MGD of peak flow rate reduction (not including 2017 project)



Why the CSMP Needs Updating



- ▶ Assess the performance of the I/I Program vs. the need for capacity improvements
- ▶ Changes in growth projections and development density (Napa Pipe, Gasser, Downtown Projects, etc.)
- ▶ Water conservation due to draught conditions (dry weather flows have decreased statewide)

Why the CSMP Needs Updating

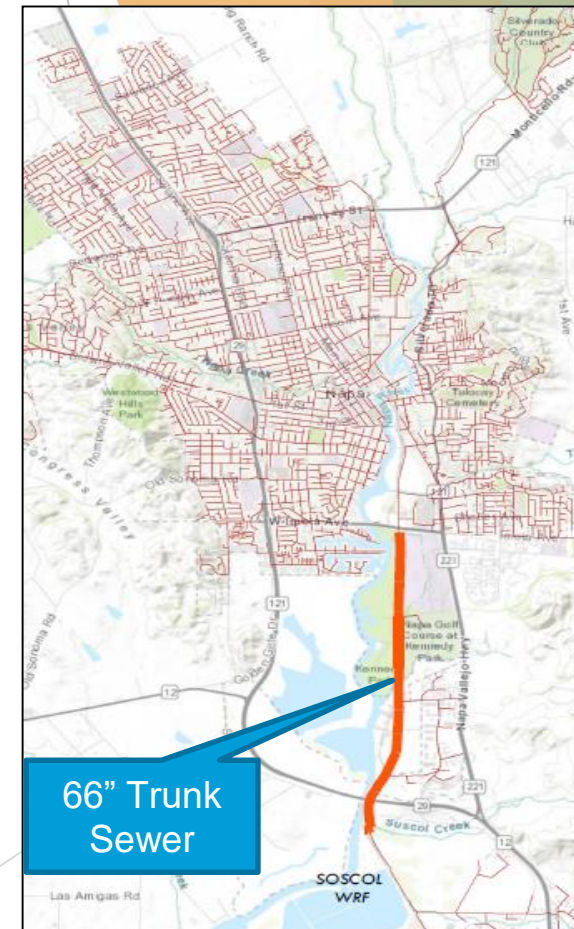
- ▶ CSMP recommendations need to be paired with AMP
- ▶ Better modeling technology
- ▶ Industry practice to update the CSMP every 5-10 years
- ▶ Evaluate the capacity of the 66” trunk main



Phase 1 of the CSMP



- ▶ Hydraulic model updates
- ▶ Flow monitoring
- ▶ Evaluate the capacity of the 66" trunk main
 - ▶ Recommend a rehabilitation or capacity upgrade project
- ▶ The CSMP was moved forward 1 year to inform NapaSan's decision on the 66" trunk project



Phase 2 of the CSMP



- ▶ Evaluate current and future buildout conditions
 - ▶ Future development based on City and County General Plans
- ▶ Condition assessments
- ▶ Establish design criteria and service levels
- ▶ Complete the hydraulic model
- ▶ Recommend a 10-year CIP for collection system upgrades

Schedule



► Phase 1

- Flow monitoring and modeling during winter 18/19
- Tech memo submittal during Spring 2019

► Phase 2

- Award task order during Spring/Summer 2019
- Adopt Master Plan in 2019/2020

Staff Recommendation



- ▶ Authorize the Purchasing Agent to execute Task Order 65 with GHD to provide engineering services for Phase 1 of the Collection System Master Plan (CIP 19727) in the amount of \$410,608.