



# Homewood and Westwood Neighborhood Inflow/Infiltration Project Funding

Napa Sanitation District  
Board of Directors Meeting  
September 7, 2016



# Recommendation

- Authorize the use of public funds for an inflow/infiltration reduction project in the Homewood/Westwood neighborhood by construction of private improvements



# Community Background



- 600 +/- homes
- Homes constructed in the 1940-50s with backyard sewer mains
- Sewer mains in streets constructed late 1970s
  - Laterals reversed



# Flow Monitoring Study

- Wet-weather peaking factor of 6.6
- Peak wet-weather flow of 4.5 million gallons per day
- Sewer mains are in great condition
- Lower laterals are in good condition
  - scheduled to be inspected/repaired (as needed)



# Neighborhood Wet-Weather Conditions



Raised-floor foundation and crawlspace

- Poor stormwater drainage
- High groundwater
- Homes have crawlspaces
- Runoff and groundwater accumulation within the crawlspaces



# Sump Pumps: An Illicit Connection



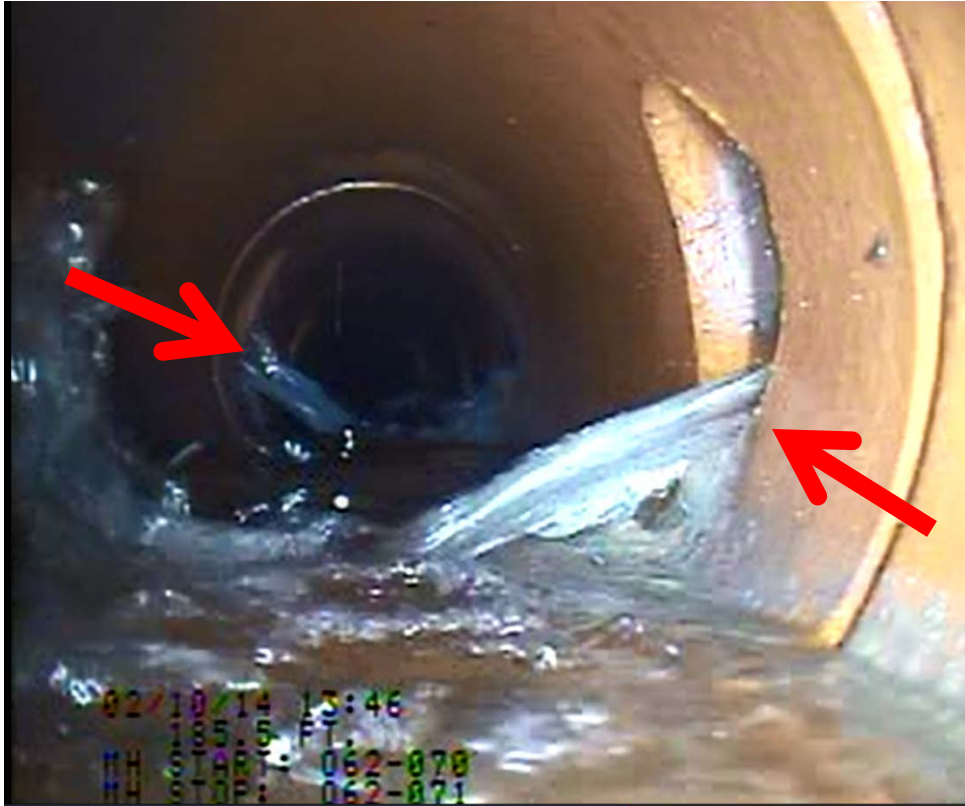
Sump pump pipe leading into the ground

- Sump pumps used to discharge water
- Many sump pumps are connected to sewer system
- Discharge to SS prohibited by Code





# Proposed Plan



Heavy clear water flow from De Witt Ave. laterals

- Public system is in excellent condition
- Inspection discovered I/I from private property
- Coordinate with property owners to reduce onsite I/I



# Benefits of Public Funding

- Participation rate
  - Higher than when funded by property owners
- Permanent solution
  - Compared to temporary disconnection by property owners
- Enforcement actions could be more expensive than design/construction
  - Inspection, communication, legal costs





# Project Details



- I/I “low hanging fruit”
  - Flow reduction likely to be greater than public system rehabilitation per dollar spent
- Construction completed prior to the City of Napa’s curb and sidewalk project of Summer 2017
- Project limited to this neighborhood due to unique conditions
  - Location, groundwater, foundation type, soil conditions



# Program Outreach



- Written letters and in-person communication
  - English and Spanish
  - Coordinate with City
- Require a form permitting the District to perform inspection and construction
- Work is prioritized on a first-come, first-served basis
- Inspect for I/I



# Project Schedule

- Outreach Sep-Nov 2016
- Inspection Oct-Dec 2016
- Design Jan-Feb 2017
- Board project approval Mar 2017
- Contractor Selection Mar-Apr 2017
- Construction May-Jun 2017





# Project Budget

- \$200,000 total project budget
  - A new capital project will be created from savings from 16/17 projects
- I/I mitigation funding from developers
  - (resolution 11-025)
- \$2,500+/- estimated cost per property
- First-come, first-served basis
- Property owners (if any) who do not respond may be required to disconnect in the future at their own cost



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