

RESOLUTION NO. 11-025

**RESOLUTION OF THE BOARD OF DIRECTORS OF THE NAPA
SANITATION DISTRICT ADOPTING A POLICY
ALLOWING INFLOW/INFILTRATION REDUCTION PROJECTS AS A
WET WEATHER FLOW MITIGATION OPTION FOR NEW
DEVELOPMENT PROJECTS**

WHEREAS, the Napa Sanitation District adopted a Collection System Master Plan (CSMP) in December 2007; and

WHEREAS, the CSMP identified several trunk pipelines in the existing collection system that have capacity deficiencies during wet weather flow conditions directly related to inflow/infiltration (I&I); and

WHEREAS, the CSMP recommends pipeline capacity upsizing to address these capacity deficiencies during wet weather flow conditions; and

WHEREAS, the District is evaluating the effectiveness of pipeline rehabilitation projects to reduce I&I entering the collection system in lieu of installing larger pipelines to convey wet weather flows; and

WHEREAS, the growth projections in the CSMP are consistent with the City of Napa General Plan and Napa County General Plan and the General Plan Update in progress at that time; and

WHEREAS, the planning period in the CSMP is through 2030; and

WHEREAS, there is the potential for development projects to request sewer service that were not anticipated or are larger than the growth projections in the CSMP; and

WHEREAS, such a development project requesting sewer service could be located immediately upstream of a trunk pipeline that was identified as lacking sufficient wet weather capacity in the CSMP; and

WHEREAS, it is possible to create adequate wet weather capacity in a pipeline by removing the ability for I&I to enter the collection system upstream of a development project by rehabilitating the sewer system; and

WHEREAS, the Board of Directors desires to adopt a policy to provide direction to staff for future development projects that are beyond planning projections and are upstream of trunk pipelines that lack sufficient wet weather capacity;

NOW, THEREFORE BE IT RESOLVED that the Board of Directors, as the governing body of the Napa Sanitation District, hereby authorizes and directs the implementation of the following policy for future development projects that are beyond planning projections and are upstream of trunk pipelines with wet weather capacity deficiencies:

Circumstances under Which Staff May Consider an I&I Reduction Project

- The proposed development shall not have been included in, or significantly exceed, the growth projection in the CSMP. Projects can be considered if they are located inside or outside of the District's boundary. Projects outside of the District's boundary are required to annex into the District before connecting to the sewer system.
- The proposed development must be upstream of a pipeline identified in the CSMP that is under capacity during peak wet weather flow.
- The CSMP identified pipelines that are under capacity during dry weather flow. In these instances, the impacted pipeline size shall be increased to convey at least the projected 2030 dry weather flow in the CSMP. If the increased pipeline size has insufficient capacity to convey the projected wet weather flow, the developer shall construct an I&I reduction project of adequate size to offset the projected wet weather flow.

Requirements for an I&I Reduction Project

- I&I reduction project must achieve a total peak wet weather flow rate reduction greater than the incremental increase for two primary reasons:
 - Depending on the location and type of I&I rehabilitation work, collection system flows from that location could be attenuated prior to reaching the portion of the trunk sewer impacted by the incremental flow increase; and
 - The rehabilitated and/or replaced portions of the existing sewer collection system will degrade over time, which can result in a future increase in I&I at those locations.

A 2:1 mitigation ratio is required for an upstream I&I reduction project based on research of similar sewer systems.

- An I&I reduction project must be located upstream of the proposed development and the pipeline where flows are projected to be greater than capacity. The developer shall pay for the District to install flow monitors in the collection system immediately downstream of the I&I reduction project during the wet weather seasons before and after the I&I reduction project is constructed. Measured reduction in I&I must meet or exceed development project impacts on a 2:1 mitigation ratio.
- An I&I reduction project shall completely rehabilitate the public sewer system between manholes. The public sewer system includes lower laterals.

Developer Options

- The Developer shall enter into an agreement with the District to fund all costs to design and construct an I&I reduction project. District staff will select and manage a design consultant who will prepare construction documents. The project will be bid in

accordance with District procedures. Depending on the scale of the project, District staff or a consultant will manage and inspect the construction of the I&I reduction project.

- The developer may contribute funds to a larger planned District I&I reduction project as long as the project meets the above requirements. The Developer's financial contribution shall be calculated by multiplying the total project cost by the development's estimated peak wet weather flow and the mitigation ratio and then dividing by the measured reduction in I&I. $(\text{total project cost}) (\text{peak wet weather flow}) (2) / (\text{measured reduction})$.
- If the measured I&I reduction on a solely funded developer project exceeds the amount required for the development project, the pipeline will effectively have additional wet weather capacity to support other development downstream of the I&I project. The developer shall have the option to apply the excess capacity to another project that is upstream of the under capacity pipeline for a period of five (5) years after the completion of the I&I reduction project. The developer is allowed to transfer the excess capacity to another developer's project as long as the transfer of excess capacity is based solely on the proportional actual direct cost of the I&I project that created the capacity. The District must agree to the transfer in writing prior to the transfer, or the transfer will not be recognized by the District. The five year period shall not be extended if the capacity is transferred to another developer. The mitigation ratio for transferred capacity shall be no less than 2.5:1.

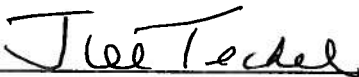
I hereby certify that the foregoing Resolution was duly and regularly adopted by the Board of Directors of the Napa Sanitation District, at its regularly scheduled meeting on the 21st day of December, 2011, by the following vote:

AYES: GRAVETT, LUCE, SHINNAMON, TECHEL, VAN GORDER

NOES: NONE

ABSENT: NONE

ABSTAIN: NONE



Chair, Board of Directors

ATTEST:



Secretary, Board of Directors