

**California Regional Water Quality Control Board
San Francisco Bay Region**

RESPONSE TO WRITTEN COMMENTS

On the Tentative Cleanup and Abatement Order for
City and County of San Francisco

The Regional Water Board received written comments on a tentative cleanup and abatement order (tentative CAO) distributed for public comment on September 3, 2021. The following parties provided comments:

1. U.S. EPA
2. Solutions not Sandbags
3. Neighbors Against Flooding
4. New Mission Terrace Improvement Association
5. Wendell Lee

The comments are summarized below in *italics* (paraphrased for brevity) and followed by a staff response. For the full content and context of the comments, please refer to the comment letters. To request copies of the letters, please contact Sam Plummer at sam.plummer@waterboards.ca.gov.

U.S. EPA

U.S. EPA Comment 1:

U.S. EPA supports the Board's adoption of the tentative CAO, which will address long-standing deficiencies regarding the City and County of San Francisco's operation of its combined sewer systems and its response to overflows of combined sewage. In particular, U.S. EPA supports the requirement for a Sewer Overflow Response Plan, pointing specifically to requirements related to water level sensing devices, public outreach, backflow prevention, grants, and sandbags.

Response to U.S. EPA Comment 1:

We acknowledge U.S. EPA's support of the tentative CAO.

U.S. EPA Comment 2:

While acknowledging the significant improvements the tentative CAO will require in three low-lying areas within San Francisco, U.S. EPA believes San Francisco needs to address systemic deficiencies across the rest of San Francisco, particularly in the Cayuga area.

Response to U.S. EPA Comment 2:

We agree that more work may be needed after the tasks identified in the tentative CAO are completed. The tentative CAO requires San Francisco to complete projects in three areas that present the greatest risk of flooding within San Francisco. As explained in Finding 20.b of the tentative CAO, we expect the Lower Alemany Project required by the tentative CAO to provide ancillary benefits to the Cayuga area. Adoption of the CAO would not preclude the Water Board from requiring San Francisco to implement additional projects in other areas of the city, including the Cayuga area, nor would it prohibit future enforcement.

U.S. EPA Comment 3:

U.S. EPA points out that San Francisco could improve its response to, and documentation of, overflows that occur across the city by applying the Sewer Overflow Response Plan and public outreach provisions in the tentative CAO citywide.

Response to U.S. EPA Comment 3:

While the tentative CAO requires improvements in three specific low-lying areas of San Francisco, we encourage San Francisco to apply many elements of the proposed Sewer Overflow Response Plan citywide. Based on discussions with San Francisco, we believe San Francisco will do so, particularly since implementing most elements of the response plan citywide would be more efficient than directing staff to only implement them in the three targeted areas. The elements of the Sewer Overflow Response Plan that we anticipate San Francisco will likely implement citywide include Provision 1.b.i(a), which requires public outreach; Provision 1.b.i(c), which requires public notification; Provision 1.b.ii, which promotes backflow prevention devices; Provision 1.b.iv, which requires making sandbags available to the public; Provision 1.c, which specifies initial overflow response measures; and Provision 1.d, which specifies follow-up overflow response measures.

The Water Board already requires documentation of sewer overflows. A September 3, 2020, Water Code 13383 Order requires San Francisco to report sewer overflows from the Bayside combined sewer system using the California Integrated Water Quality System (CIWQS) online database. Order R2-2019-0028 (the Oceanside NPDES permit) contains similar requirements for the Oceanside combined sewer system.

Solutions Not Sandbags

Solutions not Sandbags Comment 1:

Solutions not Sandbags supports the projects required by the tentative CAO and hopes they will be approved and proceed.

Response to Solutions not Sandbags Comment 1:

We acknowledge Solutions not Sandbag's support of the tentative CAO.

Solutions not Sandbags Comment 2:

Solutions not Sandbags requests that the Water Board consider the Cayuga area as it continues to work with San Francisco because the Cayuga area has historically experienced devastating sewer-related floods since the Interstate 280 Highway was built. Solutions not Sandbags would like the Water Board to engage the California Department of Transportation to improve drainage in the Cayuga area. If no engineering solutions are viable, Solutions not Sandbags wants San Francisco to purchase the affected homes and redevelop the neighborhood into dedicated green space.

Response to Solutions not Sandbags Comment 2:

As explained in Finding 20.b of the tentative CAO, we expect the Lower Alemany Project required by the tentative CAO to provide ancillary benefits to the Cayuga area. After San Francisco completes the Lower Alemany Project, modeling results predict that no sewer overflows should occur in the Cayuga area during a 25-year, 3-hour storm.¹ If the Cayuga area does not receive the anticipated benefits from the Lower Alemany Project, this tentative CAO does not preclude the Water Board from requiring San Francisco to implement additional measures to protect the Cayuga area from sewer overflows or from engaging the California Department of Transportation if necessary.

Solutions not Sandbags Comment 3:

Solutions not Sandbags notes that, while San Francisco has historically offered sandbags, promoted anti-backflow devices, and created new flood-zone maps that include the Cayuga area, these measures are not solutions to the sewer-related flooding issue.

Response to Solutions not Sandbags Comment 3:

We agree. This tentative CAO does not rely on sandbags, anti-backflow devices, and updated flood maps as long-term solutions. It requires significant capacity improvement projects for the three low-lying areas.

Solutions not Sandbags Comment 4:

Solutions not Sandbags points out that 600 housing units are being built along Cayuga Avenue several blocks south of a flood-prone area and that more housing is planned over the next few years. Solutions not Sandbags is concerned that additional sewage flows from such housing may exacerbate flooding during storms.

Response to Solutions not Sandbags Comment 4:

We do not expect the sanitary sewage flows from additional housing units to increase flooding during storms. During the large storms that result in flooding, sanitary sewer flows contribute a small fraction of the total combined wastewater flow. Given this small fraction, increases in sanitary wastewater flows from new developments will not appreciably increase the volume or frequency of sewer overflows. In fact, large new construction projects are subject to stormwater and water recycling requirements that may alleviate flooding to some extent. San Francisco's Stormwater Management Ordinance (Public Works Code, Article 4.2, sections 147 through 146.6) requires

¹ A 25-year storm is a theoretical storm with a 4% chance of occurring during any particular year based on historical weather data.

developments that create or replace 2,500 square feet or more of impervious surface to reduce stormwater runoff by at least 25 percent relative to pre-development conditions. Additionally, San Francisco's Non-Potable Ordinance (San Francisco Health Code, Article 12C) requires new developments with more than 100,000 square feet of gross floor area to install and operate on-site non-potable water systems to reuse non-potable sources such as blackwater, graywater, rainwater, and foundation drainage for toilet flushing and irrigation. By reducing runoff and potable water consumption, large new developments will likely offset their contributions to combined wastewater flows.

Solutions not Sandbags Comment 5:

Solutions not Sandbags reiterates its request that the Water Board consider the Cayuga area as it continues to work with San Francisco because the Cayuga area has historically experienced devastating sewer-related floods.

Response to Solutions not Sandbags Comment 5:

See response to Solutions not Sandbags Comment 2.

Solutions not Sandbags Comment 6:

Solutions not Sandbags provides a list of additional locations within San Francisco that typically experience sewer overflows, including 374 Alemany Boulevard, Marin Street just east of Bayshore near Beronio Lumber, and a few places in the Western Addition.

Response to Solutions not Sandbags Comment 6:

We appreciate Solutions not Sandbags pointing out these locations. While the tentative CAO requires San Francisco to complete projects in three areas, it does not preclude the Water Board from requiring San Francisco to address other areas. The following includes a brief explanation of current and planned actions to improve conditions in the areas identified by Solutions not Sandbags:

- 374 Alemany Boulevard: The Lower Alemany Project required by the tentative CAO will reduce sewer overflows at this location, which is within the Lower Alemany polygon (see Attachment 3 to the tentative CAO).
- Marin Street just east of Bayshore near Beronio Lumber: In 2013, San Francisco completed a capacity upgrade project along Cesar Chavez underneath U.S. Highway 101 to address nearby capacity issues. Following the completion of the Cesar Chavez project, San Francisco identified the need to address remaining flooding issues along Marin Street and Kansas Street. This project has been delayed, but a design and build contract has been approved and the design is currently 35 percent complete. San Francisco plans to complete construction in 2024.
- Western Addition: San Francisco plans to address the sewer overflow issues experienced in this area through a suite of projects that includes a large diameter sewer rehabilitation project. These projects are located within a high-density area and will require significant planning and coordination to minimize disruption to streets and public transit. These projects are proposed to begin in 2028.

Neighbors Against Flooding

Neighbors Against Flooding Comment 1:

Neighbors Against Flooding thanks the Water Board for requiring San Francisco to abate potential threats posed by sewer overflows in the three low-lying areas.

Response to Neighbors Against Flooding Comment 1:

We acknowledge Neighbors Against Flooding's support of the tentative CAO.

Neighbors Against Flooding Comment 2:

Neighbors Against Flooding requests that the Water Board include the Ingleside Terraces neighborhood near Victoria Street, Urbano Drive, and Pico Avenue in the tentative CAO.

Response to Neighbors Against Flooding Comment 2:

We appreciate Neighbors Against Flooding pointing out this location. San Francisco has already implemented measures to reduce sewer flooding in the Ingleside Terraces area and plans to take additional actions. In 2017, San Francisco installed 8 new inlets and 18 new high capacity catch basins sized to capture most overland flow and mitigate the effects of flooding anticipated from a typical 5-year, 3-hour storm.² Due to the San Francisco Municipal Transit Agency light rail lines that run along Ocean Avenue, a more robust solution to the overland flow and sewer overflow issue will require significant coordination between the San Francisco Public Utilities Commission and the Municipal Transit Agency. San Francisco plans to begin this work in 2028. We will continue to monitor San Francisco's progress to improve its sewer capacity in the Ingleside Terraces neighborhood.

We do not recommend adding it to the tentative CAO because the tentative CAO is subject to a stipulation agreement negotiated with San Francisco. Changing the tentative CAO would require restarting the negotiation and seeking new approvals from the San Francisco Public Utilities Commission, Board of Supervisors, and Mayor. Although the tentative CAO requires San Francisco to complete projects in three areas that present the greatest risk of flooding within San Francisco, this action would not preclude the Water Board from requiring San Francisco to implement additional projects in other areas, such as the Ingleside Terraces area, through a separate action.

Neighbors Against Flooding Comment 3:

Neighbors Against Flooding expresses concern that the Balboa Reservoir Project and planned housing will increase flood risks in the Ingleside Terrace neighborhood.

² A 5-year storm is a storm with a 20% chance of occurring during any particular year based on historical weather data. The design objective described in Provision 6 of the tentative CAO is based on this storm.

Response to Neighbors Against Flooding Comment 3:

See response to Solutions not Sandbags Comment 4. The ordinances described there also apply to the Balboa Reservoir Project.

New Mission Terrace Association

New Mission Terrace Association Comment 1:

The New Mission Terrace Association notes that the Cayuga area has historically experienced devastating sewer-related floods since the Interstate 280 Highway was built. The New Mission Terrace Association would like the Water Board to engage the California Department of Transportation to improve drainage in the Cayuga area.

Response to New Mission Terrace Association Comment 1:

See response to Solutions not Sandbags Comment 2.

New Mission Terrace Association Comment 2:

The New Mission Terrace Association points out that close to 1,000 new housing units are under construction in the Cayuga area and would like the Water Board to ensure that this will not exacerbate sewer-related flooding.

Response to New Mission Terrace Association Comment 2:

See response to Solutions not Sandbags Comment 4.

Wendell Lee

Wendell Lee's Comment 1:

Wendell Lee expresses concern about debris entering, collecting in, and causing blockages in the combined sewer systems, and causing or exacerbating sewer overflows.

Response to Wendell Lee's Comment 1:

We agree that debris can enter, collect, and cause blockages in the combined sewer systems. The tentative CAO requires San Francisco to investigate and document the causes of sewer overflows within the three polygons (see Attachments 1, 2, and 3 to the tentative CAO). This will drive San Francisco to refine its inspection and cleaning programs for those areas. Additionally, San Francisco's existing NPDES permits (Orders R2-2013-0029 and R2-2019-0028) require San Francisco to implement the Nine Minimum Controls specified by U.S. EPA's *Combined Sewer Overflow (CSO) Control Policy*. These include proper operation and maintenance of the collection

systems and maximizing wastewater storage within the collection systems. These controls require San Francisco to remove and prevent flow obstructions in the combined sewer systems through such means as catch basin cleaning; gravity sewer cleaning; fats, oils and grease control; gravity sewer condition assessment; gravity sewer rehabilitation and replacement; and disconnection of illegal connections. We review available information and perform inspections to evaluate compliance with these requirements and will take actions as necessary to ensure compliance.