CASTRO VALLEY SANITARY DISTRICT (CVSan) is a public agency providing wastewater and solid waste services (recycling, organics, and garbage) to the community of Castro Valley. CVSan owns 25% of the Castro Valley/Oro Loma Wastewater Treatment Plant (WWTP) and participates in the management of the WWTP’s ongoing operations. Quality service and reasonable rates are standard practice at CVSan.

This year, CVSan celebrates 80 years of protecting public health and the environment. Since 1939 there has been many changes in the wastewater and solid waste fields. Here’s how CVSan’s services have changed and grown over the years –

Did You Know?

Today, CVSan maintains 156 miles of public sewer mains, 8 pump stations, 3,548 manholes, and 90 public garbage and recycling cans along Castro Valley Boulevard.

Did You Know?

Today, CVSan serves over 61,000 residents and 580 businesses in an 8.5 square mile area.

1940s
CVSan is established to serve the largely agricultural community of Castro Valley.

1950s

1960s

1970s

1980s

1990s

2000s

2010s

1939
CVSan is established to serve the largely agricultural community of Castro Valley.

1967
The Castro Valley/Oro Loma Wastewater Treatment Plant expands to accommodate the rising population.

1974
The Castro Valley/Oro Loma Wastewater Treatment Plant begins discharging wastewater through the Outfall Pipe, a five-mile long pipe that extends out into the San Francisco Bay.

1991
CVSan residents begin recycling plastic, metal, paper, and glass curbside.

1994
CVSan residents begin diverting plant debris and yard trimmings curbside to be composted.

1997
CVSan hosts the first 3rd Grade Field Trip to teach students how to reduce, reuse, and recycle. Composting (rot) and Zero Waste are added as field trip topics later.

2002
CVSan hosts the first Recycles Day event to help residents properly recycle e-waste and tires.

2003
CVSan hosts the agency’s first Earth Day Clean-Up event benefitting schools and public sites throughout Castro Valley.

2006
CVSan completes a major $32 million renovation project at the Castro Valley/Oro Loma Wastewater Treatment Plant to protect it from predicted rising sea levels.

2016
CVSan completes the Ecotone Horizontal Levee Project at the Castro Valley/Oro Loma Wastewater Treatment Plant to protect it from predicted rising sea levels.

2019
CVSan celebrates 80 years of service.
Welcome to Castro Valley Sanitary District’s (CVSan’s) Annual Report, covering our achievements and activities between July 1, 2017 and June 30, 2018. We are pleased to present this important information in a new, more visual format that incorporates charts and graphs to tell our story with greater clarity. We are excited about this new style and hope you find the Annual Report interesting and engaging.

CVSan is proud to provide the community of Castro Valley with high quality solid waste and wastewater services. This Annual Report lists our “A’s” over the past year—Activities, Awards, and Achievements. It aims to offer you, our customer and partner, a snapshot of CVSan’s efforts and dedication to the community.

In addition to the Annual Report, we invite you to keep up with our activities throughout the year with the quarterly Pipeline newsletter, our social media posts on Facebook and Twitter, and the CVSan.org website. Our goal is to keep you well informed as part of our commitment to Castro Valley—the community where I live and work and where we strive for the highest level of performance.

ROLAND P. WILLIAMS, JR. General Manager

Staff Achievements

ROLAND P. WILLIAMS, JR., GENERAL MANAGER, was elected to the California Association of Sanitation Agencies (CASA) Board of Directors.

GREG WILLIAMS, COLLECTION SYSTEM MAINTENANCE SUPERVISOR, completed fifteen years of service with CVSan.

NAOMI LUE, ZERO WASTE SUPERVISOR, completed fifteen years of service with CVSan. Naomi was selected as a member of Leadership California’s Issues and Trends Program Class of 2018 and received the Pamela Hemann Scholarship.

LORENZO GRAYSON, COLLECTION SYSTEM MAINTENANCE WORKER, completed ten years of service with CVSan.

COLE CACERES was promoted from Solid Waste Program Intern to ZERO WASTE OUTREACH SPECIALIST.

EVAN CHOI was promoted from Administrative Analyst Intern to ENGINEERING TECHNICIAN.
The water is cleaned at the Castro Valley/Oro Loma Wastewater Treatment Plant and released into the middle of the San Francisco Bay through the Outfall Pipe, a five-mile-long underwater pipe. The Outfall Pipe is also used by the cities of San Leandro, Hayward, Dublin, Pleasanton, Livermore, Fremont, Union City, and Newark to discharge their cleaned wastewater. Turn to page 4 to learn how CVSan is improving the quality of the water released into the Bay.

WHAT HAPPENS TO WATER AFTER IT GOES DOWN THE DRAIN?

1. PRIVATE SEWER LATERAL
   Water going down the drain or toilet travels first through the building’s private sewer lateral. This pipe connects the building’s interior plumbing fixtures with the public sewer main under the street. Turn to page 5 to learn how CVSan can assist you financially with repairs to your private sewer lateral.

2. SEWER MAINS AND FLUME
   Water then flows into the public sewer mains until it reaches the Parshall flume, which is the point where public sewer mains merge together. Keeping public sewer mains and the flume in good working order is CVSan’s responsibility. Turn to page 5-6 to learn how CVSan maintains these structures.

3. INTERCEPTING SEWER
   After passing the flume, water flows through a large pipe called the Intercepting Sewer, which carries all of Castro Valley’s wastewater to the Castro Valley/Oro Loma Wastewater Treatment Plant in San Lorenzo.

4. CASTRO VALLEY/ORO LOMA WASTEWATER TREATMENT PLANT (WWTP) AND THE SAN FRANCISCO BAY
   The water is cleaned at the Castro Valley/Oro Loma Wastewater Treatment Plant and released into the middle of the San Francisco Bay through the Outfall Pipe, a five-mile-long underwater pipe. The Outfall Pipe is also used by the cities of San Leandro, Hayward, Dublin, Pleasanton, Livermore, Fremont, Union City, and Newark to discharge their cleaned wastewater. Turn to page 4 to learn how CVSan is improving the quality of the water released into the Bay.
Horizontal Levee Exceeds Expectations

In 2016, CVSan and Oro Loma Sanitary District completed construction of the Ecotone Horizontal Levee at the Castro Valley/Oro Loma Wastewater Treatment Plant (WWTP) in San Lorenzo. This innovative project features a sloping levee and a wetland basin, designed to protect the Hayward Shoreline against anticipated sea level rise, and to filter a portion of the wastewater from the WWTP using native wetland plants.

This past year researchers from the University of California, Berkeley completed a study on the project’s effectiveness. Different types of wetland plants were placed in sections of the levee to see which species would be the most effective at filtering wastewater. The study showed that all plant species on the levee are thriving under the testing conditions, and that the project is filtering wastewater to a higher degree than researchers had anticipated. CVSan hopes that findings from the Ecotone Horizontal Levee Project will be used to create more levees like this to protect the Bay Area’s shorelines.

New Project to Remove Harmful Nutrients

Construction has just begun for the Wet Weather and Nutrient Optimization Project at the Castro Valley/Oro Loma Wastewater Treatment Plant (WWTP). This $19.5 million project will upgrade the WWTP’s existing facilities and install new equipment to remove more nitrogen and phosphorus from wastewater during the treatment process. Since treated wastewater from the WWTP is discharged directly into the San Francisco Bay, it is important to decrease the amount of nitrogen and phosphorus nutrients that can cause harmful algae blooms. With this project, CVSan is taking proactive steps in anticipation of stricter regulations regarding wastewater nutrient levels in the near future.

The design of this project was completed in June 2018, and construction is projected to be completed in fall 2020.
Within CVSan’s service area, property owners are responsible for the upkeep of their building’s private sewer laterals. However, since 1998 CVSan has awarded grants to assist property owners with paying for their private sewer lateral repair. In 2017, a total of $50,000 was awarded to 26 property owners to help with repairing or replacing their private sewer laterals. Since the program began, a total of $1,125,000 has been granted to nearly 630 property owners.

For more information, visit www.cvsan.org/Grants.

Of the 302 sewer overflows that occurred in the East Bay in 2017/18, **ONLY ONE** was in Castro Valley.

**ACHIEVEMENTS AND AWARDS**

California Water Environment Association Collection System of the Year Award:
- 2017 (Nomination), 2014 (Winner)

12 years with no time lost due to workplace accidents.
2017/18 MAJOR WASTEWATER CONSTRUCTION PROJECTS IN CASTRO VALLEY

**PUMP STATION 4 FORCemain Replacement & Flume Rehabilitation Project**

**Purpose:** Replace aging infrastructure and improve access to the sewer main for maintenance.

**Cost:** $428,672

**Schedule:** March 24 to June 30, 2017; project was completed on schedule.

**Work Done:** The Pump Station 4 public sewer main was relocated from an easement on private property to public streets. The flume’s maintenance hatch was replaced, and Manhole Odor Eliminators were installed to reduce odor. The flume is where all of Castro Valley’s public sewer mains connect to a large pipe to be transported to the Castro Valley/Oro Loma Wastewater Treatment Plant.

**SANDY ROAD CAPACITY IMPROVEMENT & ANNUAL REPAIR PROJECT**

**Purpose:** Upgrade public sewer main to accommodate higher flow during wet weather.

**Cost:** $1,623,941

**Schedule:** May 26 to December 18, 2017; project was completed on schedule.

**Work Done:** The 8-inch vitrified clay public sewer main under Sandy Road was upsized to a 10-inch high-density polyethylene public sewer main. In addition, 13 spot repairs, five manhole installations, and 16 full line replacements were completed throughout Castro Valley.

**KEY**

**Green Areas** Construction locations for the Sandy Road Capacity Improvement & Annual Repair Project

**Blue Areas** Construction locations for the Pump Station 4 Forcemain Replacement & Flume Rehabilitation Project
COMMUNITY EVENTS TO REDUCE WASTE

PROMOTED COMPOSTING WITH ANNUAL EARTH DAY EVENTS

Over 700 volunteers participated in CVSan’s Earth Day Clean-Up event. Together they cleared over 50 cubic yards of plant debris at schools and public areas.

CVSan donated 50 cubic yards of compost and 127 cubic yards of mulch to the community sites and schools for Earth Day and other projects. In addition, CVSan donated over $2,050 to local charities selected by Earth Day participants.

HELPED RESIDENTS WITH HARD-TO-RECYCLE MATERIALS

CVSan gave over 8,100 bags of compost to residents and businesses in its service area and collected over 50,820 lbs of e-waste at Recycles Day events.

LED ZERO WASTE PROGRAMS

75 Green Hearts volunteers worked at local events to help patrons recycle and compost correctly.

Over 160 residents participated in CVSan’s Zero Waste Week events and activities.

376 lbs of broken items were repaired at CVSan’s Fixit Clinics and were kept out of the landfill.

24 residents attended a tour of the Davis Street Transfer Station.

WHAT HAPPENS AFTER MY GARBAGE, RECYCLING, AND ORGANICS ARE COLLECTED?

Starting May 1, 2019, the first stop for recycling and organics is Alameda County Industries’ Materials Recovery Facility in San Leandro, and the first stop for garbage is the Davis Street Transfer Station in San Leandro. Materials are sorted and loaded into low emission trucks before going to their next destinations.

CVSan’s organics are turned into compost at Napa’s Materials Diversion Facility. Compost is then given away at Recycles Day events!

In 2013 CVSan adopted a goal of Zero Waste by 2029, meaning 90% or more diversion from landfill. We’re off to a great start. In 2017, the community generated 16,000 tons less garbage than in 2005. What has CVSan accomplished in 2017/18 to get closer to achieving this goal?

In 2017, the community generated 16,000 tons less garbage than in 2005. What has CVSan accomplished in 2017/18 to get closer to achieving this goal?
CVSan is committed to reducing waste in schools. How are we working towards this goal? During the 2017/18 school year...

CVSan awarded $29,635 to Green Ribbon Schools for their work towards reducing waste. Green Ribbon Schools are required to complete activities throughout the school year to show their commitment to reducing, reusing, recycling, and composting.

CVSan presented a total of 27 school assemblies and presentations at the start of the school year to remind students which materials go in each cart.

Castro Valley students completed 16 waste audits. Waste audits identify materials in the garbage that could have been recycled or composted. To perform an audit, students, teachers, and parent volunteers sort through one day’s worth of garbage.

703 Castro Valley 3rd grade students attended field trips to CVSan to learn about the 4Rs (Reduce, Reuse, Recycle, and Rot).

CVSan donated $5,905 worth of containers, signs, and decals to help Castro Valley schools properly recycle and compost on their campuses.

The Results: During the 2017/18 school year, 16 Castro Valley schools became Green Ribbon Certified. On average, Castro Valley schools had over 80% diversion from landfill.

CVSan donated $10,500 worth of containers, signs, trolleys, and decals to Castro Valley businesses to help them properly recycle and compost.
CVSan staff conducted over 120 on-site visits to businesses to help them reduce waste.
WHERE CVSan’s FUNDING COMES FROM

SEWER SERVICE CHARGES

77%

SOLID WASTE CONTRACT ADMIN FEES
10%
STATE REVENUE SHARE
7%
OTHER
7%

REVENUE DETAILS

- **Sewer Service Charges** are annual fees for a building to receive sewer service. They can be found on your property tax bill.
- **Solid Waste Contract Admin Fees** are administration fees for managing the municipal solid waste contract for CVSan’s garbage, recycling, and organics collection services.
- **Other** includes income from interest, grants, Sewer Capacity Fees, permits, and inspections. Permits and inspections are required when private sewer laterals are relocated, repaired, replaced, or abandoned. The Sewer Capacity Fee is a one-time charge for connecting a new building to Castro Valley’s wastewater collection system. 100% of these fees are used to fund Capital Improvement Projects to maintain CVSan’s wastewater infrastructure.

WHERE CVSan’s FUNDING GOES

WASTEWATER COLLECTION, TREATMENT, AND DISPOSAL

52%

ADMINISTRATIVE COSTS
21%
SURPLUS TO RESERVES
12%
ZERO WASTE
8%

EXPENSES DETAILS

- **Administrative Costs** include indirect costs such as building upkeep and maintenance, computer equipment and software, insurance, legal fees, and Board of Directors costs.
- **Zero Waste** includes all operational costs for the Zero Waste Department including the cost of running programs for residents, businesses, and schools.

WHERE CAN I FIND MORE INFORMATION ON CVSan’s FINANCES?

- **Budget**
  www.cvsan.org/Budget
- **Sewer Service Charges**
  www.cvsan.org/SSC
- **Comprehensive Annual Financial Reports**
  www.cvsan.org/CAFR
- **Garbage, Recycling, and Organics Rates**
  www.cvsan.org/Rates
**SINGLE-FAMILY RESIDENTIAL**

<table>
<thead>
<tr>
<th></th>
<th>20-gallon</th>
<th>32-gallon</th>
<th>64-gallon</th>
<th>96-gallon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Garbage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recycling and Organics</td>
<td>64 or 96-gallon</td>
<td>64 or 96-gallon</td>
<td>64 or 96-gallon</td>
<td>64 or 96-gallon</td>
</tr>
<tr>
<td>Monthly Cost</td>
<td>$26.68</td>
<td>$41.37</td>
<td>$71.80</td>
<td>$102.26</td>
</tr>
</tbody>
</table>

**MULTI-FAMILY RESIDENTIAL AND COMMERCIAL**

(Once a Week Pick Up)

<table>
<thead>
<tr>
<th></th>
<th>1 cu yd</th>
<th>2 cu yds</th>
<th>3 cu yds</th>
<th>4 cu yds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Garbage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recycling</td>
<td>1 cu yd</td>
<td>2 cu yds</td>
<td>3 cu yds</td>
<td>—</td>
</tr>
<tr>
<td>Monthly Cost</td>
<td>$294.07</td>
<td>$419.43</td>
<td>$544.66</td>
<td>$782.32</td>
</tr>
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</table>

**GARBAGE, RECYCLING, AND ORGANICS RATE COMPARISON**

This chart shows monthly service costs for a single-family home with a 32-gallon garbage cart and 96-gallon recycling and organics carts.

<table>
<thead>
<tr>
<th>City</th>
<th>Garbage</th>
<th>Recycling</th>
<th>Monthly Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Francisco</td>
<td>$65.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Piedmont</td>
<td>$55.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oakland</td>
<td>$47.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Union City</td>
<td>$44.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Albany</td>
<td>$42.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Berkeley</td>
<td>$41.98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CV San</td>
<td>$41.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alameda</td>
<td>$39.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>San Jose</td>
<td>$37.95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Livermore</td>
<td>$37.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fremont</td>
<td>$34.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pleasanton</td>
<td>$33.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hayward</td>
<td>$33.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>San Leandro</td>
<td>$28.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oro Loma*</td>
<td>$25.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dublin</td>
<td>$24.94</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SEWER SERVICE RATES**

This chart shows the annual cost for a single-family home’s sewer service compared to other areas of Alameda County.

<table>
<thead>
<tr>
<th>City</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berkeley*</td>
<td>$1,485</td>
</tr>
<tr>
<td>Piedmont*</td>
<td>$984</td>
</tr>
<tr>
<td>Albany*</td>
<td>$886</td>
</tr>
<tr>
<td>Oakland*</td>
<td>$873</td>
</tr>
<tr>
<td>Alameda*</td>
<td>$724</td>
</tr>
<tr>
<td>Livermore</td>
<td>$632</td>
</tr>
<tr>
<td>Pleasanton</td>
<td>$480</td>
</tr>
<tr>
<td>San Leandro</td>
<td>$429</td>
</tr>
<tr>
<td>Dublin/San Ramon</td>
<td>$423</td>
</tr>
<tr>
<td>CV San</td>
<td>$419</td>
</tr>
<tr>
<td>Union Sanitary</td>
<td>$407</td>
</tr>
<tr>
<td>Hayward</td>
<td>$394</td>
</tr>
<tr>
<td>Oro Loma*</td>
<td>$256</td>
</tr>
</tbody>
</table>

**FINANCIAL AWARDS**

- California Society of Municipal Finance Officers
  - 2018 Operating Budget Excellence Award

- Government Finance Officers Association of the United States and Canada

- Special District Leadership Foundation

**SEWER SERVICE CHARGES**

Every two years, CVSan creates a budget to maintain its wastewater infrastructure. The Sewer Service Charge is calculated by dividing the annual budget by the number of buildings connected to CVSan’s wastewater system. CVSan has one of the lowest rates in Alameda County and a lower than the average annual charge in the State of California.

**GARBAGE, RECYCLING, AND ORGANICS RATES**

A variety of factors contribute to an area’s rates, including geography and the services provided. Due to its distance from a landfill, Castro Valley must consolidate all garbage into low emission trucks at a transfer station before continuing to the landfill. Parts of the Bay Area that are closer to landfills do not have this added cost. CVSan also provides services that some agencies do not provide, including semiannual e-waste collection and compost giveaway events for the community.

*Oro Loma Sanitary District collects its charges for recycling and organics service on the property tax roll.