

**NOVATO SANITARY DISTRICT  
SELF-MONITORING PROGRAM**

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**For: MARCH 2022**

**COLLECTION SYSTEM OVERFLOWS FOR MARCH 2022**

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The Novato Sanitary District Collection System had zero (0) sanitary system overflows (SSOs) in March 2022.

The No Spill Certification Confirmation number is: 2622203

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**For: FEBRUARY 2022**

**COLLECTION SYSTEM OVERFLOWS FOR FEBRUARY 2022**

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The Novato Sanitary District Collection System had zero (0) sanitary system overflows (SSOs) in February 2022.

The No Spill Certification Confirmation number is: 2620240

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**For: JANUARY 2022**

**COLLECTION SYSTEM OVERFLOWS FOR JANUARY 2022**

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The Novato Sanitary District Collection System had zero (0) sanitary system overflows (SSOs) in January 2022.

The No Spill Certification Confirmation number is: 2617416

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**For: DECEMBER 2021**

**COLLECTION SYSTEM OVERFLOWS FOR DECEMBER 2021**

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The Novato Sanitary District Collection System had one overflow in December 2021:

1. Thursday, December 2nd, 2021, #4 Betty Ln., Novato, CA, 110-gallon SSO, CIWQS Event ID 877973, Certification ID 993831, Category III event.

**EVALUATION OF OVERFLOWS FOR DECEMBER 2021**

**1. 4 Betty Ln.:** This SSO was categorized as a Category III event because the overflow volume was under 1,000 gallons, and did not reach surface waters of the state. Staff recovered 110 gallons (100%) of the discharge. This discharge was determined to be the result of Root Intrusion from a private lateral.

Initial actions

1. On Thursday, December 2nd, 2021 at 6:42pm, Aaron Hendricks received a call from the Novato PD reporting sewage coming out of a manhole at 4 Betty Ln.
2. Aaron H. immediately called Nate Adams at 6:45pm and then called Joe Moreno at 6:47 to see if they could help respond to the reported SSO.
3. Aaron Hendricks called Jeff Andress, Collection systems Superintendent, and left him a message regarding the situation, and then proceeded to call Javier Vega, CSW Lead at 6:47pm and notified him of the situation.
4. At 6:55pm Jeff Boheim, Field Services Manager was called and notified of the reported SSO.
5. Joe Moreno arrived on scene at 4 Betty Ln. at 7:08pm to see evidence of sewer that had ran out of the cleanout and was flowing down the curb and gutter. At that time, he used a shovel and was able to build a makeshift dam in front of the storm drain, preventing any more sewer from going into the storm drain inlet by 7:10pm.
6. At 7:30pm, Javier V. arrived on scene with the district's flusher truck and set it up at nearest downstream manhole to try and break up the blockage.
7. They flushed from MH F16026 to rod inlet F16051R, the blockage was broken up at 7:35pm.

8. Aaron Hendricks arrived on scene at 7:40pm and immediately began cleanup efforts, using the hydro-vac flusher washdown wand to pressure wash the asphalt and using the vacuum tube to vac up the dammed-up sewer. Once the street was clean, they opened up the storm drain and cleaned out the 2 gallons of water and all the debris in the storm drain box.
9. The crew was done with cleanup efforts and left the scene at 8:20pm.

#### **Follow-up actions**

1. The following day, Friday, December 3<sup>rd</sup>, Jeff A. assigned the collections crew to perform a CCTV inspection of the districts mainline between rodhole F16051R and F16026. The observation identified there was a rootball protruding out of the lateral 204 feet from the downstream manhole.
2. On Friday, December 3<sup>rd</sup>, Jeff A. was able to make contact with Miles of 4 Beaty Ln, the property owner, and original caller who reported the SSO. He mentioned that he noticed the spill at 5:45pm the previous night and that there was a wet spot on the pavement and it was part way down the curb.

#### **Subsequent Analysis and Actions**

1. This line segment was last cleaned using a hydro-flusher truck on December 16, 2020 and is on a 36-month frequency. The cleaning frequency will be increased to 6 months and the line segment will also be added to the Root Treatment List and put on the rodder schedule.
2. This event was reported into the CIWQS database on December 7th, 2021 as a Category III event, SSO Event ID # 877973 and was certified in CIWQS on December 7th, 2021, Certification ID # 993831.

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**For: NOVEMBER 2021**

#### **COLLECTION SYSTEM OVERFLOWS FOR NOVEMBER 2021**

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The Novato Sanitary District Collection System had zero (0) sanitary system overflows (SSOs) in November 2021.

The No Spill Certification Confirmation number is: **2612949**

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For: **OCTOBER 2021**

**COLLECTION SYSTEM OVERFLOWS FOR OCTOBER 2021**

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The Novato Sanitary District Collection System had one overflow in October 2021:

1. Sunday, October 24<sup>th</sup> 2021, 1811 Virginia Ave., Novato, CA 1240 Gallon SSO  
CIWQS Event ID 877059, Certification ID 283444, Category I event.

**EVALUATION OF OVERFLOWS FOR OCTOBER 2021**

1. **1811 Virginia Ave.:** This SSO was categorized as a Category I event due to its volume, estimated at 1240 gallons, and the fact that it did reach a storm drain or waterway of the State. Zero (0) gallons of the discharge was recovered by cleaning crews. The cause of the overflow was due to a large root ball.

**Initial Actions**

1. On Sunday, October 24<sup>th</sup>, 2021 at 10:45am, Joe Moreno, Collections Systems Worker II (CSW II) who was on standby duty, was paged by the Novato Police Department. Joe immediately called the Novato PD back and was notified of a potential overflow at a manhole located at 1811 Virginia Ave.
2. At 10:51am, Joe notified Collection Systems Superintendent, Jeff Andress that there was a possible SSO occurring at 1811 Virginia Ave. Joe also notified CSW I Jason Roach to meet on site with the District's Vactor sewer cleaner.
3. At 10:55 Joe Moreno arrived on scene and laid out sandbags from the back of the pickup truck across the curb and gutter to try and dam up the overflow and took pictures.
4. At 10:57AM Joe notified Jeff Andress that there was an active overflow at 1811 Virginia Ave.
5. At 10:59AM Jeff Andress notified Erik Brown, Deputy General Manager, of the active overflow situation.
6. At 11:10AM, Jason Roach arrived with the Vactor truck and set up at the downstream Manhole F15017 and proceeded to flush upstream to Manhole F15019.
7. The obstruction was hit and broken up 270 feet upstream at 11:15AM. Jason and Joe noticed roots and grease chunks coming back.
8. At 11:25AM Jason and Joe began cleanup efforts vacuuming up paper and grease around the manhole. The crew was not able to recover any discharge from the curb and gutter due to the volume of runoff running down the curb from the storm's heavy rains.
9. At approximately 11:35AM, Jeff Andress arrived on scene. Joe and Jason filled him in on the cleanup efforts. Jeff noticed the surcharge was no longer receding and asked the crew to flush the line again.

10. While the crew was flushing the line for a second time, Jeff Andress took pictures of the scene along with a video, then proceeded to follow the storm drain to the outfall into Novato Creek at the intersection of Grant Ave. and Virginia Ave. He was unable to locate the storm drainpipe's exact location due to heavy blackberries along the creek bank and high flows due to heavy rains. There were no obvious signs of any impact to the receiving waters upstream or downstream.
11. At 12:20PM Jeff Andress instructed Jason to power wash and vacuum up the remaining grease around the manhole
12. At 12:47PM Jeff Andress spoke with Erik Brown to inform him of the details of the spill and the cleanup efforts.
13. 12:50PM Jeff Andress called OES to report the SSO due to the overflow reaching waters of the state (Novato Creek). He was given the OES #21-5931
14. Recovery: The only portion of the discharge able to be recovered was a minimal amount of grease and paper on the pavement around the manhole.
15. Volume Estimation: From the pictures provided by Joe, Jeff Andress estimated the overflow rate from the manhole to be approximately 20 gallons per minute. It was estimated that the SSO could have started approximately 15 minutes prior to the initial call to the PD (10:28AM) due to there being moderate traffic, and someone noticing the overflow within that time. With an estimated 10:13AM start time, and the blockage being broken up at 11:15AM, a total of 62 minutes and a rate of 20GPM was used to calculate the total estimated spill volume of 1,240 gallons.

#### Follow up Actions

1. At 1:58PM, Jeff Andress contacted Marin County Environmental Health Services to report the overflow and left a voice mail. Jeff received a return call from Eithne Bullick at 9:48am the following day. He described the details of the SSO, and that the creek bank was covered in blackberry's so there was not access to the creek to post signage. He also stated that there was no indication of an impact from the spill as Novato Creek was swollen from the rains.
2. On Monday, October 25, 2021, Collections Crew went to 1811 Virginia Ave with the CCTV Van to survey the line segment. While doing so, they observed a root-ball that remained in the pipeline and a hole in the pipe joint that was allowing root intrusion. After the CCTV survey, they returned with the District's Vactor sewer cleaner and used a chain flail nozzle to remove the remaining roots.

#### Subsequent Analysis and Actions

1. The spill volume was estimated at 1,240 gallons which was based on time and flow rate as described above. The cause of the SSO was determined to be due to Roots and Grease build up and the surcharging of the pipe from heavy rainfall that day.
2. The Collection Systems Superintendent will research adding this line segment to the root treatment list, or increasing the root treatment frequency. Additionally, this segment will be added to the spot repair list.

3. This event was reported into the CIWQS database on October 25, 2021, at 10:31AM as a Category I event due the overflow being over 1,000 gallons and reaching waters of the state. The Spill Event ID #877059. This SSO was certified on November 2<sup>nd</sup>, 2021 with Certification ID #283444

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**For: SEPTEMBER 2021**

**COLLECTION SYSTEM OVERFLOWS FOR SEPTEMBER 2021**

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The Novato Sanitary District Collection System had zero (0) sanitary system overflows (SSOs) in September 2021.

The No Spill Certification Confirmation number is: **2608677**

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**For: August 2021**

**COLLECTION SYSTEM OVERFLOWS FOR AUGUST 2021**

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The Novato Sanitary District Collection System had one overflow in August 2021:

2. Tuesday, August 17, 2021, 2675 Center Rd., Novato, CA, 10-gallon SSO, CIWQS Event ID 876199, Certification ID 728825, Category III event.

**EVALUATION OF OVERFLOWS FOR AUGUST 2021**

**1. 2675 Center Rd.:** This SSO was categorized as a Category III event because the overflow volume was under 1,000 gallons, and did not reach surface waters of the state. Staff was unable to recover any of the discharge. This discharge was determined to be the result of plugging the mainline to perform a CCTV survey and the pumping of water from an upstream industrial user.

Initial actions

1. On Tuesday, August 17th, 2021 at 8:45AM, Nathaniel Adams CSW 1, Liam O'Sullivan CSW 2, and Jeff Andress Collection Systems Superintendent were set up on manhole B14008 in front of address 2675 Center Rd. with 3135, the District's CCTV van.
2. After attempting to survey the mainline downstream of MH B14008, it was determined the upstream section of line needed to be plugged off with a 6 inch pneumatic plug due to the flow splashing on the camera head making it impossible to capture the video needed.
3. At this time, Jeff Andress and Liam O'Sullivan installed the plug. Nate Adams moved up to MH B14009 to monitor the flow in the manhole to let Jeff Andress and Liam O'Sullivan know of surcharging at that point, and the inspection began.

4. At approximately 9:08, the CCTV survey had been completed, and Nate Adams was notified that the line was complete and that he could return back to the van.
5. Liam O'Sullivan had completed the survey and began bringing the camera back upstream at approximately 9:10am when Jeff Andress heard the residents at 2675 Center Rd. make the comment "what is that noise?" from their door front. As he looked over, the sewer lateral relief cap popped up and surge of water discharged out of the cap and into the surrounding landscape rocks.
6. After seeing that initial surge, Jeff Andress grabbed the pneumatic plug relief valve to deflate the plug in the line. While the pressure was being relieved, a second surge came out of the relief cap and it also went into the landscaping rocks around the cap. The flow was restored at approximately 9:11AM.
7. Jeff Andress, Collection Systems Superintendent then went up to the scene of the discharge and spoke with the residents. He took some photos of the affected area. He asked them to check if there were any problems inside the residence, they inspected their bathrooms and no issues were discovered. They were notified that the districts crew would clean up the discharge.
8. At 9:20AM Liam O'Sullivan and Nate Adams finished getting the camera back into the van and clearing the worksite in the street. Jeff Andress instructed Nate Adams to drive back to the NSD Treatment Plant to bring 3210, the District's Vactor truck to that house for cleanup.
9. Jeff Andress explained to the resident the need for the crew to leave to get additional vehicles and would be back to cleanup. They were instructed to not let the pets out of the house in the front there until cleanup was complete.
10. At 9:35 Erik Brown was called by Jeff Andress and notified of the situation and the intended cleanup efforts.
11. Jeff Andress retrieved a wheel barrel along with 5 gallon buckets and a few extra shovels, and returned to 2675 Center Rd at approximately 10AM. Nate Adams returned with 3210 a few minutes later.
12. Liam O'Sullivan, Jeff Andress and Nate Adams began shoveling affected rock into the wheel barrel and into the 5 gallon buckets which was brought down to the street and vacuumed up with the 3210 Vactor. Once the affected rock was removed down to the fabric and dirt, the crew began to spray down the entire area with the pressure washdown gun.
13. At approximately 10:30am the cleanup efforts were complete. Nate Adams and Liam O'Sullivan were then instructed to go cleanup the truck and dump the debris.

14. Jeff Andress, Collection Systems Superintendent, then again spoke with the residents to explain he would return with new clean rock to replace what was removed during the cleanup process.
15. Jeff Andress was able to source the same like rock and returned to 2675 Center Rd. He then contacted the homeowner to confirm that he would be happy with new rock to replace what had been removed, which he was. Jeff proceeded to empty the new rock into the landscape area. Once complete he took final pictures and reconfirmed with the resident that the job was complete and they did not have any additional issues.
16. Recovery: As stated above, staff was able to recover the affected rocks in the area. The estimated 10 gallons of discharge was absorbed into the dirt under the rocks.
17. Volume Estimation: As described above, staff and reporting party observations, were used to estimate the volume of the event.
18. After completing calculations, it was determined this was a Category 3 SSO because it was fully contained on the property and did not reach any waters of the state.

#### **Follow-up actions**

1. After review of the mainline cctv inspection, it was determined that there are no defects in this section of pipeline that would have been the cause of this incident.

#### **Subsequent Analysis and Actions**

1. The cause of this overflow was determined to be due to the pumping of backflush water from the NMWD filter facility and happened to start pumping at the time this discharge occurred. Any future work in this area will require a call to NMWD to make sure they will not be pumping in this line at that time.
2. This event was reported into the CIWQS database on September 2nd, 2021, as a Category III event, SSO Event ID # 876199 and was certified in CIWQS on September 2nd, 2021, Certification ID # 728825.

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**For: JULY 2021**

#### **COLLECTION SYSTEM OVERFLOWS FOR JULY 2021**

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The Novato Sanitary District Collection System had zero (0) sanitary system overflows (SSOs) in July 2021.

The No Spill Certification Confirmation number is: **2604146**



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**For: JUNE 2021**

**COLLECTION SYSTEM OVERFLOWS FOR JUNE 2021**

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The Novato Sanitary District Collection System had zero (0) sanitary system overflows (SSOs) in June 2021.

The No Spill Certification Confirmation number is: 2602432

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**For: MAY 2021**

**COLLECTION SYSTEM OVERFLOWS FOR MAY 2021**

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The Novato Sanitary District Collection System had zero (0) sanitary system overflows (SSOs) in May 2021.

The No Spill Certification Confirmation number is: 2600039

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**For: APRIL 2021**

**COLLECTION SYSTEM OVERFLOWS FOR APRIL 2021**

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The Novato Sanitary District Collection System had zero (0) sanitary system overflows (SSOs) in April 2021.

The No Spill Certification Confirmation number is: 2598102