



Office of the City Manager
City of Gulf Breeze
1070 Shoreline Drive
Gulf Breeze, Florida 32561
850.934.5115

November 1, 2021

By Email to: Elizabeth.Orr@dep.state.fl.us>

Ms. Elizabeth Mullin Orr
Director
Florida Department of Environmental Protection
Northwest District
160 W. Government Street, Suite 308
Pensacola, FL 32502

RE: Warning Letter
South Santa Rosa Utilities System WWTF
Facility ID No. FLA010212
Santa Rosa County

Dear Ms. Orr:

Please accept this letter and the attached report as the City of Gulf Breeze's response to the October 19, 2021, Warning Letter from the Florida Department of Environmental Protection ("FDEP") regarding the sanitary sewer cross-connection to the Midway Water System.

The City acknowledges that a cross-connection did occur when a private contractor, engaged by the homeowner, connected the sewer line for the home at 5000 Soundside Drive to the Midway Water System's water main instead of to the City's South Santa Rosa Utilities System sewer main.¹ The City was first notified of the cross-connection on October 18, 2021, and immediately responded to ensure that the line was disconnected from the water main and properly connected to the sewer main. The City also began working with Midway, and as you are aware, with you and other FDEP staff to assist with the response to customers potentially impacted by the cross-connection. To date, the City has assisted with sampling at the approximately 400 potentially impacted properties. Fortunately, as you are aware, all samples have now come back negative for E. coli bacteria associated with wastewater.

Although its initial focus was on assistance with the efforts to respond to customers and ensure their potable water was safe, the City also began an internal investigation to ascertain how the cross-connection occurred. The findings of our investigation and information on the City's response to the incident are set forth in the attached report.

Highlights of the City's findings include the following:

- The cross-connection was made on April 1, 2021, following notification through the Florida 811 system on March 25, 2021, and again on March 30, 2021, to all area utilities,

¹ Please note that the former South Santa Rosa Utilities System is now the Gulf Breeze Regional Water System.

... will preserve and enhance its hometown character and natural environment to foster a high quality of family life.

Florida Department of Environmental Protection
c/o Elizabeth Orr, District Director
Nov 1, 2021

including the City and Midway, that Brown Construction intended to connect the sewer line at 5000 Soundside Drive to the sewer force main;

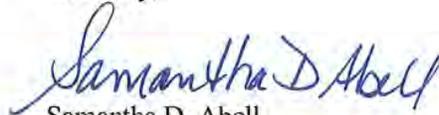
- The 811 system records include an entry from Midway indicating the water main was marked as of March 29, 2021; however, other information raises questions about whether Midway's entry into the system indicating the water had been marked was correct;
- The City received a call from Brown Construction on the morning of April 1, 2021, requesting that the City come and mark the sewer line as soon as possible because Brown was ready to excavate;
- The City's locate crew arrived onsite mid-morning, but found that Brown's onsite crew had decided to proceed with the excavation before the City's crew arrived and could mark the sewer lines;
- Once the City's crew arrived, the Brown supervisor onsite intercepted the City's crew and told them that they were not needed because the excavation and connection had been completed;
- On April 2, 2021, Brown sent a City employee an as-built sketch of where the connection was made and related pictures, but the sketch and the pictures taken by Brown's crew in the field did not indicate the error that Brown made;
- On September 21, 2021, the sewer service to 5000 Soundside Drive was activated, which resulted in sewer water flowing into the water main.

Additional details are provided in the City's attached report and City representatives stand ready to meet with you and your staff to discuss this matter further at the meeting that has been scheduled for November 9, 2021. We intend to cooperate fully in your investigation of the matter and to provide you with any documentation and information that is in the City's possession.

The City does not take the error that occurred lightly and is therefore also taking steps within its control to protect against an event such as this cross-connection happening again. We will present more information to you on those steps in supplemental submissions or when we meet.

Please let us know if you have questions or would like additional information prior to our meeting.

Sincerely,


Samantha D. Abell
City Manager

cc: Mayor and Council of the City of Gulf Breeze
Mary Jane Bass, City Attorney



City of Gulf Breeze

AFTER-ACTION REPORT

CROSS-CONNECTION AT 5000 SOUNDSIDE DRIVE

November 1, 2021

**AFTER-ACTION REPORT ON THE CROSS-CONNECTION
AT 5000 SOUNDSIDE DRIVE**

I. INTRODUCTION

On October 18, 2021, the City of Gulf Breeze was notified of a cross-connection between a residential sewer line and a water transmission main which, according to the water utility servicing the area, had potentially impacted over 400 homes. The water line belongs to a private utility, Midway Water System, and the sewer line belongs to a public municipal sewer system owned by the City. The accidental tap was made by the homeowner's private contractor, Brown Construction.

As soon as the City learned of the cross-connection, it immediately responded to ensure that the line was disconnected from the water main and properly connected to the sewer main. Thereafter, the City participated in an interagency response overseen by the Florida Department of Environmental Protection (FDEP) and the Florida Department of Health (FDOH) to provide information and to conduct sampling of water at properties within the area of potential impact.

The Office of the City Manager also launched an investigation into how the cross-connection occurred. The investigation was completed within 10 days of discovery of the error. This After-Action Report details the City's response and the findings of its investigation. The City intends through this Report to provide information and an understanding of the events surrounding the accidental cross-connection. Additionally, the City intends to use its investigation and this Report to identify steps that can be taken to ensure an incident such as this does not happen again.

The Report includes information gathered by the City Manager in interviews of City employees and discussions with principals of Midway Water and Brown Construction. The Appendix to the Report also provides copies of relevant documentation located by the City.

II. HISTORY OF THE MIDWAY WATER SYSTEM AND CITY OF GULF BREEZE'S SEWER UTILITY

The Santa Rosa County Board of County Commissioners grants franchise agreements for water and sewer utilities in unincorporated areas of the County. Historically, south Santa Rosa County, and in particular the unincorporated area between Gulf Breeze and Navarre, was served by several private utilities. In 1989, the City acquired one of those private utilities, South Santa Rosa Utilities, Inc. (SSRUS), and has provided water and sewer service in the franchise area granted to SSRUS since that time¹ Today, only Midway Water System and Holley-Navarre Water System (HNWS) remain as private, non-public utilities serving the area. The areas served by HNWS, Midway Water, and the City are depicted on the Service Franchise Areas map included in the Appendix attached hereto as **Exhibit A**.

¹ Today Gulf Breeze Regional Water System operates the service area formerly served by SSRUS.

According to Midway Water, the utility serves approximately 8,343 water customers. The Midway Water territory is in a rapidly growing area, which is one of the last undeveloped areas in South Santa Rosa County. The intensity of growth in the area, coupled with the impact of the pandemic, has significantly increased the workload of all utilities in the area.

Midway Water customers are primarily on septic sewer systems, but the City provides sewer service under the City's franchise agreement with the County to 3,998 Midway Water customers, or roughly half, within Midway Water's water franchise territory. It was in this area where the services of Midway Water and the City's sewer utility overlap that the cross-connection occurred.

III. 5000 SOUNDSIDE DRIVE CROSS-CONNECTION AND RESPONSE

The following City employees are the primary ones who assisted in gathering background, documentation, and information on the events leading up to the accidental connection of the residential sewer line at 5000 Soundside Drive to the Midway Water main that serves the property:

City Manager, Samantha Abell
Public Works Director, Thomas Lambert
Utility Manager, Zachary Lewis
Utility Construction Supervisor, Jeremy Norris
Collection System Supervisor, Kevin Monroe
Line Locator, Dillon Tyree
Line Locator, Adam Henshaw

In addition to the narrative provided herein, the City has prepared a timeline in chart form (**Exhibit B**) of the events leading up to the discovery of the cross-connection.

A. Background and Discussion of Events Prior to Discovery of the Cross-Connection

The City's sewer force mains were constructed in rights-of-way in the Soundside Drive area beginning in 2004-2005 timeframe. The original home at 5000 Soundside Drive was constructed in 1986 prior to the sewer service being available. At that time, there were no requirements as there are today for utilities to color code their lines to distinguish water from sewer. Today, utility lines and locate marks are colored coded with water as blue and sewer as green. However, as Lee Brown, president of Brown Construction, has noted "it's not uncommon to see different colors or types of pipe that are not necessarily up to the latest codes." *See* Gulf Breeze News, October 28, 2021, at page 8A.

The main water line that serves 5000 Soundside Drive is 4" white polyvinyl chloride ("PVC"), and the main sewer line is 4" black high density polyethylene ("HDPE") bore pipe. This black pipe also has a green tracer wire above it to indicate it is a sewer pipe. The color of the sewer mains transition at the next service location to the east to a 4" green sewer pipe.² The water and sewer mains at 5000 Soundside Drive are approximately 6 feet apart. **Exhibit C.**

On July 24, 2020, Home Builder applied to the City for sewer service on behalf of the owner of 5000 Soundside Drive. As part of the application, a Low Pressure Sewer Agreement signed by

² In other parts of the City's service area, older white sewer pipe does exist, but not at 5000 Soundside Drive.

the homeowner (**Exhibit D**) was submitted to allow for connection of the low pressure lift station (grinder) to the City's sewer main. The Agreement required that the work be done by a Certified Underground Utility Contractor and that the connection not be covered until approved by the City.

Although the application was submitted in July of 2020, it was not until March 25, 2021, that Brown entered a locate ticket into the Sunshine State One-Call of Florida, Inc.'s system (the "811 system"), which was established pursuant to section 556.103, Florida Statutes, to alert utilities of upcoming excavation work in a right-of-way ("ROW"). The Brown Construction locate ticket entry specifically requested that all utilities in the area locate their lines because Brown Construction was going to connect new sewer service at 5000 Soundside Drive to the sewer main in the ROW. **Exhibit E**.

The 811 system entries (**Exhibit E and F**) show that both the City and Midway Water were among the utilities notified on March 25, 2021, of the pending work to connect a sewer line at 5000 Soundside Drive included. Thereafter, on March 29, 2021, the 811 system records show that a Midway Water employee entered a "1" which is the code for "Marked" into the system thereby evidencing that Midway Water was aware of the work that the sewer connection was pending and indicating that Midway Water had at that point marked its lines. **Exhibit F; Exhibit G (811 system codes)**.

Initially, only the City of Gulf Breeze Natural Gas responded that it had located its line, and so Brown Construction's locate ticket was re-issued on March 30, 2021, to again request locates by other utilities. **Exhibit E**.

It should be noted, however, that whether the Midway Water lines were in fact marked is unclear. The entry made by Midway Water into the 811 system on March 29, 2021, indicates that Midway Water had marked its lines, but this entry and the fact of the 811 locate request entered by Brown on March 25 and March 30 is directly counter to the statement of Midway Water quoted in the Pensacola News Journal on October 29, 2021, that "no notice was given to Midway Water System of the work being performed." Midway Water was, therefore, notified through the 811 system of the pending sewer connection work. Moreover, if Midway had marked its lines as it said in the 811 entry on March 29, then Brown Construction would have seen the blue locate lines and presumably would not be excavated where they did to make the connection.

As of the morning of April 1, 2021, the 811 system showed that Gulf Breeze Natural Gas and Midway Water had marked their lines, but Brown was still waiting for locates by other utilities, including the City's sewer utility. At approximately 8:30 AM on April 1, Wade Brown of Brown Construction phoned the City's utility construction supervisor and requested that he contact the City's utility line locator and tell him that Brown's crew was on the jobsite.

The Gulf Breeze two-man line locator crew was notified and after completing a job they were on inside the City limits, they drove to the jobsite at 5000 Soundside Drive, arriving according to the line locators within approximately an hour. Upon arrival, the City line locators found, and were told by the Brown crew onsite, that the excavation and connection had been made. The Brown Construction crew had chosen to proceed before the City locators arrived.

Lee Brown, the president of the Brown Construction, told the City Manager that he was later told by a Brown crew supervisor that two city line locators arrived on scene and that after discussion,

the Brown crew was of the impression that should “carry on.” However, the time stamp on pictures taken by the Brown crew confirms that the excavation and cross-connection had been made by 9:14 AM on the morning of April 1, prior to the City’s locators arriving at the site.

In the City Manager’s independent interviews with the City’s two line locators, they reported that the Brown supervisor onsite waved them off “dismissively” and “condescending” when they arrived. The line locators reported that in a loud voice the supervisor told them “We’ve got it. We did your job for you. We don’t need you. We already made the connection. You can go.” The two locators phoned the City’s construction supervisor and expressed their frustration. After leaving the site, at 10:38 AM CST (11:28 EST) on April 1, one of the line locators also made an entry in the 811 system noting that the sewer line was marked. Although the City’s locators had not been able to mark the line prior to the excavation and connection, it appeared that the line had been located by Brown Construction because they had proceeded with the excavation and completed the connection.

Notably, according to City personnel, a similar altercation with the same Brown Construction supervisor had previously occurred at a jobsite on Beach Drive within the City limits. There, as at 5000 Soundside Drive, when the City locators arrived, the Brown Construction supervisor instructed them to leave because the connection was complete. The City’s line locators therefore departed the site and marked the ticket to close it out.

On the afternoon of April 1, following the excavation and cross-connection made by Brown Construction at 5000 Soundside Drive, the City’s Utility Construction Supervisor went to the site and inspected the low pressure sewer connection box. He also noted at that time that the force main connection had been buried and therefore the connection to the main was not visible.

It has been the practice for over a decade, that Brown Construction would send pictures of the materials used for the Utility Construction Supervisor to verify proper specifications if the supervisor was not onsite to take the pictures personally at the time of installation. In accordance with that practice, on April 2, Brown Construction emailed the City’s Utility Construction Supervisor a copy of the City’s engineering design standard schematic for installation of a low pressure single-family grinder pump with red notations added by Brown’s crew to show the location of the connection. The email also attached pictures of the tapping saddle, coupon, and new residential sewer line connection to the private property at 5000 Soundside Drive. **Exhibit H Re: “5000 Soundside Dr. – As-builts/pictures”.**

As noted above, the time stamp on the sewer tapping saddle photo taken by the Brown crew is 9:14 AM. The image does not indicate there were issues with the connection. The purpose of the information in emails such as these is for the construction supervisor to verify that the proper materials were installed to City specifications and not to verify that the correct line has been tapped.

The responsibility for identifying the correct line is up to those in the field who make the connection. As Brown Construction’s president has acknowledged, older lines might not be color coded. For this reason, the onsite crew making the connection must verify they have the proper line in other ways. For example, when a white line such as the Midway Water main at 5000 Soundside Drive is uncovered, there are other signs that will signal to an experienced crew what kind of line they are tapping into. Foremost, the lack of sewer aroma that is apparent when cutting

into a sewer line should have alerted an experienced crew to the fact that the white line they uncovered was a water line. Why the lack of sewer odor did not alert the Brown crew at 5000 Soundside Drive to the error of connecting the residential sewer line to the Midway Water line is unknown.

The City Manager discussed how the cross-connection error occurred with Brown Construction's president, who told her that there were things that Brown's crew could have done to avoid the incident, including looking at the coupon and taking note that there was no odor. He further told the City Manager that they should have found the water main before they started.

The cross-connection error was made on April 1, 2021, but the homeowner's sewer service was not activated until September 21, 2021.

B. Response Upon Notification of Cross-Connection

According to Midway Water, it began receiving reports of low water pressure and clogged faucets on September 25, 2021. The first reports included complaints of debris in lines and low pressure within the Areca Palms neighborhood, which is located in the center of the impacted area. **Exhibit I.** Calls subsequently came in from across the Soundside Drive area.

The City first learned about these reports on September 30, 2021, when Midway Water contacted the City's Utility Manager about Midway Water customer complaints in the Soundside Drive area of low water pressure and debris in their water lines. In response, the City dispatched collection system crews that same day to check sewer taps in the reported area of concern (Areca Palms), and those investigations continued through October 4.

Additional communications between Midway and the City occurred as follows:

October 5: Midway reports to the City that there were still issues with debris and pressure in and around the Areca Palms subdivision. Midway also informed the City that bacterial samples had been pulled to confirm lack of contaminants.

October 6: Midway reports to the City that it had isolated the area of impact and that the bacteria samples had all come back negative.

October 6 – October 11: The City received no communications from Midway regarding the issues. Midway Water's Director of Operations later told the City's Utility Manager that he had been on vacation.

October 12: Midway reported to the City that the issues were ongoing. Midway asked the City to provide a list of any new connects in the affected area in the late September timeframe.

October 13: The City's Utility Manager provided to Midway Water a list of new sewer service connects in the Soundside Drive areas, of which there were only three, and provided them to Midway Water. Midway's Operations Director, however, informed the City that the identified properties were not in the affected area.

October 13: The City's Utility Manager texted the Midway Operations Director and requested that Midway generate a list of all new water turn-ons for the affected area so that Gulf Breeze could correlate those with new sewer service. The list of new water service addresses would indicate areas where lines may have been disturbed outside of Areca Palms. Midway never responded to this request.

October 18: The City's Utility Manager again requested via a phone call to Midway's Operations Director and its General Manager a list of all new water turn-ons for the affected area where low pressure and debris had been reported. The City wanted the list of new Midway connections to accelerate the City's investigations into new taps and any possible cross-connection.

October 18: Midway Water's Operations Director contacted the City's Utility Manager to ask if City crews had checked 5000 Soundside Drive, which had come online for water service on September 21. The City's Utility Manager called the collections system supervisor, who dispatched to 5000 Soundside Drive.

October 18: At 1:11 PM, the City's Utility Manager received a call from Midway's Utility Manager to inform the City that the cross-connection had been located at 5000 Soundside Drive. City personnel arrived at the location shortly after to confirm. The City contacted Brown Construction, which dispatched a crew to the site. The City personnel remained onsite to witness and assist in properly connecting the residential line to the sewer main. The City also provided equipment to assist in the removal of the cross-connection to the water line and in the tapping of the correct main.

Also, on October 18, 2021, at 4:00 PM, the Midway Water Systems' Board President contacted the City Manager to inform her of the cross-connection and that Midway Water's annual shareholders meeting was that evening. The City Manager informed the City Council and sent the Assistant City Manager and the City's Utility Manager to the Midway Water meeting to address any questions.

That same day, the City also dispatched three service workers and a supervisor to check five more connections on Soundside Dr. and provide Midway with assistance in flushing lines and distributing door hangers.

The City continued its response efforts, assistance to Midway, and communications on the incident in the days that followed. On October 19, 2021, the City Manager contacted the Santa Rosa County District 5 Commissioner and Interim Assistant County Administrator with updates of the incident response, and spoke with them again on October 20 and 24. At 10:53 PM on October 21, 2021, the City Manager was contacted by the Santa Rosa County Emergency Management Operations Interim Public Safety Director regarding a meeting scheduled for the following morning for representatives from FDEP, FDOH, the County, Midway Water, and the City to plan for sampling of residential homes. The City Manager and others from the City attended the meeting and offered mutual aid to expedite the sampling efforts.

After the meeting on October 22, a scattered site sampling plan was mobilized across the impacted area in order to target sampling at those homes that had reported material debris and the most significant impacts. Midway Water and the City established teams to begin sampling that day.

The City provided four certified water operators and an independent contractor to participate in the sampling. On October 25 and 26, the City again provided four certified water operators and an independent contractor to assist with sampling, and the City provided two operators on October 27 to assist with completion of the sampling.

As FDEP is aware, of all of the homes that were sampled, elevated levels of bacteria were found at only 6, but retesting revealed no contamination.

IV. CONCLUSION

As noted in this Report, under the circumstances, it would not have been possible for the City to detect the cross-connection around the time Brown Construction's error occurred. It was only after the sewer service was activated over six months later, and after residents began to complain to Midway Water, that either utility was alerted to the problem. Once aware, the City requested lists of the properties reporting complaints and information on new water connections from Midway in order to identify possible cross-connections, but Midway did not provide the information. There were only three new sewer connections identified by the City in the Soundside area, yet initially the City was told by Midway Water that this was not an area of concern.

In the City's view, progress was hampered by needless territorial divisiveness. Almost from the inception of residents' complaints, the City heard accusations from Midway Water. Even after the cross-connection was discovered, Midway Water incorrectly reported to media and the public that it was the City's contractor who made the error, among other accusations. Eventually, FDEP took command of the incident response, which facilitated cooperative efforts between Midway Water and the City to sample the water at all homes in the area of concern.

Fortunately, all sample have now come back negative for E. coli.

Finally, as stated in the Damage Prevention Guide published by the Sunshine 811 system, "Damage responsibility is a shared responsibility. The 811 Process works when everyone does their part." **Exhibit J at page 7.**

The City's response to the accidental cross-connection at 5000 Soundside Drive is not over. The City intends to cooperate with FDEP and FDOH investigations into the incident and it will continue its internal investigations, with a particular focus on steps and changes in procedure to prevent such an incident from happening again. These steps will include improvements in line locating, inspections and review of documentation on connections, and completion of future single low-pressure connections by the City's utility staff. The City will provide additional information on these steps when it meets with FDEP.