

STORMWATER UTILITY ANNUAL REPORT



AUGUST 2018

Stormwater Maintenance Crews Completed Nearly 2,040 Work Orders During FY 2017-18

The SWU's Engineering Technician and Maintenance Crews work as a team to provide quality service when it comes to responding to customer calls. On average, a customer complaint was responded to within thirteen (13)



hours. When a customer calls with a stormwater issue, our Stormwater Engineering Technician is dispatched. During Fiscal Year 2017-18, our technician

responded to over 470 customer related calls.

Part of the maintenance activity includes an aggressive inspection program. This helps our staff determine potential problem locations, as well as being compliant with our Stormwater Permit. Using both internal staff and outside contractors, CCWA inspected the following structures over the past year:

- ↔ Approximately 3,900 catch basin and inlets
- ↔ Approximately 411,000 linear feet (77.8 miles) of storm drains
- ↔ Approximately 130,000 linear feet (24.6 miles) of ditches

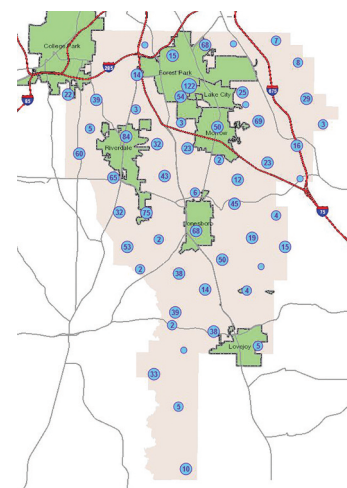
The Stormwater Maintenance staff of 16 employees (2 pipe repair crews, 1

grading crew and 1 vacuum truck crew) addressed 2,039 work orders. Activities from these completed work orders represent:

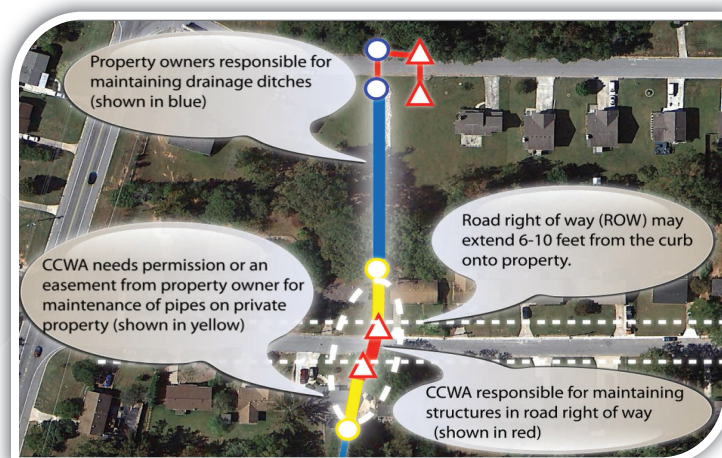
- ↔ Approximately 84,000 linear feet (15.9 miles) of storm drain lines
- ↔ Approximately 51,000 linear feet (9.7 miles) of graded ditches
- ↔ Nearly 640 cleaned/repaired catch basins

Maintenance costs for this work completed between May 2017 and April 2018 were slightly more than \$2.6 million. In addition to the maintenance work orders, CCWA solicited the help of outside construction firms to perform larger-scaled Capital Improvement Projects (CIP). These projects include repair methods of "Remove and Replace" (R/R), as well as a newer technology called "Cured-In-Place Piping" (CIPP).

Using both methods, CCWA performed 48 large scaled CIP's throughout the county last year. The 41 R/R and 10 CIPP jobs resulted in costs slightly over \$3.3 million. Combined, more than 10,200 feet (1.9 miles) of pipe were replaced/renewed using these methods.



Your Stormwater Dollars At Work



This annual report is produced to provide a summary of the activities performed by CCWA's Stormwater Utility over the past year and how your stormwater dollars are being used.

Top 3 Constituent Concerns

What are Stormwater Utility fees used for?

- ↔ Stormwater utility fees are dedicated exclusively to stormwater management activities

Who is responsible for neighborhood detention and retention pond maintenance?

- ↔ The Homeowners Association or the developer is typically responsible
- ↔ For unfinished subdivision ponds, the developer or the bank holding the lots is responsible

Who is responsible for overflowing stormwater pipes or inlets?

- ↔ Overflows from stormwater facilities within or directly connected to the right-of-way are the responsibility of the Stormwater Utility
- ↔ All other overflows are the responsibility of the property owner or another jurisdiction

Quality Water, Quality Service

1600 BATTLE CREEK ROAD, MORROW, GA 30260 // CUSTOMER SERVICE 770.960.5200 // WWW.CCWA.US

CLAYTON COUNTY
Water
AUTHORITY



AUGUST 2018

Failing Creek Culverts Replaced Under Major Thoroughfare

Irongate Boulevard (Foxfire Terrace) – Jonesboro | \$148,940

BEFORE



AFTER

When CCWA's Stormwater Utility was created, CCWA inherited hundreds of miles of underground infrastructure without knowing if it was in good shape or ready to fail. As part of our asset management approach to understanding this existing infrastructure running throughout the county, we decided to concentrate on large diameter stormwater pipes and culverts that run under roadways. Many of these pipes were installed years ago using corrugated metal pipe with active streams and creeks flowing through them. After years of continuous creek flow, many of these culverts are in poor condition and failing. If they fail, they can cause personal and property damage from road cave-ins and flooding. CCWA's goal is to assess and address these culverts before failure occurs. Inspections revealed dual 54" corrugated metal culverts located under Irongate Boulevard, near the intersection of Foxfire Terrace, in the Irongate Subdivision in Jonesboro. In addition to the culvert being severely corroded, the outlet headwall was undermined by years of creek erosion. Because of the culverts condition, CCWA was required to replace the metal culverts with reinforced concrete pipe (RCP). Because of existing utilities (water, sewer, and gas) above and below, CCWA had to use an arched pipe. Reinforced concrete pipe has 6" thick walls. To minimize the effects to the other utilities, arched pipe was able to fit between those existing utilities.

Staff also replaced the existing damaged headwall, at either end of the culverts, with precast concrete structures. The upstream and downstream areas were also stabilized with rip rap (stone) to minimize erosion. While on site, staff noticed a nearby 18" corrugated metal storm drain in need of repair. Roughly 40' of this drain was replaced with High Density Polyethylene (HDPE) pipe. After completion, the work areas were restored and cleaned of existing trash and debris. The replacement pipes are expected to have a life expectancy of at least 50 years of service, keeping this culvert issue-free for a long time. The overall cost of this repair was approximately \$148,940.

Intern Spotlight: Drew High School Graduate Delves Deeper into Stormwater

Recent Charles R. Drew High School graduate, Georgia Antwi-Adjei returned for a second summer of interning for CCWA's Stormwater Utility.

While last summer was about learning the ropes, Georgia says this year is about applying what she learned previously to a slew of new responsibilities,



including filtering work orders and reviewing data for the 2017-2018 CCWA Watershed Management Annual Report. However, Georgia says her favorite part of her internship experience has been going into the field with her coworkers. When asked about her tasks in the field, she says, "I complete various inspections such as commercial (HVPS) and industrial inspections. HVPS stands for Highly Visible Pollutant Source. I also complete Detention Pond and Catch Basin inspections. At times, I also assist with service requests."

Georgia expressed that being a stormwater utility intern has been a tremendously rewarding experience that has prepared her for the working world. In August, Georgia will begin her college career at the University of West Georgia in Carrollton, GA.

Though she's currently enrolled as a nursing major, Georgia says she's considering pursuing a major in water resource engineering. When asked what made her consider the change she said "I like that there's more to the company than meets the eye. It really caters to the community." Should she decide to change her major, Georgia says the job experience gained through the internship has made her more equipped for learning about the field.

Stormwater Utility Services include:

Maintenance, repair and replacement of stormwater infrastructure within the road right-of-way, and directly connected to the right-of-way.

- ↔ Floodplain management ↔ Construction plan reviews and inspections ↔ Illicit discharge/illegal connection inspections
- ↔ Public education/public involvement ↔ Watershed improvement activities

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What Lies Underneath?

Ever wonder what all winds up in a stormwater catch basin on the road side? Look at what the vac truck crew cleaned out of just one catch basin. This debris and litter is what clogs a catch basin and causes road flooding when there is nowhere for rain water to go.



Stormwater Pollution Solutions

- ➔ Never dump anything down storm drains or into streams. Report anyone who does.
- ➔ Apply lawn chemicals according to the label. Do not over apply chemicals and never apply before a rain event.
- ➔ Keep grass clippings and other yard waste out of street gutters and storm drains. Drains blocked by excessive debris could cause flooding. Compost or mulch instead.

Find Us on YouTube!



CCWA has a YouTube channel that features educational videos on:

- ➔ preventing stormwater pollution
- ➔ finding and fixing leaks
- ➔ proper disposal of fats, oils and greases
- ➔ and other topics

Do You Know Your Property's Floodplain Status?

New Flood Insurance Rate Maps (FIRM's), also known as Floodplain Maps, went into effect on June 7, 2017 for properties located in Clayton County. After years of extensive studies and analysis, CCWA revised the County's Floodplain Maps, as guided by Federal Emergency Management Agency. The County's maps were digitally updated in 2007, but several other factors required additional field studies and desktop engineering to bring the maps up to date.

These updated maps are more precise than older maps because better flood hazard and risk data have been incorporated, and the latest science has been used to make them more accurate. Flood risks change over time due to construction, development, environmental changes, floodplain widening or shifting, and other factors. These changes send water flowing in new directions, creating flood risks that didn't exist previously—precisely why flood maps must be updated periodically.

The updated maps give staff a better understanding of local risk assessment, floodplain management, land use and emergency planning. FEMA has preliminarily approved the updated Digital Flood Insurance Rate Maps (DFIRM's).

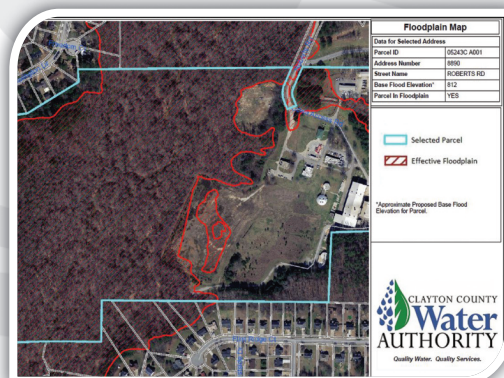
To determine your floodplain status, visit CCWA's Floodplain Management at <http://www.ccwa.us/floodplain-mapping>. Click the link that follows the text, "To check the status of your property in Clayton County". From there, take the following steps

1. Enter your information on the disclaimer form and "Accept" to continue. You will be taken to an internal Floodplain Mapping page where you will begin your search.
2. Click "Begin Search".
3. Enter your address number and street name. Click "Run Search."
4. Your personalized floodplain map will appear.

Please note, your floodplain status is determined on whether the boundary touches your property. Your home, or important structure, may be elevated such that the lowest floor may be higher than the Base Flood Elevation (BFE). These maps may not provide you information on your particular structure. It may be necessary for property owners to have an elevation certificate prepared, at their cost. Elevation certificates must be prepared by a Registered Land Surveyor or Professional Engineer. CCWA does not provide this service for property owners. Costs for the preparation of an elevation certificate ranges from \$500 to \$1,500. It is up to the property owner to procure this service.

If you have a mortgage on your property, the lender may require a Flood Insurance policy if you are within the boundaries of a floodplain. An elevation certificate may assist in reducing the cost of a flood insurance policy if it can be determined the structure in question is elevated to where flooding risks are minimized. In some cases, the flood insurance policy may not be needed.

If you need additional assistance, contact CCWA's Floodplain Division at 770.960.5200



Looking for a Speaker? Call Us

If you would like a Stormwater staff member to speak to your civic group or HOA, please call 770.960.6972.





Rivers Alive Stream Cleanup Saturday, October 27, 2018 10 a.m. – Noon

Join community volunteers at our annual stream cleanup event as we remove trash, litter and debris from one of our local creeks. This is a great volunteer opportunity for scouts, civic groups, church groups, environmental clubs and families.

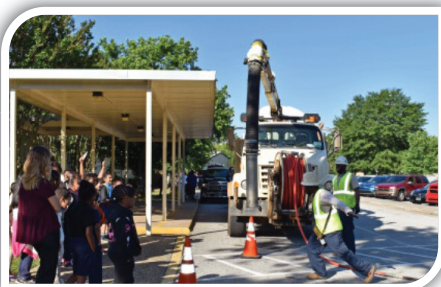
CCWA's Stormwater staff works throughout the year to educate residents about the damage stormwater pollution does to our local waterways and how residents can prevent this pollution from making its way into our drinking water. This event gets residents involved in preserving and protecting our local waterways. **For location and more information, visit ccwa.us or call 770.960.5200.**



Career Connections

Stormwater staff participates in numerous Career Day events at Clayton County Public Schools. Through these events, they connect with thousands of students and educate them about the damaging effects of stormwater pollution and what students can do to protect our water quality. Plus, staff introduce students to critical jobs in the water industry.

If you are interested in having CCWA participate in your school's event, call 770.960.6972.



Residents Turn In More than 100,000 lbs. of Household Hazardous Waste During Spring Collection Day



Household Hazardous Waste Collection Day is held every April to give residents the chance to dispose of a variety of household items, such as used paints, oils, pesticides, cleaners, batteries and pharmaceuticals.

CCWA contracted with Care Environmental to collect and properly dispose of the waste during the free, four hour event on Saturday, April 22 at the W.B. Casey Water Resource Recovery Facility in Jonesboro.

Care serviced 470 vehicles and processed 100,500 lbs. of waste. The event

cost the Stormwater Utility approximately \$34,929.59 (the cost of the contractor collecting and properly disposing of the items) and goes a long way to keeping these pollutants out of our local creeks, streams and landfill's. Clayton County Police Department assisted this year with the collection of over-the-counter and prescription medication.

Thank you to all Clayton County residents and volunteers who participated in our 2017 event!

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