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July 7, 2022

Mr. Greg Cassidy  
South Carolina Department of Health and Environmental Control  
Division of Site Assessment, Remediation, and Revitalization  
Bureau of Land and Waste Management  
2600 Bull Street  
Columbia, South Carolina 29201

SUBJECT: Quarterly Progress Report – Second Quarter 2022  
Former Bramlette Manufactured Gas Plant  
400 East Bramlette Road  
Greenville, South Carolina  
VCC 16-5857-RP

Dear Mr. Cassidy:

This Quarterly Progress Report pertaining to the Former Bramlette Manufactured Gas Plant (MGP) site has been prepared in accordance with the requirements of the Responsible Party Voluntary Cleanup Contract (VCC 16-5857-RP) between Duke Energy Carolinas, LLC (Duke Energy) and the South Carolina Department of Health and Environmental Control (SCDHEC), dated July 29, 2016. As required in the VCC, this Quarterly Progress Report summarizes:

- Work performed during the reporting period
- Test and sampling results generated during the reporting period
- Environmental problems experienced during the reporting period and their resolution
- Work to be performed during the next reporting period

The work was conducted in accordance with the Interim Surface Water Best Management Practice Work Plan approved on March 31, 2021.

### **Work Performed During this Reporting Period**

Work performed associated with the second quarter (April 1 through June 30, 2022) is summarized in the table below. A site layout map is included as **Figure 1**.

<b>Date</b>	<b>RI Activity</b>
April 15, 2022	<b>Quarterly Progress Report – First Quarter 2022</b> – Submitted
April through June 2022	<b>Surface Water Best Management Practice (BMP) Inspections</b> – Turbidity curtain, rock check dams and concrete cloth were inspected twice per month.

### **Summary of Test and Sampling Results Generated During this Reporting Period**

Hydrographs of groundwater level measurements in wells instrumented with data logging pressure transducers are provided in **Figure 2** through **Figure 5**. Observations from these hydrographs include:

- Groundwater elevation measurements since 2021 at the MW-29 well cluster indicate seasonality with highest elevations generally measured in the Spring and lowest elevation in measured in the Fall (**Figure 2**).
- Groundwater elevations measured in MW-45BR show a sharp reduction and recovery in water level in March 2021, September 2021, October 2021 (resampling event due to laboratory fire) and March 2022. Those measurements correspond to removal and replacement of the transducer during groundwater monitoring events (**Figure 3**).
- Groundwater elevation measurements since 2019 at the MW-3 well cluster indicate seasonality with highest elevation generally measured in March and lowest elevation measured in September (**Figure 4**).
- Groundwater elevation measurements from monitoring wells located along the Swamp Rabbit Train correlate to Reedy River stage elevation, indicating connectivity between groundwater and surface water (**Figure 5**).

### **Environmental Problems Identified During Reporting Period and their Resolution**

No problems were identified during this reporting period.

**Work to be Performed During the Next Reporting Period (third quarter 2022)**

The following activities are scheduled to be conducted during the third quarter of 2022 (July 1 through September 30, 2022). The proposed schedule is subject to change based on safe work practices, weather conditions, site access, availability of subcontractors, and other unforeseen delays. Field work notifications will be provided in accordance with the VCC and access agreements.

<b>Proposed Date</b>	<b>RI Activity</b>
September 5-16, 2022	Perform site-wide groundwater and surface water semiannual monitoring (event #6)
Quarter 3, 2022	Download and redeploy data logging pressure transducers
Quarter 3, 2022	Inspect and maintain Surface Water BMPs per approved work plan

If you have any questions regarding this submittal, please contact me at 980.373.2663 or by email at **Richard.Powell2@duke-energy.com**.

Sincerely,

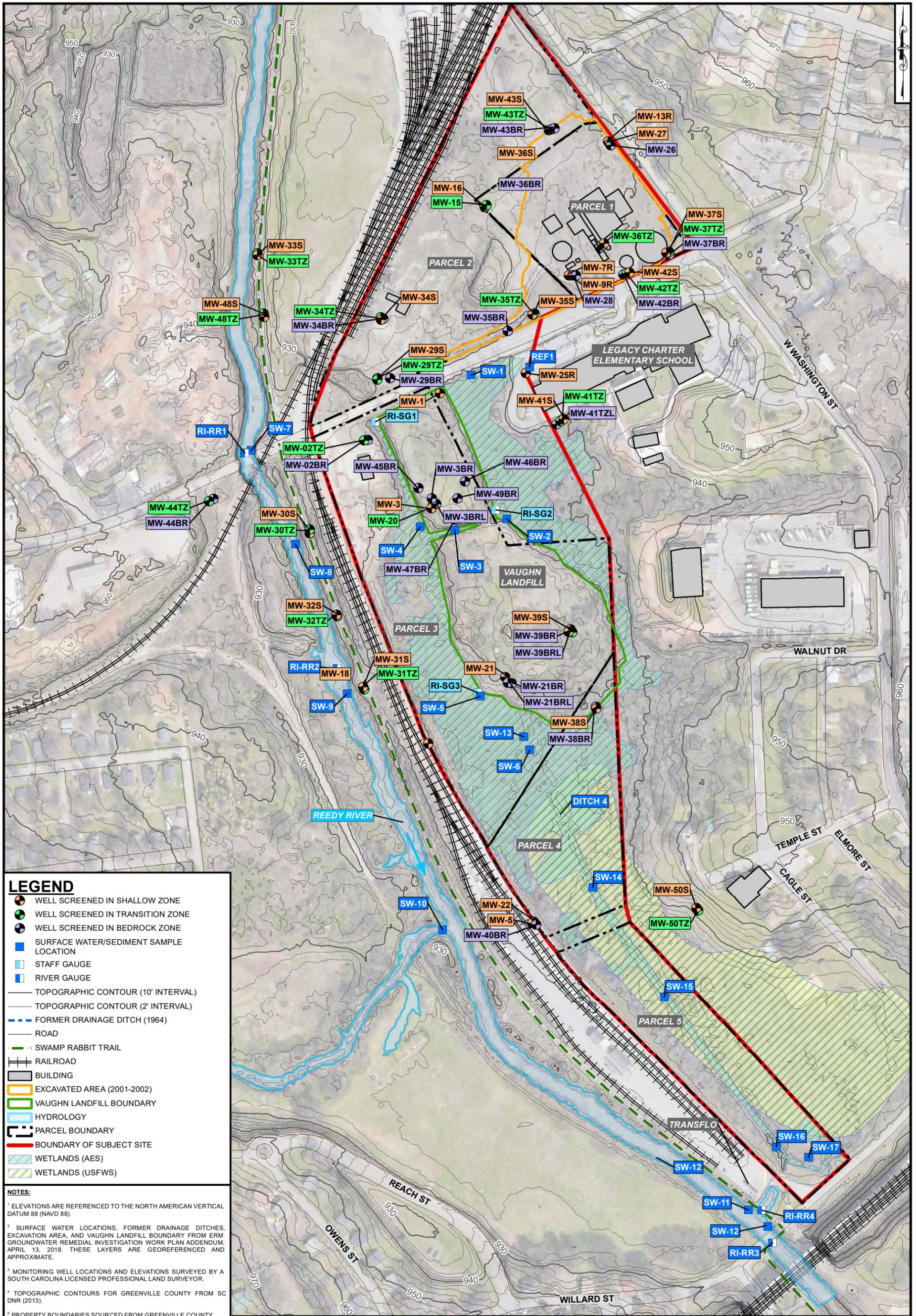
*Richard E. Powell*

Richard E. Powell, P.G.  
Lead Environmental Specialist

Cc: Kevin Boland, CSXT  
Daniel Schmitt, Esq., CSXT  
Ty Houck, Greenville County  
William W. Brown, Legacy School Properties, LLC  
Lee Drago, SynTerra

**ATTACHMENTS:** Figure 1 – Site Layout Map  
Figure 2 – MW-29 Cluster Hydrographs  
Figure 3 – Vaughn Landfill Hydrographs  
Figure 4 – MW-03 Cluster Hydrographs  
Figure 5 – Reedy River Well Hydrographs

## FIGURES



**LEGEND**

- WELL SCREENED IN SHALLOW ZONE
- WELL SCREENED IN TRANSITION ZONE
- WELL SCREENED IN BEDROCK ZONE
- SURFACE WATER/SEDIMENT SAMPLE LOCATION
- STAFF GAUGE
- RIVER GAUGE
- TOPOGRAPHIC CONTOUR (10' INTERVAL)
- TOPOGRAPHIC CONTOUR (2' INTERVAL)
- FORMER DRAINAGE DITCH (1964)
- ROAD
- SWAMP RABBIT TRAIL
- RAILROAD
- BUILDING
- EXCAVATED AREA (2001-2002)
- VAUGHN LANDFILL BOUNDARY
- HYDROLOGY
- PARCEL BOUNDARY
- BOUNDARY OF SUBJECT SITE
- WETLANDS (AES)
- WETLANDS (USFWS)

**NOTES:**

<sup>1</sup> ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM 88 (NAVD 88).

<sup>2</sup> SURFACE WATER LOCATIONS, FORMER DRAINAGE DITCHES, EXCAVATION AREA, AND VAUGHN LANDFILL BOUNDARY FROM ERM GROUNDWATER REMEDIAL INVESTIGATION WORK PLAN ADDENDUM, APRIL 13, 2018. THESE LAYERS ARE GEOREFERENCED AND APPROXIMATE.

<sup>3</sup> MONITORING WELL LOCATIONS AND ELEVATIONS SURVEYED BY A SOUTH CAROLINA LICENSED PROFESSIONAL LAND SURVEYOR.

<sup>4</sup> TOPOGRAPHIC CONTOURS FOR GREENVILLE COUNTY FROM SC DNR (2013).

<sup>5</sup> PROPERTY BOUNDARIES SOURCED FROM GREENVILLE COUNTY.

<sup>6</sup> WETLANDS (USFWS) BY US FISH AND WILDLIFE NATIONAL WETLAND INVENTORY. WETLANDS (AES) DELINEATED BY APPLIED ENGINEERING AND SCIENCE, INC. IN 1999.

<sup>7</sup> SWAMP RABBIT TRAIL CENTERLINE FROM CITY OF GREENVILLE.

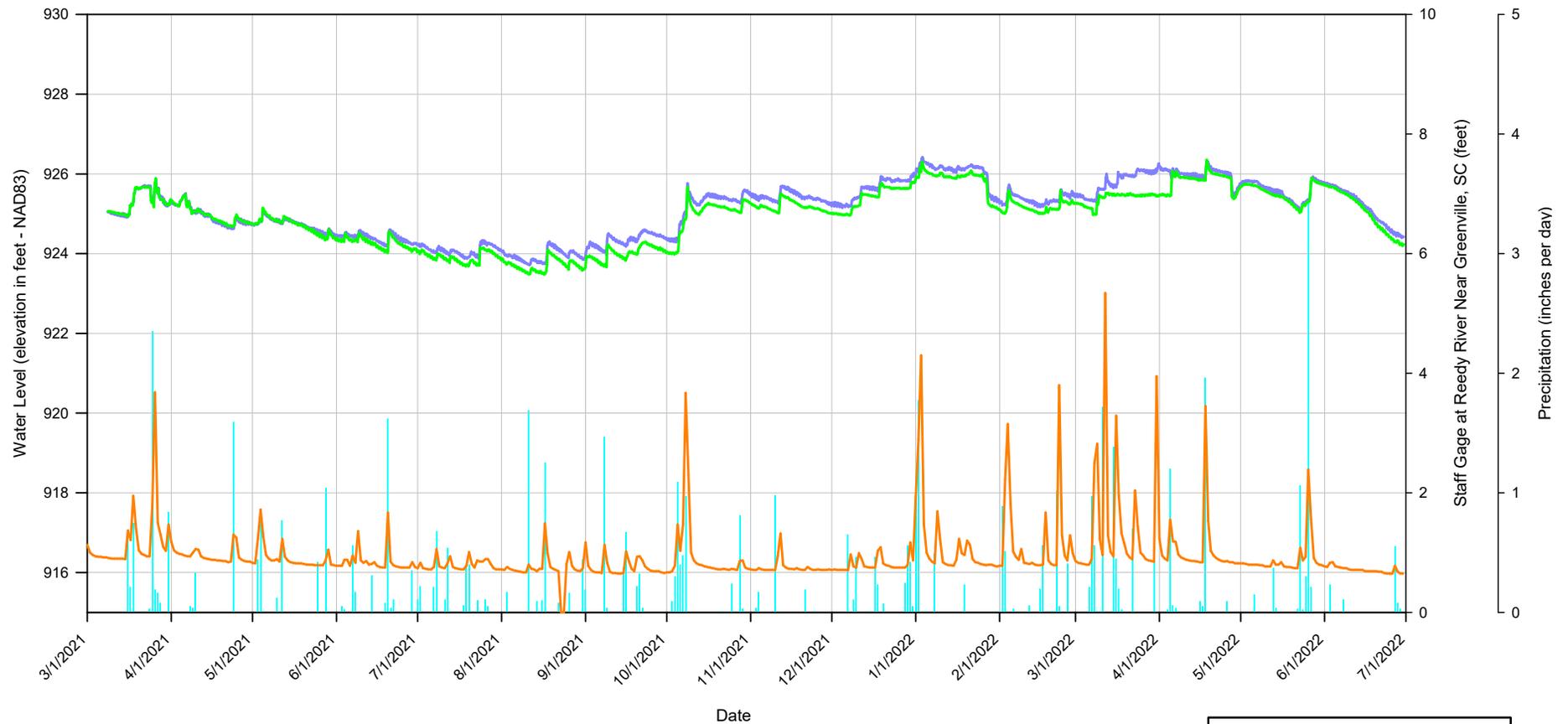
<sup>8</sup> AERIAL PHOTOGRAPHY OBTAINED FROM GOOGLE EARTH PRO ON MAY 3, 2019. INSET AERIAL OBTAINED OCTOBER 20, 2020. AERIAL WAS COLLECTED ON MARCH 12, 2018.

<sup>9</sup> DRAWING HAS BEEN SET WITH A PROJECTION OF SOUTH CAROLINA STATE PLANE COORDINATE SYSTEM FIPS 3900 (NAD83 INTERNATIONAL FEET).



GRAPHIC SCALE	
125	250
(IN FEET)	
DRAWN BY: T. KING	DATE: 05/21/2019
REVISED BY: L. DRAGO	DATE: 01/04/2022
CHECKED BY: T. PLATING	DATE: 01/04/2022
APPROVED BY: L. DRAGO	DATE: 01/04/2022
PROJECT MANAGER: L. DRAGO	
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**FIGURE 1**  
**SITE LAYOUT MAP**  
**QUARTERLY PROGRESS REPORT - SECOND QUARTER 2022**  
**FORMER BRAMLETTE MGP SITE**  
**EAST BRAMLETTE ROAD**  
**GREENVILLE, SOUTH CAROLINA**



Notes:

1. Elevations referenced to North American Vertical Datum of 1988
2. Precipitation obtained from online published data from [https://waterdata.usgs.gov/nwis/dv/?site\\_no=02164000&agency\\_cd=USGS&referred\\_module=sw](https://waterdata.usgs.gov/nwis/dv/?site_no=02164000&agency_cd=USGS&referred_module=sw)
3. feet-msl – feet mean sea level



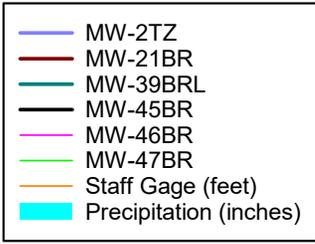
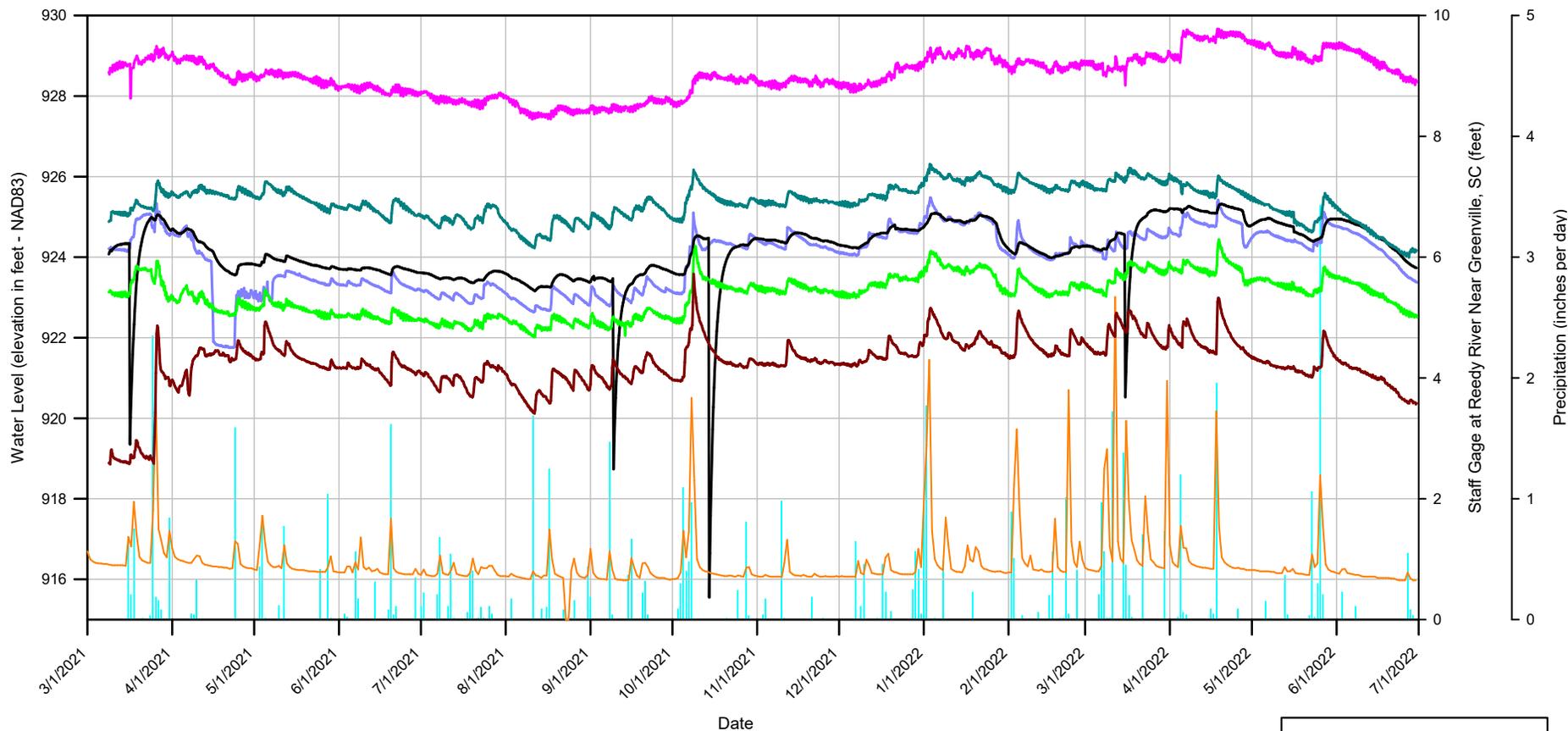
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 CHECKED BY: L. DRAGO  
 APPROVED BY: L. DRAGO  
 PROJECT MANAGER: L. DRAGO

DATE: 7/1/2022  
 DATE: 7/1/2022  
 DATE: 7/5/2022  
 DATE: 7/5/2022



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**FIGURE 2**  
**MW-29 CLUSTER HYDROGRAPHS**  
**QUARTERLY STATUS REPORT**  
**QUARTER 2, 2022**  
**FORMER BRAMLETTE MGP SITE**  
**EAST BRAMLETTE ROAD**  
**GREENVILLE, SOUTH CAROLINA**



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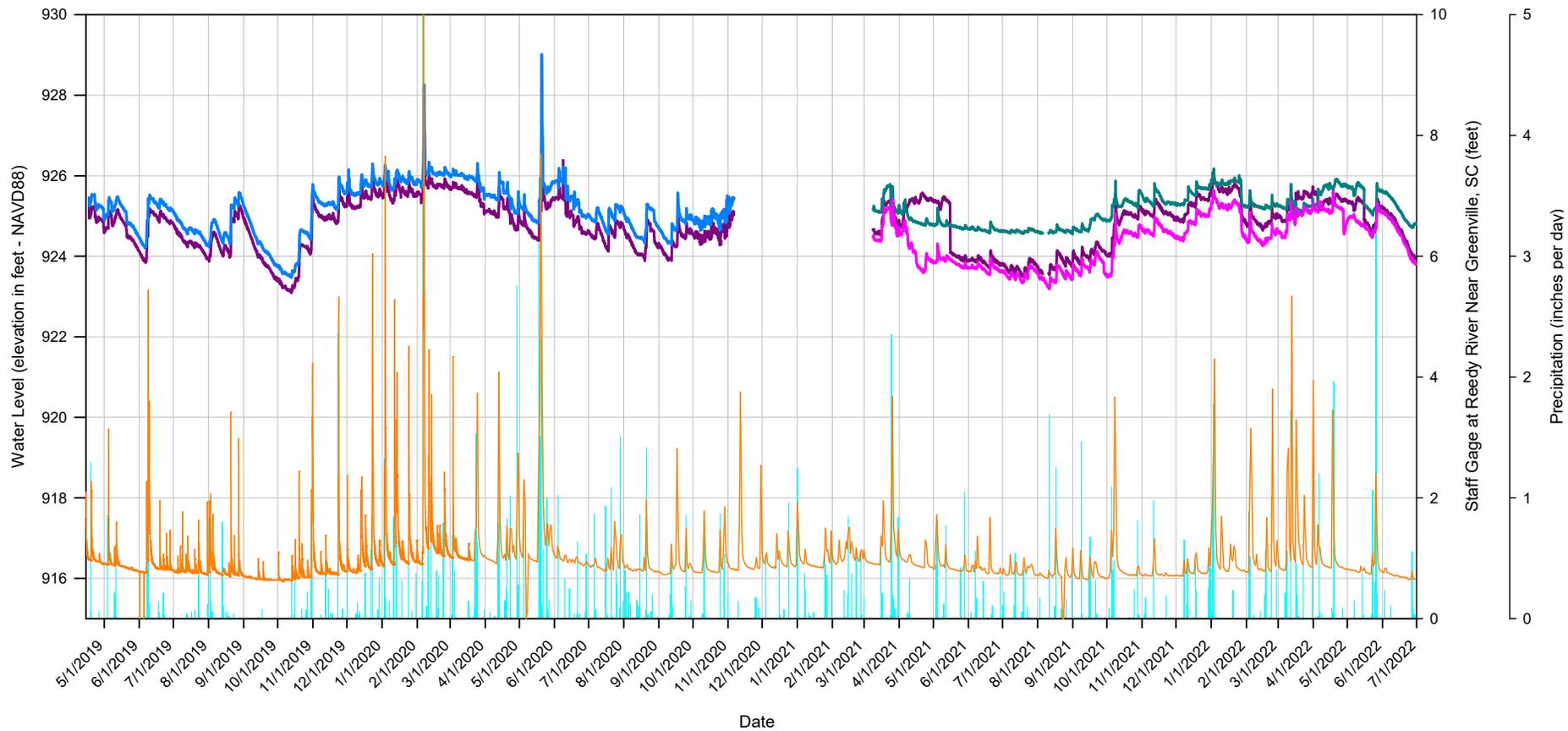


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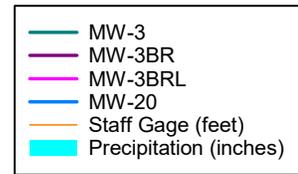
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**FIGURE 3**  
**VAUGHN LANDFILL HYDROGRAPHS**  
**QUARTERLY STATUS REPORT**  
**QUARTER 2, 2022**  
**FORMER BRAMLETTE MGP SITE**  
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3. feet-msl – feet mean sea level



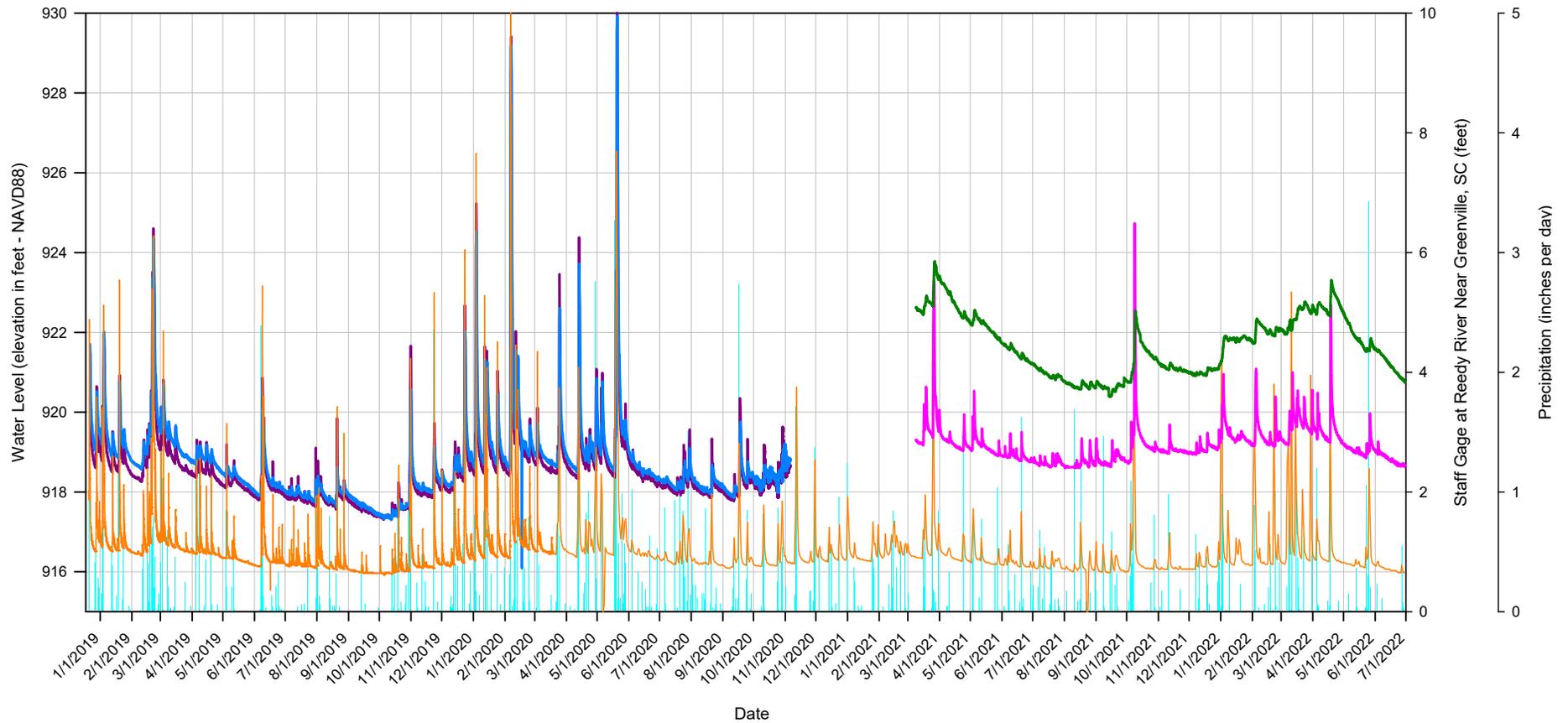
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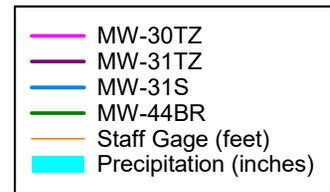
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**FIGURE 4**  
**MW-03 CLUSTER HYDROGRAPHS**  
**QUARTERLY STATUS REPORT**  
**QUARTER 2, 2022**  
**FORMER BRAMLETTE MGP SITE**  
**EAST BRAMLETTE ROAD**  
**GREENVILLE, SOUTH CAROLINA**



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**FIGURE 5**  
**REEDY RIVER WELL HYDROGRAPHS**  
**QUARTERLY STATUS REPORT**  
**QUARTER 2, 2022**  
**FORMER BRAMLETTE MGP SITE**  
**EAST BRAMLETTE ROAD**  
**GREENVILLE, SOUTH CAROLINA**