



526 South Church Street
Mail Code EC13K
Charlotte, NC 28202

o: 980.373.2663
c: 704.497.3627
f: 000.000.0000

October 15, 2021

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 – Third Quarter 2021
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 following approved work plans:

- Remedial Investigation Work Plan Addendum (approved on August 6, 2019)
- Interim Surface Water Best Management Practice Work Plan (approved on March 31, 2021)

Work Performed During this Reporting Period

Work performed during the third quarter (July 1 through September 30, 2021) is summarized in the table below. A site layout map is included as **Figure 1**.

Date	RI Activity
July 30, 2021	Remedial Investigation Report Addendum – Submitted
August 2021	Site Maintenance – Maintained access to gravel roads and all monitoring wells prior to semiannual monitoring event.
September 1, 2021	Semiannual Monitoring Report – Submitted
September 2021	Semiannual Monitoring Event – Completed groundwater and surface water monitoring between September 2, 2021 and September 15, 2021.
July through September 2021	Sorbent Boom Inspection – Inspected and maintained sorbent booms at five locations.
September 2021	Interim BMP Installation <ul style="list-style-type: none">• Mobilized to site on September 14, 2021• Completed installation of turbidity curtain in drainage channel through the Vaughn Landfill on Parcel 3 on September 15, 2021• Completed rock check dam construction in Ditch 4 on September 27, 2021• Began removal of rip rap in ditch south of Transflo property for concrete cloth installation on September 28, 2021
September 2021	Water Level/Data Loggers – Downloaded and redeployed data loggers (Figure 2 through Figure 5).

Summary of Test and Sampling Results Generated During this Reporting Period

Test and sampling results for work performed during the third quarter (July 1 through September 30, 2021) are summarized below:

- Groundwater and surface water samples were collected from 69 monitoring wells and 17 surface water locations for analysis of volatile organic compounds (VOC) and semi-volatile organic compounds (SVOCs). Natural attenuation parameter analysis was performed on samples collected from select monitoring wells as described in the Semiannual Monitoring Report. Laboratory analytical data are not available at the time of this submittal and will be presented in the fourth quarter 2021 Progress Report.
- A laboratory fire occurred at the Pace Analytical Huntersville location on September 19, 2021. Approximately half of the semiannual monitoring event

samples were affected by the fire. Those samples are to be recollected and resubmitted for analysis.

Hydrographs of groundwater level measurements in wells instrumented with data logging pressure transducers are provided in **Figure 2 through Figure 5**, observations are summarized below:

- Groundwater levels in the shallow, transition, and fractured bedrock flow zones correlate to precipitation events indicating a groundwater recharge response.
- Groundwater elevation at MW-30TZ along the Swamp Rabbit Trail correlates to the Reedy River staff gauge indicating connectivity between the shallow flow system and the Reedy River.
- Seasonal high groundwater elevations occur in the spring (March) and seasonal low groundwater elevation occurs in the fall (September).

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 (fourth quarter 2021)

The following activities are scheduled to be conducted during the fourth quarter of 2021 (October 1 through December 31, 2021). 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.

Proposed Date	RI Activity
October 2021	Submit Quarterly Progress Report – Third Quarter 2021
October 2021	Complete Interim BMP Installation
October 2021	Recollect samples from groundwater monitoring wells and surface water locations
Quarter 4 2021	Review and respond to SCDHEC comments regarding the RI Report Addendum
Quarter 4, 2021	Inspect and maintain surface water Interim Best Management Practices (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

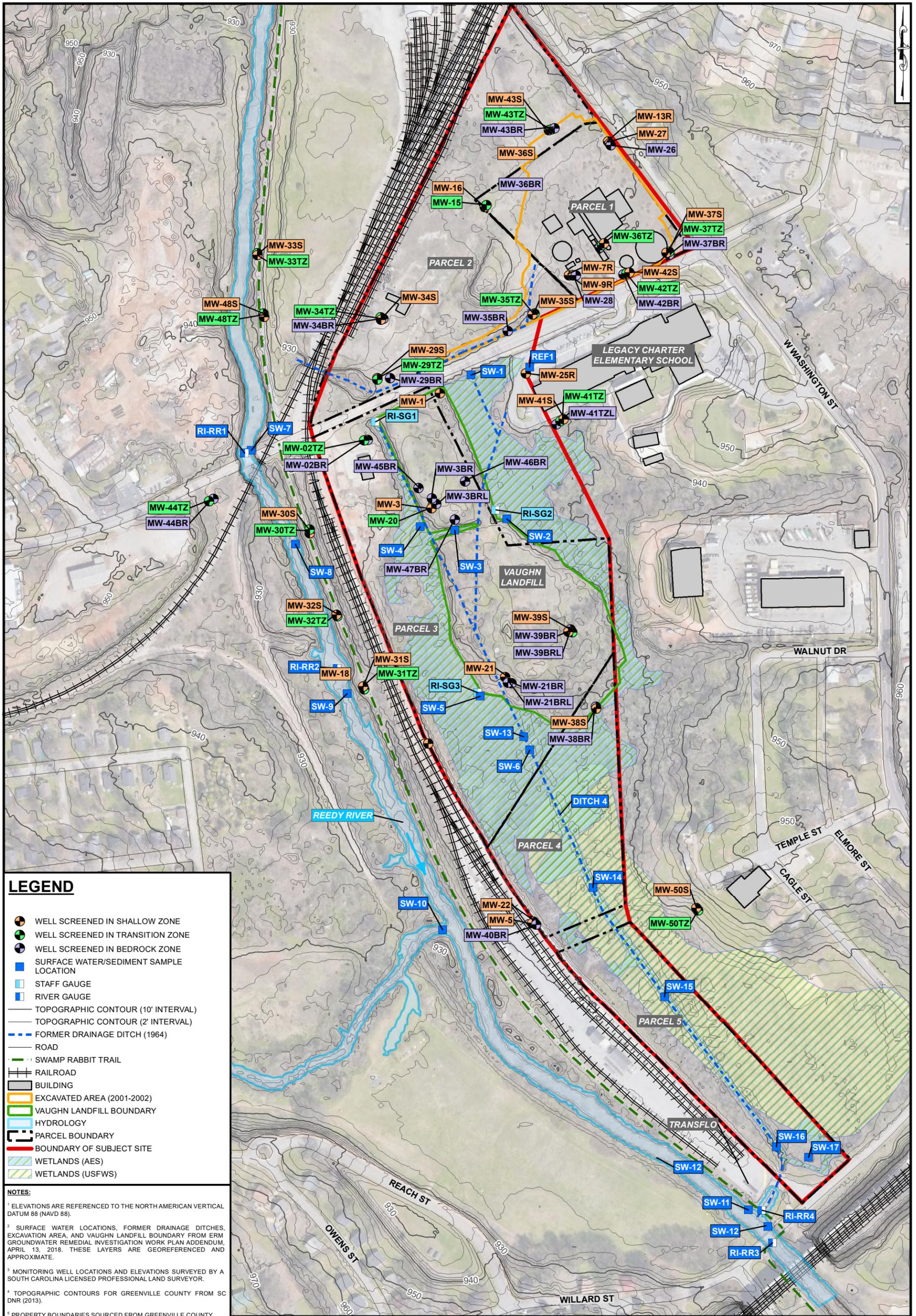
Richard E. Powell, P.G.
Lead Environmental Specialist

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

Attachments: **Figures**

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

¹ ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM 88 (NAVD 88).

² 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.

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

⁴ TOPOGRAPHIC CONTOURS FOR GREENVILLE COUNTY FROM SC DNR (2013).

⁵ PROPERTY BOUNDARIES SOURCED FROM GREENVILLE COUNTY.

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

⁷ SWAMP RABBIT TRAIL CENTERLINE FROM CITY OF GREENVILLE.

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

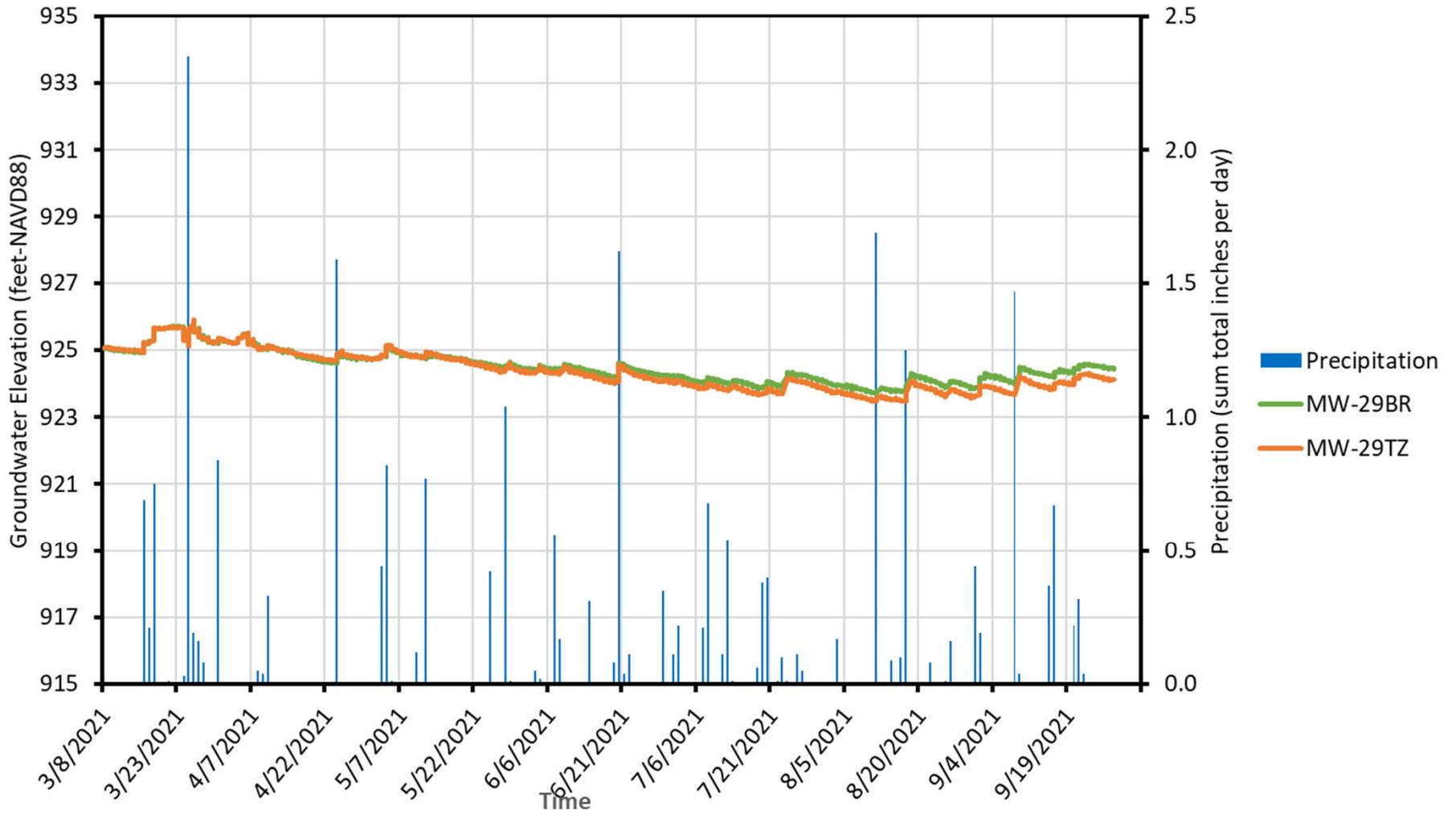
⁹ DRAWING HAS BEEN SET WITH A PROJECTION OF SOUTH CAROLINA STATE PLANE COORDINATE SYSTEM FIPS 3900 (NAD83 INTERNATIONAL FEET).



GRAPHIC SCALE
125 0 125 250
(IN FEET)

DRAWN BY: T. KING DATE: 05/21/2019
 REVISED BY: T. KING DATE: 10/04/2021
 CHECKED BY: T. PLATING DATE: 10/04/2021
 APPROVED BY: T. PLATING DATE: 10/04/2021
 PROJECT MANAGER: T. PLATING
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FIGURE 1
SITE LAYOUT MAP
QUARTERLY STATUS REPORT - QUARTER 3, 2021
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
3. feet-msl – feet mean sea level

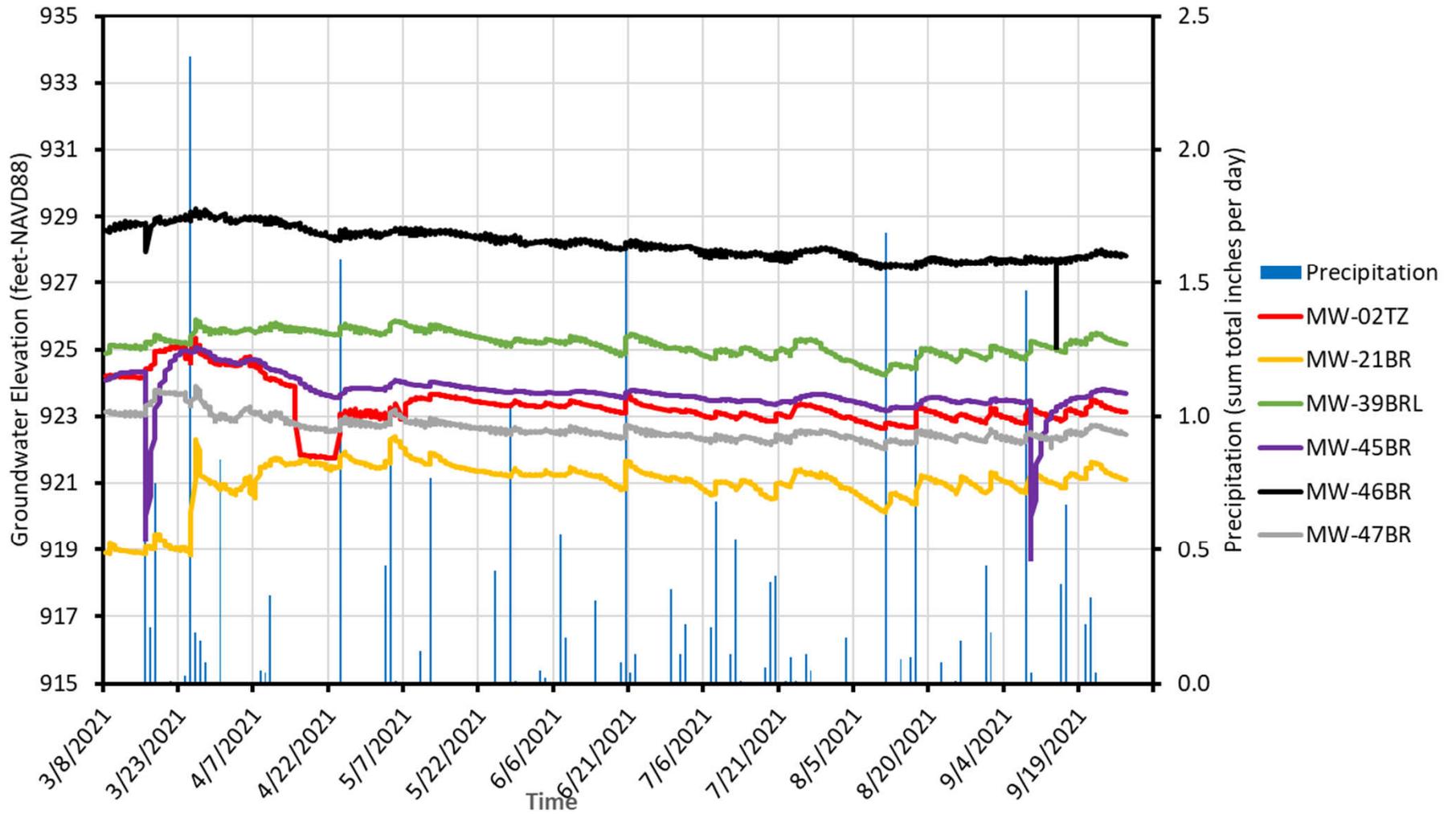


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FIGURE 2
MW-29 CLUSTER HYDROGRAPHS
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FORMER BRAMLETTE MGP SITE
EAST BRAMLETTE ROAD
GREENVILLE, SOUTH CAROLINA



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3. feet-msl – feet mean sea level



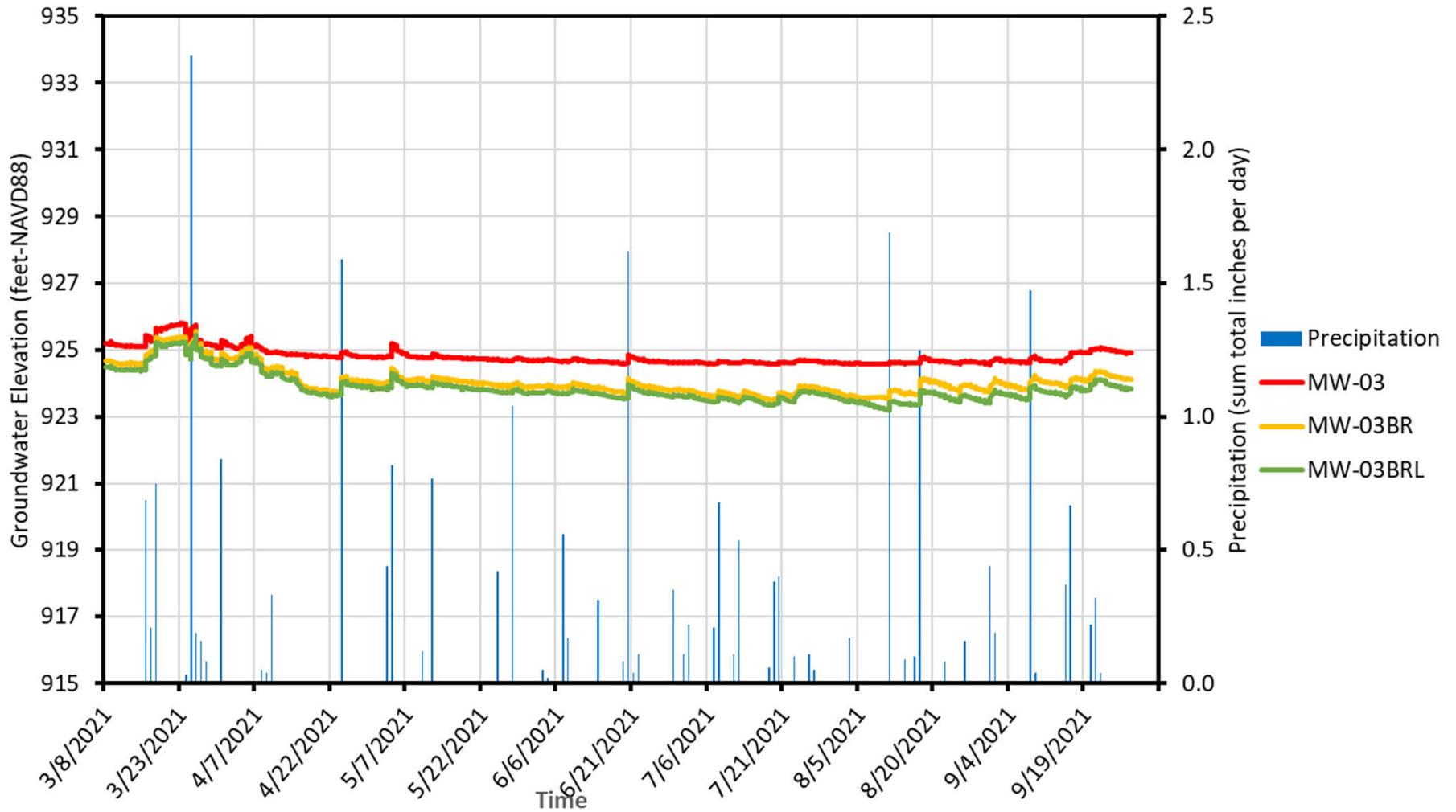
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FIGURE 3
VAUGHN LANDFILL HYDROGRAPHS
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FORMER BRAMLETTE MGP SITE
EAST BRAMLETTE ROAD
GREENVILLE, SOUTH CAROLINA



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3. feet-msl – feet mean sea level

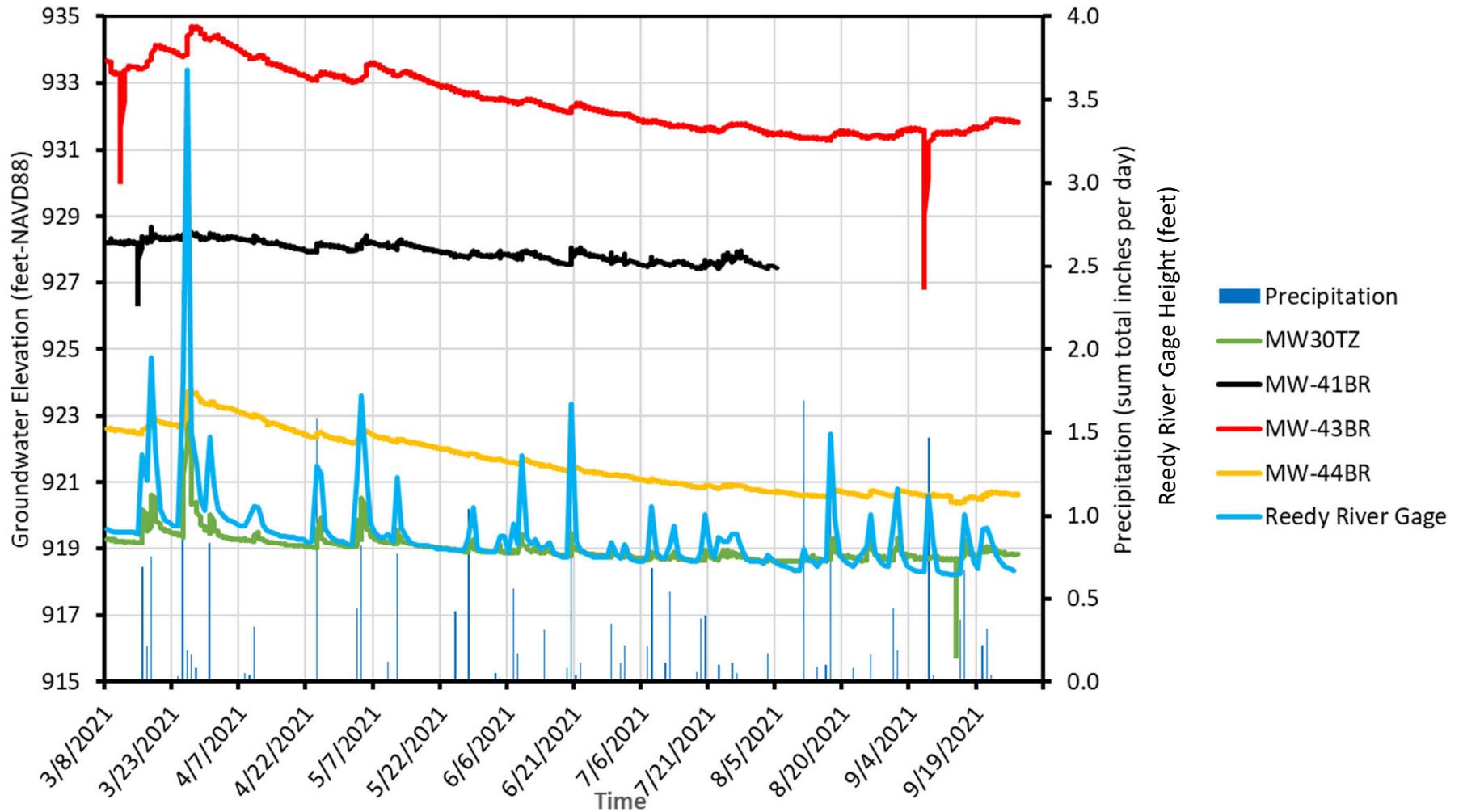


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FIGURE 4
MW-03 CLUSTER HYDROGRAPHS
QUARTERLY STATUS REPORT – QUARTER 3, 2021
FORMER BRAMLETTE MGP SITE
EAST BRAMLETTE ROAD
GREENVILLE, SOUTH CAROLINA



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FIGURE 5
REEDY RIVER, AND UPGRADIENT WELL HYDROGRAPHS
QUARTERLY STATUS REPORT – QUARTER 3, 2021
FORMER BRAMLETTE MGP SITE
EAST BRAMLETTE ROAD
GREENVILLE, SOUTH CAROLINA