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Butler, NJ 07405
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September 9, 2022

Mr. Matthew Hubicki
Project Manager, Remedial Bureau C
Division of Environmental Remediation
New York State Department of Environmental Conservation (NYSDEC)
625 Broadway
Albany, NY 12233-7014

Re: NYSDEC Site No. 360174
August 2022 – September 2022 Monthly Progress Report
Westchester County Airport, 240 Airport Road
White Plains, New York 10604

Dear Mr. Hubicki:

Actions Taken/Accomplishments (August-September 2022)

A schedule of planned operations is included as Appendix A.

1. Continued to monitor surface water flow and per- and polyfluoroalkyl substance (PFAS) concentrations leaving the end-of-pipe at OF-7 and at New York City Department of Environmental Protection (NYCDEP) gauging station (E-10) while collecting water levels in temporary wells along Airport Road and New King Street. The purpose of the monitoring was to evaluate the presence of a gaining or losing stream leading to E-10 and how surface water and groundwater are influencing PFAS concentrations leaving the Airport and downgradient of the Airport. This assessment will continue until December 2022. In July, based on higher water levels at piezometers relative to the tributary base and that surface water flow is higher at E-10 than at OF-7, it is believed the tributary is a gaining stream, meaning groundwater is contributing to the surface water flow in the main tributary.
2. In August groundwater water levels continued to decline due to drought conditions. The groundwater levels were so low, we believe no contributing groundwater was added to the mainstream leading to E-10. Figure 1 illustrates the locations where the water levels were measured. Measured water-level depths below ground surface are included in (Appendix B). In August, due to drought conditions, the flow rate leaving the Airport at OF-7 matched the flow rate approximately 1,000 feet downgradient at E-10. Water flow measured at OF-7, E-10, Trib 1, and Trib 2 is shown in Table 1. PFAS surface water samples were collected for laboratory analysis on August 30, 2022. The sample results will be provided during the next monthly progress report.
3. First Environment measured the end-of-pipe flow leaving OF-7 storm sewer on August 15 and 30 to be between approximately two to three gallons per

minute (gpm) compared to an average flow of 54 gpm measured from July 8-13, 2019. This reduced flow is the result of the new stormwater system completed at OF-7 despite continued infiltration of groundwater of 1 to 2 gpm at leaking inlets 7015.1, 7014.2, 7013, 7008, and 7007, as shown in Figure 3. We also believe the low flow can be attributed to dry conditions. The leaking issue will require repairs to obtain watertight seals.

4. Although it is early in the performance monitoring at OF-7, the initial performance results identify elevated PFAS levels at OF-7 end-of-pipe resulting from infiltration of groundwater to structures 7015.1, 7014.2, 7013, 7008, and 7007, as shown in Figure 3. The newly constructed system has reduced flow of PFAS impacted water leaving the Airport at OF-7 by as much as approximately 50 times during dry conditions and will be monitored further as performance monitoring continues at OF-7 and E-10.
5. Submit a pilot test proposal to the County to reduce PFAS levels in groundwater and a downgradient location of NYANG Burn Pit.
6. First Environment continued the data evaluation of the July 27 pilot scale test using Cetco's Fluor-sorb to reduce PFAS in water at OF-7. The pilot test results will be reported in next month's progress report. This pilot test involves a combination of Fluor-sorb matting folded into three layers and used to line the 15-foot section of HDPE pipe between Manhole MH 7004 and Headwall 7003. Additionally, loose Fluor-sorb granules were loaded into sandbags and placed at the upstream and downstream ends to provide an additional sink for PFAS.

September & October Activities

1. Continue monthly performance monitoring for PFAS in surface water at OF-7 and NYCDEP gauging station E-10.
2. Awaiting NYSDEC review of the Waterline Construction New King Street Workplan. The purpose of the workplan describes handling of soil and groundwater containing PFAS, soil sampling as well as provisions for environmental oversight and air monitoring conducted during construction, and installation of a water supply pipeline from Westchester Joint Water Works (WJWW).
3. Awaiting NYSDEC review of the RIWP. Upon approval, will implement the RIWP. It is anticipated that implementation will begin in either September or October.
4. Continue to evaluate the practicality and calculate associated costs to remove the PFAS source at the former New York Air National Guard (NYANG) Burn Pit.
5. Once the Groundwater pilot test using Regenesis' PlumeStop is approved by the Airport, First Environment will provide a scope for work to the NYSDEC describing its implementation and performance monitoring.

6. Decontamination of the remaining frac tank on-site is scheduled for early September and its removal by the end of September.
7. Remove all sediment from newly installed storm sewer, as shown in Figure 4.
8. Evaluate the larger application of the Fluorsorb mat for use at OF-7 and OF-4 to reduce PFAS in surface water.
9. First Environment is working the Westchester County Public Works & Transportation (WCPWT) to develop a solution to correct the daylighting of groundwater to the storm sewer as shown in Figure 3.
10. Work with WCPWT and Pugni to correct/repair infiltration of groundwater near the former burn pit at drains 7015.1, 7014.2, 7013, 7008, and 7007, as shown in Figure 3.

If you have any questions, please do not hesitate to call.

Regards,

FIRST ENVIRONMENT, INC.

Scott R. Green, P.G.
Director, Insurance Consulting Service Group

David Luer
Project Manager/Field Team Leader

Att.

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G. Heitzman
S. Crisafulli
M. Murphy
J. Brown
J. Carpenter
M. Schuck – NYSDOH
K. Kulow – NYSDOH

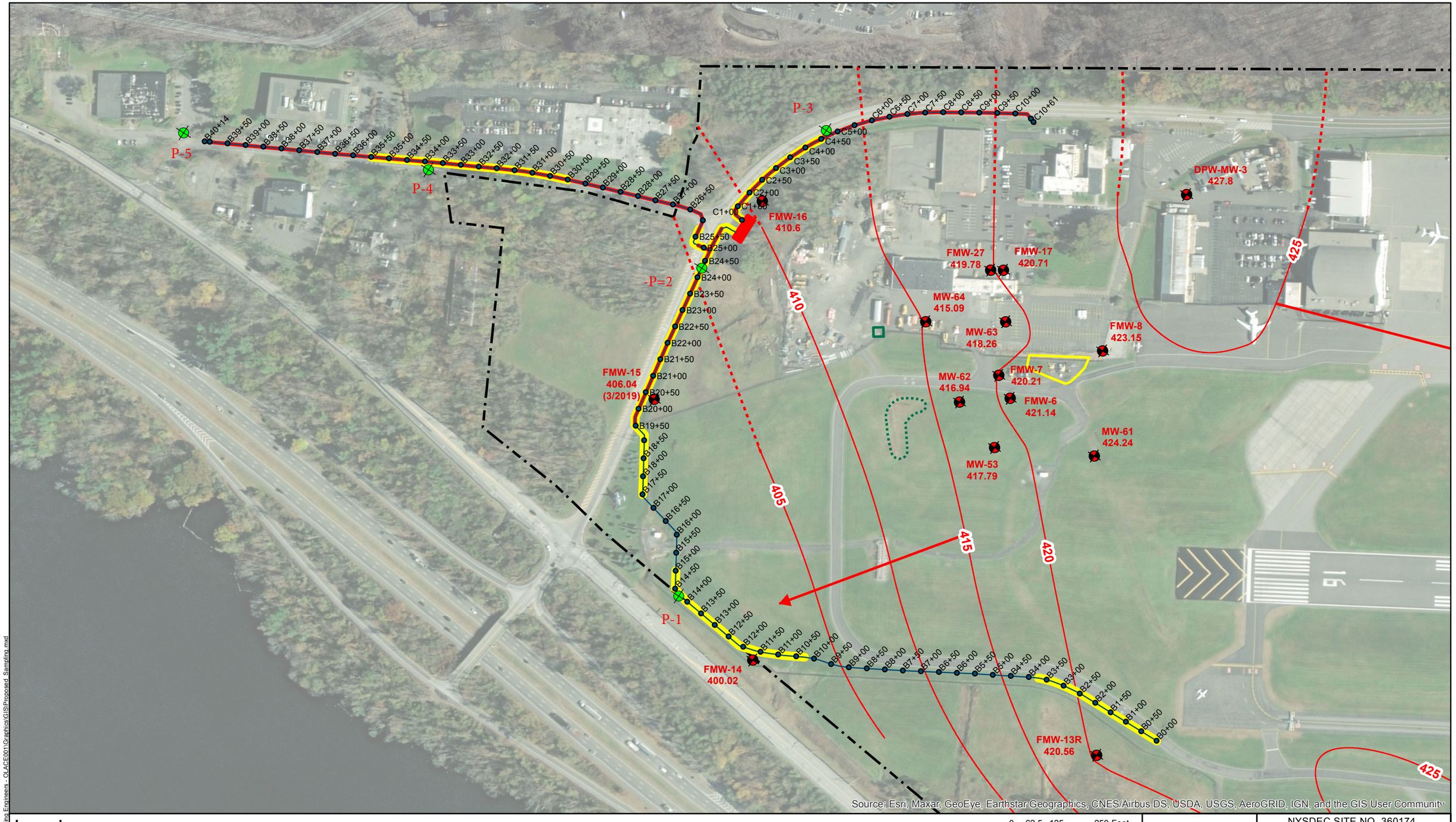
TABLES

TABLE 1
Surface Water Flow

Date/Location	OF-7	E-10	Trib 1	Trib 2
6/17/2022	5	20	2	0.5
6/27/2022	5	17	2	0.5
7/5/2022	1	10	1	0
7/27/2022	1.5	10	1	0
8/15/2022	3	3	0.1	0
8/30/2022	2	2	0	0

Note - Flow is in gallons per minute

FIGURES



Legend

- Unconsolidated Groundwater Flow Direction
- Unconsolidated Groundwater Elevation Contour (feet) as of 5/20/2020
- Inferred Unconsolidated Groundwater Elevation Contour (feet)
- Unconsolidated Monitoring Well
- 411.82 Unconsolidated Groundwater Elevation (feet) as of 5/20/2020
- Temp Well
- Station
- Proposed Water Line
- Excavation Requiring Removal
- Estimated Area Requiring Dewatering
- Former AFFF Burn Pit
- Subsurface Catch Basin
- Open Catch Area
- Property Boundary

0 62.5 125 250 Feet

1 inch = 250 feet

N

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NYSDEC SITE NO. 360174
WESTCHESTER COUNTY AIRPORT
White Plains, Westchester County, New York
FIGURE 1
GROUNDWATER MEASUREMENT LOCATIONS

Revised	Drawn	Checked	Approved	Date
	LS	DL	SG	1/28/2022

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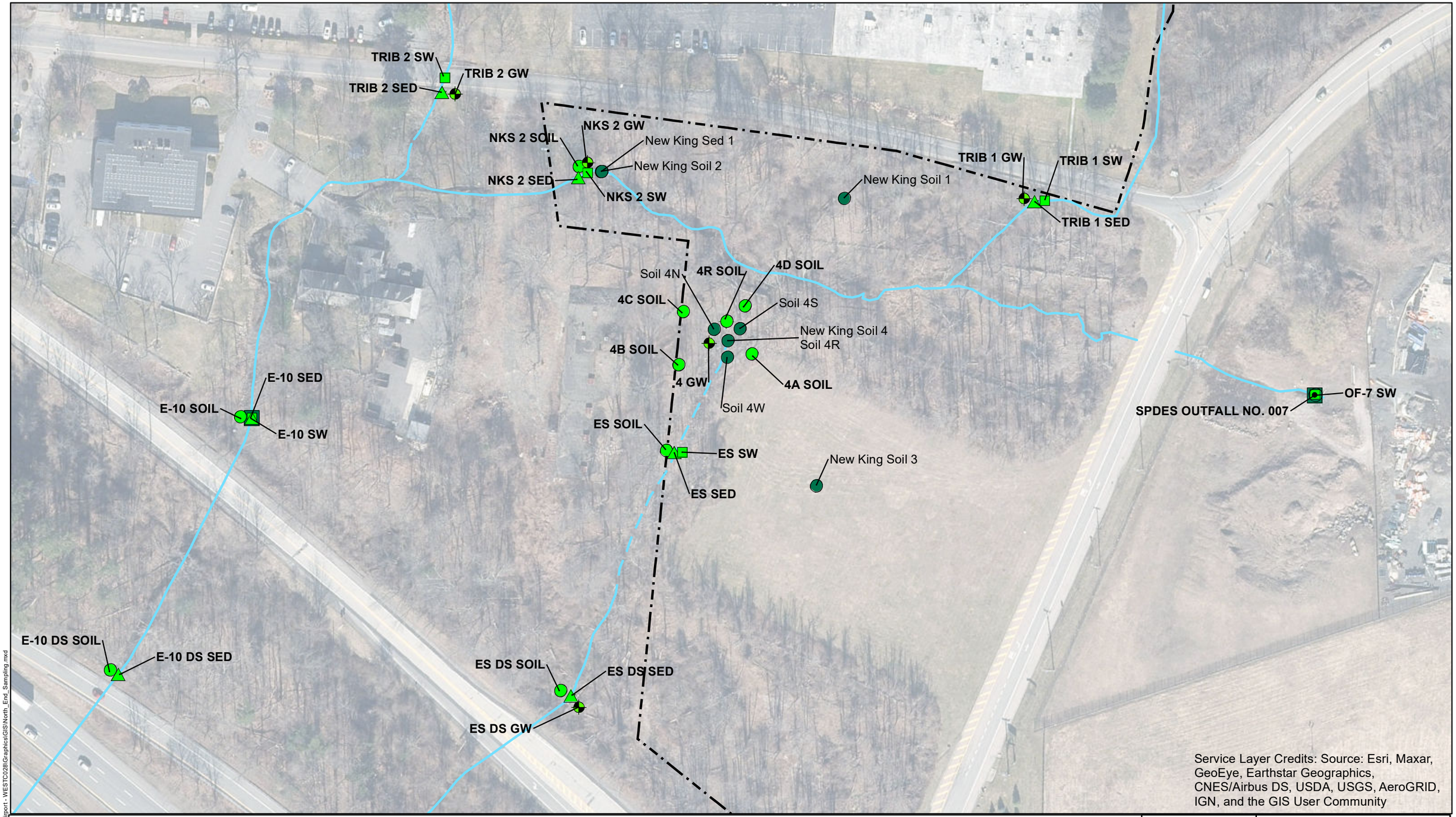

Legend

- Outfall Location
- Surface Soil Sample Location
- Sediment Sample Location
- Surface Water Sample Location
- Shallow Groundwater Sample Location
- Former Soil Sample Locations
- Former Surface Water Sample Locations
- Stream
- Ephemeral Stream
- Airport Property Boundary

Notes

ES	Ephemeral Stream
DS	Down Stream
NKS	New King Street
TRIB	Tributary
OF	Ooutfall

0 25 50 100 Feet

1 inch = 100 feet

N

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FIGURE 2
SAMPLING LOCATIONS - NORTH END

Revised	Drawn	Checked	Approved	Date
	LS	DL	SG	5/27/2022

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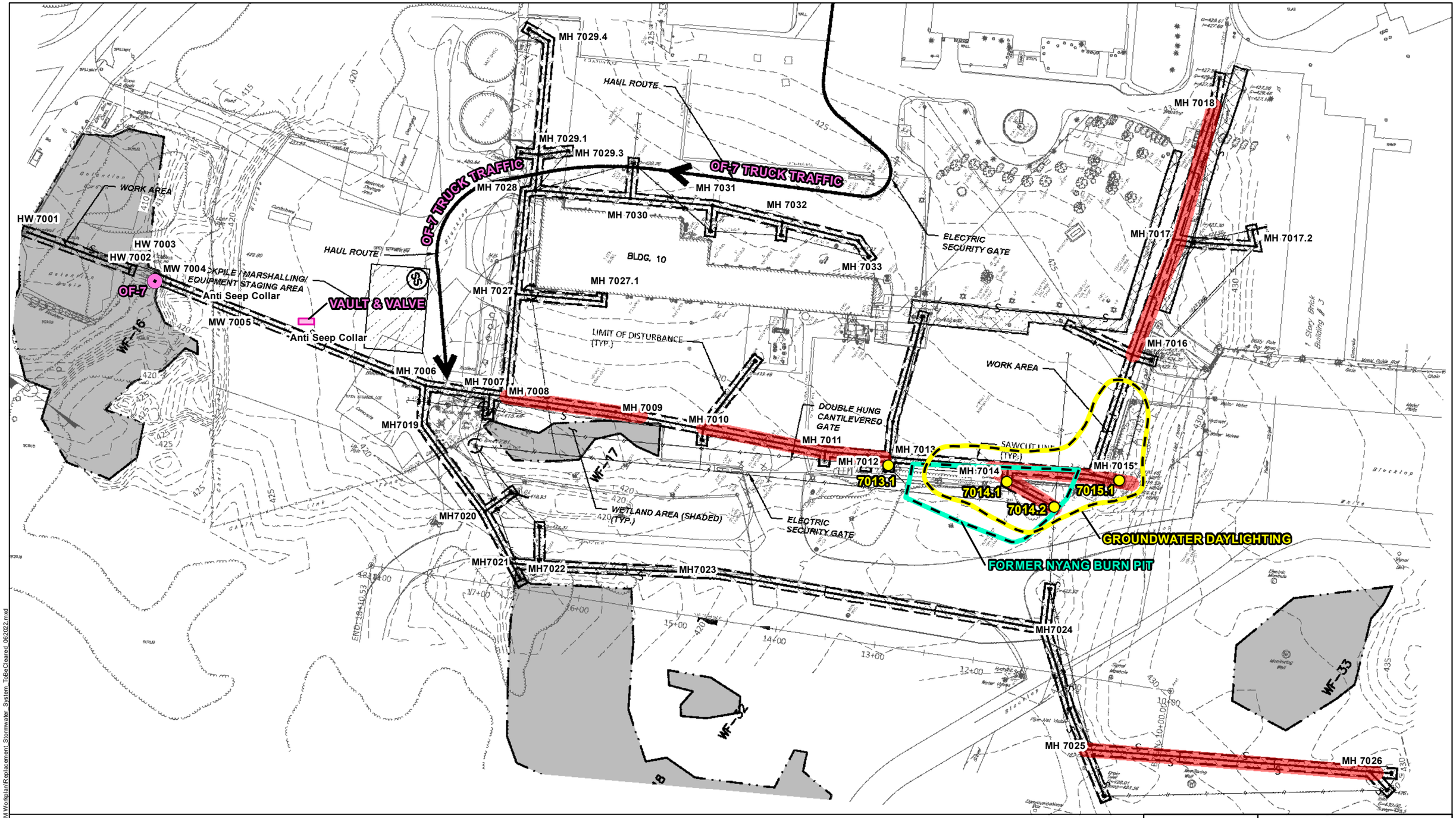

Legend

- Section of Pipe Requiring Clearing
- Wetland

0 22.5 45 90 Feet

1 inch = 90 feet

Source: Provident Design Engineering PLLC, 2020 100% OF-7 Storm Sewer Design

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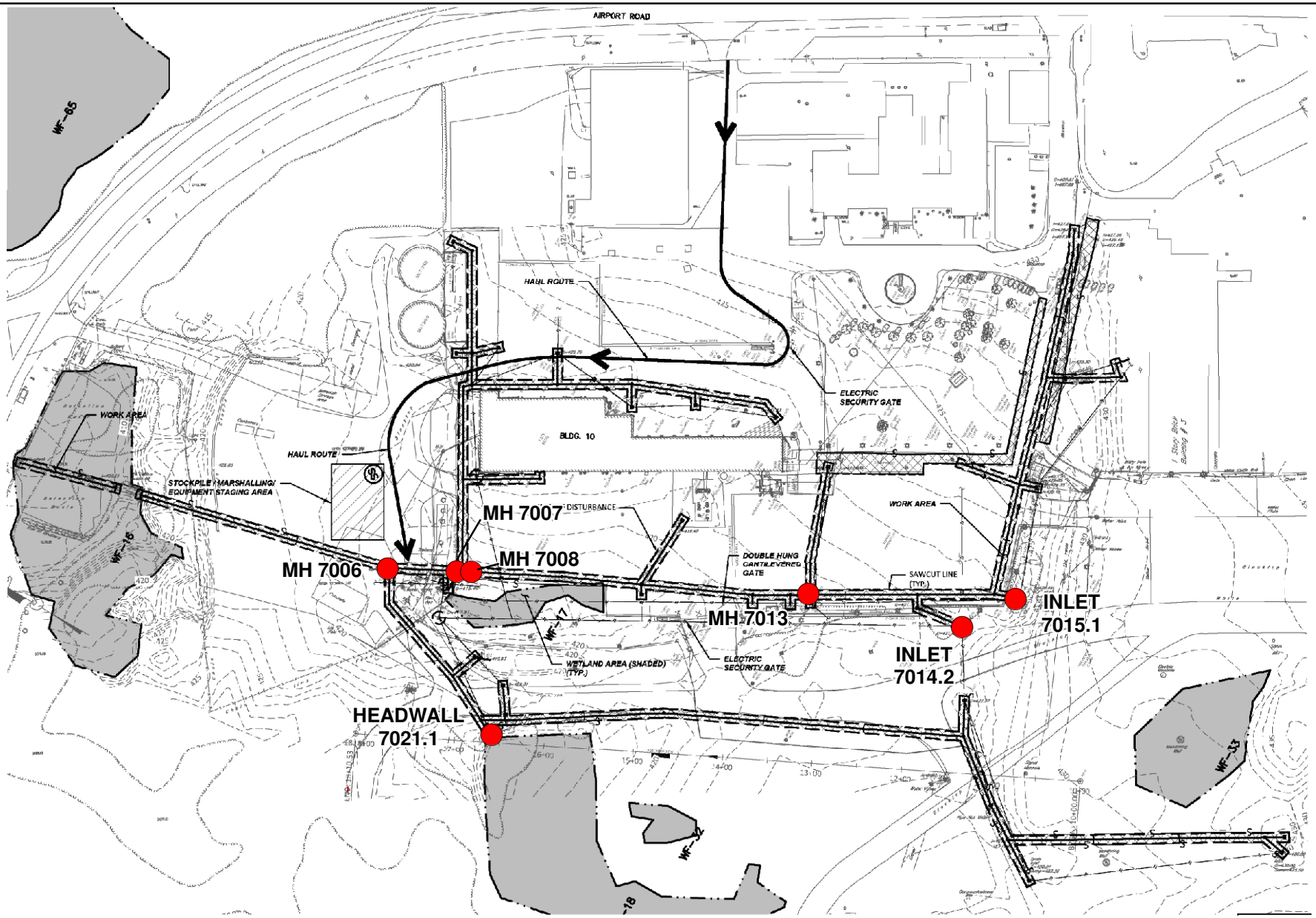
FIGURE 4
OF-7 STORM SEWER SEDIMENT CLEAN OUT

Revised	Drawn	Checked	Approved	Date
	ES	DL	SG	6/15/2022

K:\WESCHESTER AIRPORT\TRM\Workplan\Replacement Stormwater System_ToBeCleared_062022.mxd



Legend

- Leaking Manhole Structures

N
W E
S

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WESTCHESTER COUNTY AIRPORT

FIGURE 3
SYSTEM LEAKS AS OF
JULY 28, 2022

Revised	Drawn	Checked	Approved	Date
	CL			8/2/2022

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APPENDIX A

APPENDIX A
Work Activity Schedule
2022

Milestone	Estimated Completion Date	Estimated Completion Percentage
OF-7 Storm Sewer Installation	May 13, 2022	100%
OF-7 Performance Monitoring	2nd Quarter 2023	42%
New King Street Workplan	January 24	100%
Execution of New King Street Workplan	April 2022	100%
Waterline Workplan	April 1	100%
Execution of Waterline Workplan	October 2023	0%
OF-4 IRM Pilot Test*	Summer 2022	50%
Remedial Investigation Workplan**	July 2022	100%
GW Pilot Test Scope of Work***	Summer 2022	100%
GW Pilot Test	Fall 2022	0%
Execution of RI workplan	Fall 2022	0%
Remedial Action Alternatives	2023	0%
Certificate of Completion	TBD	0%

*Pilot test CETCO Fluor sorb at OF-7 before testing at OF-4. Evaluate the effectiveness of Flour sorb reducing PFOS and PFOA in surface water.

** RIWP submitted to the County. Submit RIWP to NYSDEC in July.

*** Scope of work submitted to the County.

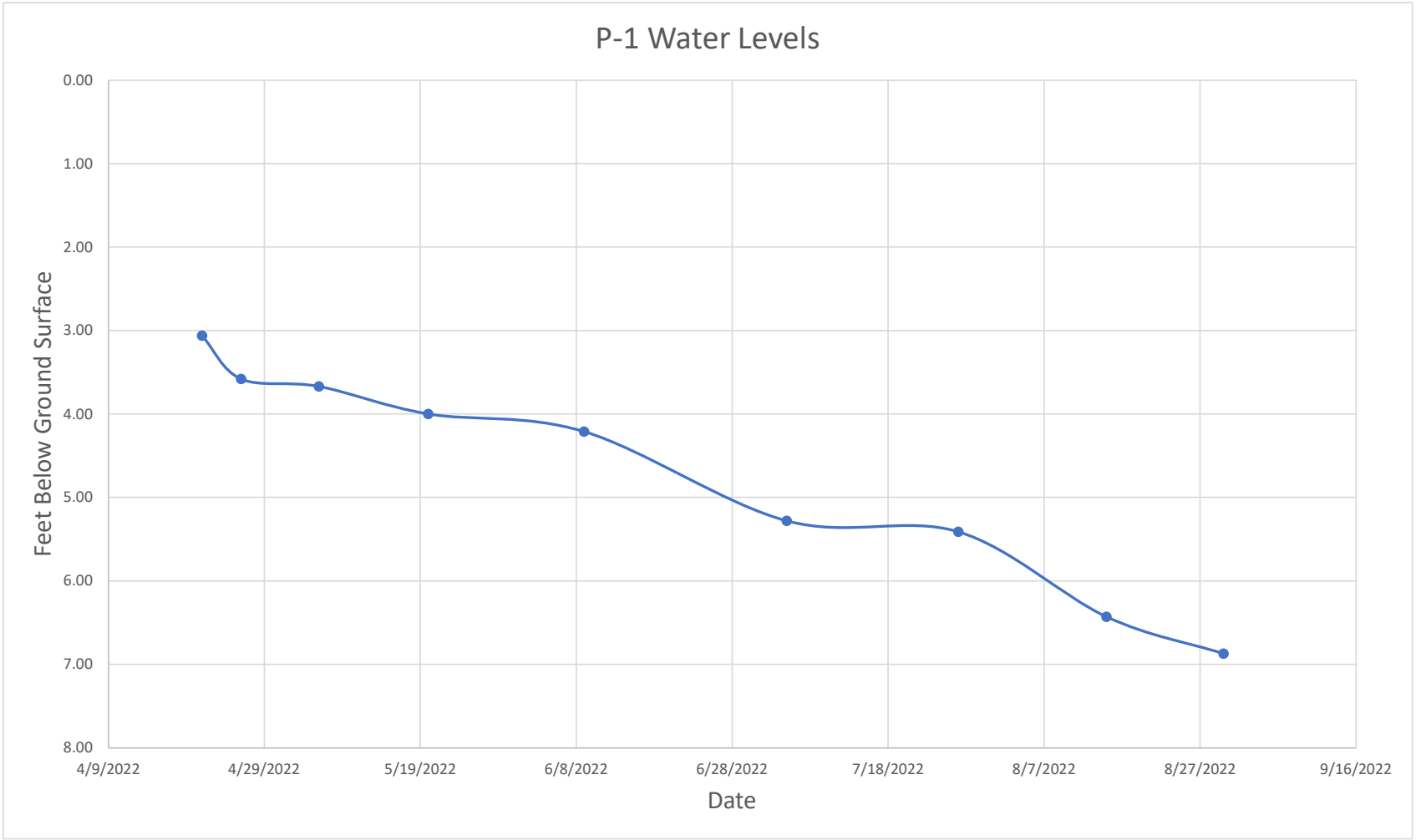
Estimated task durations and completions are tentative and are subject to modification based on site work, progress, weather delays, and other considerations such as contractor availability or Airport access.

Monthly progress reports will provide task initiation date for next month activity.

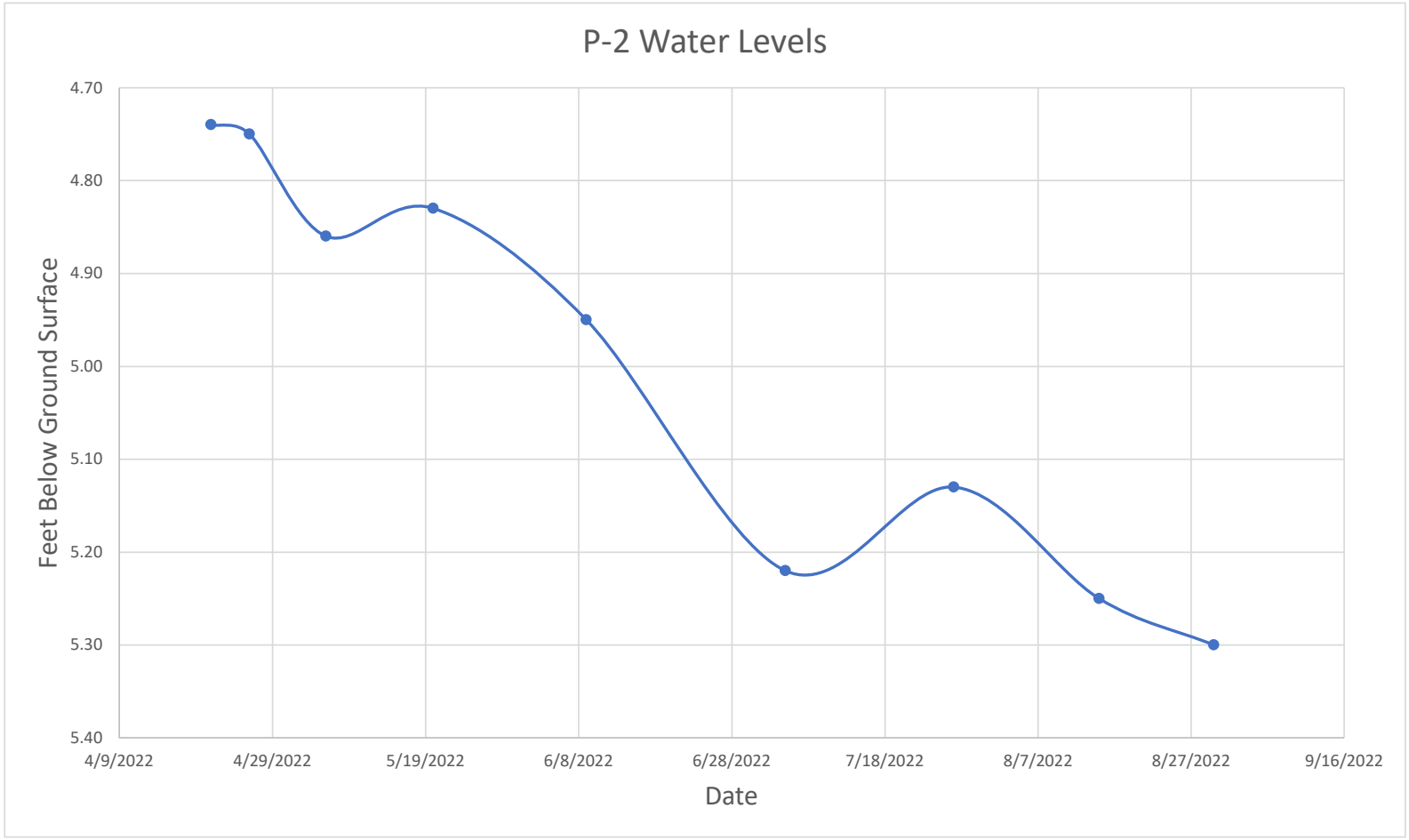
Implementation of reactive core mat and PFAS filter box using CETCO called FLUOR-SORB for a pilot test to reduce PFAS in surface water.

APPENDIX B

APPENDIX B


P-1 Water Levels
Feet Below Ground Surface
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
4/9/2022
4/29/2022
5/19/2022
6/8/2022
6/28/2022
7/18/2022
8/7/2022
8/27/2022
9/16/2022
Date

APPENDIX B


P-2 Water Levels
Feet Below Ground Surface
4.70
4.80
4.90
5.00
5.10
5.20
5.30
5.40
4/9/2022
4/29/2022
5/19/2022
6/8/2022
6/28/2022
7/18/2022
8/7/2022
8/27/2022
9/16/2022
Date

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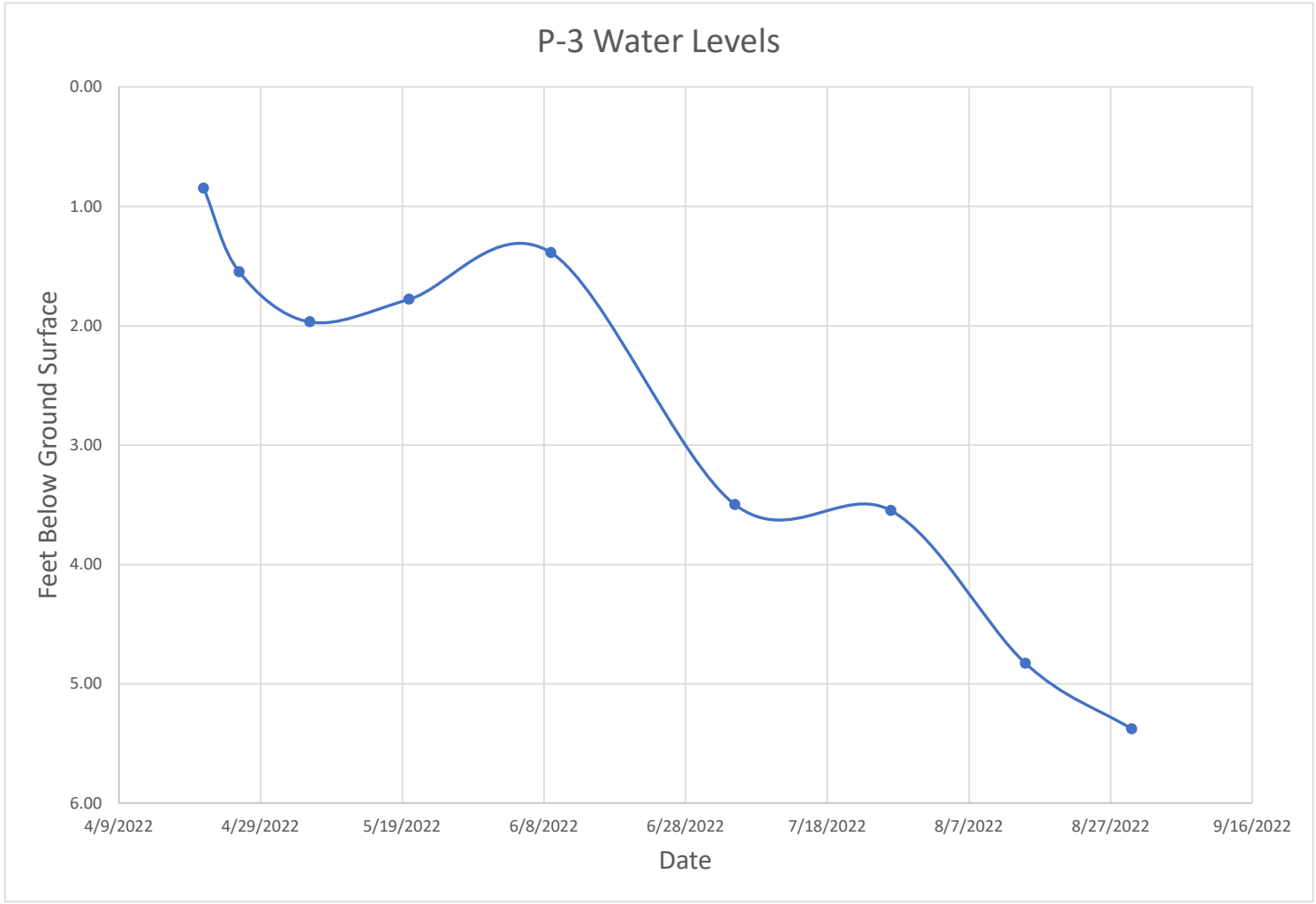
P-3 Water Levels
Feet Below Ground Surface
0.00
1.00
2.00
3.00
4.00
5.00
6.00
4/9/2022
4/29/2022
5/19/2022
6/8/2022
6/28/2022
7/18/2022
8/7/2022
8/27/2022
9/16/2022
Date

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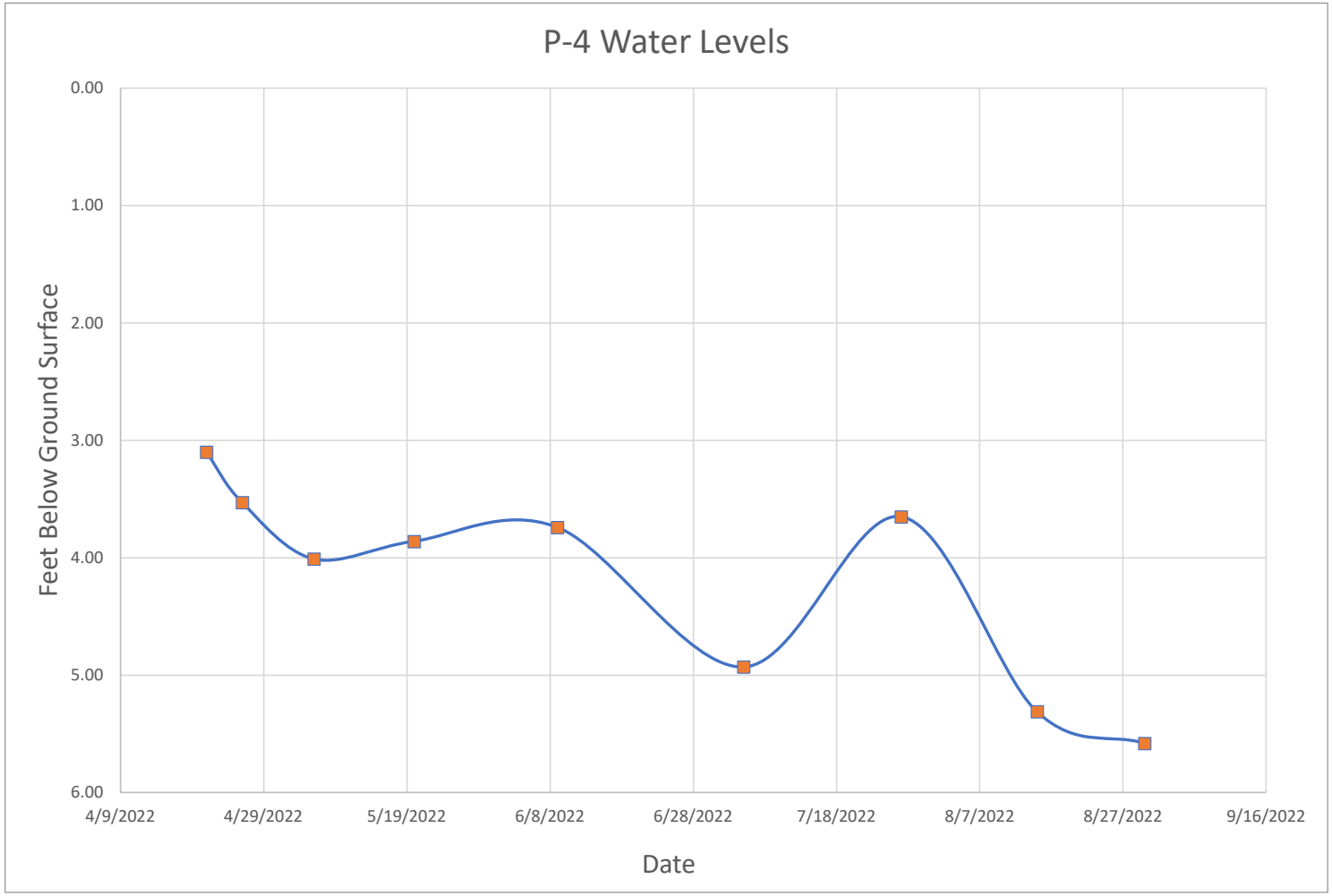
P-4 Water Levels
Feet Below Ground Surface
0.00
1.00
2.00
3.00
4.00
5.00
6.00
4/9/2022
4/29/2022
5/19/2022
6/8/2022
6/28/2022
7/18/2022
8/7/2022
8/27/2022
9/16/2022
Date

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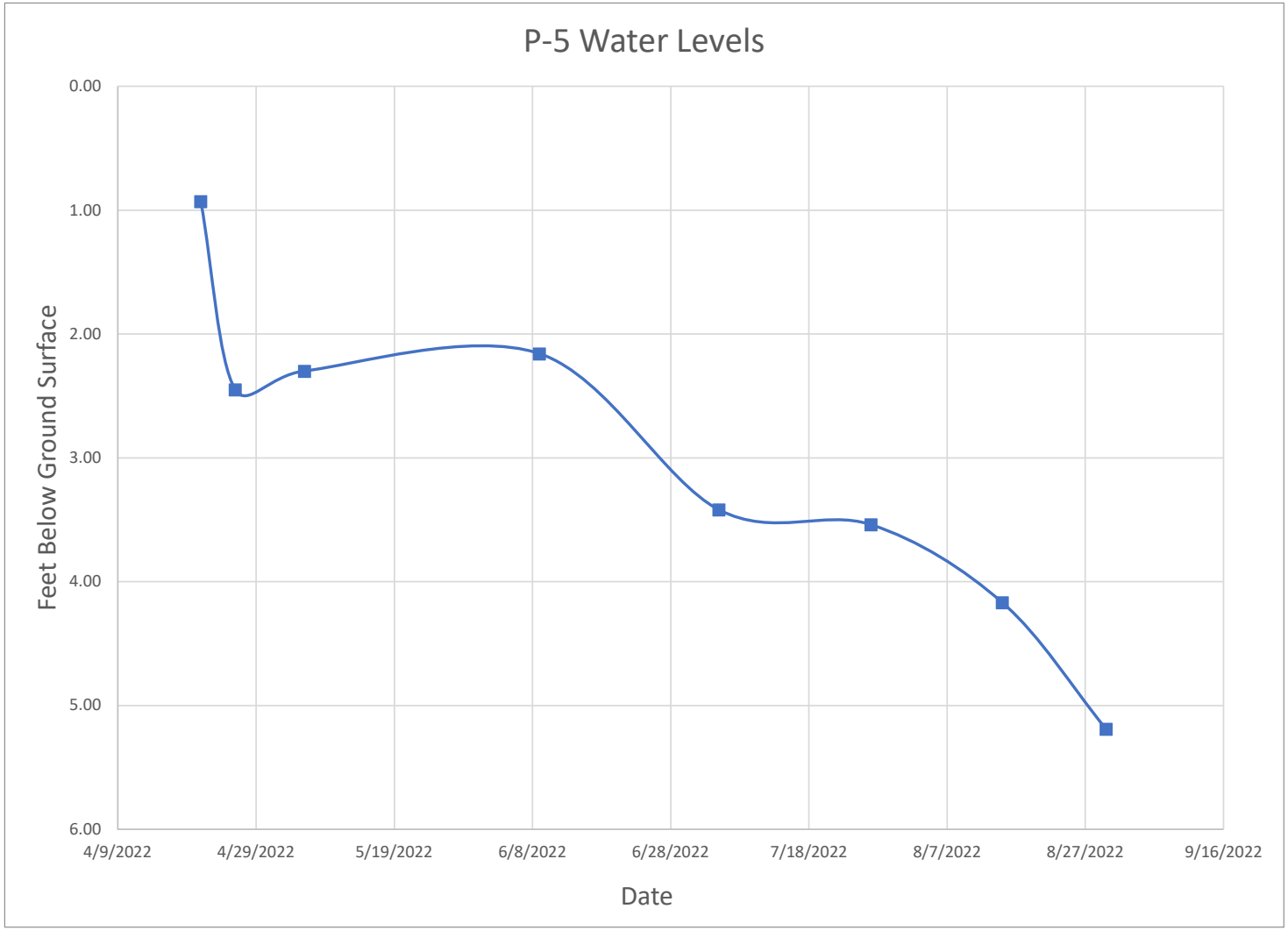
P-5 Water Levels
Feet Below Ground Surface
0.00
1.00
2.00
3.00
4.00
5.00
6.00
4/9/2022
4/29/2022
5/19/2022
6/8/2022
6/28/2022
7/18/2022
8/7/2022
8/27/2022
9/16/2022
Date

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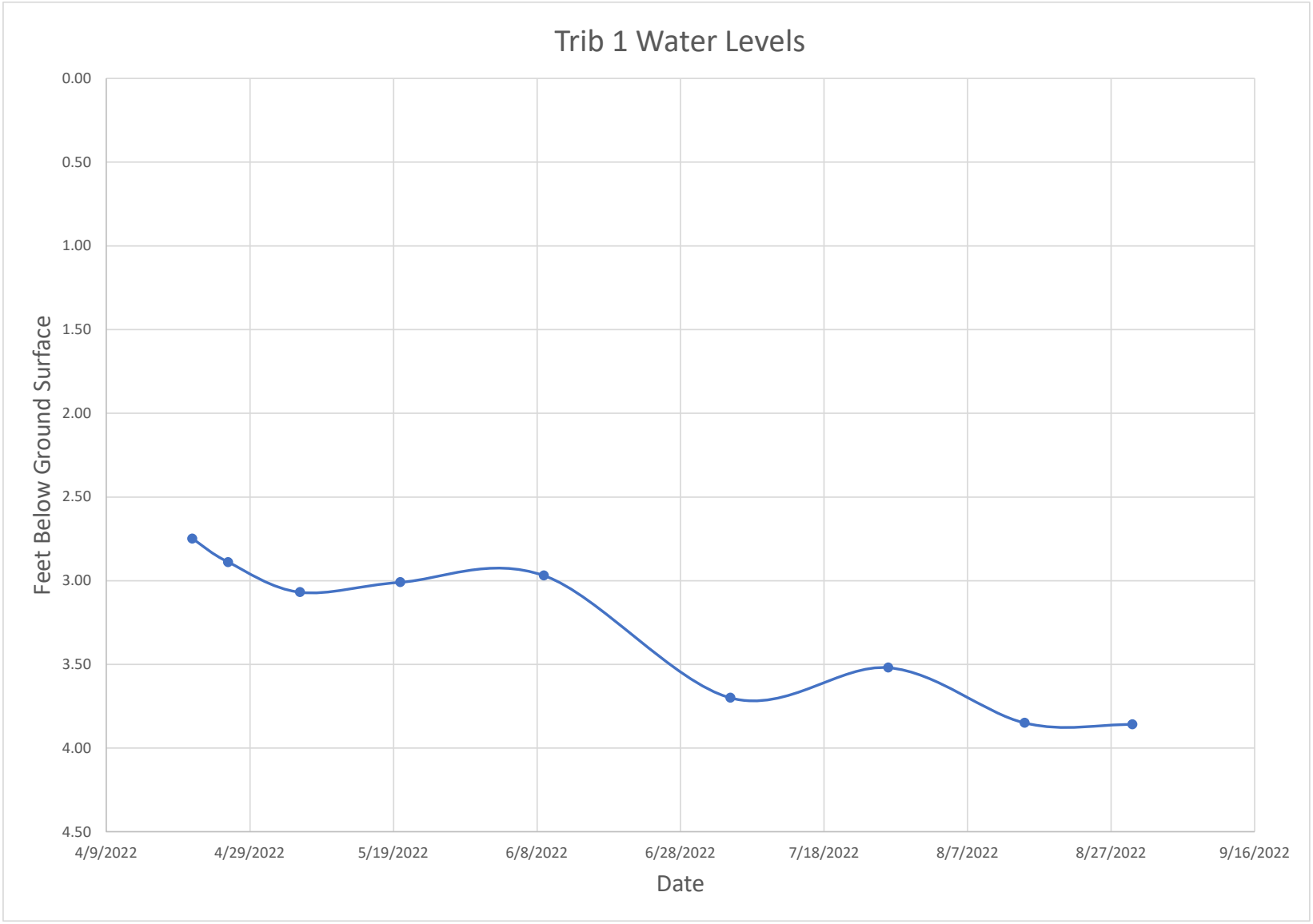
Trib 1 Water Levels
Feet Below Ground Surface
0.00
0.50
1.00
1.50
2.00
2.50
3.00
3.50
4.00
4.50
4/9/2022
4/29/2022
5/19/2022
6/8/2022
6/28/2022
7/18/2022
8/7/2022
8/27/2022
9/16/2022
Date

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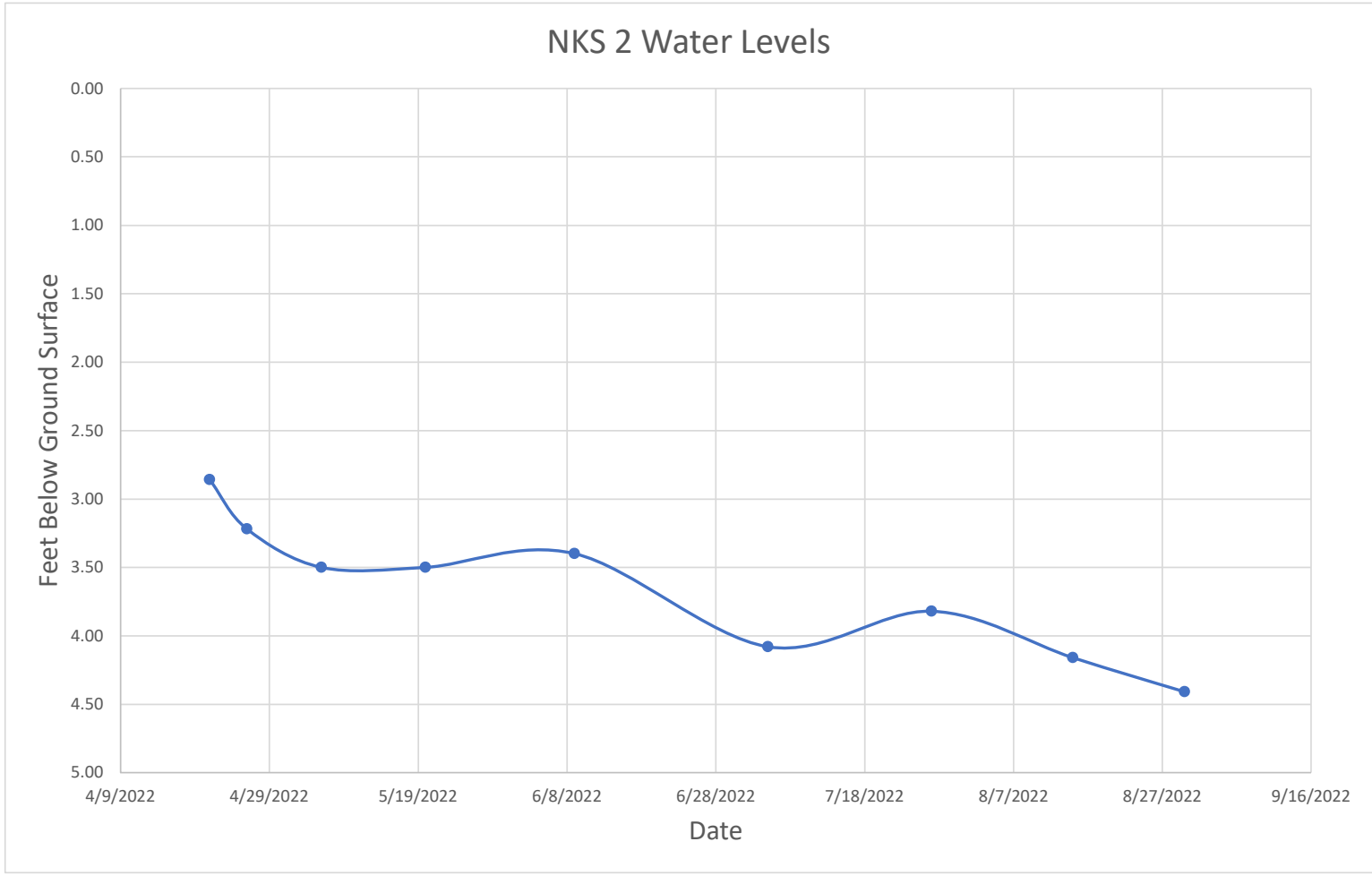
NKS 2 Water Levels
Feet Below Ground Surface
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1.50
2.00
2.50
3.00
3.50
4.00
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5.00
4/9/2022
4/29/2022
5/19/2022
6/8/2022
6/28/2022
7/18/2022
8/7/2022
8/27/2022
9/16/2022
Date

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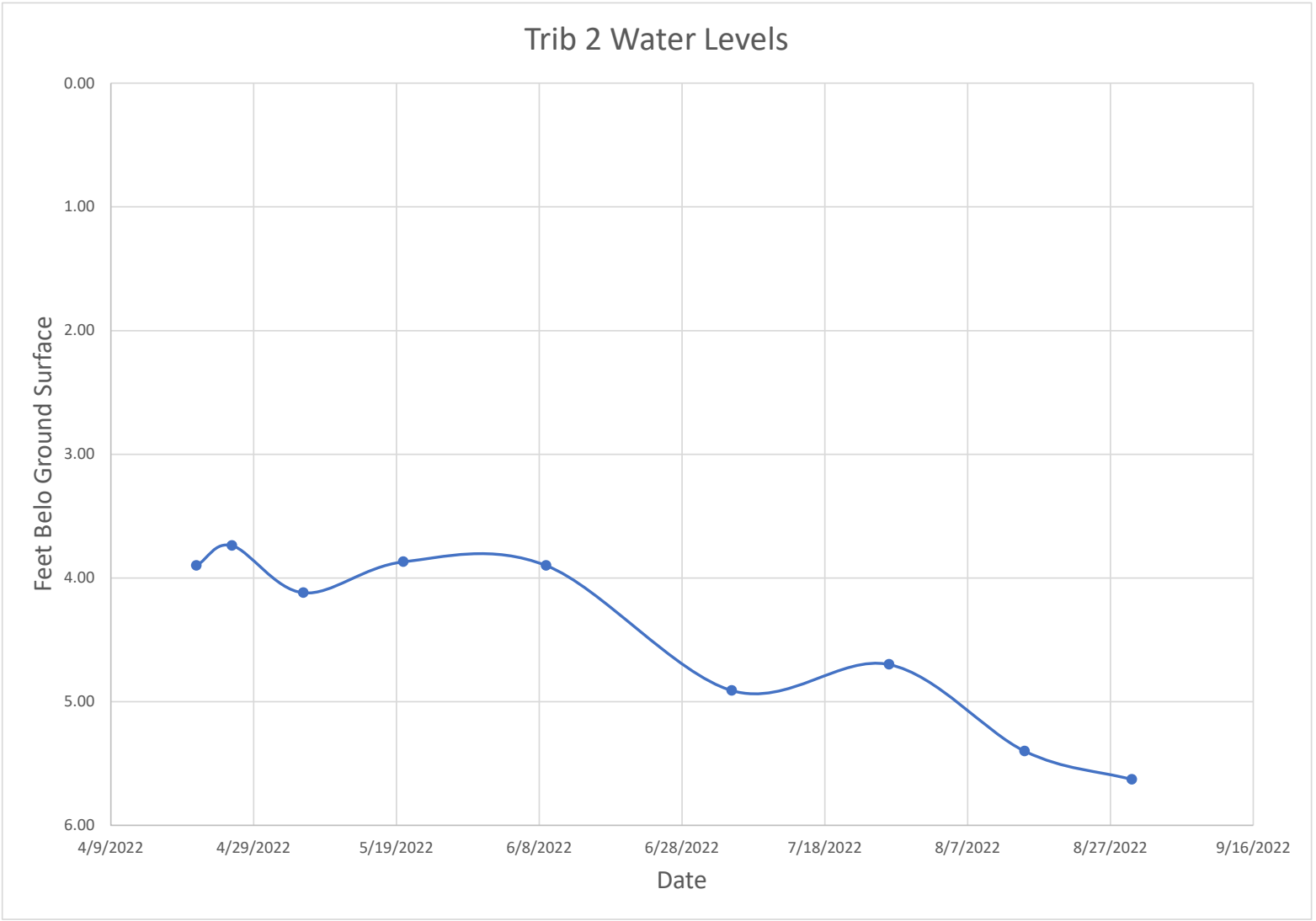
Trib 2 Water Levels
Feet Belo Ground Surface
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1.00
2.00
3.00
4.00
5.00
6.00
4/9/2022
4/29/2022
5/19/2022
6/8/2022
6/28/2022
7/18/2022
8/7/2022
8/27/2022
9/16/2022
Date

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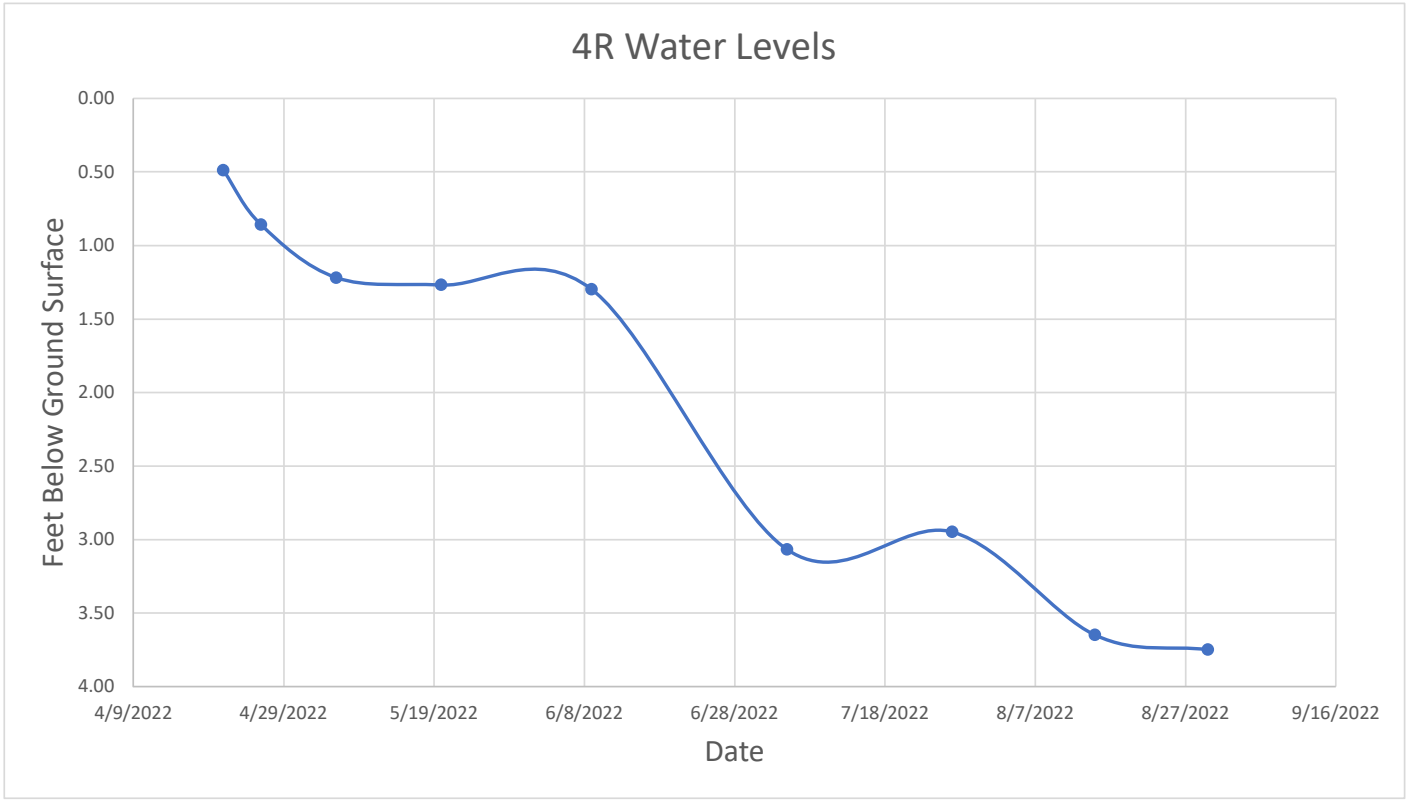
4R Water Levels
Feet Below Ground Surface
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0.50
1.00
1.50
2.00
2.50
3.00
3.50
4.00
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4/29/2022
5/19/2022
6/8/2022
6/28/2022
7/18/2022
8/7/2022
8/27/2022
9/16/2022
Date

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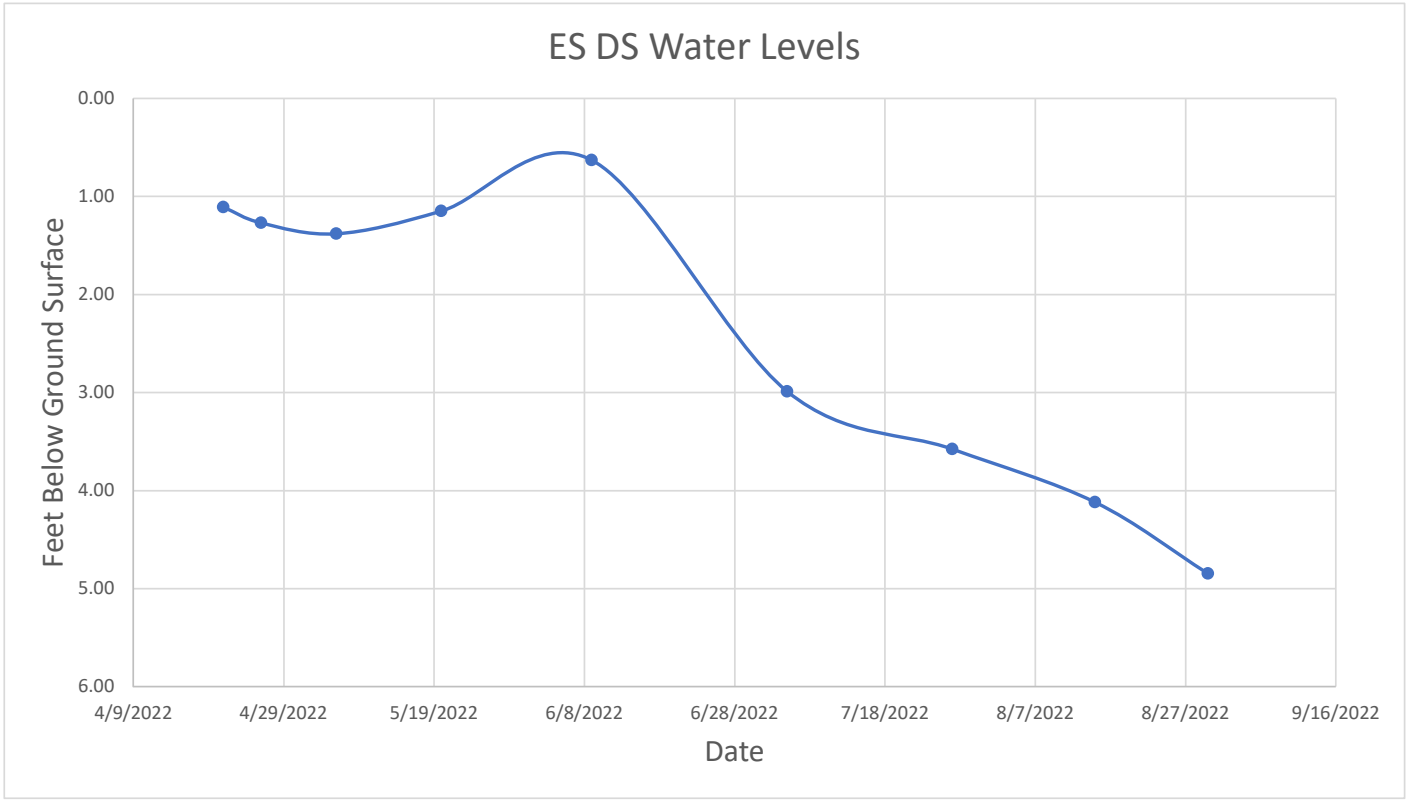
ES DS Water Levels
Feet Below Ground Surface
0.00
1.00
2.00
3.00
4.00
5.00
6.00
4/9/2022
4/29/2022
5/19/2022
6/8/2022
6/28/2022
7/18/2022
8/7/2022
8/27/2022
9/16/2022
Date

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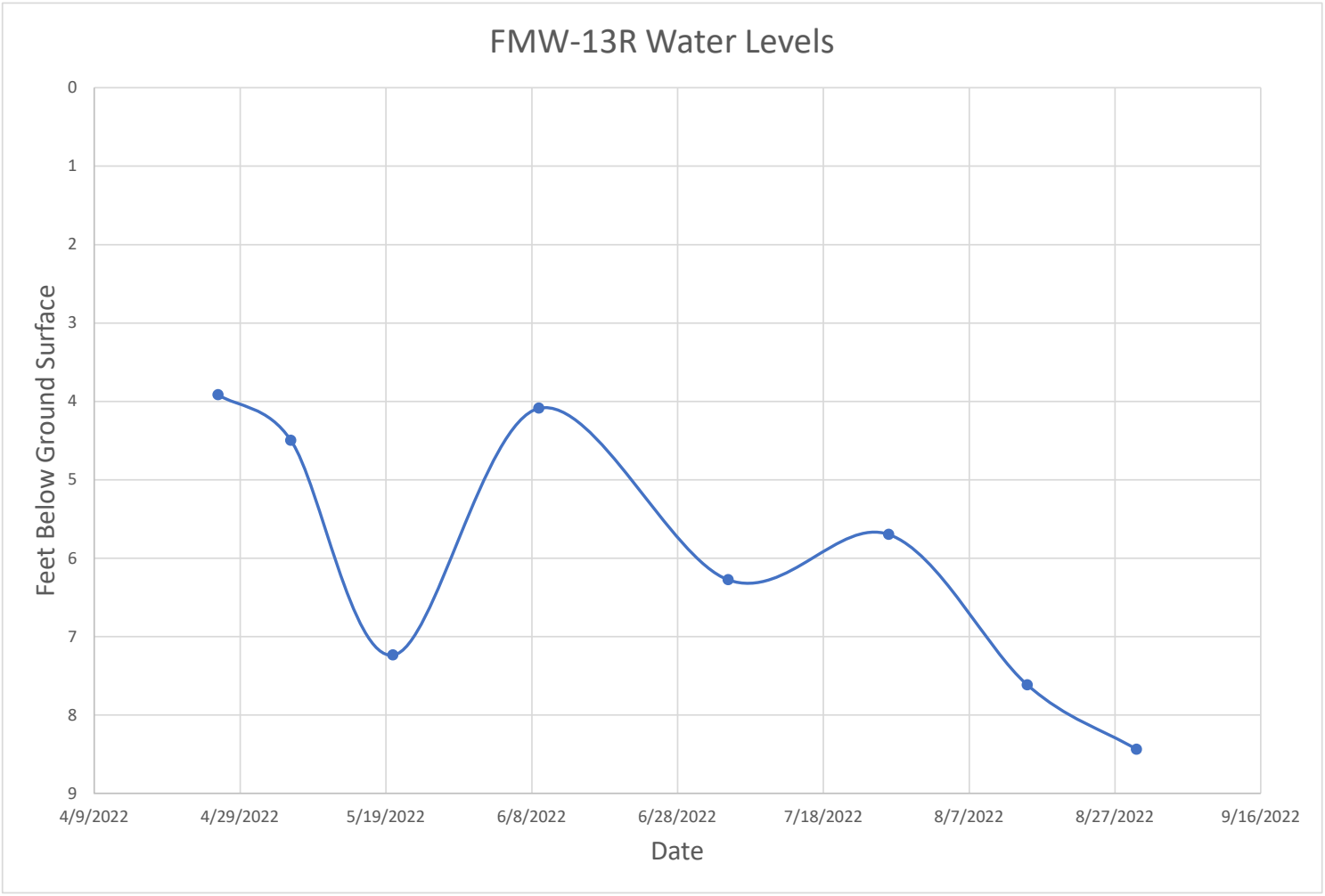
FMW-13R Water Levels
Feet Below Ground Surface
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1
2
3
4
5
6
7
8
9
4/9/2022
4/29/2022
5/19/2022
6/8/2022
6/28/2022
7/18/2022
8/7/2022
8/27/2022
9/16/2022
Date

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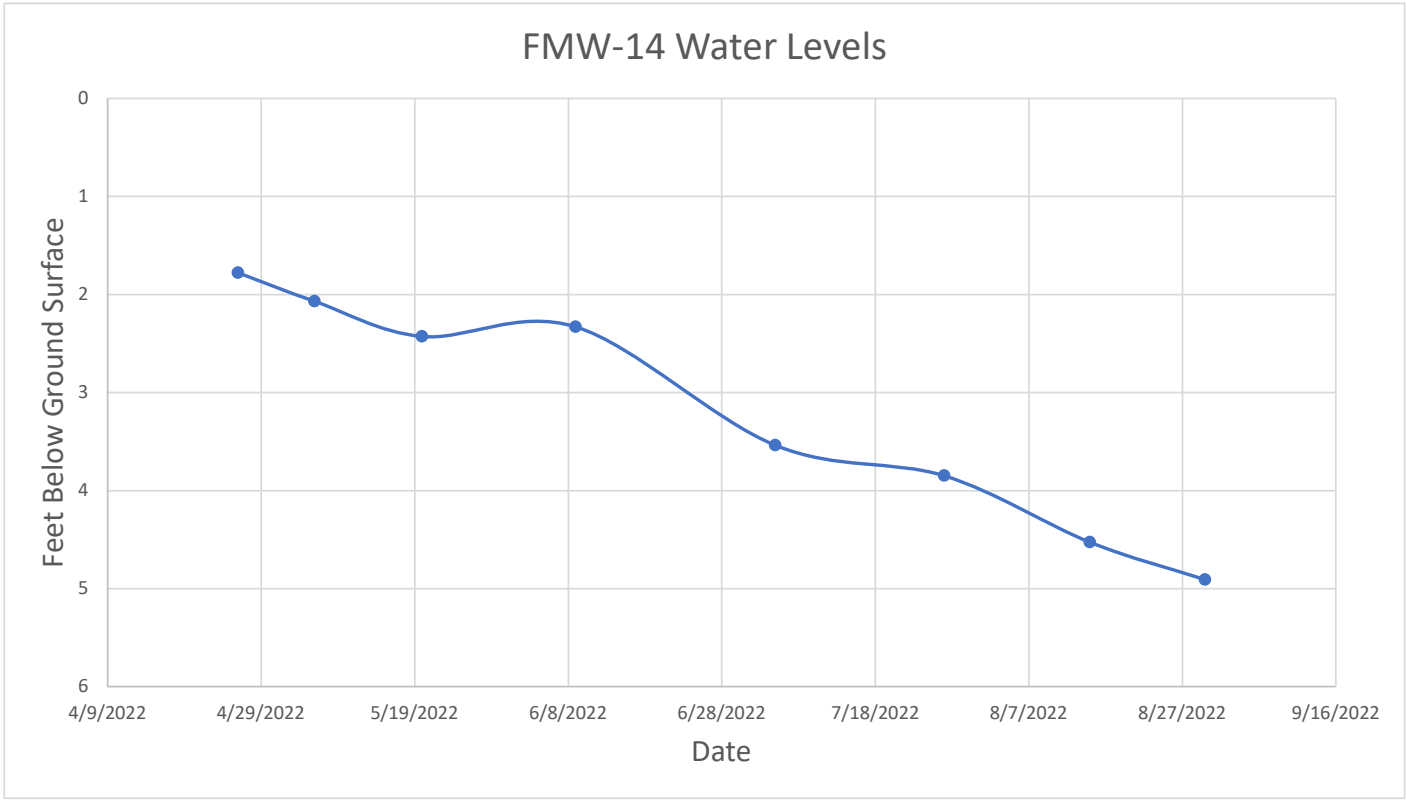
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Feet Below Ground Surface
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1
2
3
4
5
6
4/9/2022
4/29/2022
5/19/2022
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6/28/2022
7/18/2022
8/7/2022
8/27/2022
9/16/2022
Date

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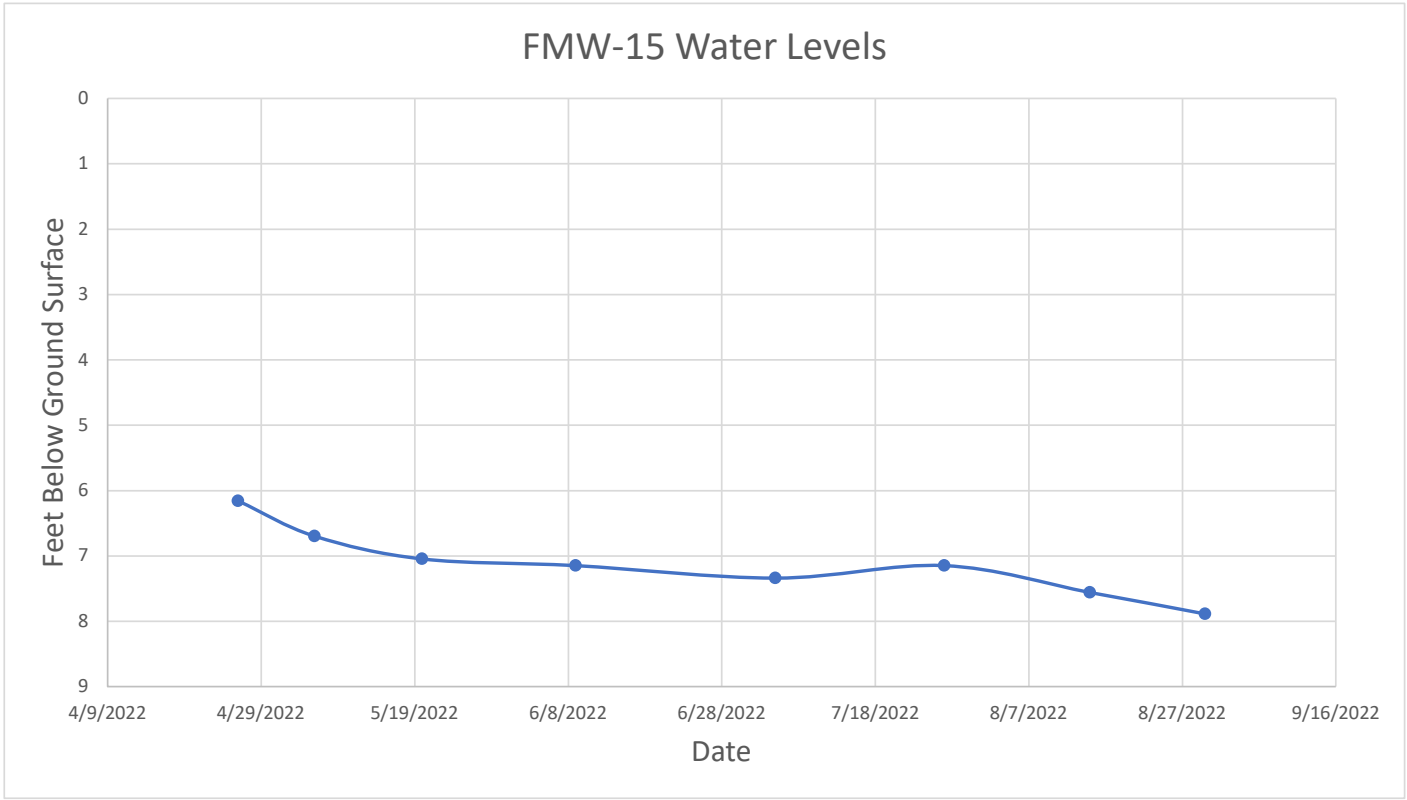
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Feet Below Ground Surface
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1
2
3
4
5
6
7
8
9
4/9/2022
4/29/2022
5/19/2022
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7/18/2022
8/7/2022
8/27/2022
9/16/2022
Date

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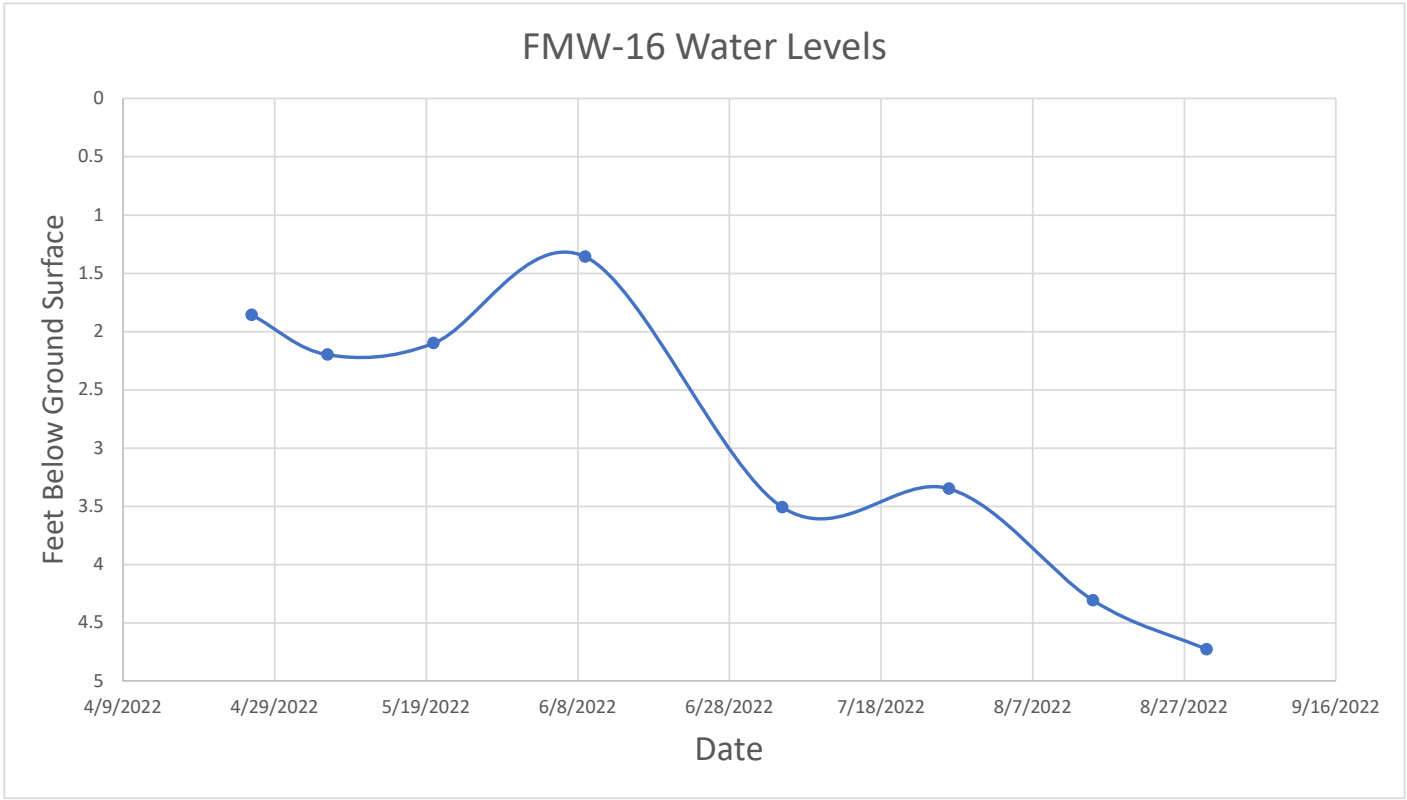
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Feet Below Ground Surface
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0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
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4/29/2022
5/19/2022
6/8/2022
6/28/2022
7/18/2022
8/7/2022
8/27/2022
9/16/2022
Date