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Via: Electronic Mail

April 5, 2024

Attn: Ms. Greta White
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; BCP C361074**
March – April 2024 Monthly Progress Report
Westchester County Airport
240 Airport Road
Harrison, New York 10604

Dear Ms. White:

Actions Taken/Accomplishments (March to April 2024)

A schedule of completed and projected activities is included as Appendix A.

1. In March, construction activities included the newly installed RPZ meter vault building, installation of safety bollards surrounding the RPZ meter vault building, and various backfilling/cleanup activity in the associated area. Other subcontractors were present on-site continuing installation of roofs on the Airport Road and Tower Road backflow preventer buildings. OLA Consulting Engineers reported that the Westchester County Joint Water Works installed twelve-inch watermain pipeline from the existing pipeline located on Purchase Street directly across the road to the airport's property boundary on Purchase Street. The Tower Road backflow preventer building is now ready to be connected into the existing watermain pipeline on Purchase Street, which is expected to occur in April 2024. A photolog of the construction is included in Appendix B.

2. No air monitoring for particulate matter or organic vapors occurred during March as Triumph did not conduct any excavation of soil or other dust-generating activity. First Environment will continue to coordinate with Triumph so that air monitoring is conducted when dust-generating activity takes place.

3. First Environment continues to measure water level elevations at monitoring well locations along the waterline installation area. Environmental data collection tables and hydrographs are included in Appendix C.

4. Triumph has utilized the construction dewatering pump intermittently at the RPZ meter vault building during the month of March. The water containing per- and polyfluoroalkyl substance (PFAS) has been collected for treatment, once treated the water is discharged to the sanitary sewer at flow rate not exceeding 17 gallons per minute (gpm).

5. As of March 26, 2024, approximately 246,000 gallons of groundwater have been collected resulting from construction dewatering activities. A total of 235,000 gallons of groundwater has been treated by the GWTT activated carbon treatment system and then discharged to the designated sanitary sewer at 17 gpm per Westchester Department of Environmental Facilities (DEF) remediation permit requirements. A total of approximately 11,000 gallons of groundwater have been collected but not treated as of March 26, 2024.

6. On March 13, 2024, First Environment conducted a scheduled performance groundwater sampling event at the FMW-13R Pilot Test Area to further assess the reduction of perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) downgradient of the injected activated carbon permeable reactive barrier. Groundwater samples were collected and analyzed for PFAS. The sample results continue to demonstrate a reduction of PFOS and PFOA. since the test was conducted in April 2023. The laboratory results are summarized in Table 1 and illustrated by Figure 1.

7. Using updated groundwater elevation levels, a groundwater elevation contour map was created of the FMW-13R area to show the groundwater flow direction. The groundwater flow direction is depicted in Figure 2.

8. Submittal of the Laboratory EDDs to the NYSDEC.

9. First Environment submitted the modified Remedial Investigation Workplan (RIWP) addressing NYSDEC comments in the January 25, 2024, letter.

April to May 2024 Planned Activities

1. First Environment will initiate RIWP activities during the month of April by obtaining access agreements from three offsite properties and coordination with subcontractors. Progress of RIWP activities will be summarized in future monthly progress reports.

2. ECT2 will complete the bench scale test and is expected to provide a final report at the end of April that provides the results of the bench scale and pilot test.

3. Waste class sampling results associated with the two 55-gallon drums and five-gallon bucket of spent GAC media from the ECT2 pilot test were forwarded to AWT Environmental Services. A waste profile sheet will be created, and First Environment will coordinate disposal of the drums and bucket from the site.

4. Planned construction activity for April include backfilling and other cleanup activity around the Airport Road RPZ meter vault building, continuing installation of the roof on the Airport Road and Tower Road backflow preventer buildings, and, tentatively, tie-in of the existing Purchase Street watermain to the Tower Road backflow preventer building. If this occurs, First Environment will be on site to provide air monitoring of particulate matter and volatile organic compounds (VOCs) as described in the Community Air Monitoring Plan (CAMP).

5. Triumph will treat and discharge the remaining groundwater at 17 gpm, per the DEF remediation permit requirements, before removing the GWTT system from the site. First Environment will continue to provide oversight for the treatment system operation, including monitoring the volume of treated water and testing of water discharged per the DEF remediation permit requirements.

6. Westchester County Department of Public Works and Transportation (WCDPWT) is seeking quotes to repair the storm sewer leading to outfall seven where groundwater was observed leaking into the storm sewer. WCDPWT expects an award to be made to the lowest bidder and have the work performed in the early summer.

7. Continue to submit monthly progress reports in an American Disabilities Act (ADA) format to Westchester County.

8. Prepare Interim Site Management Plan.

9. Revisions and submittal of the EDDs to the NYSDEC.

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

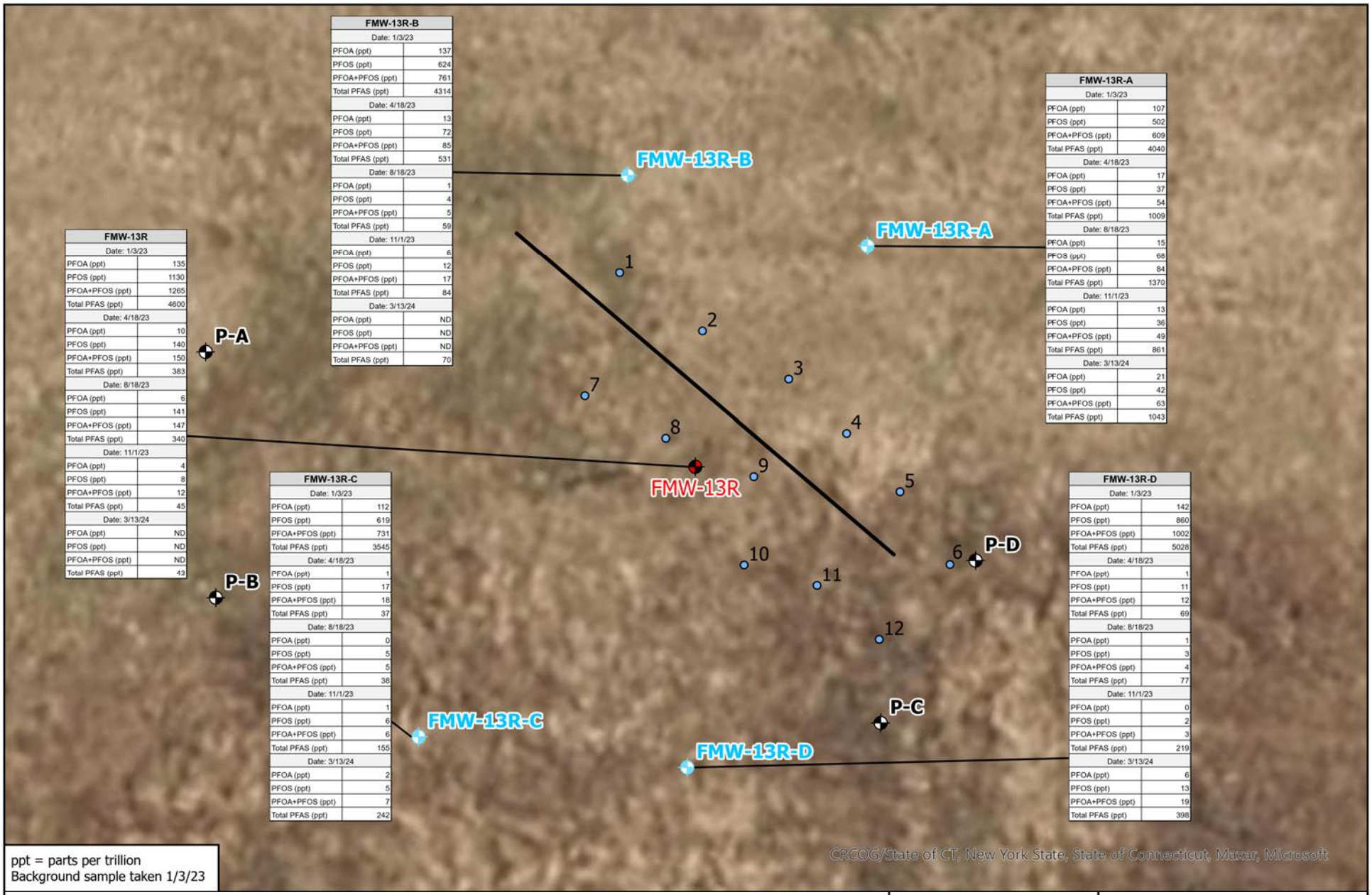
David Luer
Project Manager/Field Team Leader

Attachments
1. Figures
2. Table
3. Appendix A – Work Activity Schedule 2022-2024
4. Appendix B – Backflow Preventer Building Photo Log
5. Appendix C – Flow Data Collection Table / CAMP Air Monitoring Data / Hydrographs

c: B. Tod Delaney, Ph.D., P.E., BCEE - First Environment, Inc.
Arthur Clarke, J.D. - First Environment, Inc.
Hugh Greechan, Jr. P.E. - Westchester County Public Works & Transportation
John Nonna - Westchester County Attorney
April Gasparri – Westchester County Executive Director of Aviation
Francisco Tejada – Airport Manager

John Inserra - Westchester County Airport Environmental
Loren Zeitler - Westchester County
John Benvegna - WSP
K. Thompson - NYSDEC
M. Murphy - NYSDEC
D. Bendell/D. Pollock - NYSDEC
M. Doroski – NYSDOH
K. Kulow – NYSDOH

Figures



ppt = parts per trillion
Background sample taken 1/3/23

Legend

- Monitoring Well Location
- Piezometer Locations
- Pilot Test Well
- Injection Permeable Reactive Barrier
- Injection Points

0 5 10 Feet
1:100

N

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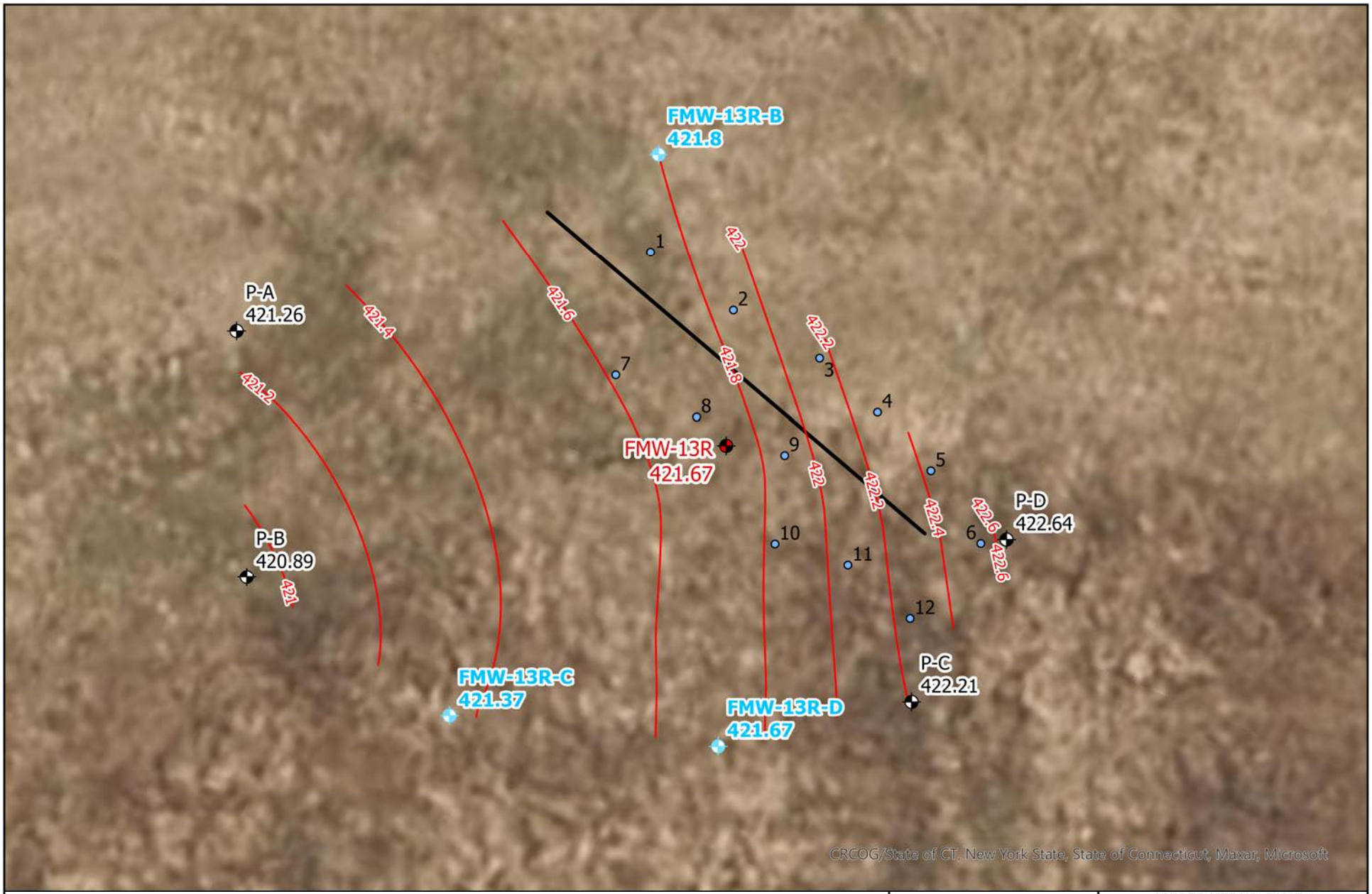
Butler, NJ 07405

NYSDEC SITE NO. 360174
WESTCHESTER COUNTY AIRPORT
White Plains, Westchester County, New York
FIGURE 1
GROUNDWATER PILOT TEST SAMPLING RESULTS

Revised	Drawn	Checked	Approved	Date
	DOL			3/20/24



Legend

- Injection Points
- Monitoring Well Location
- Piezometer Locations
- Pilot Test Well
- Groundwater Elevation Contour
- Injection Permeable Reactive Barrier

Elevation = ft above mean sea level

0 5 10 Feet

1:100

N

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10 Park Pl, Bldg 1A, Suite 504
Butler, NJ 07405

NYSDEC SITE NO. 360174
WESTCHESTER COUNTY AIRPORT
White Plains, Westchester County, New York
FIGURE 2
GROUNDWATER ELEVATION CONTOURS:
MARCH 13, 2024

Revised	Drawn	Checked	Approved	Date
	DOL			3/20/24

Table

Table 1
Pre and Post Pilot Test PFAS and TOC
Groundwater Comparison
Westchester County Airport

	Sample ID	FMW-13R	FMW-13R	FMW-13R	FMW 13R	FMW-13R
	York ID	23A0033-01	23D1067-01	23H1504-01	23K0112-03	24C0860-03
	Sampling Date	1/3/2023 10:19:00 AM	4/18/2023 11:25:00 AM	8/18/2023 11:30:00 AM	11/1/2023 12:50:00 PM	3/13/2024 11:05:00 AM
	Client Matrix	Water	Water	Ground Water	Ground Water	Ground Water
Compound		Result	Result	Result	Result	Result
Total Organic Carbon		ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor		1	1	1	2	1
Total Organic Carbon (TOC)		1,000	4,400	1,200	3.8	1,000.0
PFAS, EPA 1633 Target List		ng/L	ng/L	ng/L	ng/L	ng/L
Dilution Factor		5.00	1.00	1.00	1.00	1.00
11CL-PF3OUdS	763051-92-9					
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	39108-34-4	2.52	2.97			
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	757124-72-4					
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	27619-97-2	217.00	19.40	19.20		
3-Perfluoroheptyl propanoic acid (FHpPA)	812-70-4					
3-Perfluoropentyl propanoic acid (FPePA)	914637-49-3					
3-Perfluoropropyl propanoic acid (FPrPA)	356-02-5	2.00				
9CL-PF3ONS	756426-58-1					
ADONA	919005-14-4					
HFPO-DA (Gen-X)	13252-13-6					
N-EtFOSA	4151-50-2	2.33	5.66			
N-EtFOSAA	2991-50-6					
N-EtFOSE	1691-99-2		21.00			
N-MeFOSA	31506-32-8	1.67				
N-MeFOSAA	2355-31-9					
N-MeFOSE	24448-09-7		10.50			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	113507-82-7					
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3		1.49			
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	28.30		5.69		
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-1	2.08				
Perfluoro-1-octanesulfonamide (FOSA)	754-91-6					
Perfluoro-1-pentanesulfonate (PFPeS)	2706-91-4	85.50	6.50	6.04		
Perfluoro-3,6-dioxaheptanoic acid (NFDHA)	151772-58-6					
Perfluoro-4-oxapentanoic acid (PFMPA)	377-73-1					
Perfluoro-5-oxahexanoic acid (PFMBA)	863090-89-5					
Perfluorobutanesulfonic acid (PFBS)	375-73-5	36.20	2.84	2.94		
Perfluorodecanoic acid (PFDA)	335-76-2	3.07		1.05		
Perfluorododecanesulfonic acid (PFDoS)	79780-39-5			1.03		
Perfluorododecanoic acid (PFDoA)	307-55-1					
Perfluoroheptanoic acid (PFHpA)	375-85-9	230.00	14.90	9.86		
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	994.00	66.00	73.60		
Perfluorohexanoic acid (PFHxA)	307-24-4	453.00	23.50	9.56		5.98
Perfluoro-n-butanoic acid (PFBA)	375-22-4	246.00	17.80	29.70		
Perfluorononanoic acid (PFNA)	375-95-1	81.80	5.35	14.40		
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	1130.00	140.00	141.00		
Perfluorooctanoic acid (PFOA)	335-67-1	135.00	9.93	6.46		
Perfluoropentanoic acid (PFPeA)	2706-90-3	950.00	35.40	19.40	32.80	37.40
Perfluorotetradecanoic acid (PFTA)	376-06-7					
Perfluorotridecanoic acid (PFTrDA)	72629-94-8					
Perfluoroundecanoic acid (PFUnA)	2058-94-8					
PFOS + PFOA		1265.00	149.93	147.46	0.00	0.00
Total PFAS		4600.47	383.24	339.93	32.80	43.38

NOTES:
Blank space - No detectable levels.
Q is the Qualifier Column with definitions as follows:
D=result is from an analysis that required a dilution
J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated
U=analyte not detected at or above the level indicated
B=analyte found in the analysis batch blank
E=result is estimated and cannot be accurately reported due to levels encountered or interferences
NT=this indicates the analyte was not a target for this sample
D=result is from an analysis that required a dilution
~=this indicates that no regulatory limit has been established for this analyte

Table 1
Pre and Post Pilot Test PFAS and TOC
Groundwater Comparison
Westchester County Airport

	Sample ID	FMW-13R-A	FMW-13R-A	FMW-13R-A	FMW 13-R-A	FMW-13R A
	York ID	23A0033-02	23D1067-02	23H1504-02	23K0112-05	24C0860-05
	Sampling Date	1/3/2023 10:25:00 AM	4/18/2023 11:00:00 AM	8/18/2023 12:00:00 PM	11/1/2023 1:26:00 PM	3/13/2024 11:15:00 AM
	Client Matrix	Water	Water	Ground Water	Ground Water	Ground Water
Compound		Result	Result	Result	Result	Result
Total Organic Carbon		ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor		1	1	1	1	1
Total Organic Carbon (TOC)		1,180		2,790	1.5	1,750
PFAS, EPA 1633 Target List		ng/L	ng/L	ng/L	ng/L	ng/L
Dilution Factor		1.00	1.00	1.00	1.00	1.00
11CL-PF3OUdS	763051-92-9					
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	39108-34-4	2.88			2.88	
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	757124-72-4					
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	27619-97-2	246.00	48.40	40.00	38.30	27.30
3-Perfluoroheptyl propanoic acid (FHpPA)	812-70-4					
3-Perfluoropentyl propanoic acid (FPePA)	914637-49-3					
3-Perfluoropropyl propanoic acid (FPrPA)	356-02-5					
9CL-PF3ONS	756426-58-1					
ADONA	919005-14-4					
HFPO-DA (Gen-X)	13252-13-6					
N-EtFOSA	4151-50-2					
N-EtFOSAA	2991-50-6					
N-EtFOSE	1691-99-2	100.00				
N-MeFOSA	31506-32-8					
N-MeFOSAA	2355-31-9					
N-MeFOSE	24448-09-7					
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	113507-82-7					
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3					
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	19.00	0.92	1.68	1.32	2.24
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-1					
Perfluoro-1-octanesulfonamide (FOSA)	754-91-6	1.64			0.91	
Perfluoro-1-pentanesulfonate (PFPeS)	2706-91-4	71.60	8.69	13.60	12.20	15.20
Perfluoro-3,6-dioxaheptanoic acid (NFDHA)	151772-58-6					
Perfluoro-4-oxapentanoic acid (PFMPA)	377-73-1					
Perfluoro-5-oxahexanoic acid (PFMBA)	863090-89-5					
Perfluorobutanesulfonic acid (PFBS)	375-73-5	32.40	5.22	11.80	6.71	7.86
Perfluorodecanoic acid (PFDA)	335-76-2					
Perfluorododecanesulfonic acid (PFDoS)	79780-39-5	0.83				
Perfluorododecanoic acid (PFDoA)	307-55-1	1.31		2.58		
Perfluoroheptanoic acid (PFHpA)	375-85-9	253.00	42.80	43.90	34.40	66.30
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	675.00	70.00	72.90	63.00	97.00
Perfluorohexanoic acid (PFHxA)	307-24-4	531.00	131.00	131.00	115.00	163.00
Perfluoro-n-butanoic acid (PFBA)	375-22-4	288.00	221.00	230.00	156.00	170.00
Perfluorononanoic acid (PFNA)	375-95-1	44.10	3.79	8.65	3.89	6.70
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	502.00	36.90	68.30	36.00	41.90
Perfluorooctanoic acid (PFOA)	335-67-1	107.00	17.30	15.30	12.60	21.20
Perfluoropentanoic acid (PFPeA)	2706-90-3	1150.00	423.00	525.00	377.00	424.00
Perfluorotetradecanoic acid (PFTA)	376-06-7	5.27				
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	7.75		205.00		
Perfluoroundecanoic acid (PFUnA)	2058-94-8	1.05				
PFOS + PFOA		609.00	54.20	83.60	48.60	63.10
Total PFAS		4039.83	1009.02	1369.71	860.21	1042.70

NOTES:
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Table 1
Pre and Post Pilot Test PFAS and TOC
Groundwater Comparison
Westchester County Airport

	Sample ID	FMW-13R-B	FMW-13R-B	FMW-13R-B	FMW 13-R-B	FMW-13R B
	York ID	23A0033-03	23D1067-03	23H1504-03	23K0112-04	24C0860-04
	Sampling Date	1/3/2023 10:32:00 AM	4/18/2023 11:10:00 AM	8/18/2023 11:45:00 AM	11/1/2023 1:15:00 PM	3/13/2024 11:30:00 AM
	Client Matrix	Water	Water	Ground Water	Ground Water	Ground Water
Compound		Result	Result	Result	Result	Result
Total Organic Carbon		ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor		1	1	1	2	1
Total Organic Carbon (TOC)			1,190	1,000	6.4	2,130
PFAS, EPA 1633 Target List		ng/L	ng/L	ng/L	ng/L	ng/L
Dilution Factor		1.00	1.00	1.00	1.00	1.00
11CL-PF3OUdS	763051-92-9					
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	39108-34-4	2.39	87.20			
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	757124-72-4					
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	27619-97-2	346.00	11.10			
3-Perfluoroheptyl propanoic acid (FHpPA)	812-70-4					
3-Perfluoropentyl propanoic acid (FPePA)	914637-49-3					
3-Perfluoropropyl propanoic acid (FPrPA)	356-02-5					
9CL-PF3ONS	756426-58-1					
ADONA	919005-14-4					
HFPO-DA (Gen-X)	13252-13-6		4.49			
N-EtFOSA	4151-50-2		2.52			
N-EtFOSAA	2991-50-6					
N-EtFOSE	1691-99-2		70.10			
N-MeFOSA	31506-32-8					
N-MeFOSAA	2355-31-9					
N-MeFOSE	24448-09-7		13.50			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	113507-82-7					
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3					
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	23.10	1.25			
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-1	1.12				
Perfluoro-1-octanesulfonamide (FOSA)	754-91-6	1.36				
Perfluoro-1-pentanesulfonate (PFPeS)	2706-91-4	74.00	3.34			
Perfluoro-3,6-dioxaheptanoic acid (NFDHA)	151772-58-6					
Perfluoro-4-oxapentanoic acid (PFMPA)	377-73-1					
Perfluoro-5-oxahexanoic acid (PFMBA)	863090-89-5					
Perfluorobutanesulfonic acid (PFBS)	375-73-5	29.50	3.74	0.62		
Perfluorodecanoic acid (PFDA)	335-76-2	1.08				
Perfluorododecanesulfonic acid (PFDoS)	79780-39-5					
Perfluorododecanoic acid (PFDoA)	307-55-1					
Perfluoroheptanoic acid (PFHpA)	375-85-9	254.00	15.40	1.75		
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	820.00	32.60	2.08		
Perfluorohexanoic acid (PFHxA)	307-24-4	531.00	46.80	3.76	5.17	10.00
Perfluoro-n-butanoic acid (PFBA)	375-22-4	294.00	37.80	27.40	40.20	
Perfluorononanoic acid (PFNA)	375-95-1	55.60	6.12	0.65		
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	624.00	71.80	3.50	11.50	
Perfluorooctanoic acid (PFOA)	335-67-1	137.00	13.10	1.16		
Perfluoropentanoic acid (PFPeA)	2706-90-3	1120.00	109.00	17.80	21.00	60.10
Perfluorotetradecanoic acid (PFTA)	376-06-7					
Perfluorotridecanoic acid (PFTrDA)	72629-94-8		1.06			
Perfluoroundecanoic acid (PFUnA)	2058-94-8					
PFOS + PFOA		761.00	84.90	4.66	11.50	0.00
Total PFAS		4314.15	530.92	58.72	77.87	70.10

NOTES:
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U=analyte not detected at or above the level indicated
B=analyte found in the analysis batch blank
E=result is estimated and cannot be accurately reported due to levels encountered or interferences
NT=this indicates the analyte was not a target for this sample
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~=this indicates that no regulatory limit has been established for this analyte

Table 1
Pre and Post Pilot Test PFAS and TOC
Groundwater Comparison
Westchester County Airport

	Sample ID York ID Sampling Date Client Matrix	FMW-13R-C 23A0033-04 1/3/2023 10:45:00 AM Water	FMW-13R-C 23D1067-04 4/18/2023 11:40:00 AM Water	FMW-13R-C 23H1504-04 8/18/2023 11:15:00 AM Ground Water	FMW-13R-C 23K0112-01 11/1/2023 11:41:00 AM Ground Water	FMW-13R C 24C0860-01 3/13/2024 10:30:00 AM Ground Water
Compound		Result	Result	Result	Result	Result
Total Organic Carbon		ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor		1	1	1	1	1
Total Organic Carbon (TOC)			1,840	1,000		1,000
PFAS, EPA 1633 Target List		ng/L	ng/L	ng/L	ng/L	ng/L
Dilution Factor		1.00	1.00	1.00	1.00	1.00
11CL-PF3OUdS	763051-92-9					
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	39108-34-4					
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	757124-72-4					
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	27619-97-2	139.00	2.07			1.44
3-Perfluoroheptyl propanoic acid (FHpPA)	812-70-4					
3-Perfluoropentyl propanoic acid (FPePA)	914637-49-3					
3-Perfluoropropyl propanoic acid (FPrPA)	356-02-5					
9CL-PF3ONS	756426-58-1					
ADONA	919005-14-4					
HFPO-DA (Gen-X)	13252-13-6					
N-EtFOSA	4151-50-2	3.20				
N-EtFOSAA	2991-50-6					
N-EtFOSE	1691-99-2					
N-MeFOSA	31506-32-8					
N-MeFOSAA	2355-31-9					
N-MeFOSE	24448-09-7					
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	113507-82-7					
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3					
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	20.40				
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-1	0.96				
Perfluoro-1-octanesulfonamide (FOSA)	754-91-6					
Perfluoro-1-pentanesulfonate (PFPeS)	2706-91-4	66.50				0.84
Perfluoro-3,6-dioxaheptanoic acid (NFDHA)	151772-58-6					
Perfluoro-4-oxapentanoic acid (PFMPA)	377-73-1					
Perfluoro-5-oxahexanoic acid (PFMBA)	863090-89-5					
Perfluorobutanesulfonic acid (PFBS)	375-73-5	27.90				0.69
Perfluorodecanoic acid (PFDA)	335-76-2	1.17				
Perfluorododecanesulfonic acid (PFDoS)	79780-39-5					
Perfluorododecanoic acid (PFDoA)	307-55-1					
Perfluoroheptanoic acid (PFHpA)	375-85-9	217.00	1.39	0.70	1.18	6.67
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	775.00	2.32	1.09	2.19	6.20
Perfluorohexanoic acid (PFHxA)	307-24-4	409.00	3.32	`	4.40	18.80
Perfluoro-n-butanoic acid (PFBA)	375-22-4	245.00	5.81	20.00	102.00	113.00
Perfluorononanoic acid (PFNA)	375-95-1	46.90	1.65	0.62		0.87
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	619.00	17.40	5.00	5.69	5.26
Perfluorooctanoic acid (PFOA)	335-67-1	112.00	0.97	0.45	0.69	2.35
Perfluoropentanoic acid (PFPeA)	2706-90-3	862.00	4.72	8.84	39.20	86.00
Perfluorotetradecanoic acid (PFTA)	376-06-7					
Perfluorotridecanoic acid (PFTrDA)	72629-94-8					
Perfluoroundecanoic acid (PFUnA)	2058-94-8					
PFOS + PFOA		731.00	18.37	5.45	6.38	7.61
Total PFAS		3545.03	39.65	36.70	155.35	242.12

NOTES:
Blank space - No detectable levels.
Q is the Qualifier Column with definitions as follows:
D=result is from an analysis that required a dilution
J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated
U=analyte not detected at or above the level indicated
B=analyte found in the analysis batch blank
E=result is estimated and cannot be accurately reported due to levels encountered or interferences
NT=this indicates the analyte was not a target for this sample
D=result is from an analysis that required a dilution
~=this indicates that no regulatory limit has been established for this analyte

Table 1
Pre and Post Pilot Test PFAS and TOC
Groundwater Comparison
Westchester County Airport

	Sample ID	FMW-13R-D	FMW-13R-D	FMW-13R-D	FMW 13-R-D	FMW-13R D
	York ID	23A0033-05	23D1067-05	23H1504-05	23K0112-02	24C0860-02
	Sampling Date	1/3/2023 11:00:00 AM	4/18/2023 11:55:00 AM	8/18/2023 11:00:00 AM	11/1/2023 12:20:00 PM	3/13/2024 10:45:00 AM
	Client Matrix	Water	Water	Ground Water	Ground Water	Ground Water
Compound		Result	Result	Result	Result	Result
Total Organic Carbon		ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor		1	1	1	1	1
Total Organic Carbon (TOC)				1,000		1,370
PFAS, EPA 1633 Target List		ng/L	ng/L	ng/L	ng/L	ng/L
Dilution Factor		5.00	1.00	1.00	1.00	1.00
11CL-PF3OUdS	763051-92-9					
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	39108-34-4	2.69				
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	757124-72-4					
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	27619-97-2	295.00	1.56		1.35	6.81
3-Perfluoroheptyl propanoic acid (FHpPA)	812-70-4					
3-Perfluoropentyl propanoic acid (FPePA)	914637-49-3					
3-Perfluoropropyl propanoic acid (FPrPA)	356-02-5					
9CL-PF3ONS	756426-58-1					
ADONA	919005-14-4					
HFPO-DA (Gen-X)	13252-13-6					
N-EtFOSA	4151-50-2	3.32				
N-EtFOSAA	2991-50-6					
N-EtFOSE	1691-99-2					
N-MeFOSA	31506-32-8	1.67				
N-MeFOSAA	2355-31-9					
N-MeFOSE	24448-09-7					
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	113507-82-7					
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3					
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	29.50				
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-1					
Perfluoro-1-octanesulfonamide (FOSA)	754-91-6					
Perfluoro-1-pentanesulfonate (PFPeS)	2706-91-4	111.00			1.04	3.67
Perfluoro-3,6-dioxaheptanoic acid (NFDHA)	151772-58-6					
Perfluoro-4-oxapentanoic acid (PFMPA)	377-73-1					
Perfluoro-5-oxahexanoic acid (PFMBA)	863090-89-5					
Perfluorobutanesulfonic acid (PFBS)	375-73-5	39.00			1.10	2.49
Perfluorodecanoic acid (PFDA)	335-76-2	1.54				
Perfluorododecanesulfonic acid (PFDoS)	79780-39-5					
Perfluorododecanoic acid (PFDoA)	307-55-1					
Perfluoroheptanoic acid (PFHpA)	375-85-9	301.00	1.87	0.98	2.52	17.30
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	1080.00	2.81	2.09	4.03	23.00
Perfluorohexanoic acid (PFHxA)	307-24-4	555.00	5.77	4.46	16.20	47.70
Perfluoro-n-butanoic acid (PFBA)	375-22-4	328.00	20.40	35.20	92.10	125.00
Perfluorononanoic acid (PFNA)	375-95-1	58.30	0.77			2.08
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	860.00	11.00	3.18	2.48	12.50
Perfluorooctanoic acid (PFOA)	335-67-1	142.00	0.86	0.65		6.00
Perfluoropentanoic acid (PFPeA)	2706-90-3	1220.00	23.60	30.70	97.70	151.00
Perfluorotetradecanoic acid (PFTA)	376-06-7					
Perfluorotridecanoic acid (PFTrDA)	72629-94-8					
Perfluoroundecanoic acid (PFUnA)	2058-94-8					
PFOS + PFOA		1002.00	11.86	3.83	2.48	18.50
Total PFAS		5028.02	68.65	77.26	218.52	397.55

NOTES:
Blank space - No detectable levels.
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D=result is from an analysis that required a dilution
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NT=this indicates the analyte was not a target for this sample
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Appendix A – Work Activity Schedule 2022-2024

APPENDIX A
Work Activity Schedule
2022-2024

Milestone	Estimated Completion Date	Estimated Completion Percentage
OF-7 Storm Sewer Installation	May 2022	100%
OF-7 Performance Monitoring	3rd Quarter 2023	100%
OF-7 Pilot Test Treatment System	October 2023	100%
New King Street Workplan – Phase 1	January 2022	100%
New King Street Workplan – Phase 2	April 2022	100%
Waterline Workplan	April 2022	100%
Waterline Trench & Installation	November 2023	100%
OF-4 IRM Pilot Test[1]	Summer 2024	55%
Remedial Investigation Workplan Submittal	July 2022	100%
GW Pilot Test Scope of Work	Summer 2022	100%
GW Pilot Test	Winter 2022	100%
GW Pilot Test Performance Monitoring	Winter 2023	100%
Execution of RI workplan[2]	Spring/Summer 2024	0%
Remedial Investigation Report	Winter 2024	0%
Remedial Action Alternatives Evaluation	2025	0%
Interim Site Management Plan	Spring-Summer 2024	20%
Remedial Action Selection Report	TBD	0%
Remedial Action Workplan	TBD	0%
Certificate of Completion	TBD	0%

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.

[1] Assessing pilot test technology applicability..
[2] Start date dependent upon workplan approval.

Appendix B – Backflow Preventer Building Photo Log

Appendix B
Backflow Preventer Building Photo Log
Westchester County Airport

Photo 1 – Taken 3/26/24.
The photo shows the construction progress of the roof for the Tower Road backflow preventer building, as well as the surrounding area.

Appendix B
Backflow Preventer Building Photo Log
Westchester County Airport

Photo 2 – Taken 3/26/24.
The photo shows the construction progress of the roof for the Airport Road backflow preventer building, as well as the surrounding area.

Appendix B
Backflow Preventer Building Photo Log
Westchester County Airport

Photo 3 – Taken 3/26/24.
The photo shows the RPZ meter vault after being tied into the recently installed watermain line, as well as installation of safety bollards.

Appendix C – Flow Data Collection Table / CAMP Air Monitoring Data / Hydrographs

Appendix C
Table 1 - Flow Data Collection Table
Westchester County Airport

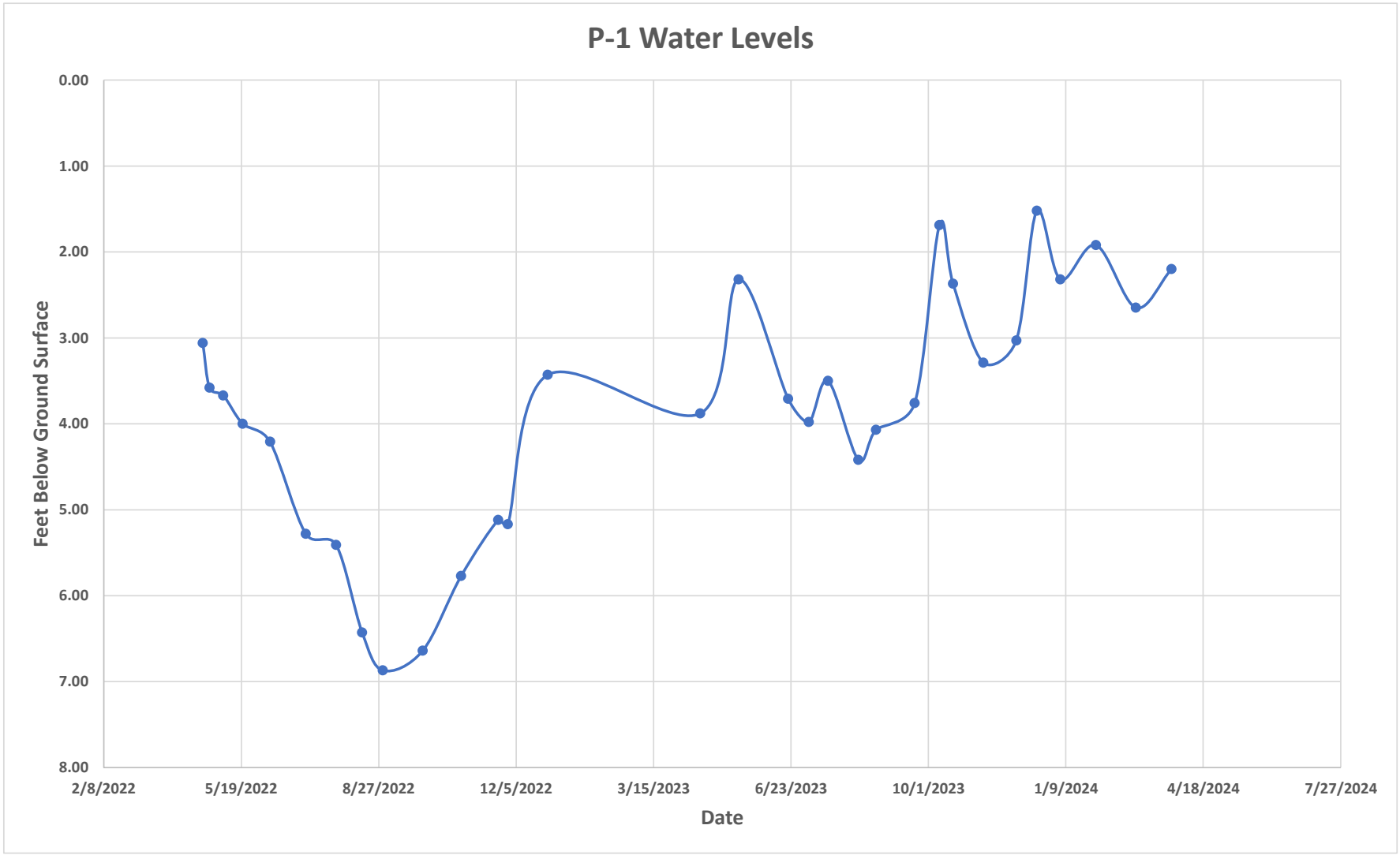
Date	Trib 1 (gpm)	Trib 2 (gpm)	OF-7 (gpm)	E-10 (gpm)	E-10 Stream Gauge	Rain Gauge 1 (in)	Rain Gauge 2 (in)
2/1/2024	0.25	10-15	~	150-200*	0.52	0.00	0.00
2/12/2024	0.25	6-8	~	83.40	0.44	0.05	0.15
2/14/2024	0.25	4-6	~	~	~	0.15**	0.40**
2/29/2024	0.25	15-20	15*	200-250*	0.59	2.00**	~
3/26/2024	0.50	15-20	15*	150-200*	0.56	6.4***	~

*Indicates an estimate when a measurement cannot be taken; **Water in the rain gauge was partially/fully frozen,***Not checked since 2/29

Appendix C
Table 2 - GWTT Totalizer Data
Westchester County Airport

Date/Time	GWTT Totalizer Reading	Total Gallons Discharged (gal)
10/11/23 9:00	18886	0
10/18/23 12:40	23870	4984
10/18/23 14:20	24988	6102
10/19/23 15:20	30180	11294
10/20/23 14:50	30180	11294
10/23/23 14:35	32096	13210
10/24/23 13:58	35884	16998
10/25/23 13:50	40550	21664
10/26/23 15:00	48928	30042
10/27/23 10:53	48928	30042
10/30/23 12:27	52745	33859
10/31/23 10:35	57271	38385
11/2/23 12:15	57271	38385
11/6/23 13:10	57271	38385
11/10/23 14:00	61336	42450
11/14/23 10:30	61337	42451
11/16/23 14:25	68604	49718
11/17/23 14:10	69111	50225
11/30/23 12:22	76548	57662
12/1/23 12:30	87683	68797
12/4/23 14:00	108785	89899
12/7/23 9:30	109842	90956
1/5/24 10:15	112722	93836
1/22/24 14:30	116997	98111
1/24/24 12:13	124267	105381
1/30/24 8:30	127016	108130
2/12/24 14:50	149343	130457
2/29/24 14:45	184422	165536
3/8/24 13:05	184422	165536
3/26/24 12:00	253939	235053

Appendix C
Monitoring Well Hydrographs
Westchester County Airport



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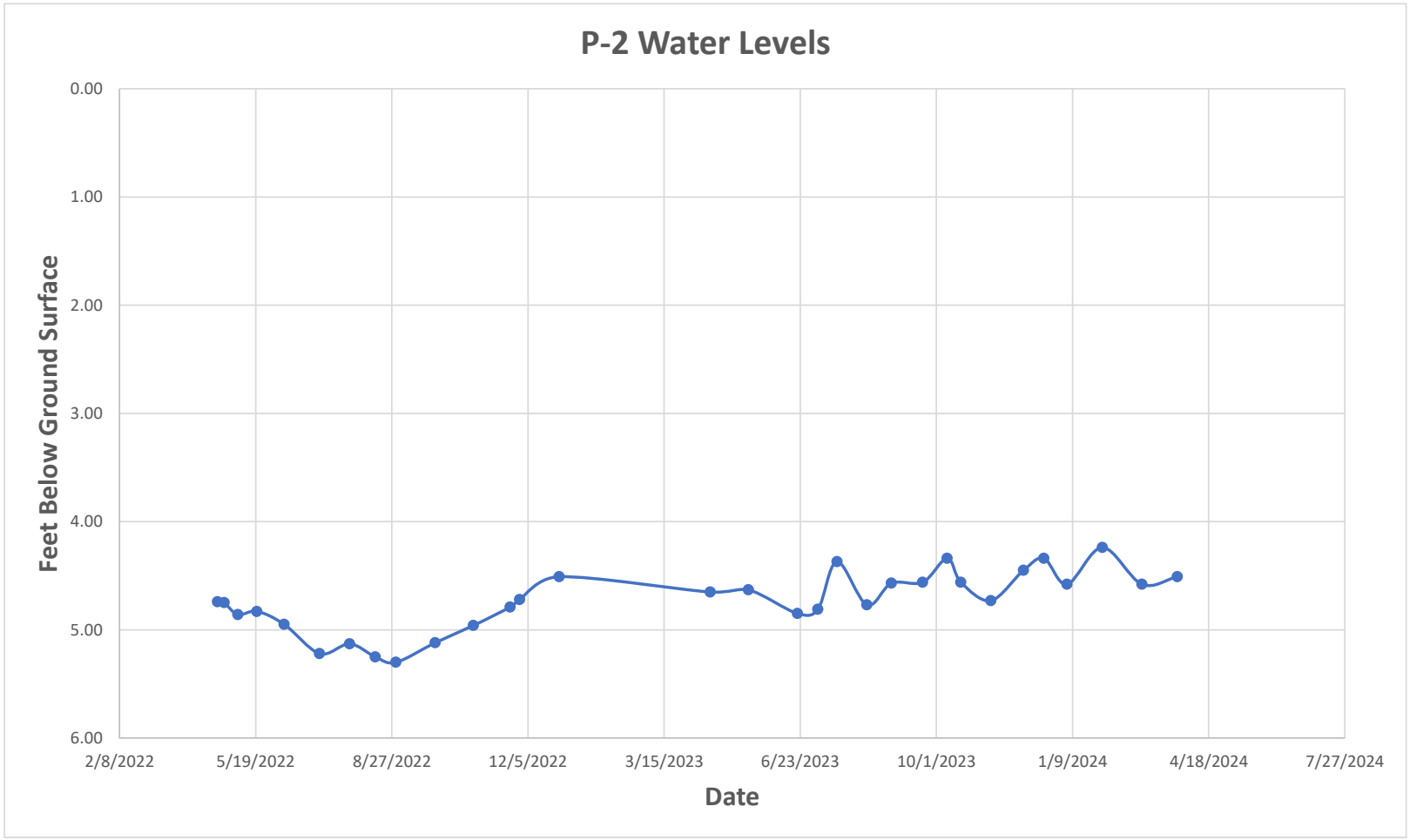
Monitoring Well Hydrographs
Westchester County Airport



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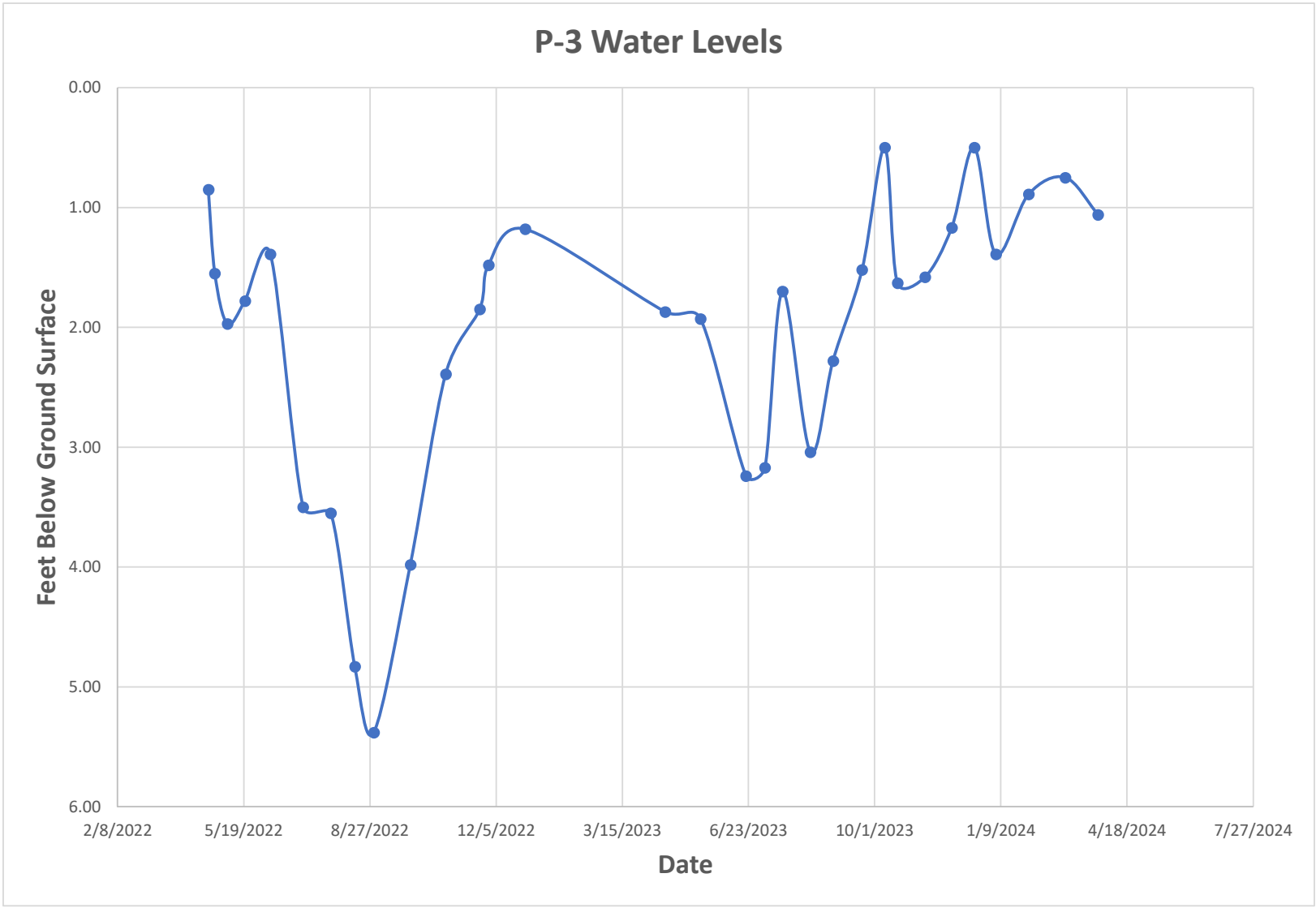
Westchester County Airport



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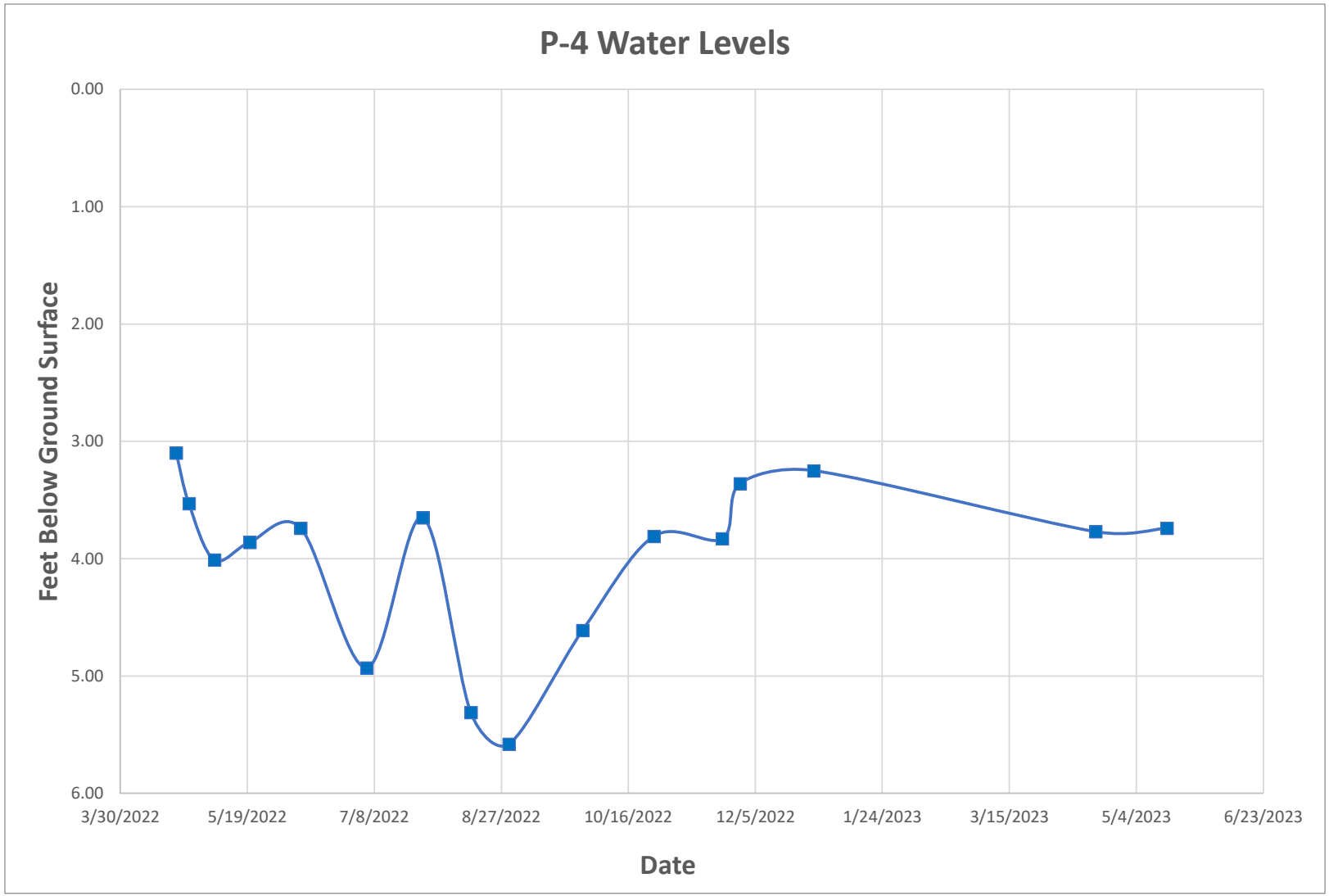
Westchester County Airport



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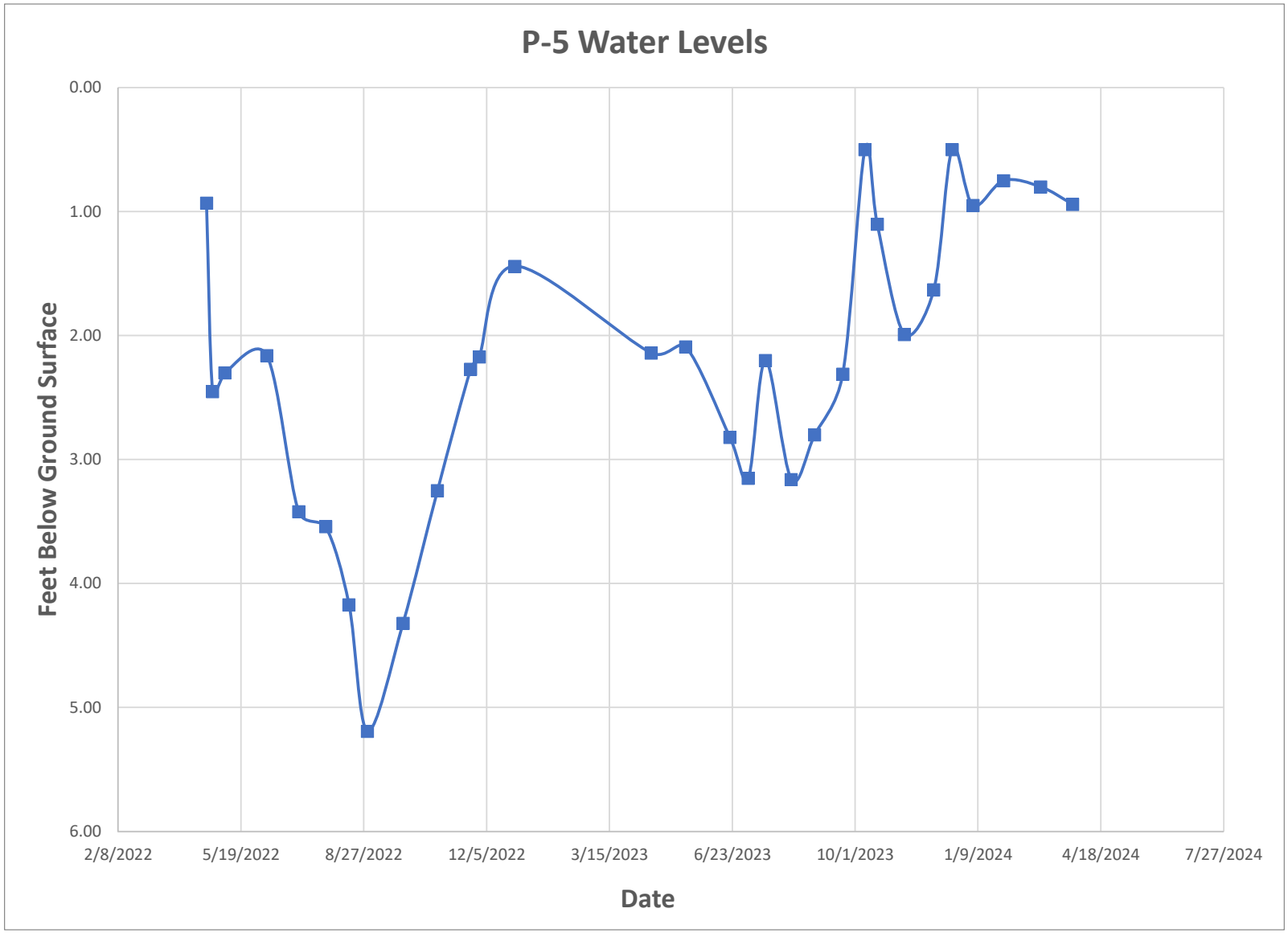
Westchester County Airport



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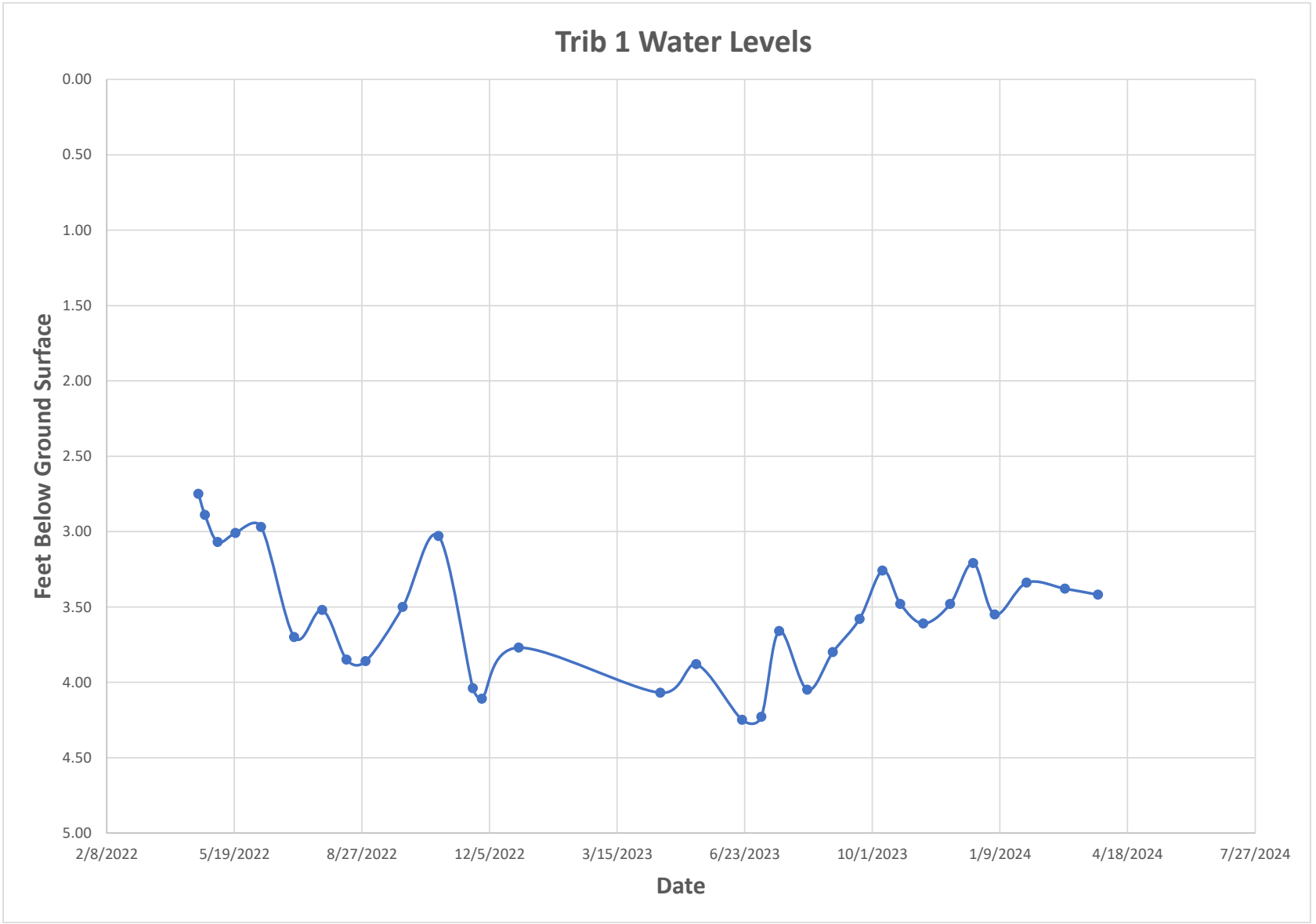
Westchester County Airport



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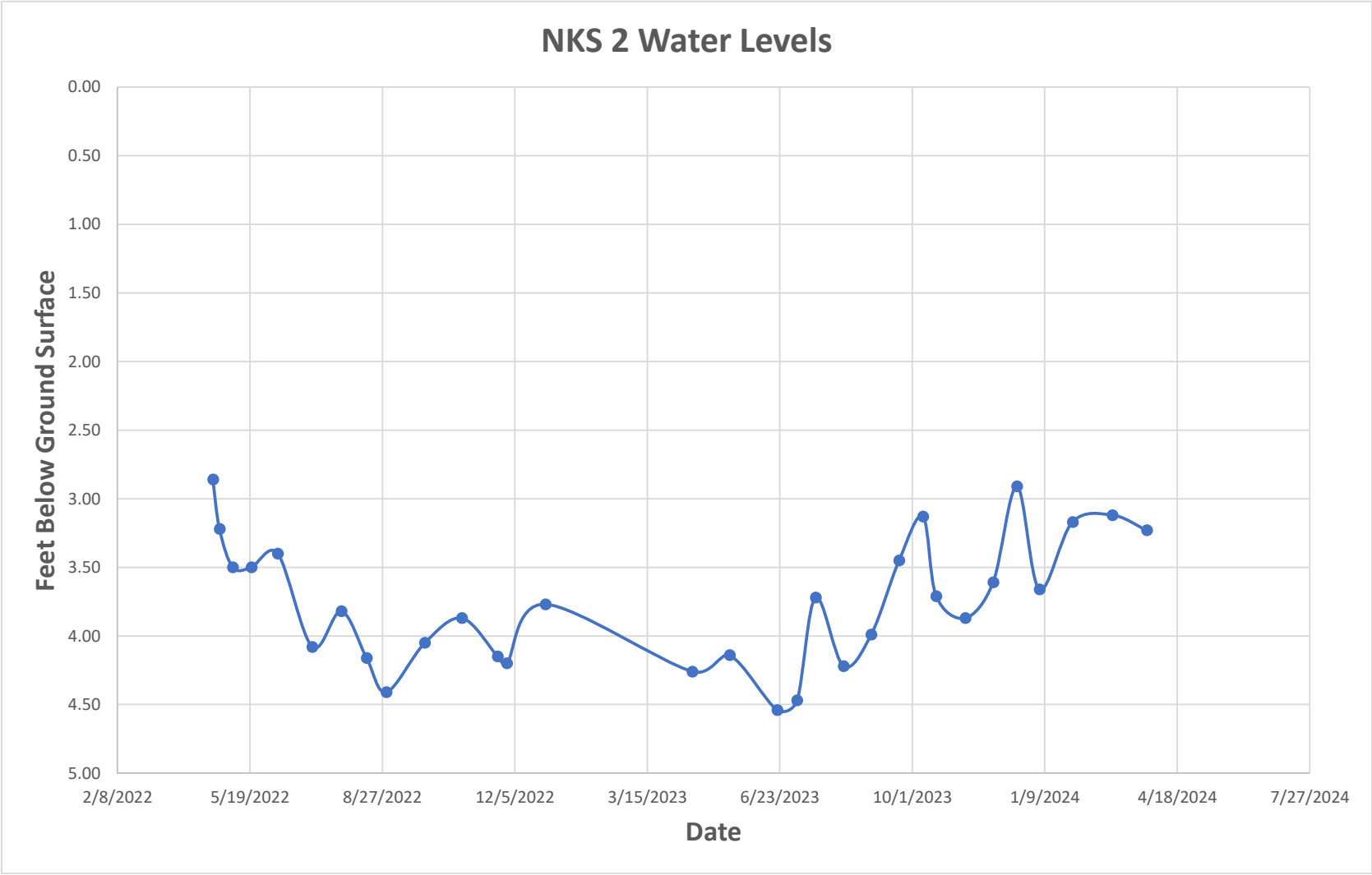
Westchester County Airport



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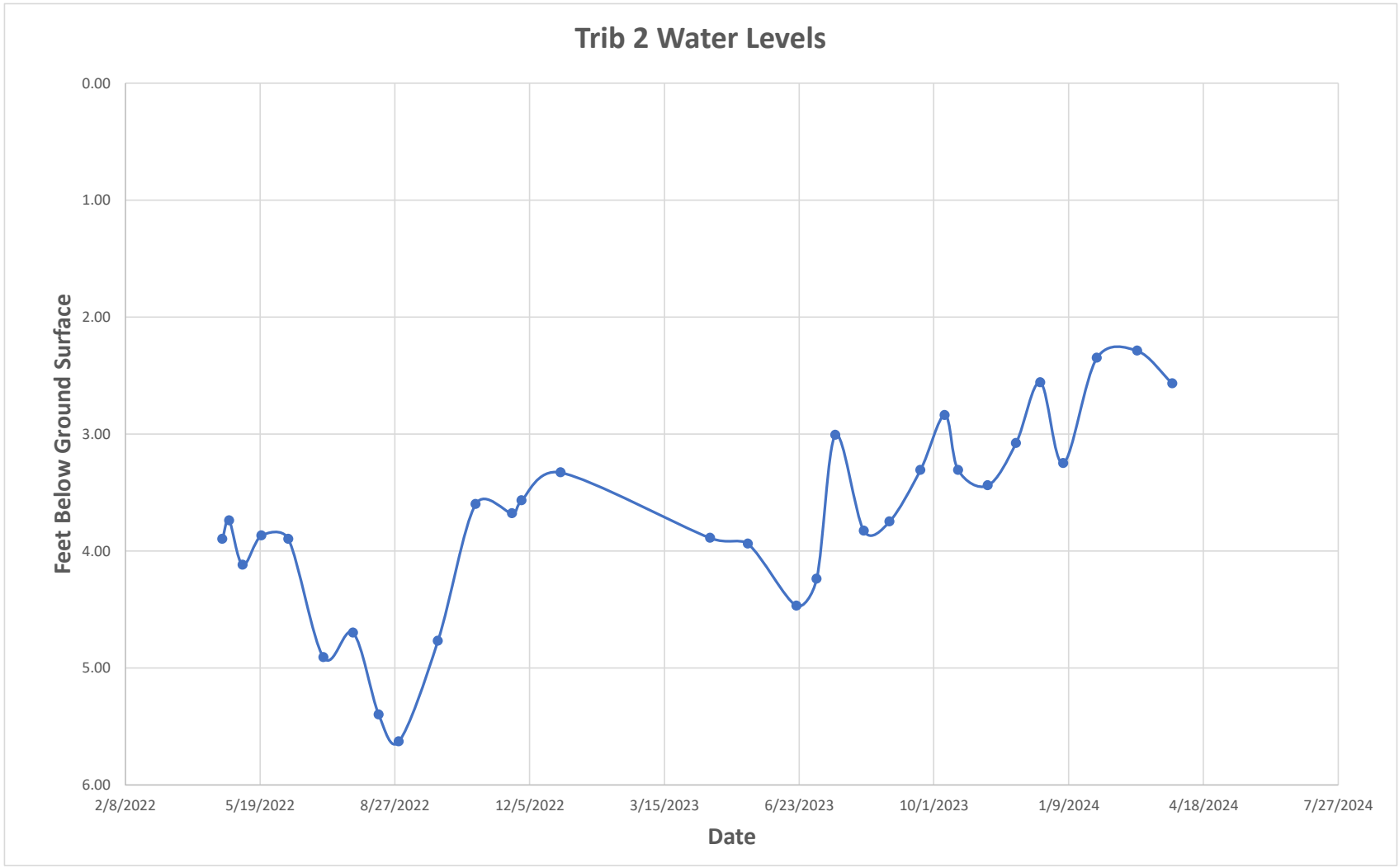
Westchester County Airport



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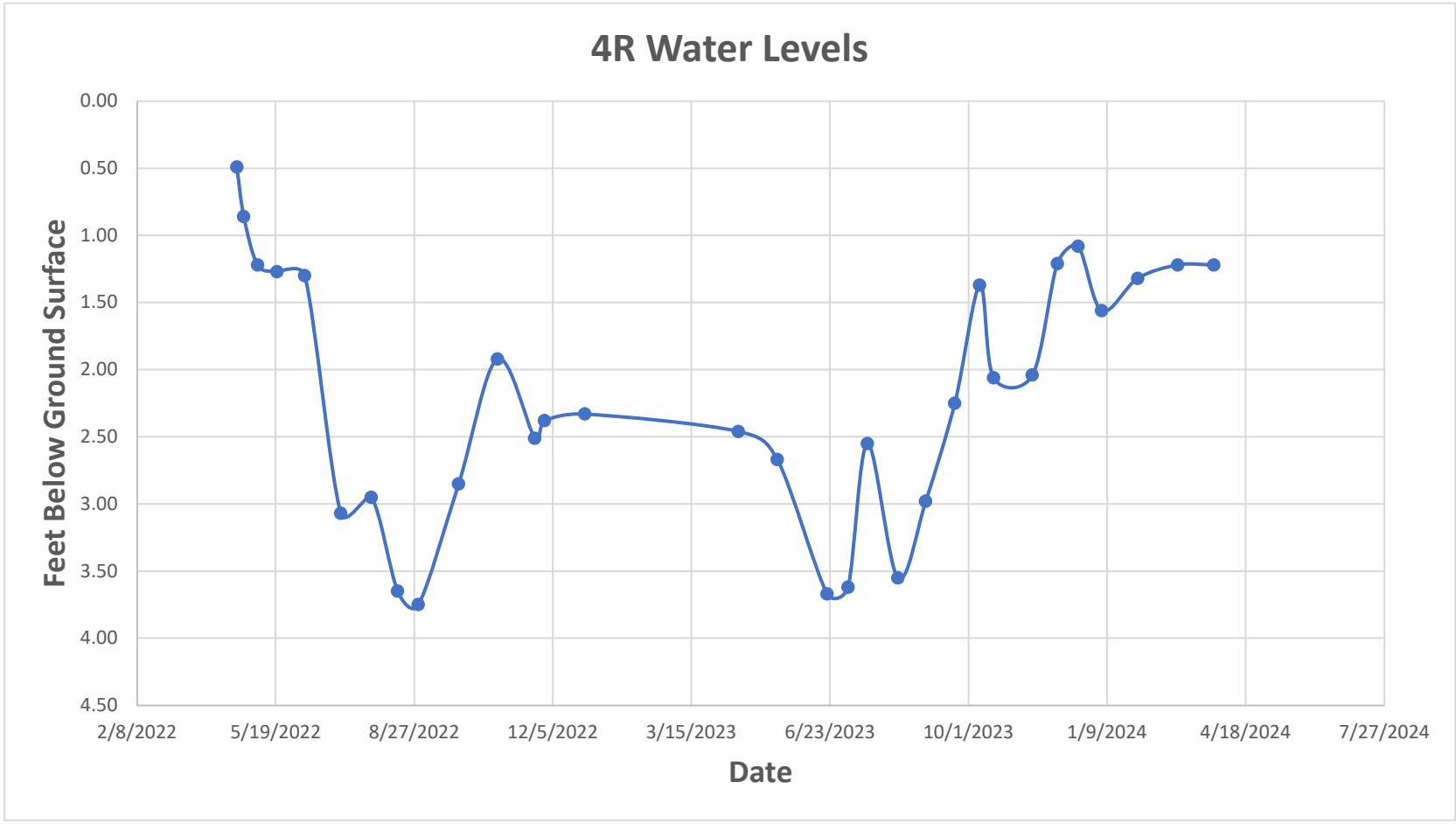
Westchester County Airport



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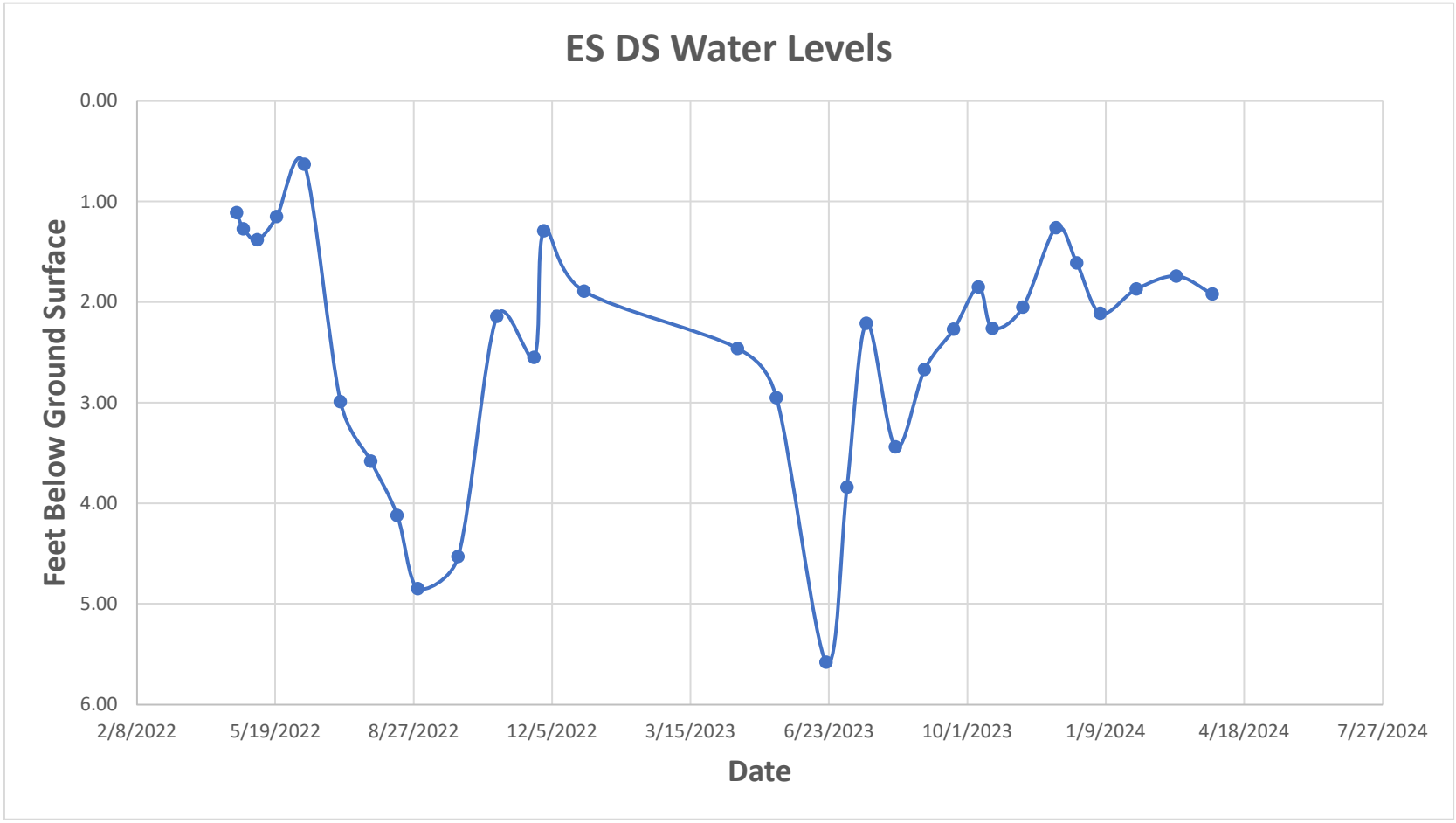
Westchester County Airport



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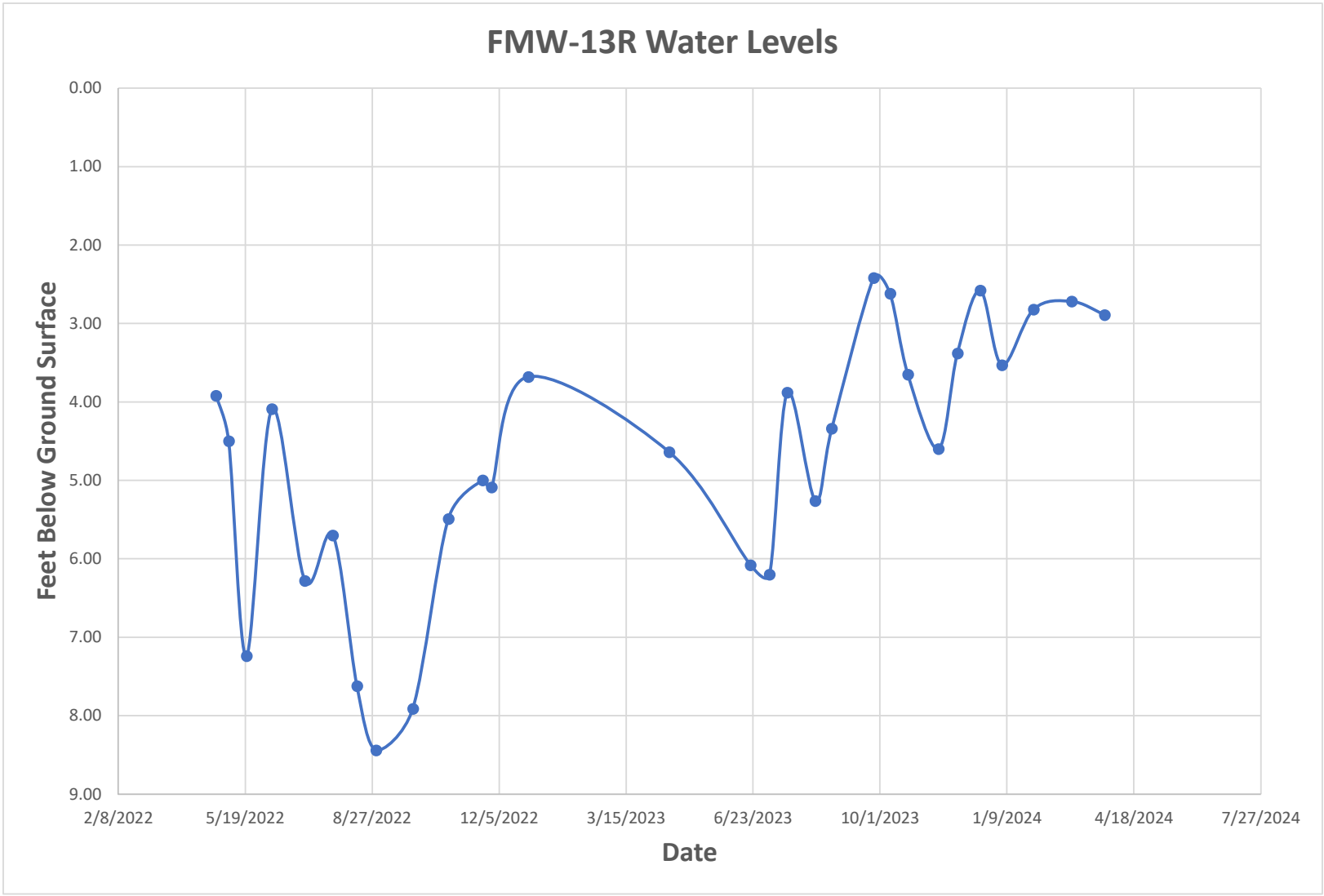

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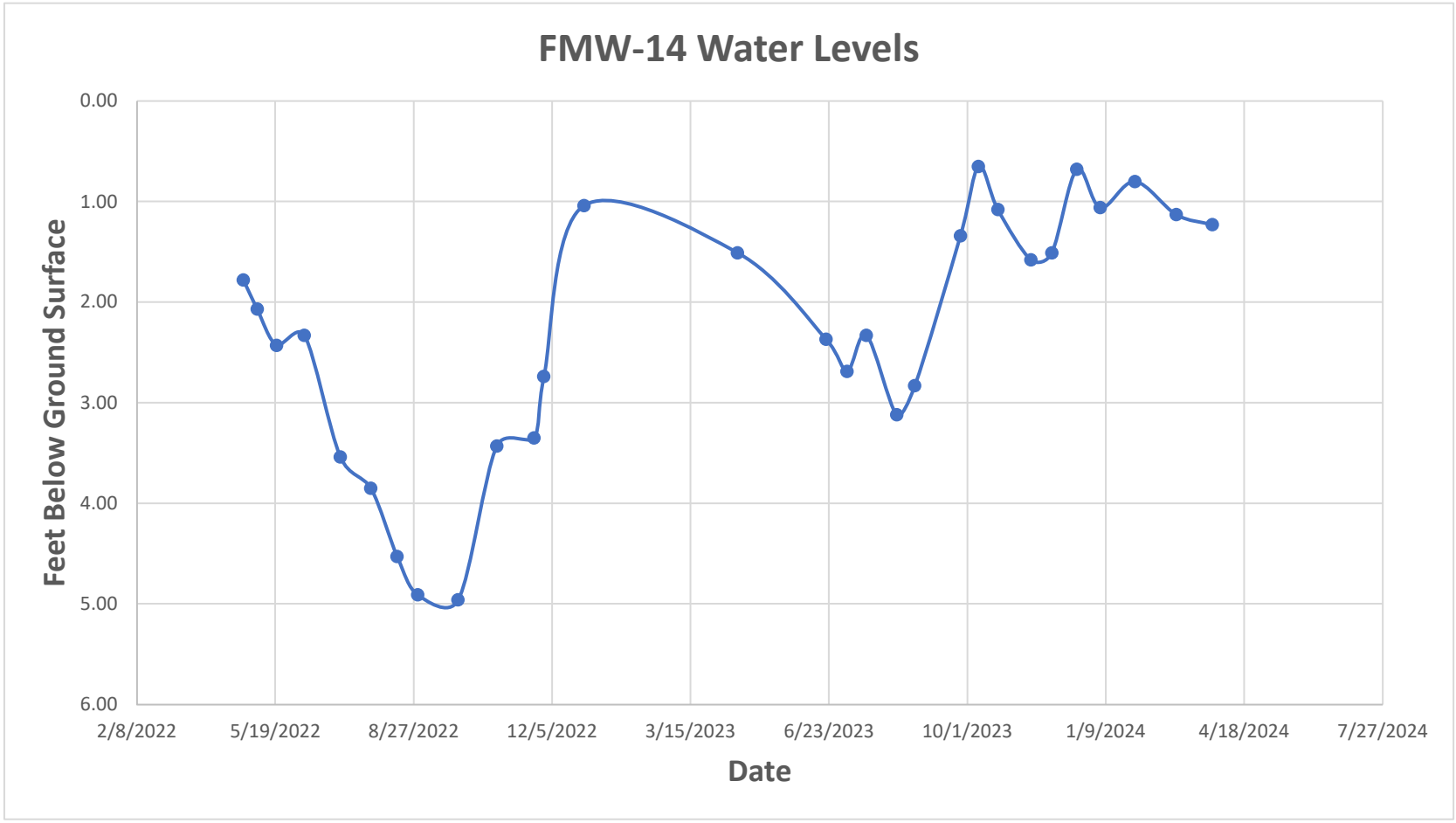

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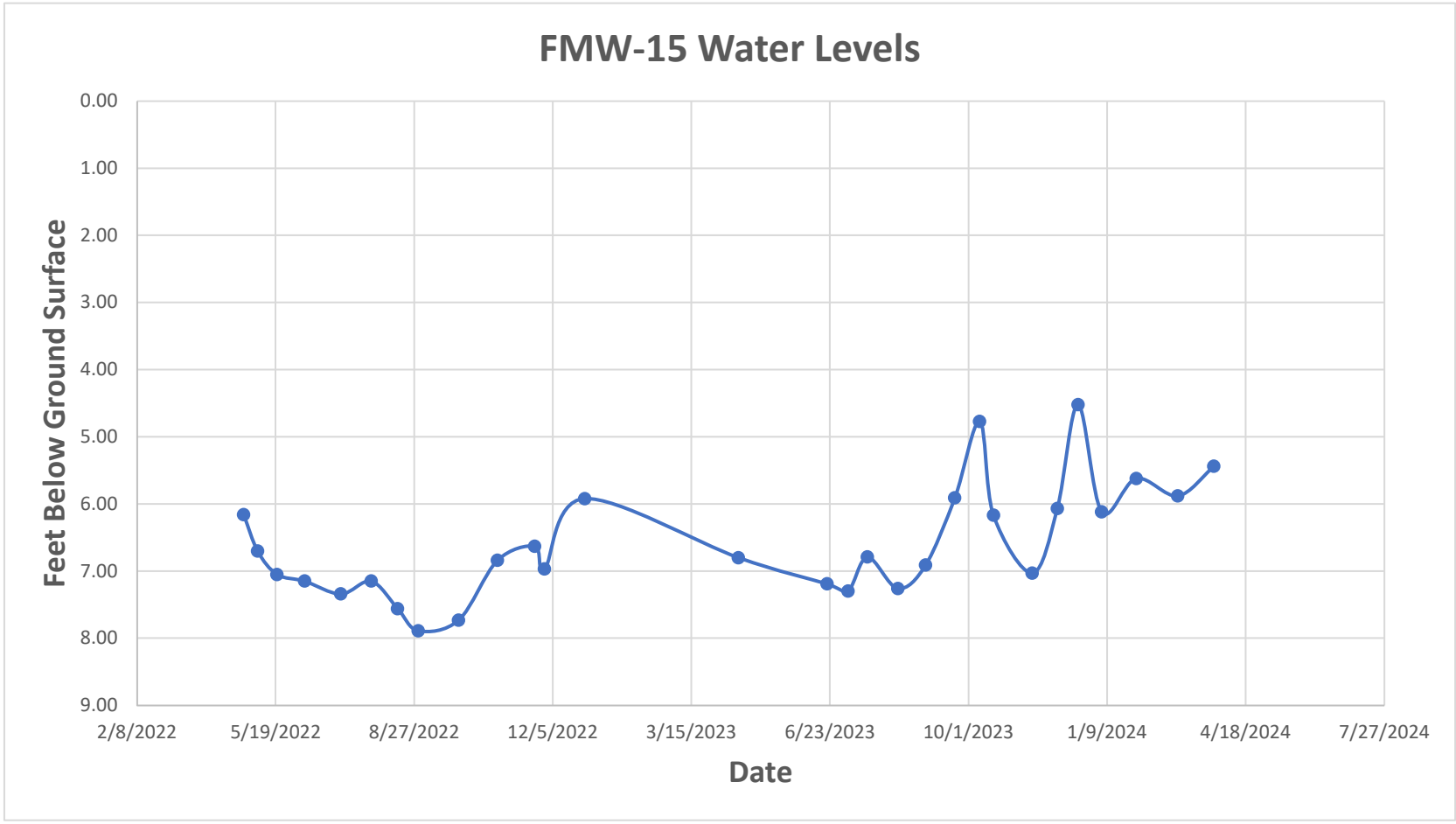

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