Appendix A – Flow Monitoring Report

Monitoring Site: FM01

Selma-Kingsburg-Fowler Sanitation District

Sanitary Sewer Flow Monitoring

December 09, 2022 - January 17, 2023

Location: Median at E Merced St & Golden State Blvd

Data Summary Report

Vicinity Map: FM01

FM01A

Site Information MH ID: 3D00-0400

Location: Park off of W Fresno St

Coordinates: 119.6797° W, 36.6251° N

Rim Elevation: 300.22 feet

Expected Pipe Diameter: 12 inches

Measured Pipe Diameter: 12 inches

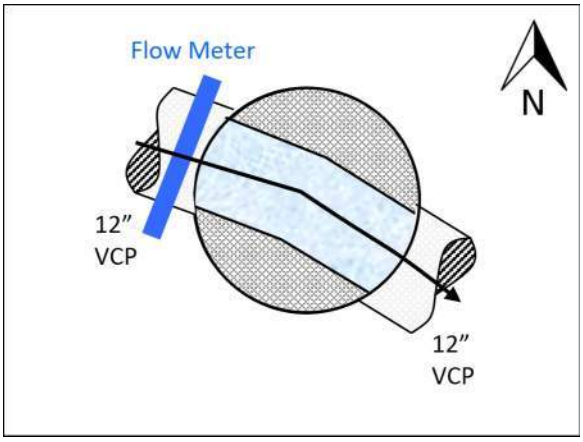
ADWF: 0.070 mgd

Peak Measured Flow: 0.538 mgd

Sediment: None

Satellite Map

Sanitary Map



Flow Sketch

Street View

Plan View

FM01

Additional Site Photos

Effluent Pipe

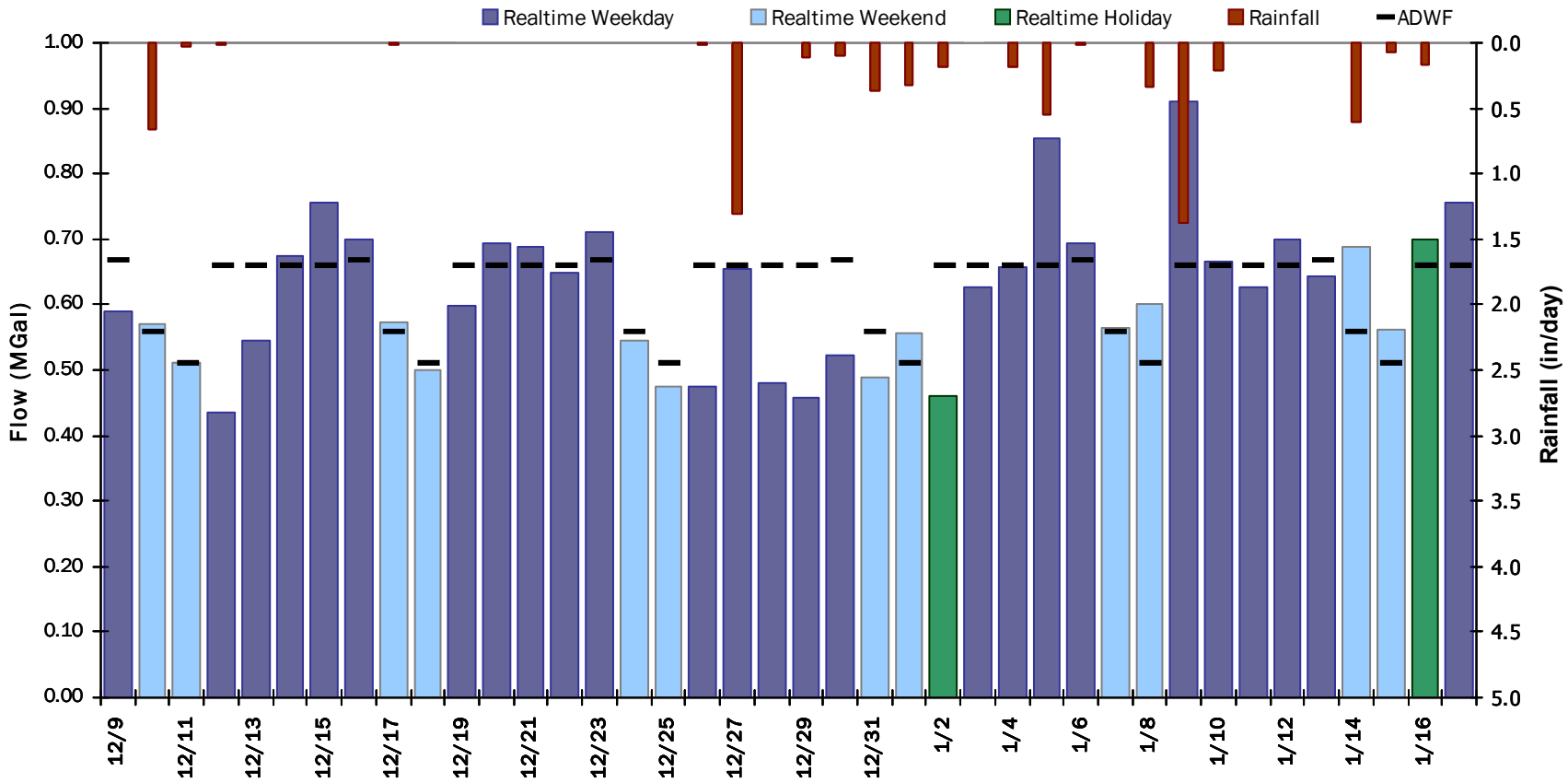
Influent Pipe

FM01

Period Flow Summary: Daily Flow Totals

Avg Daily Flow: 0.614 MGal Peak Daily Flow: 0.910 MGal Min Daily Flow: 0.435 MGal

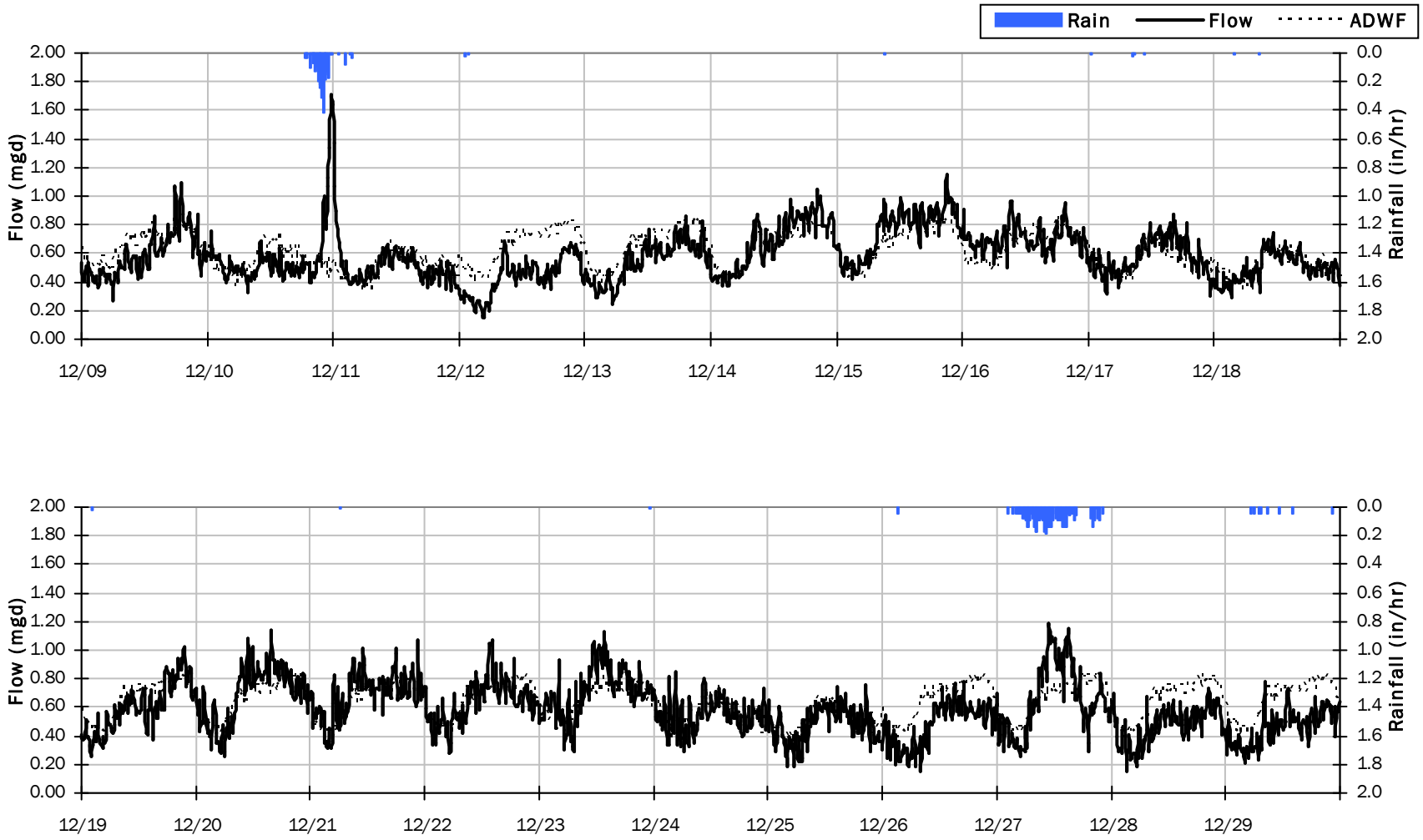
Total Rainfall: 6.63 inches



FM01

Flow Summary: 12/9/2022 to 12/29/2022

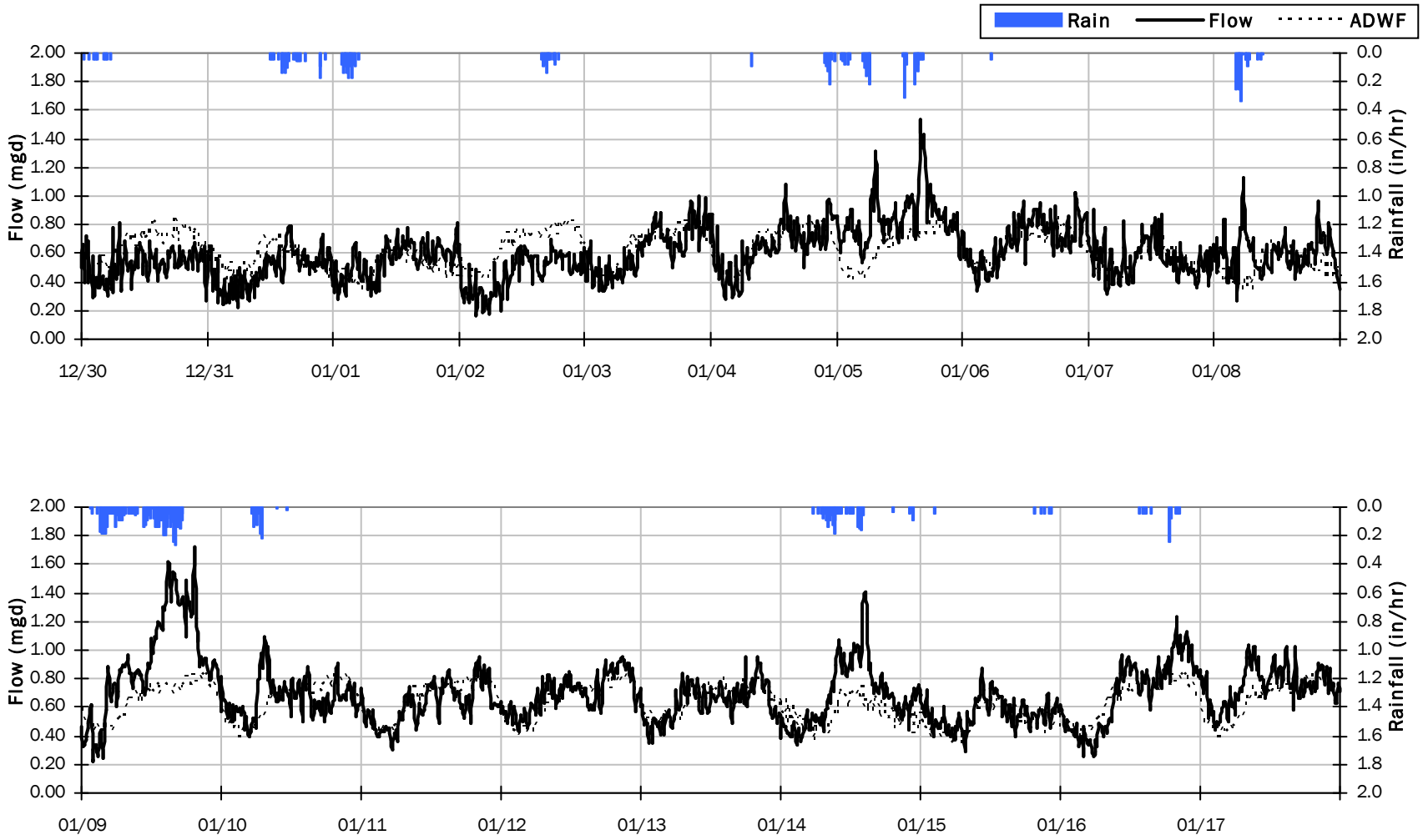
Period Rainfall: 2.16 inches Period Avg Flow: 0.585 mgd Period Peak Flow: 1.693 mgd Period Min Flow: 0.146 mgd



FM01

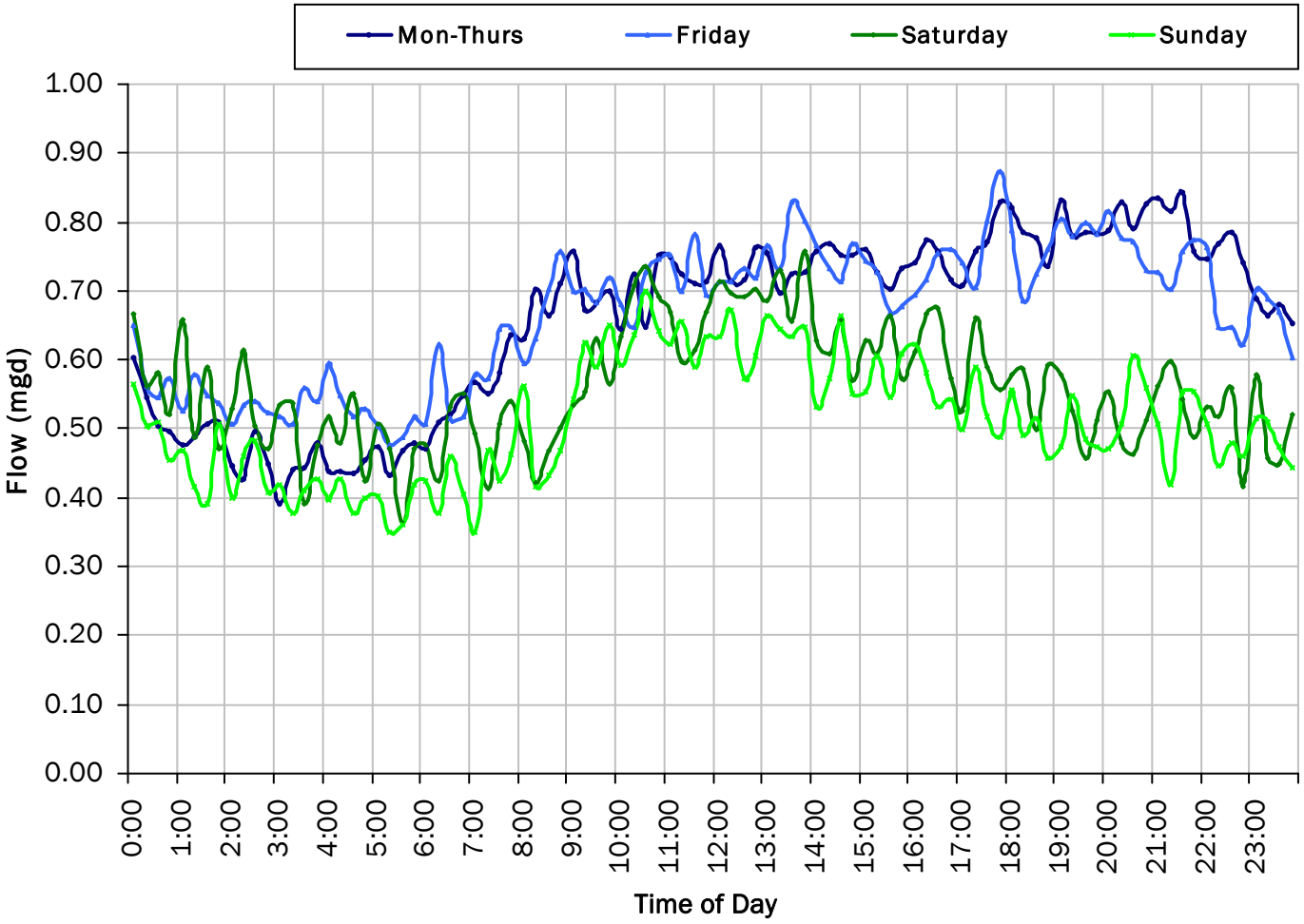
Flow Summary: 12/30/2022 to 1/17/2023

Period Rainfall: 4.48 inches Period Avg Flow: 0.646 mgd Period Peak Flow: 1.722 mgd Period Min Flow: 0.177 mgd



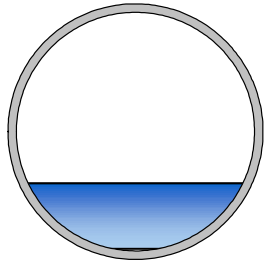
FM01

Average Dry Weather Flow Hydrographs



ADWF:

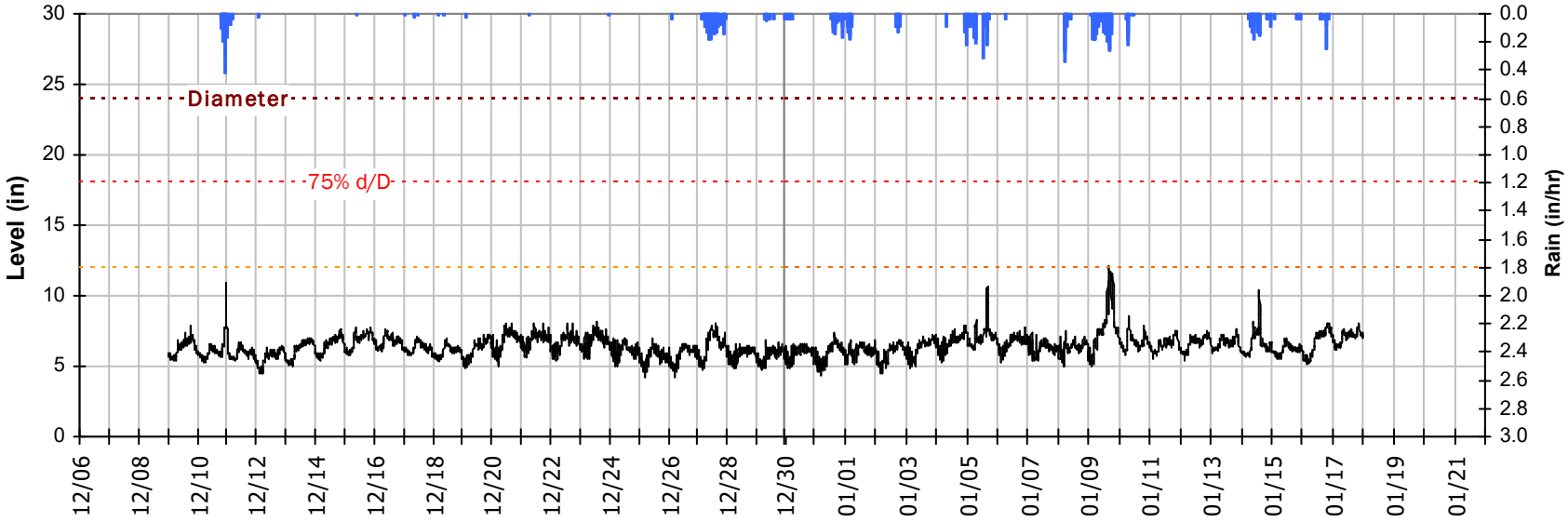
0.628 *mgd*

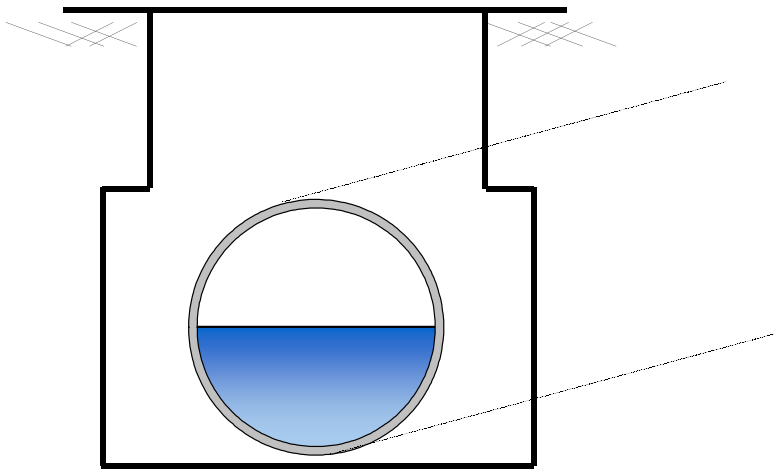


FM01

Site Capacity and Surcharge Summary

Realtime Flow Levels with Rainfall Data over Peak Level Period



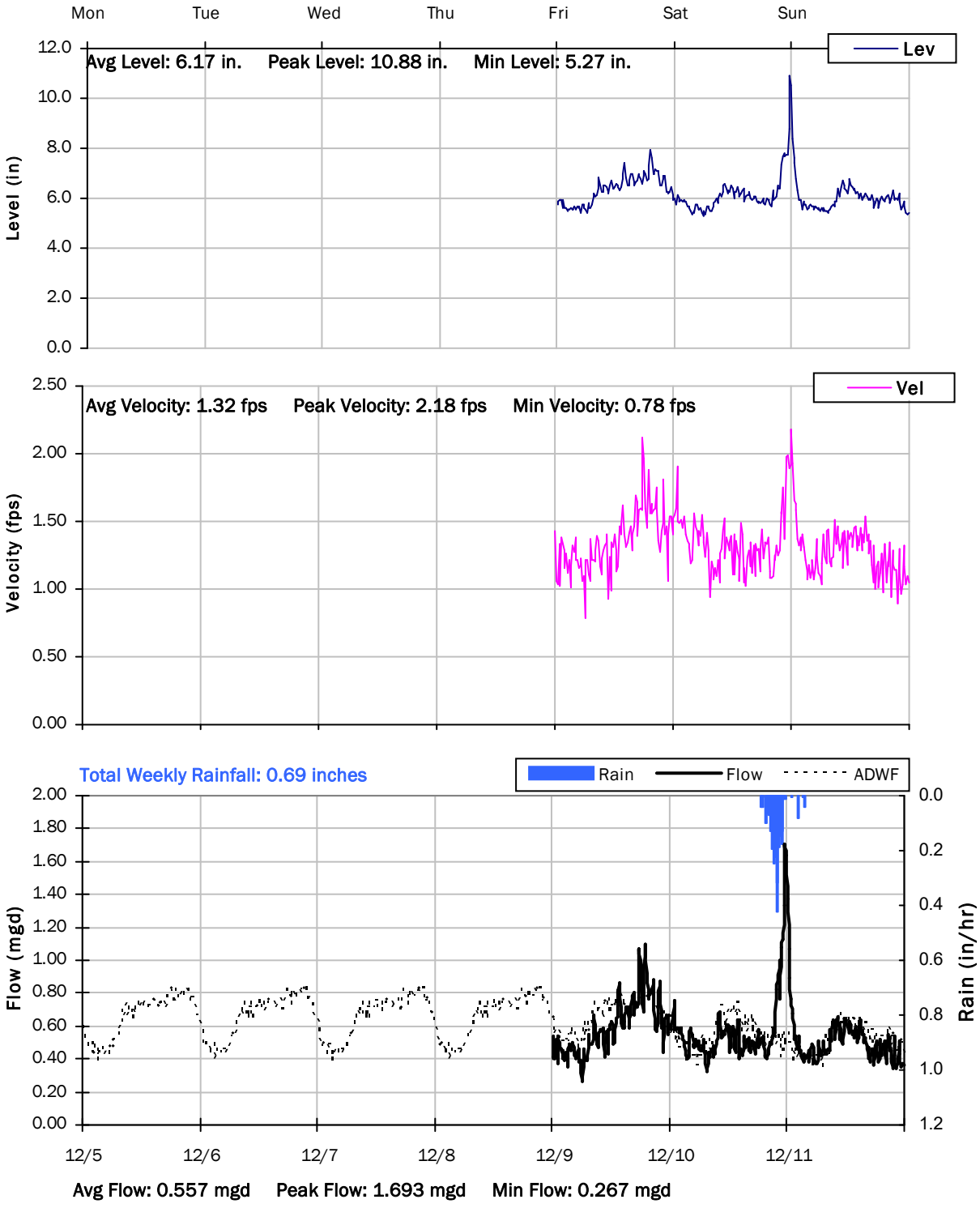


Pipe Diameter:	24	*inches*
Peak Measured Level:	12.1	*inches*
Peak d/D Ratio:	0.50	

FM01

Weekly Level, Velocity and Flow Hydrographs

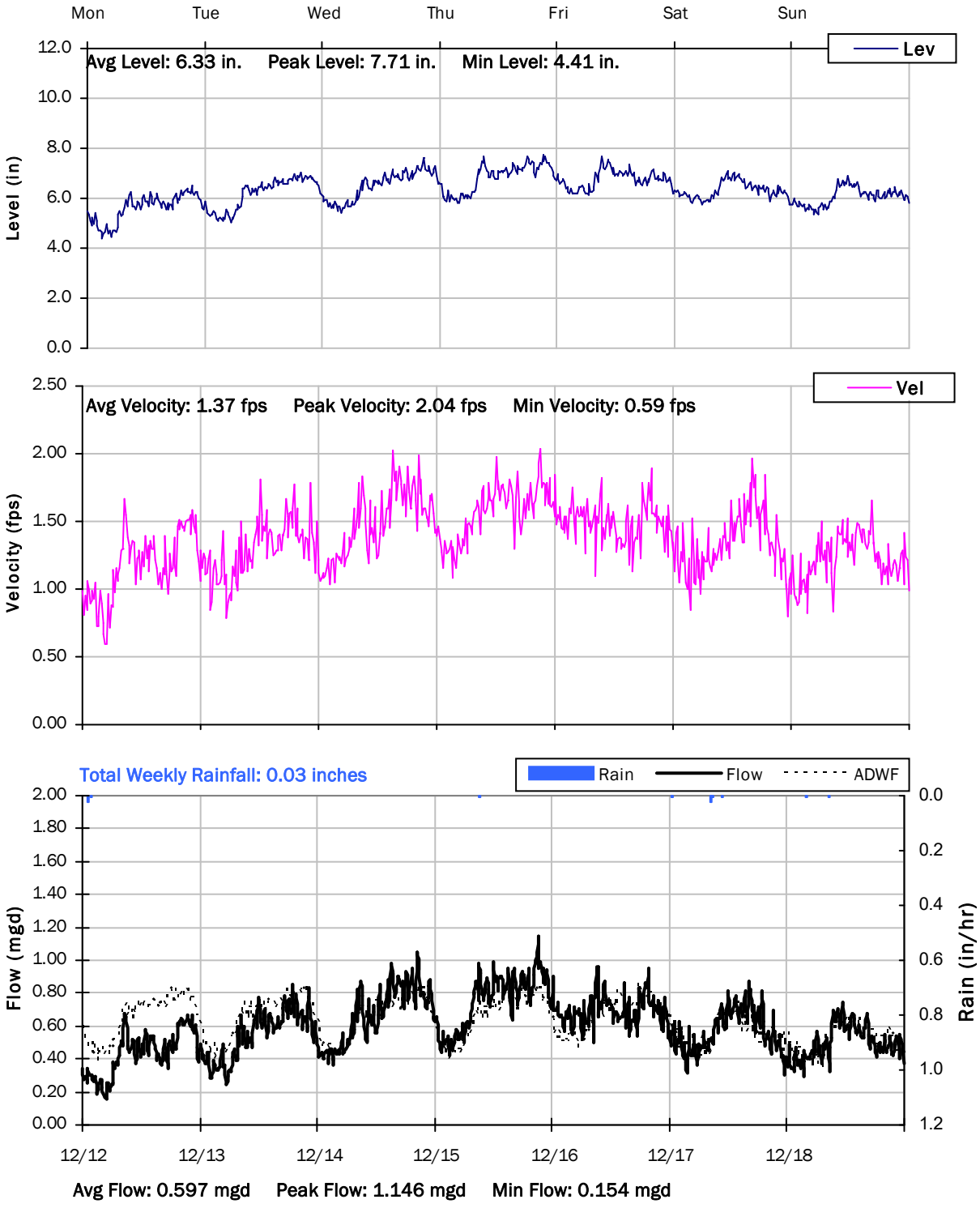
12/5/2022 to 12/12/2022



FM01

Weekly Level, Velocity and Flow Hydrographs

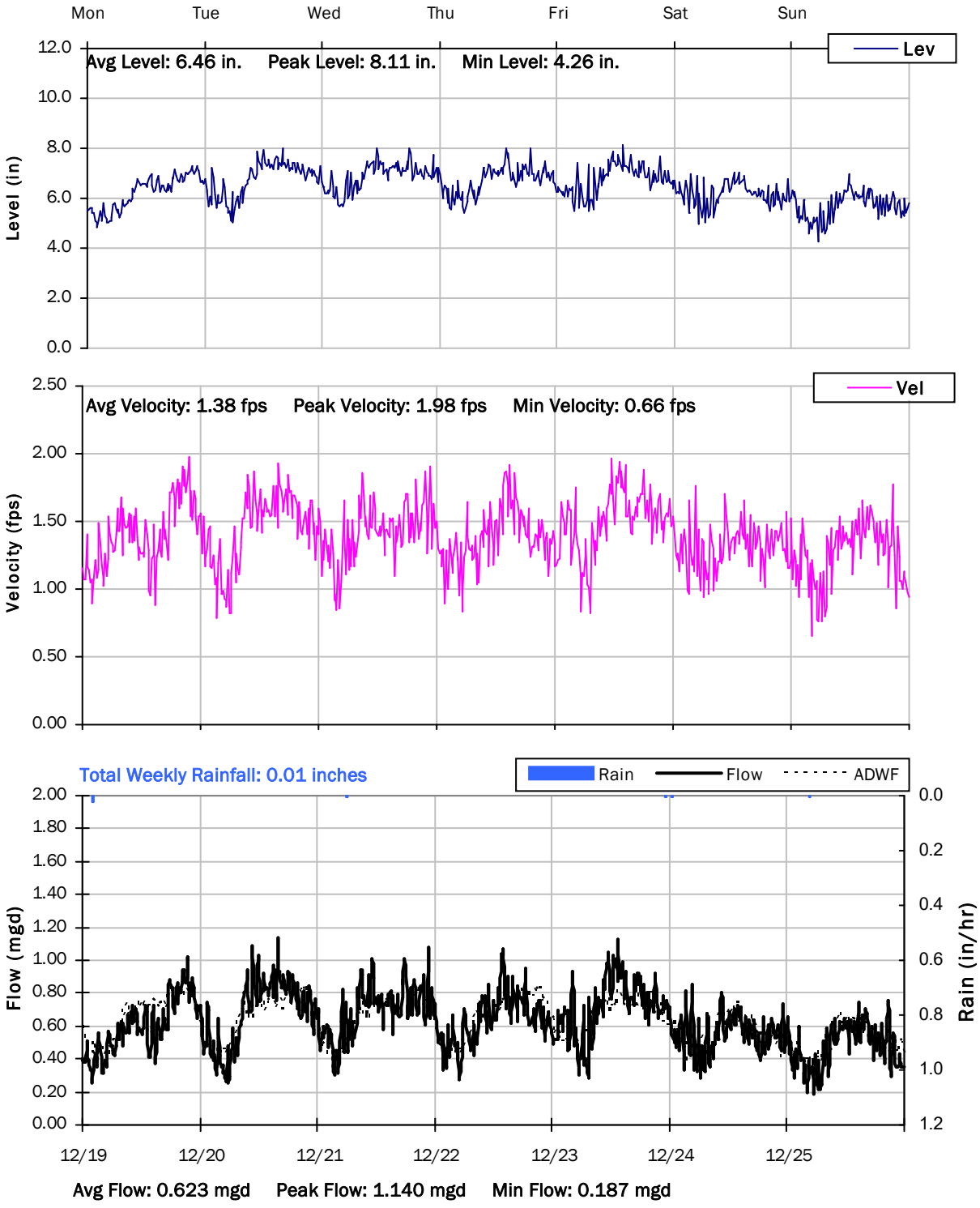
12/12/2022 to 12/19/2022



FM01

Weekly Level, Velocity and Flow Hydrographs

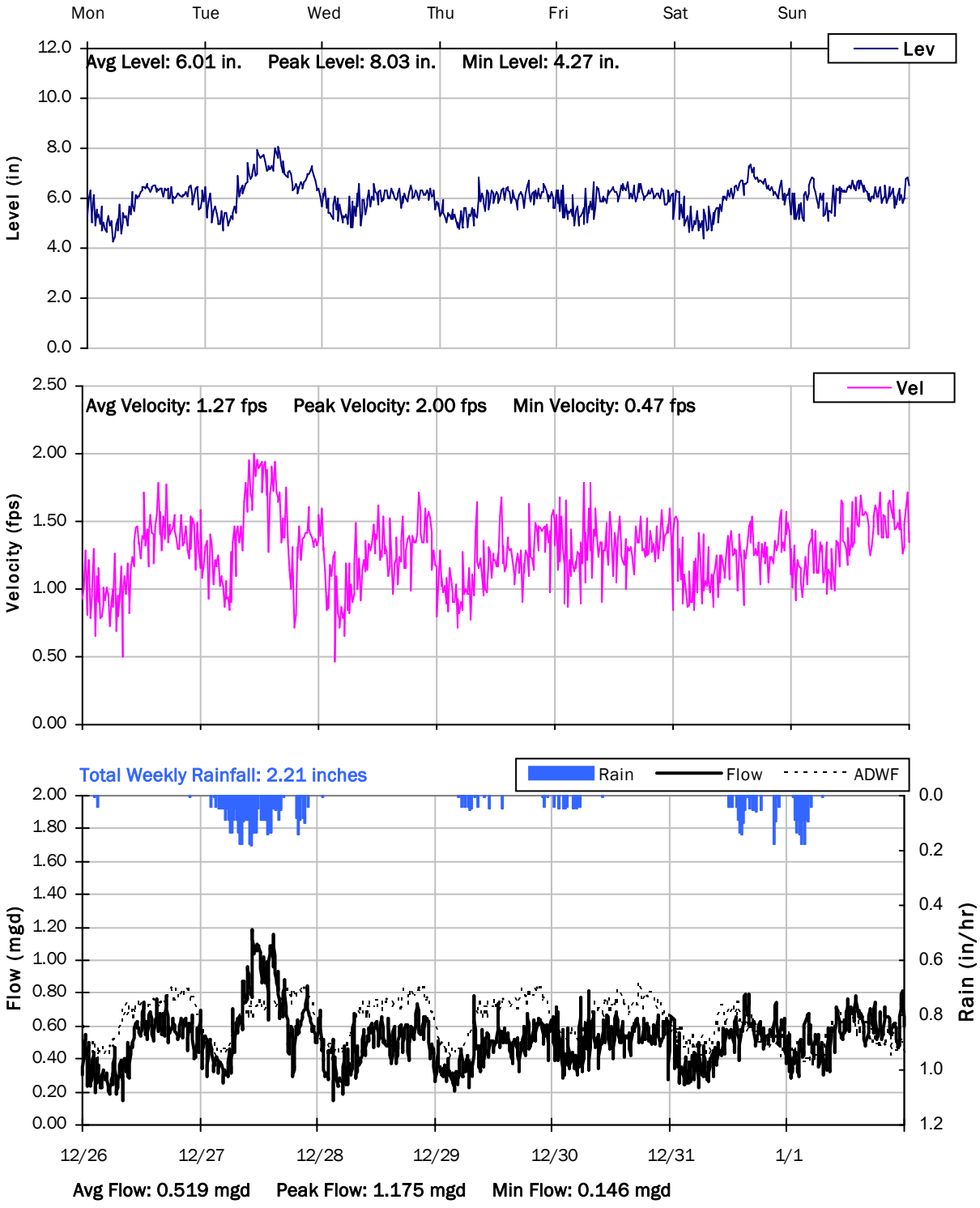
12/19/2022 to 12/26/2022



FM01

Weekly Level, Velocity and Flow Hydrographs

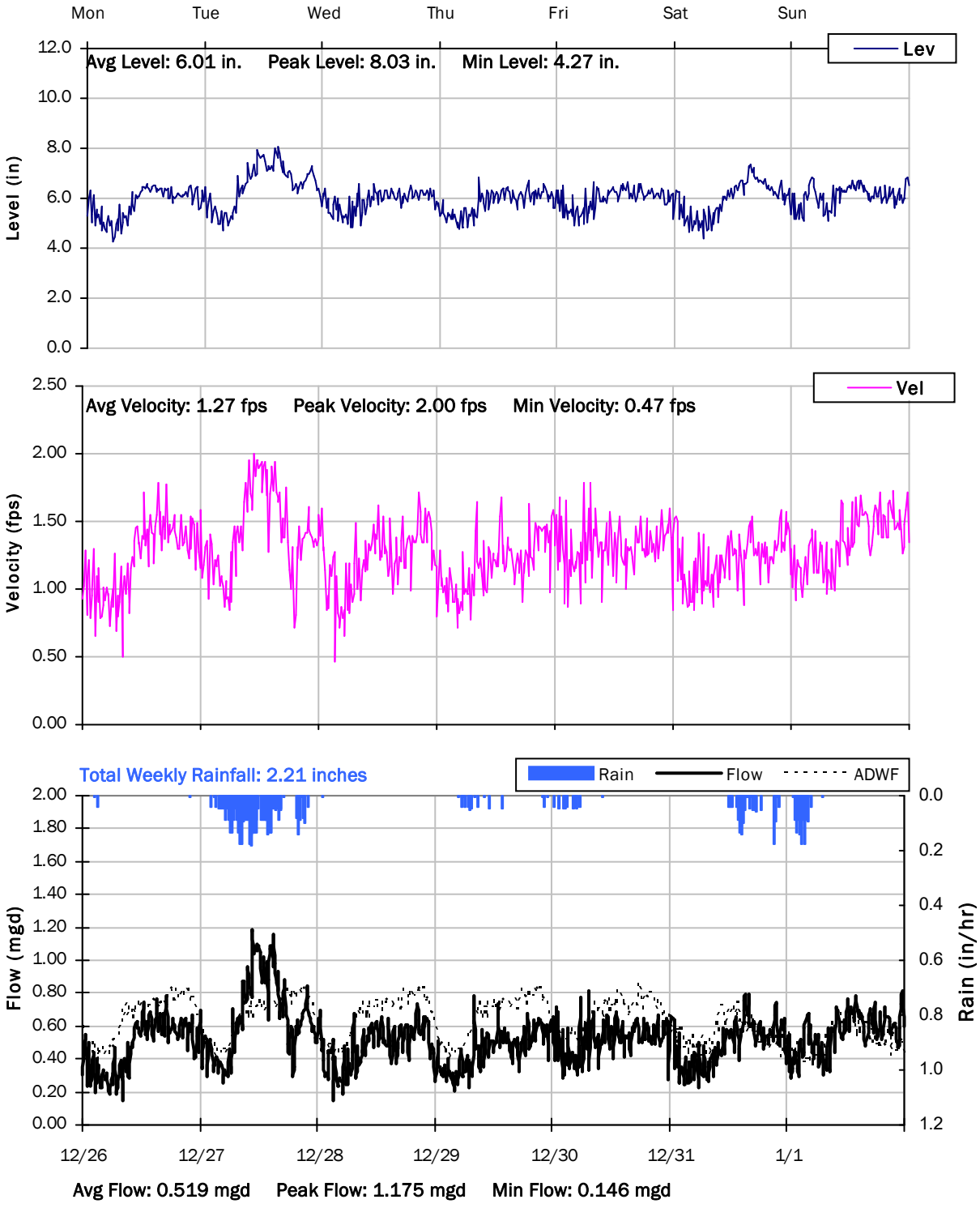
12/26/2022 to 1/2/2023



FM01

Weekly Level, Velocity and Flow Hydrographs

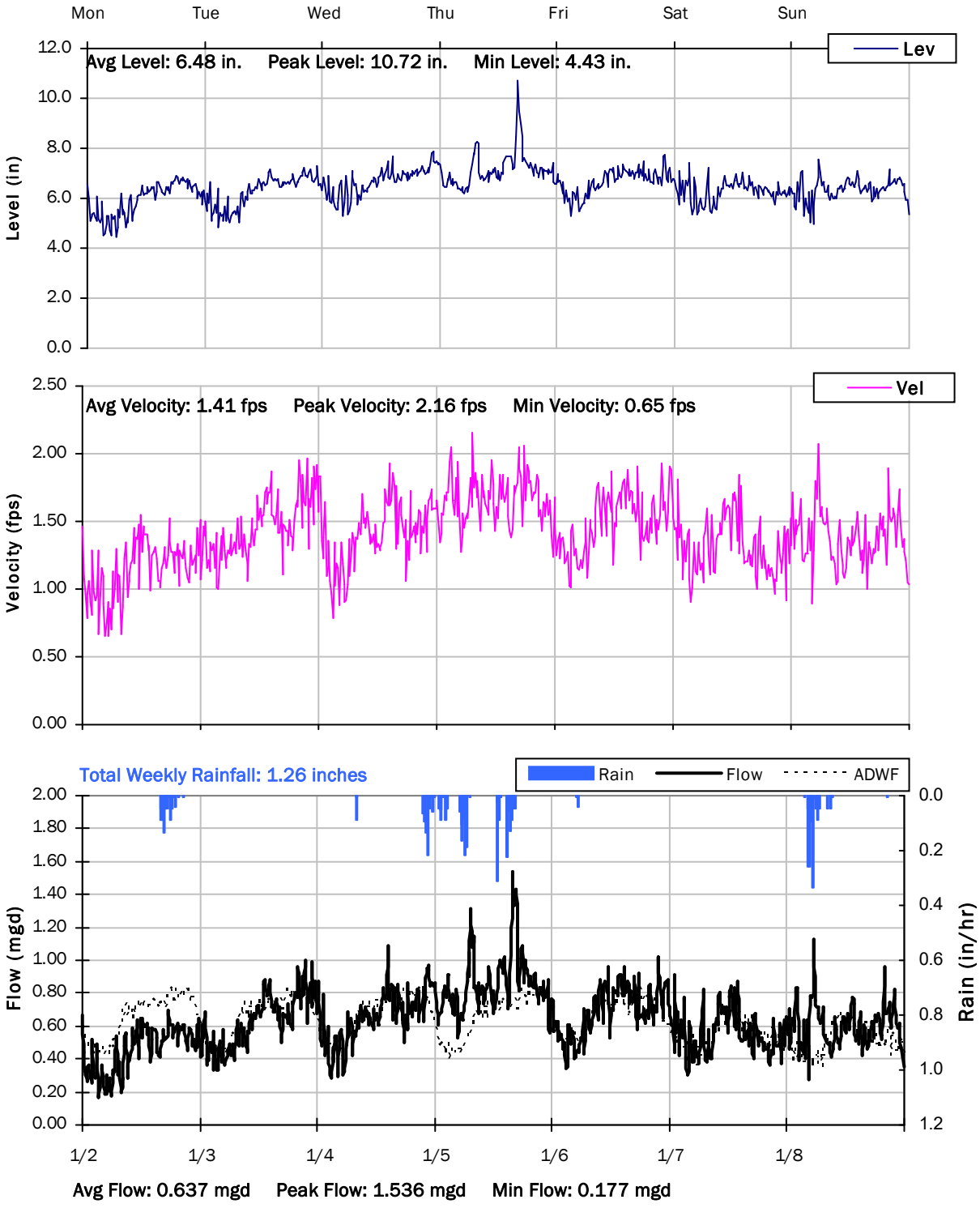
12/26/2022 to 1/2/2023



FM01

Weekly Level, Velocity and Flow Hydrographs

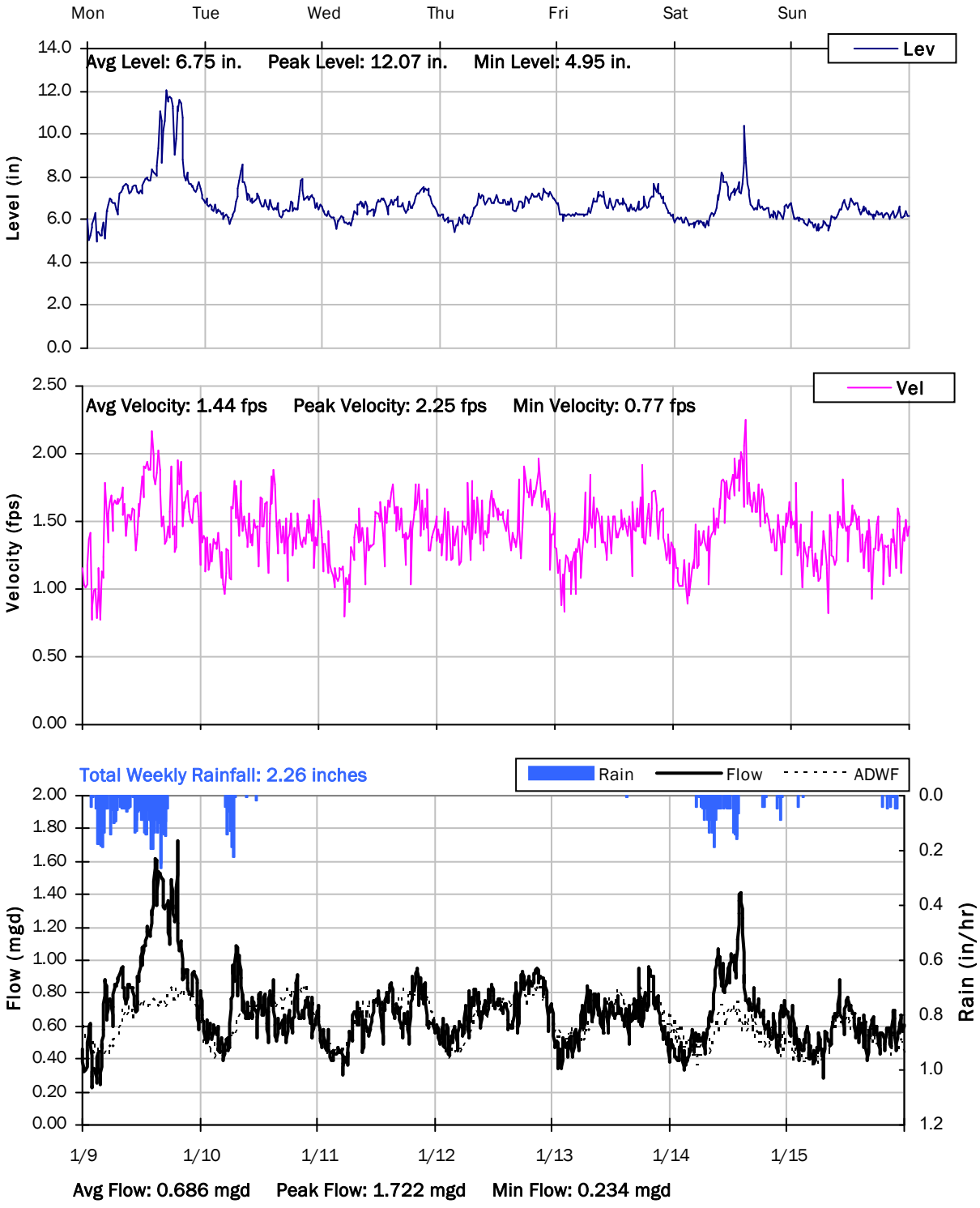
1/2/2023 to 1/9/2023



FM01

Weekly Level, Velocity and Flow Hydrographs

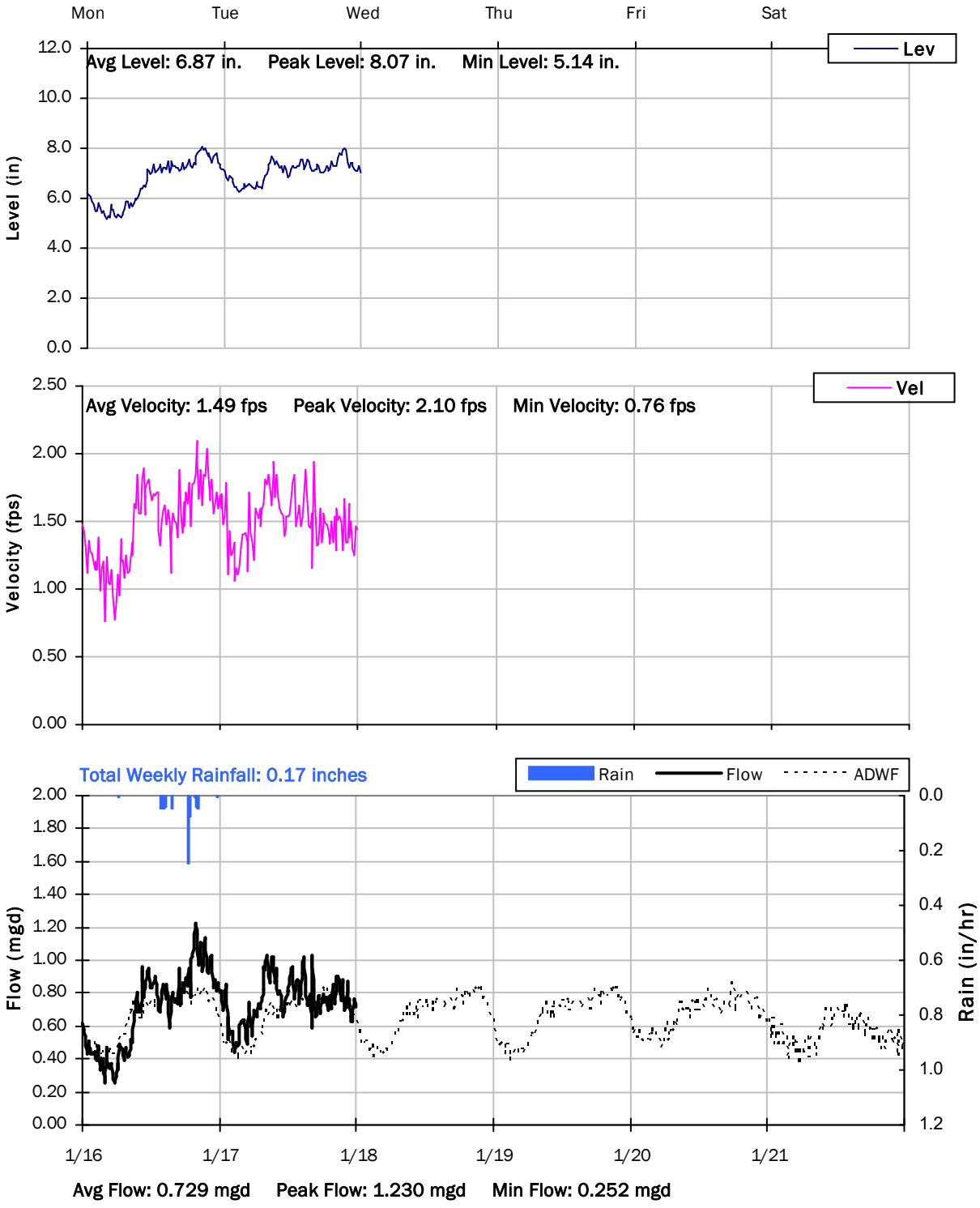
1/9/2023 to 1/16/2023



FM01

Weekly Level, Velocity and Flow Hydrographs

1/16/2023 to 1/22/2023



Monitoring Site: FM01A

Selma-Kingsburg-Fowler Sanitation District

Sanitary Sewer Flow Monitoring

December 09, 2022 - January 17, 2023

Location: Park off of W Fresno St

Data Summary Report

Vicinity Map: FM01A

FM01B

Site Information MH ID: 3A00-0100

Location: Median off of E Adams Ave

Coordinates: 119.6863° W, 36.6345° N

Rim Elevation: 303.35 feet

Expected Pipe Diameter: 12 inches

Measured Pipe Diameter: 12 inches

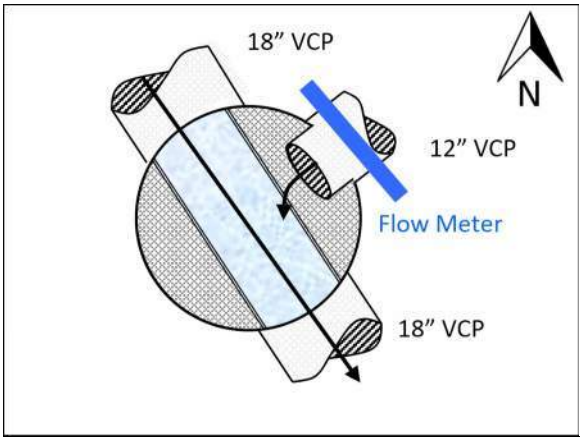
ADWF: 0.021 mgd

Peak Measured Flow: 0.116 mgd

Sediment: None

Satellite Map

Sanitary Map



Flow Sketch

Street View

Plan View

FM01A

Additional Site Photos

Effluent Pipe

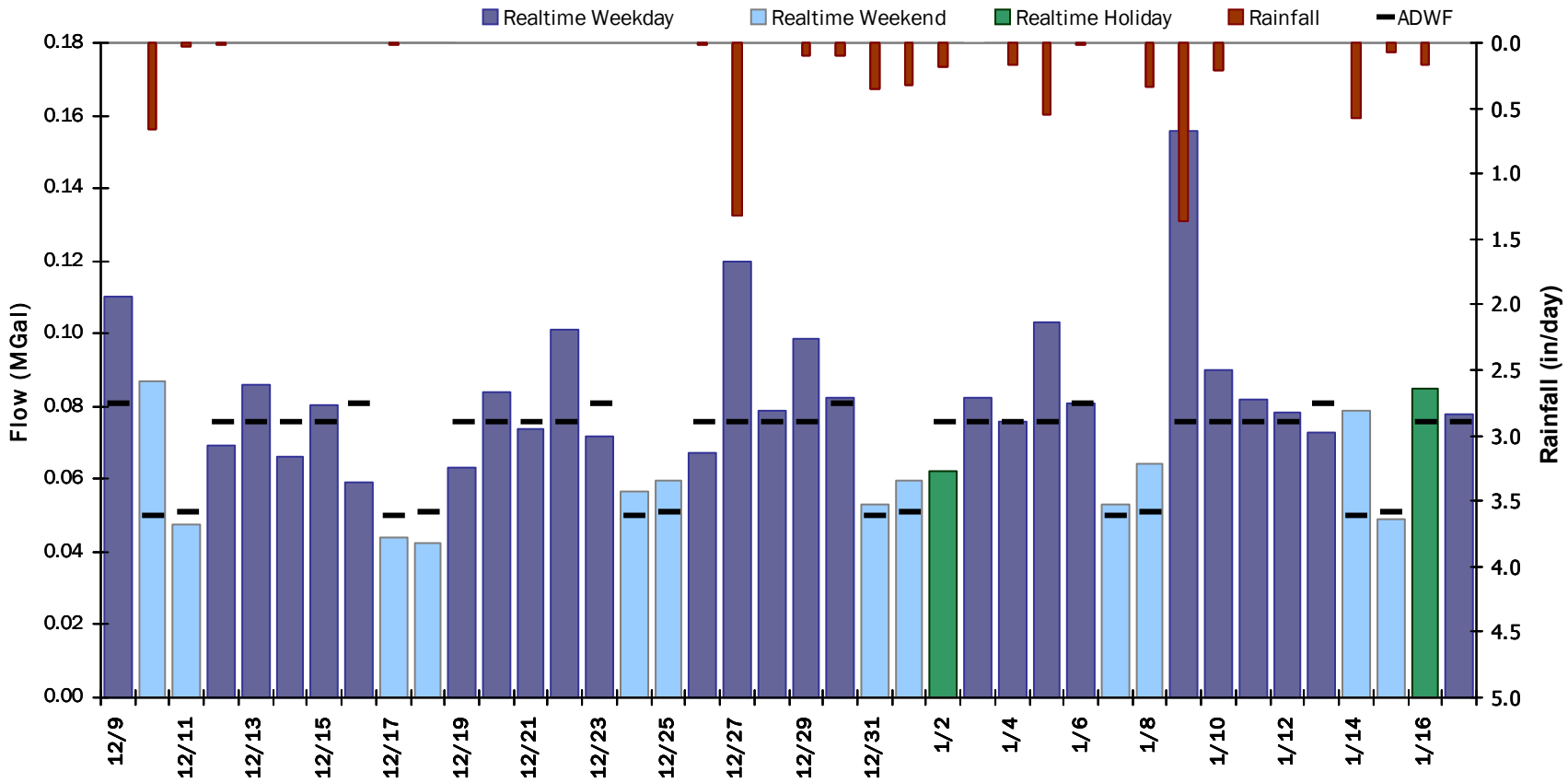
Influent Pipe

FM01A

Period Flow Summary: Daily Flow Totals

Avg Daily Flow: 0.076 MGal Peak Daily Flow: 0.156 MGal Min Daily Flow: 0.042 MGal

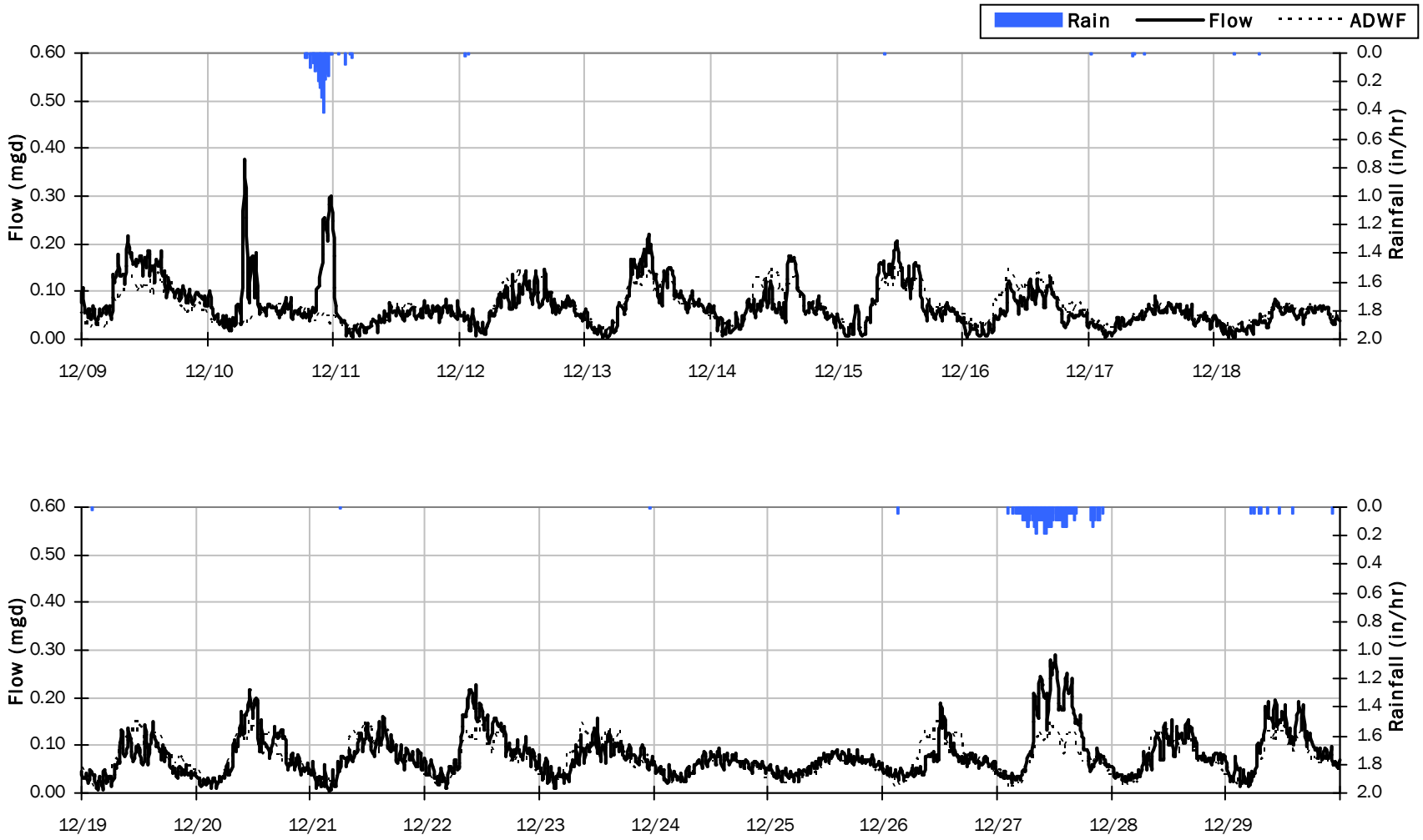
Total Rainfall: 6.57 inches



FM01A

Flow Summary: 12/9/2022 to 12/29/2022

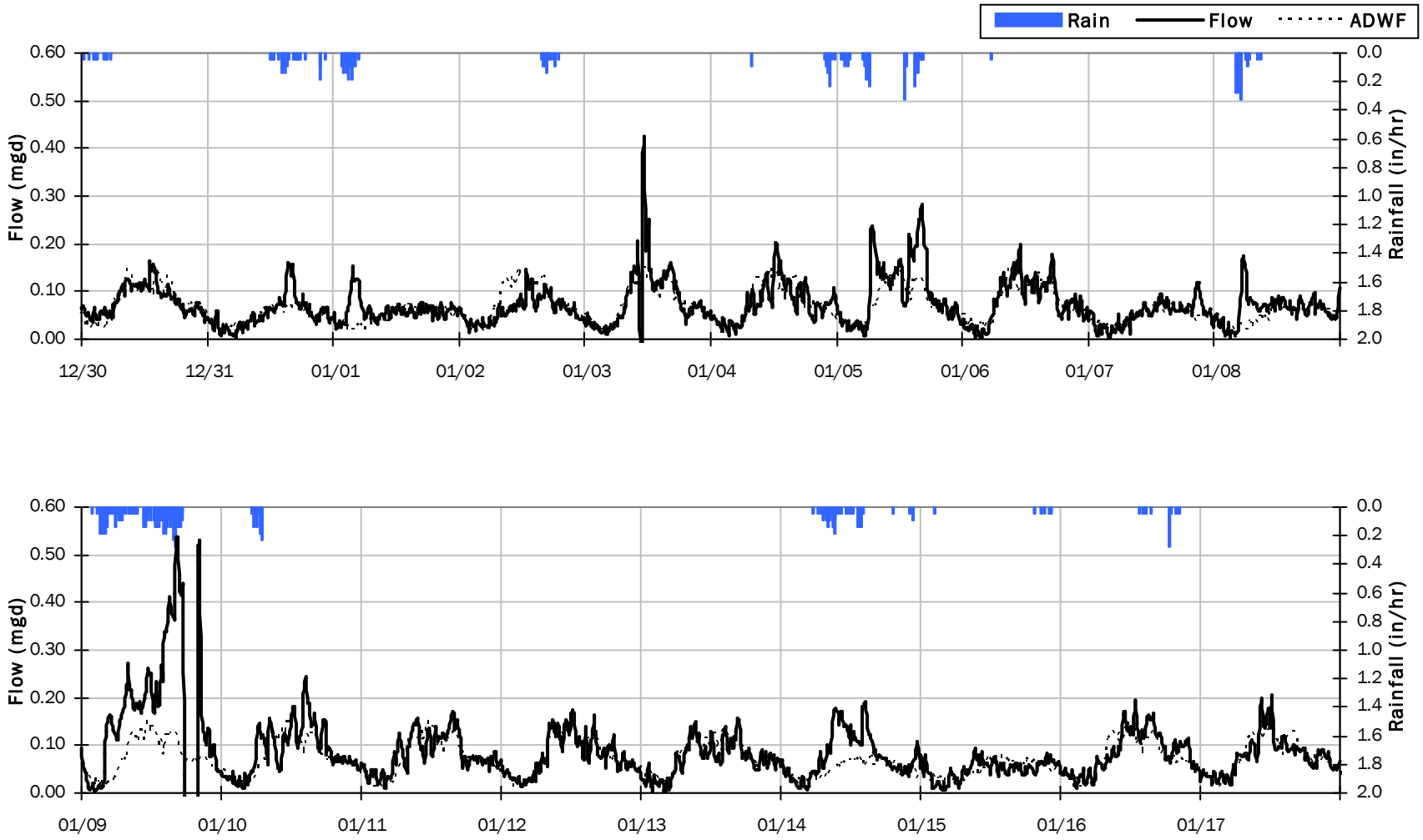
Period Rainfall: 2.16 inches Period Avg Flow: 0.075 mgd Period Peak Flow: 0.372 mgd Period Min Flow: 0.003 mgd



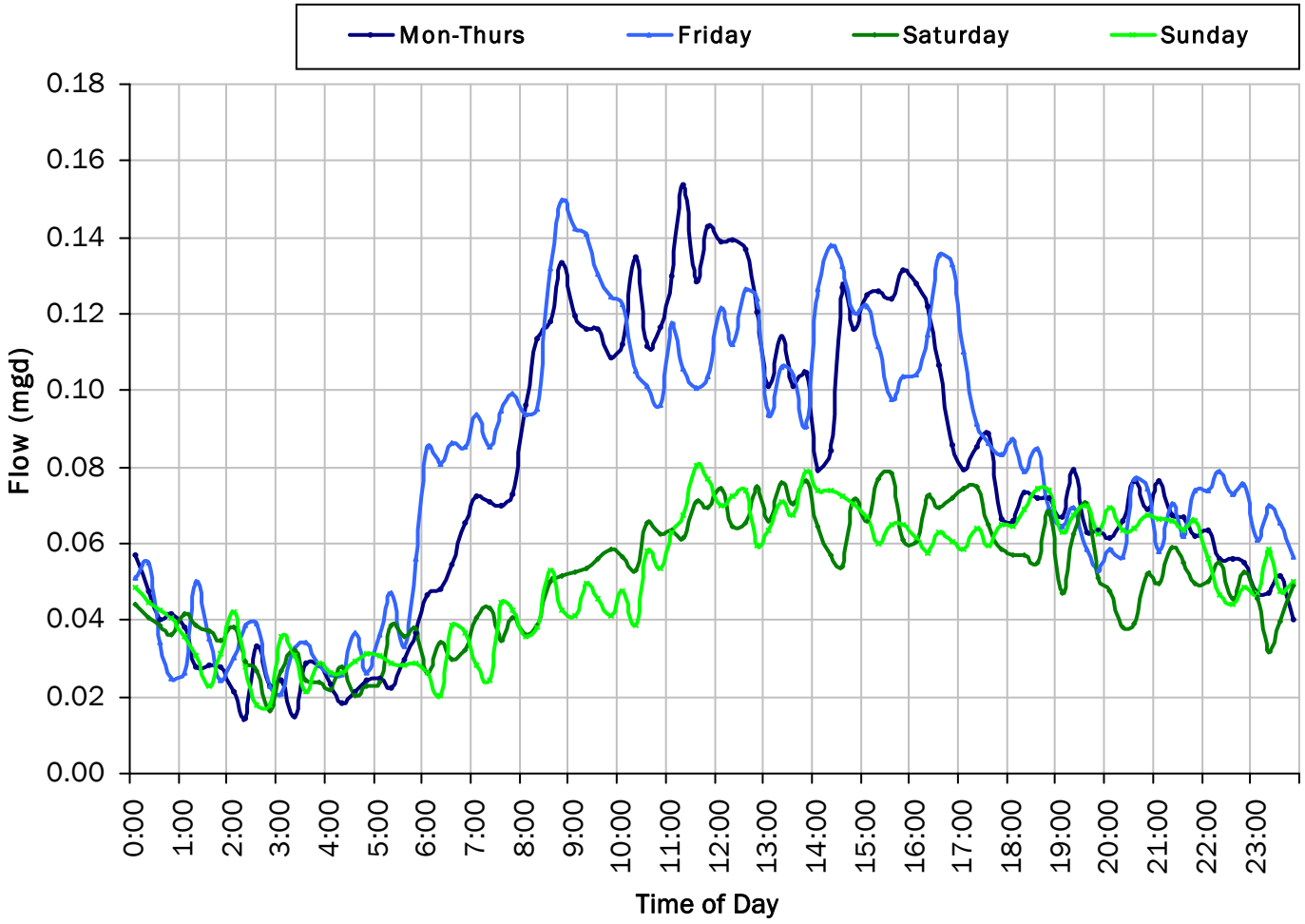
FM01A

Flow Summary: 12/30/2022 to 1/17/2023

Period Rainfall: 4.40 inches Period Avg Flow: 0.078 mgd Period Peak Flow: 0.538 mgd Period Min Flow: -0.201 mgd

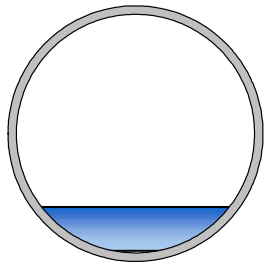


FM01A
Average Dry Weather Flow Hydrographs



ADWF:

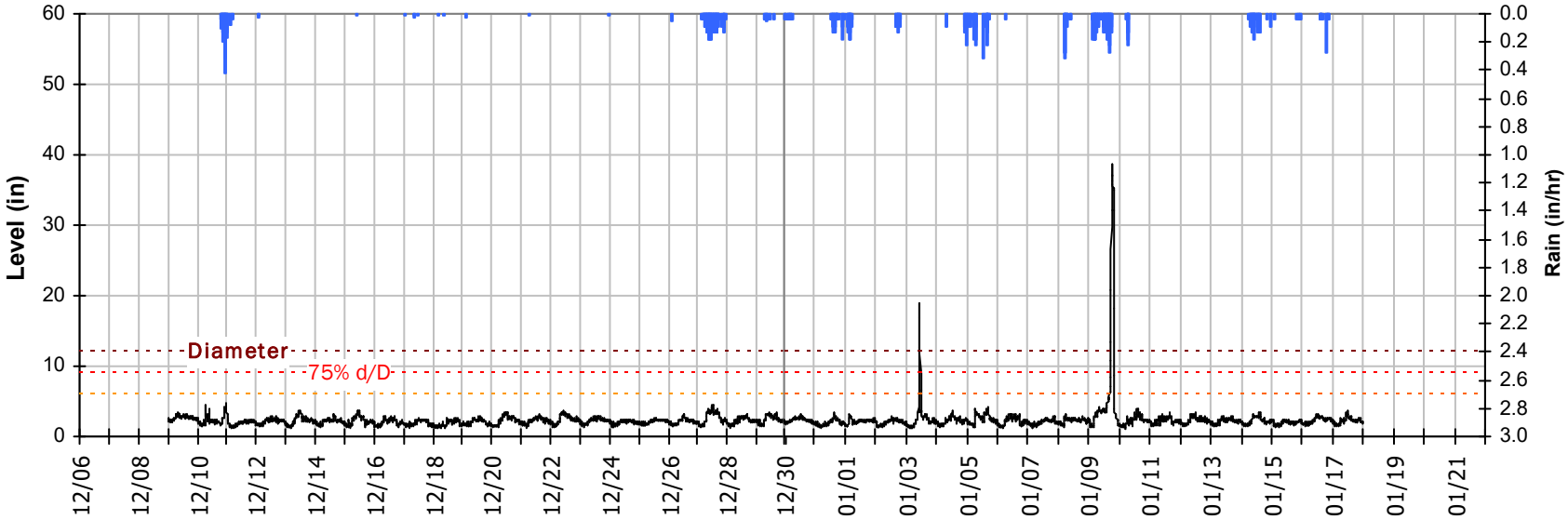
0.070 *mgd*

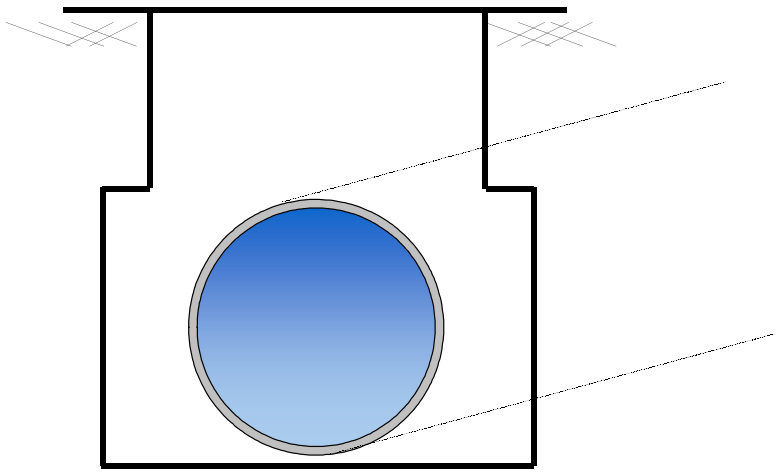


FM01A

Site Capacity and Surcharge Summary

Realtime Flow Levels with Rainfall Data over Peak Level Period





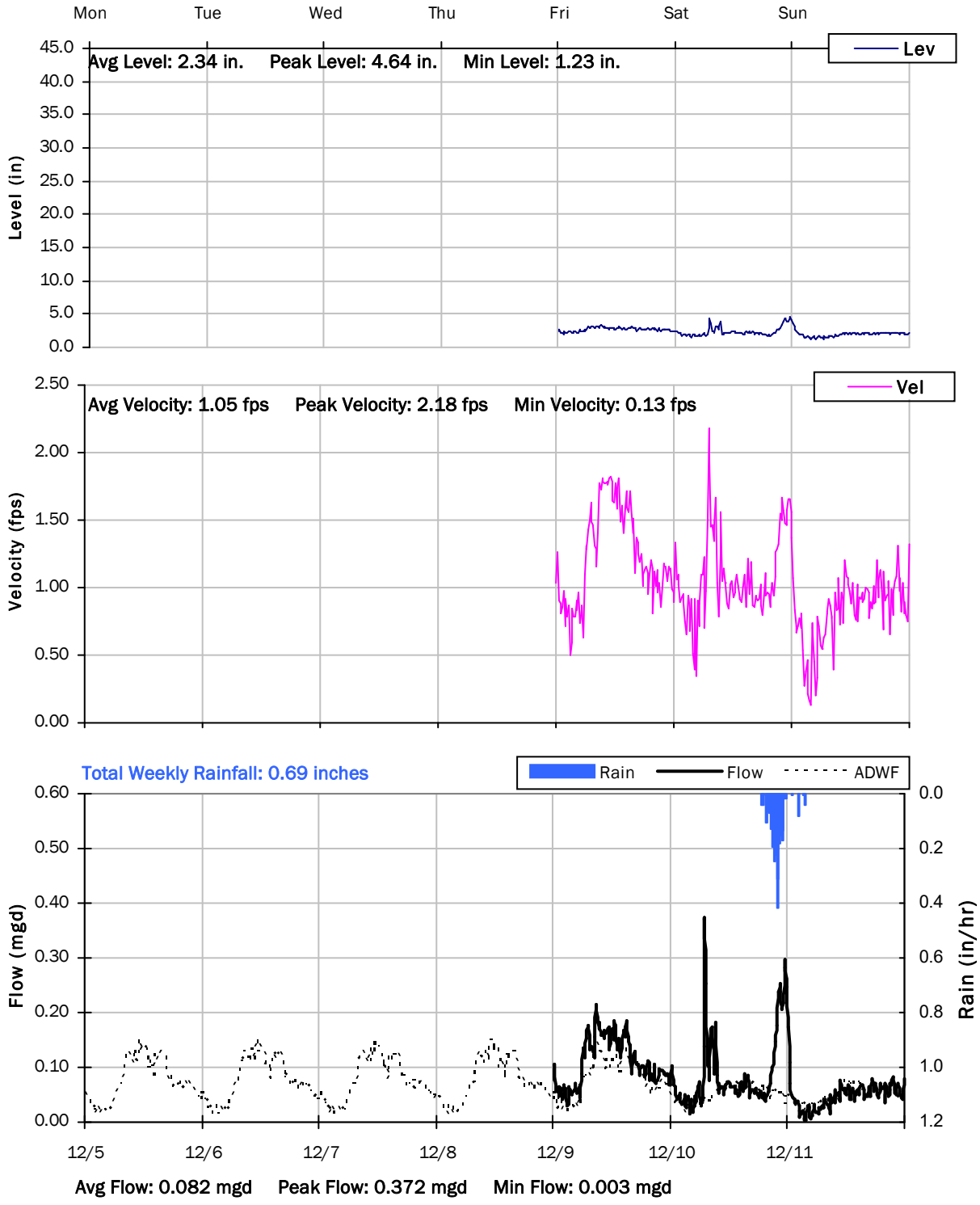
Pipe Diameter:	12	*inches*
Peak Measured Level:	38.7	*inches*
Peak d/D Ratio:	3.23	

Surcharged 26.7 inches over crown

FM01A

Weekly Level, Velocity and Flow Hydrographs

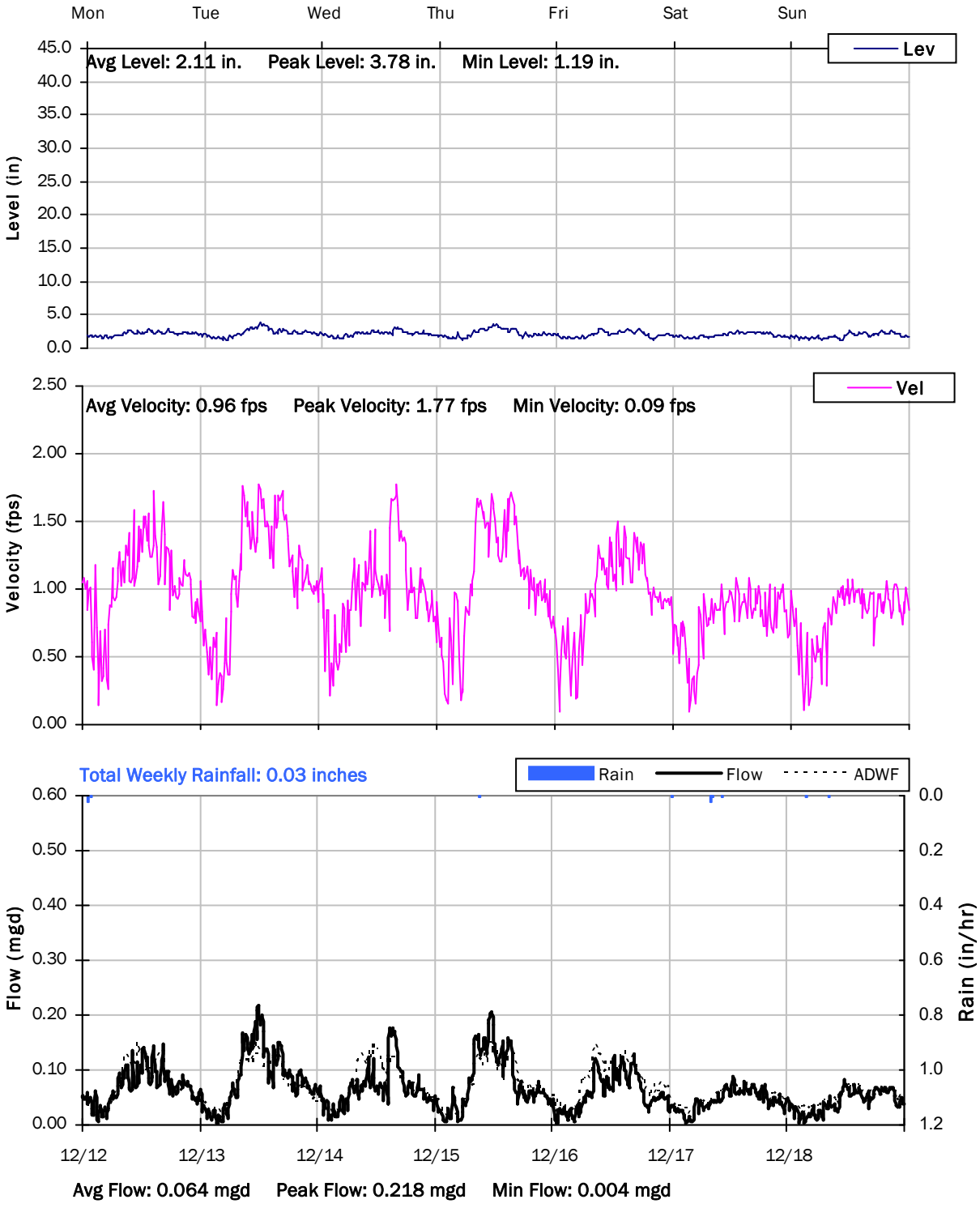
12/5/2022 to 12/12/2022



FM01A

Weekly Level, Velocity and Flow Hydrographs

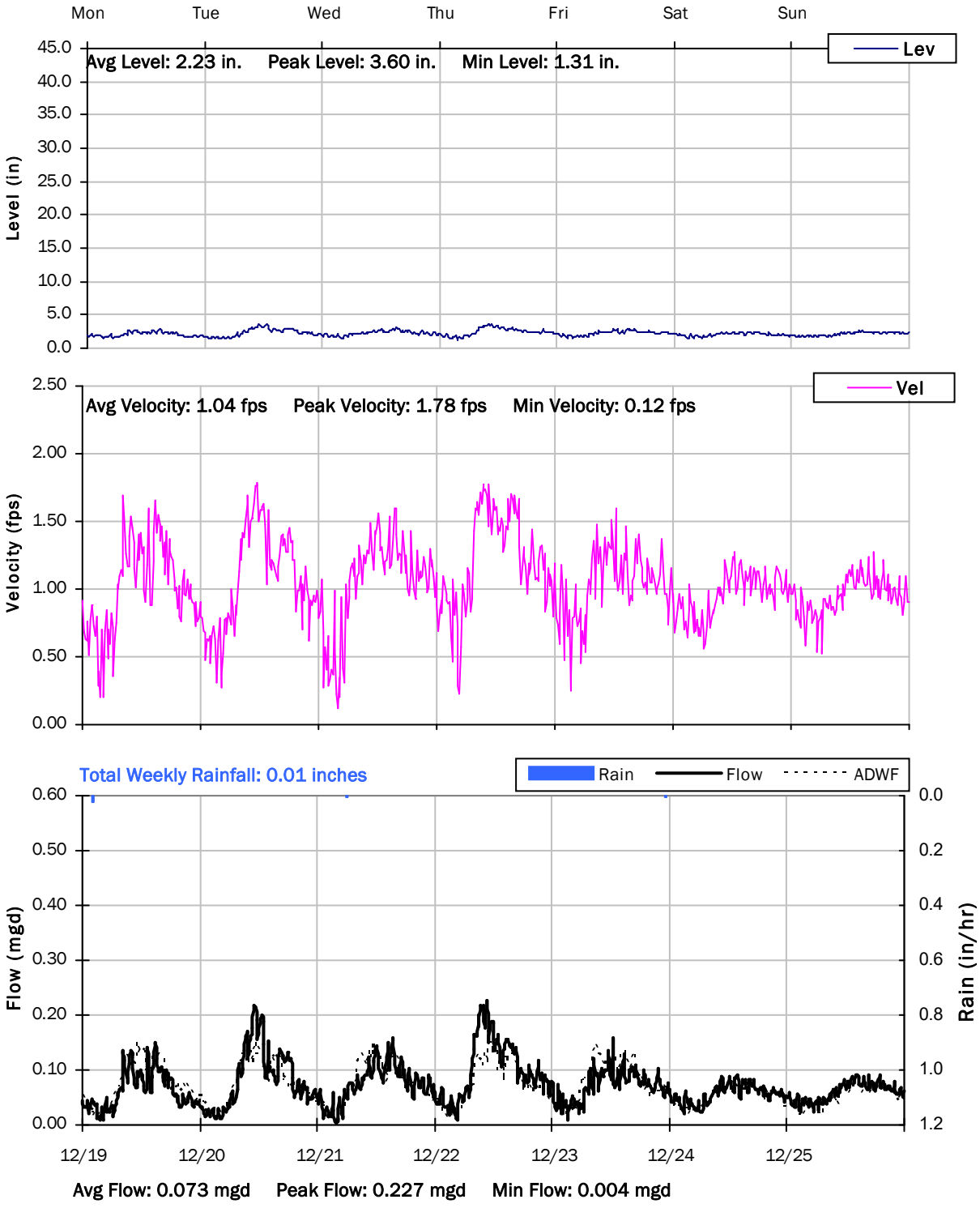
12/12/2022 to 12/19/2022



FM01A

Weekly Level, Velocity and Flow Hydrographs

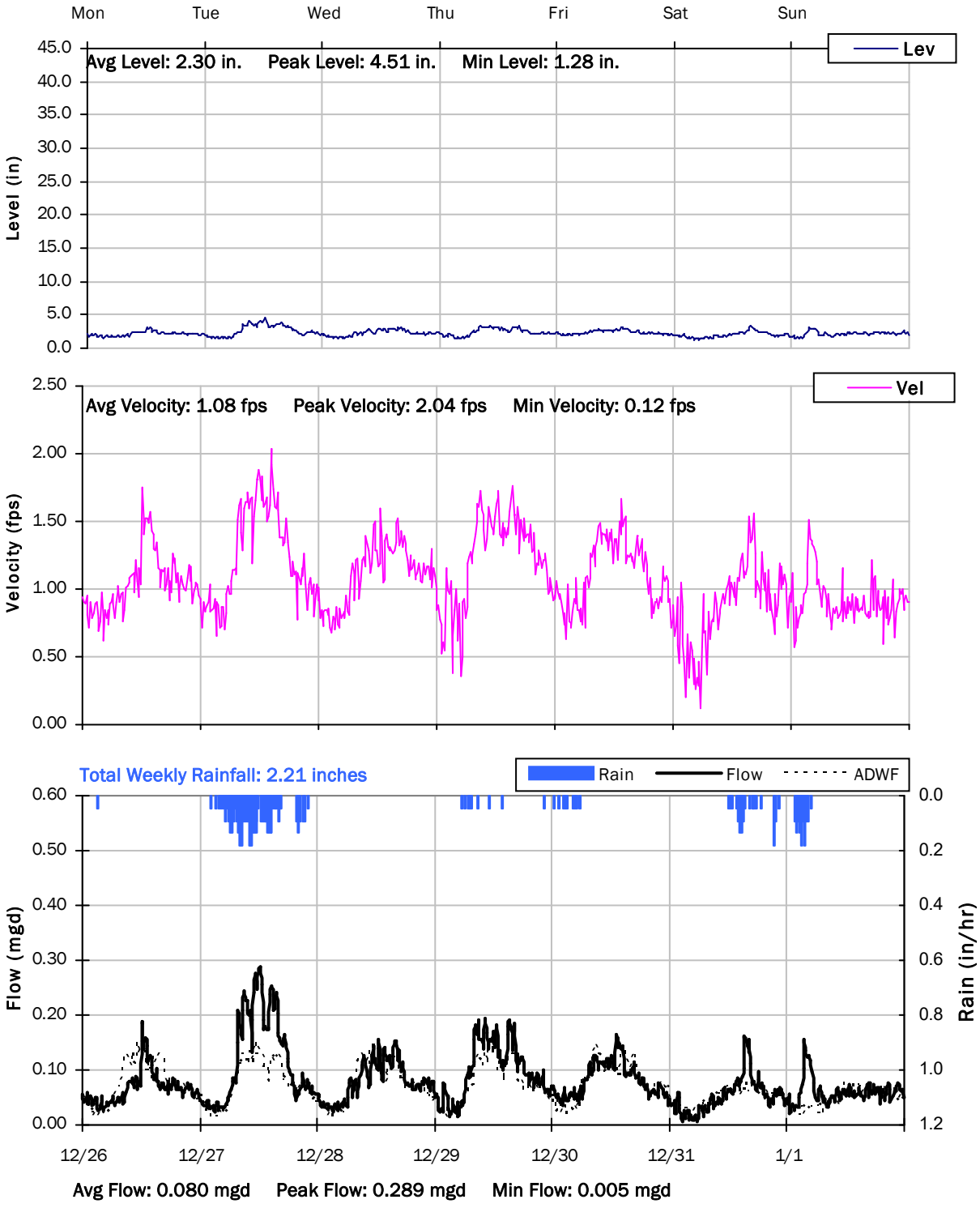
12/19/2022 to 12/26/2022



FM01A

Weekly Level, Velocity and Flow Hydrographs

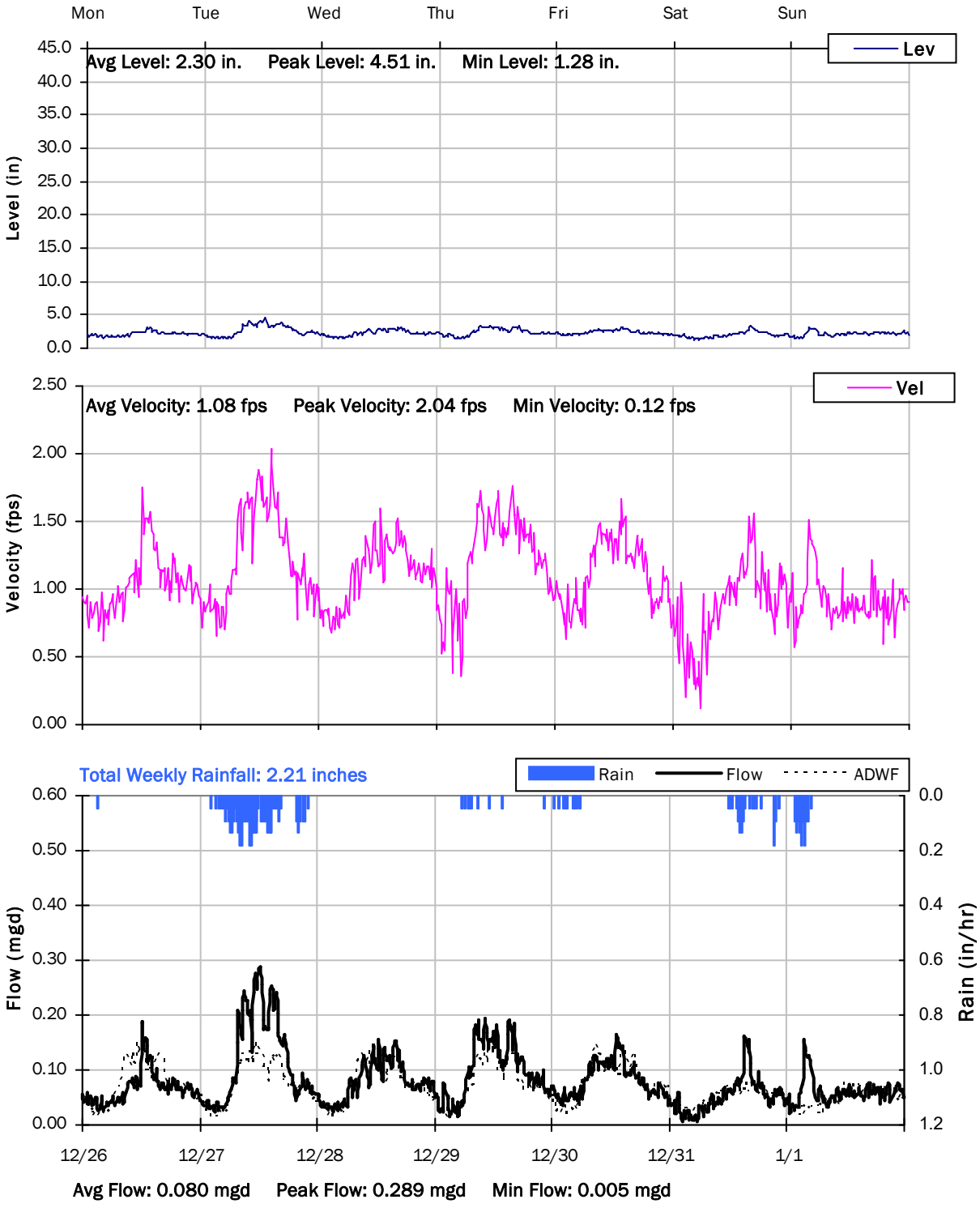
12/26/2022 to 1/2/2023



FM01A

Weekly Level, Velocity and Flow Hydrographs

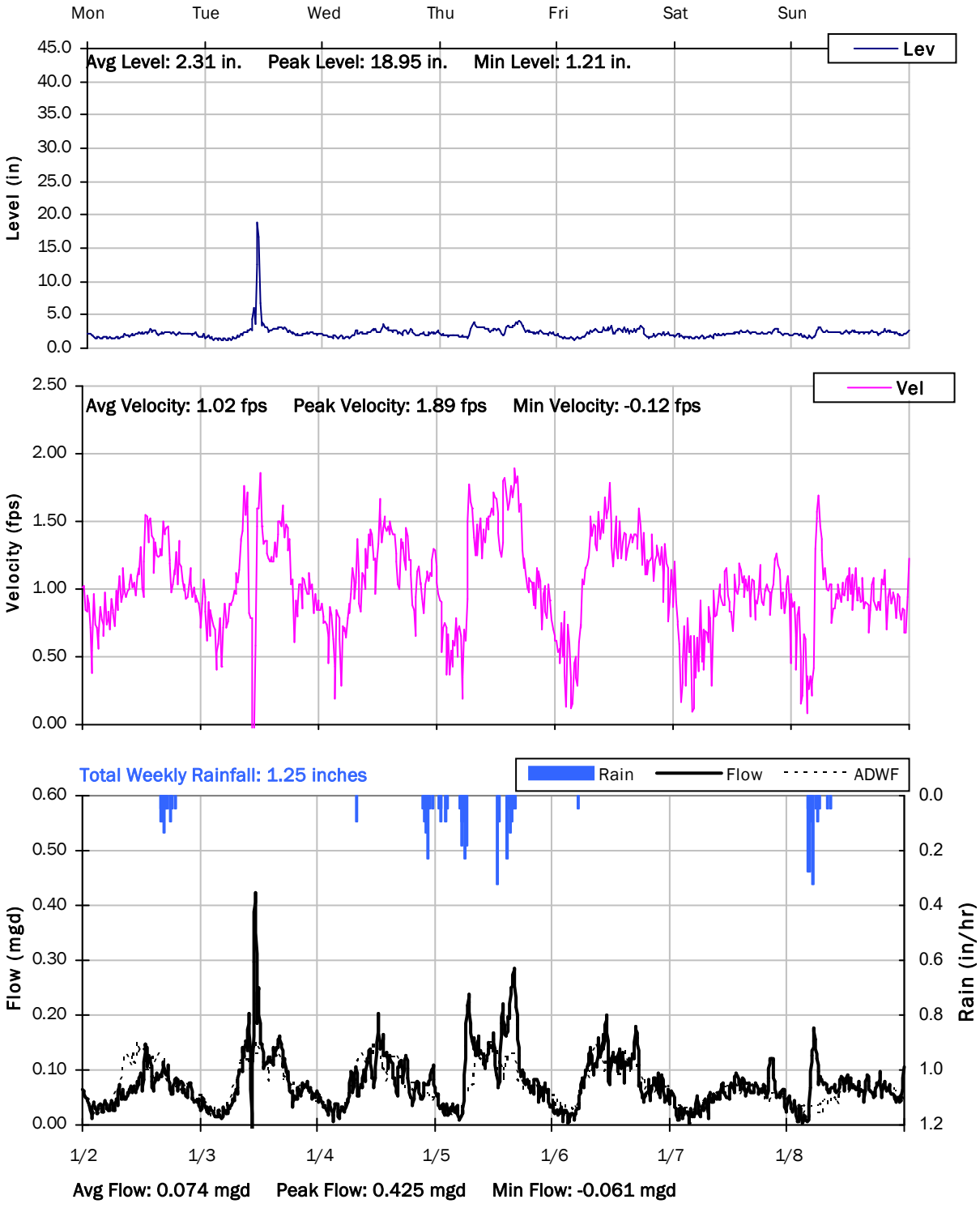
12/26/2022 to 1/2/2023



FM01A

Weekly Level, Velocity and Flow Hydrographs

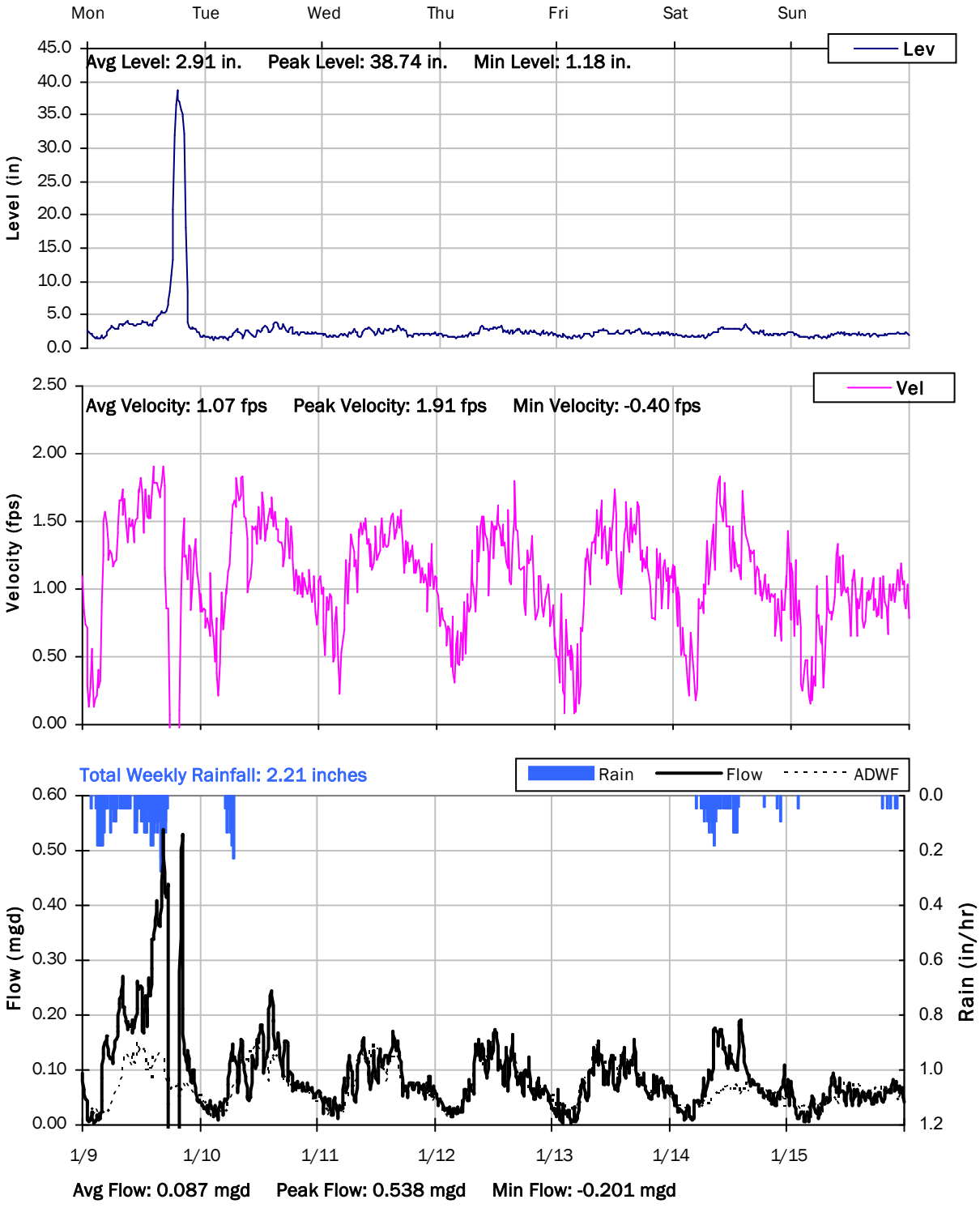
1/2/2023 to 1/9/2023



FM01A

Weekly Level, Velocity and Flow Hydrographs

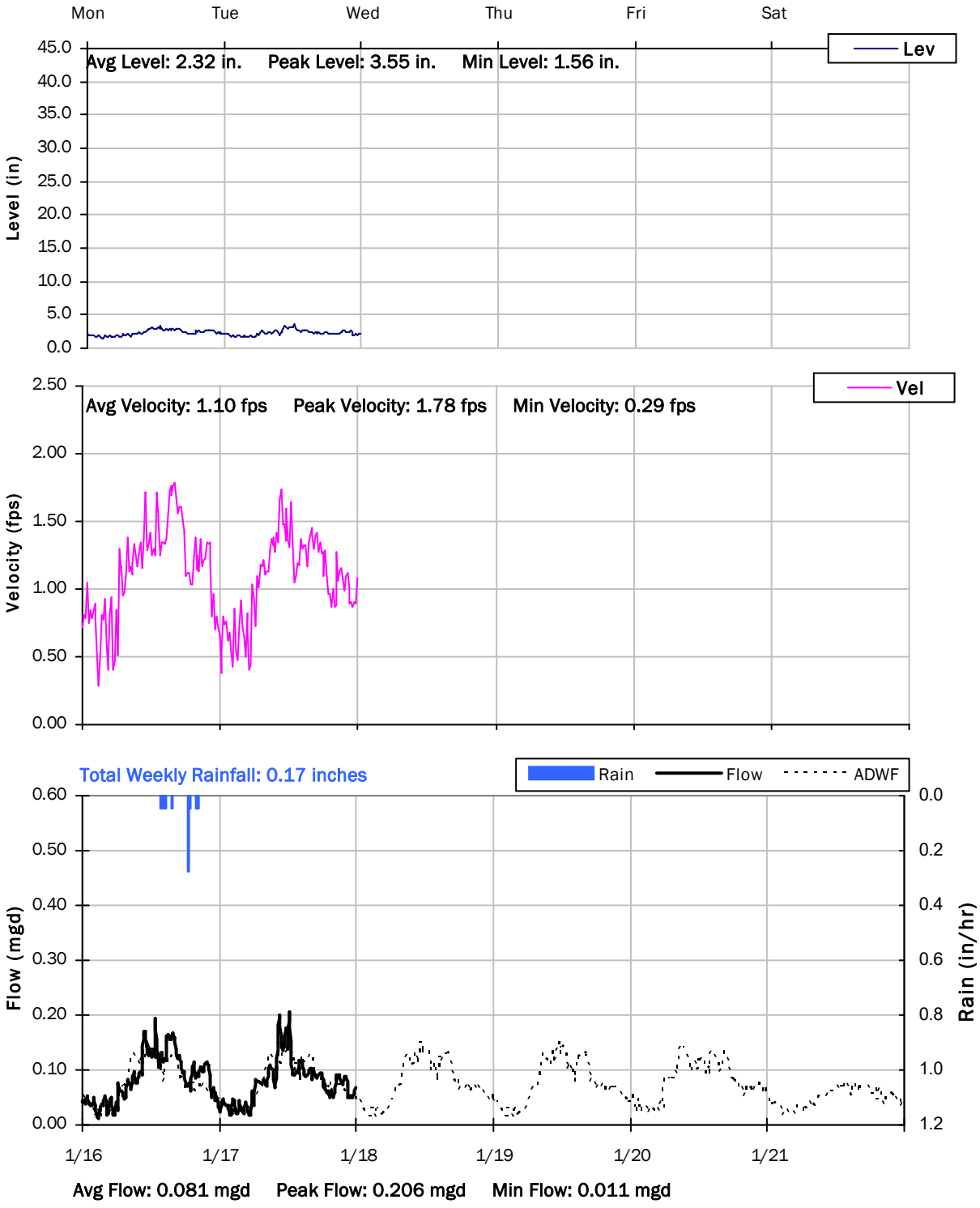
1/9/2023 to 1/16/2023



FM01A

Weekly Level, Velocity and Flow Hydrographs

1/16/2023 to 1/22/2023



Monitoring Site: FM01B

Selma-Kingsburg-Fowler Sanitation District

Sanitary Sewer Flow Monitoring

December 09, 2022 - January 17, 2023

Location: Median off of E Adams Ave

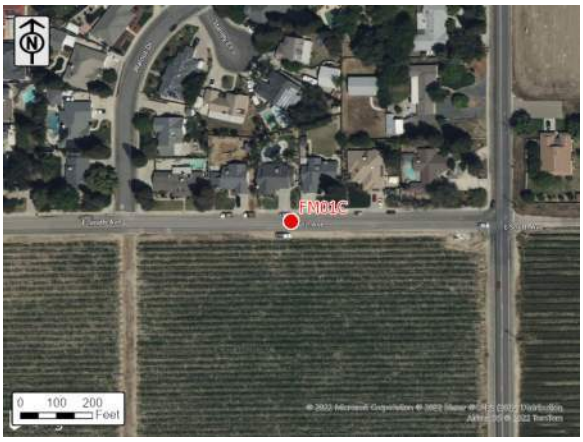
Data Summary Report

Vicinity Map: FM01B

FM01C

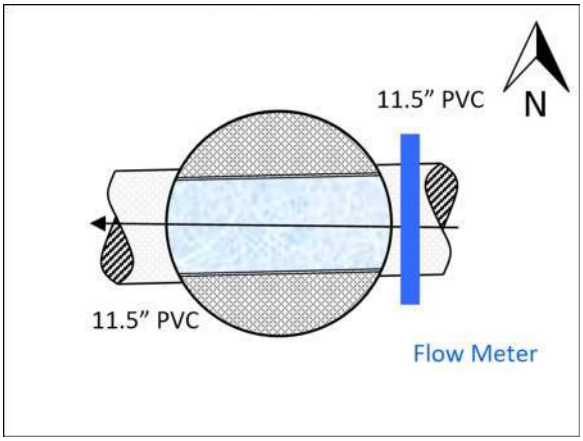
Site Information MH ID: 3DG0-0200

Location:	381 E South Ave
Coordinates:	119.6836° W, 36.6200° N
Rim Elevation:	302.64 feet
Expected Pipe Diameter:	12 inches
Measured Pipe Diameter:	11.5 inches
ADWF:	0.104 mgd
Peak Measured Flow:	0.412 mgd
Sediment:	0.25 inches



Satellite Map

Sanitary Map



Flow Sketch

Street View

Plan View

FM01B

Additional Site Photos

Effluent Pipe

Northwest Influent Pipe

FM01B

Additional Site Photos

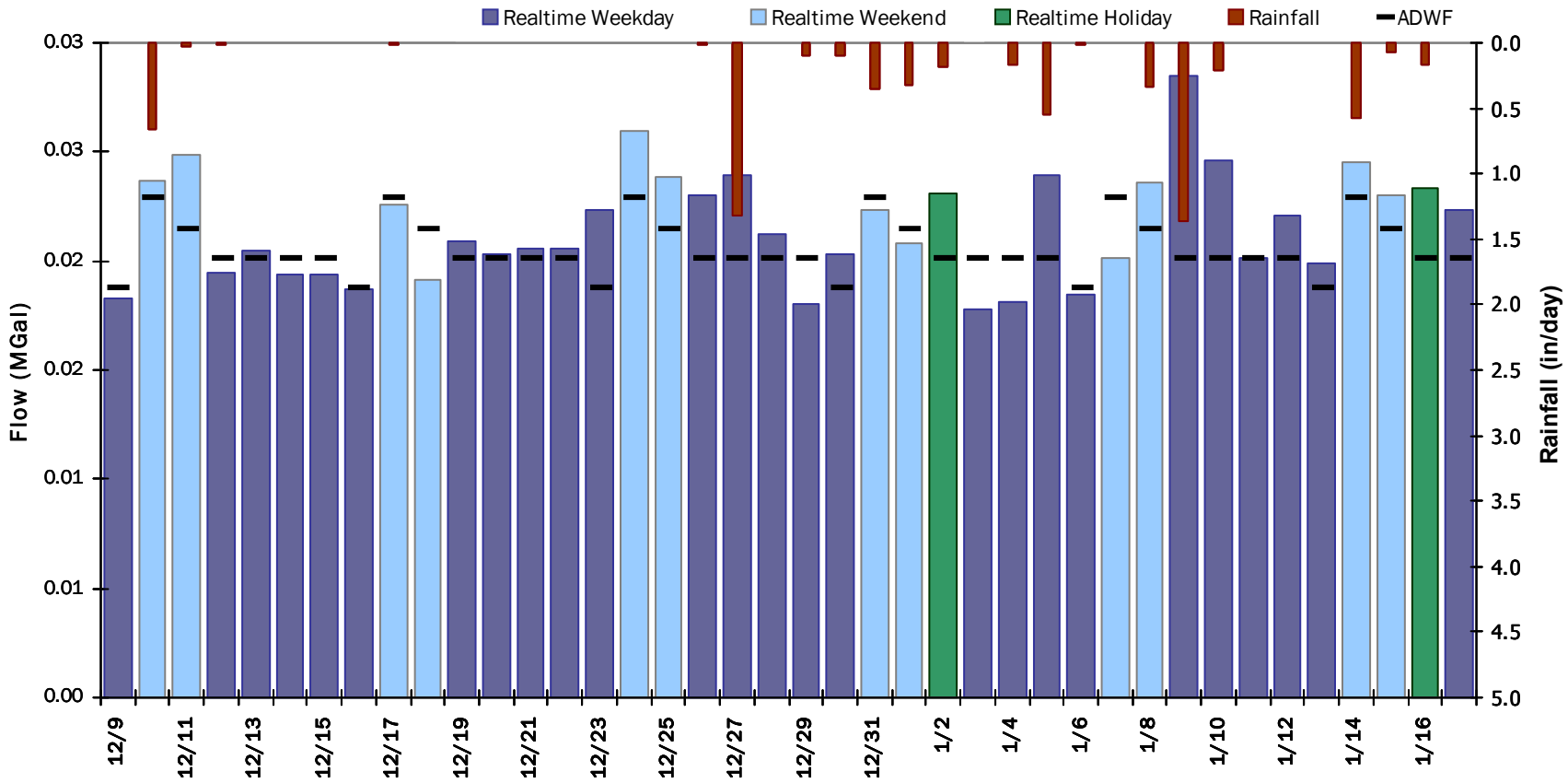
Mounted Northeast Influent Pipe

FM01B

Period Flow Summary: Daily Flow Totals

Avg Daily Flow: 0.022 MGal Peak Daily Flow: 0.028 MGal Min Daily Flow: 0.018 MGal

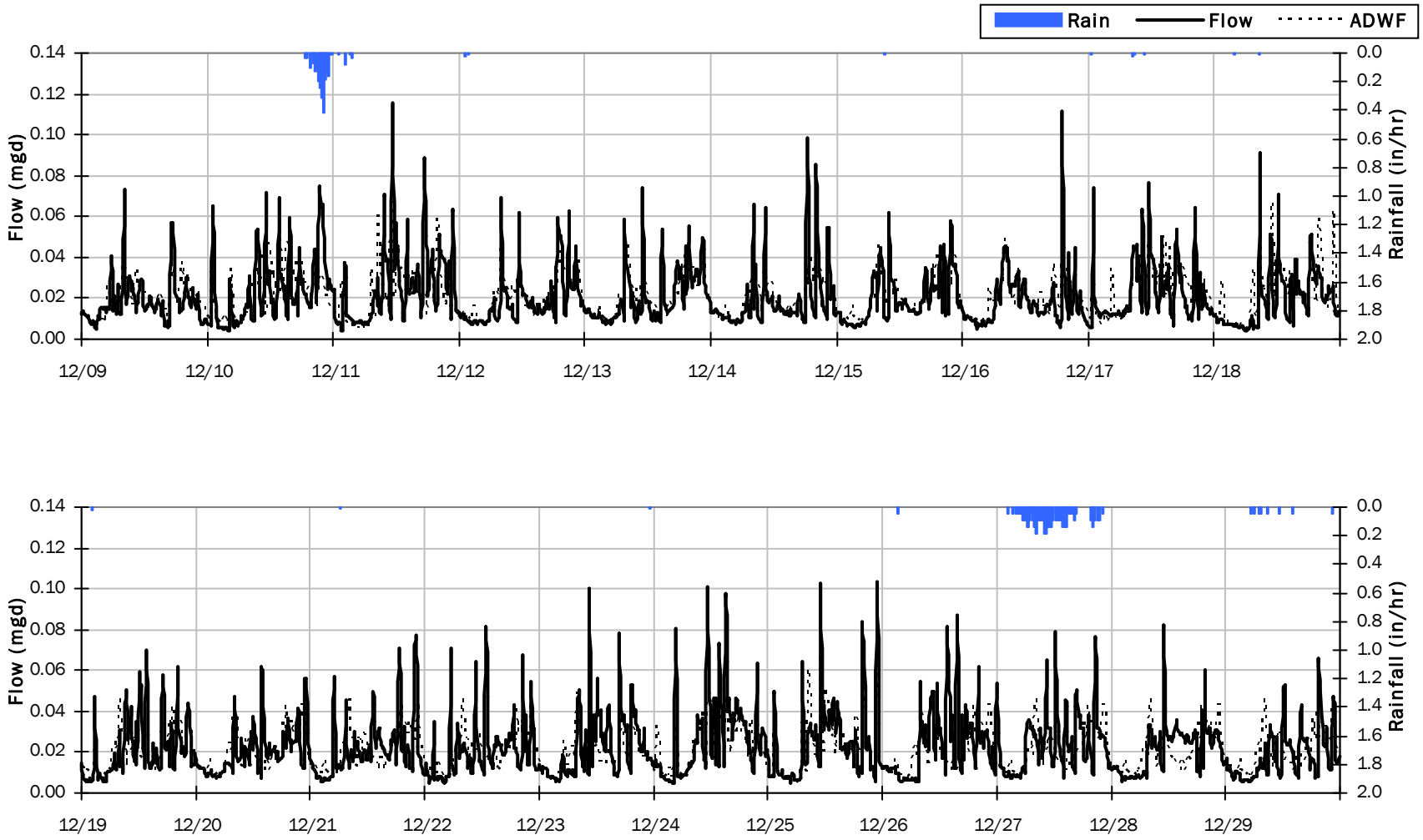
Total Rainfall: 6.57 inches



FM01B

Flow Summary: 12/9/2022 to 12/29/2022

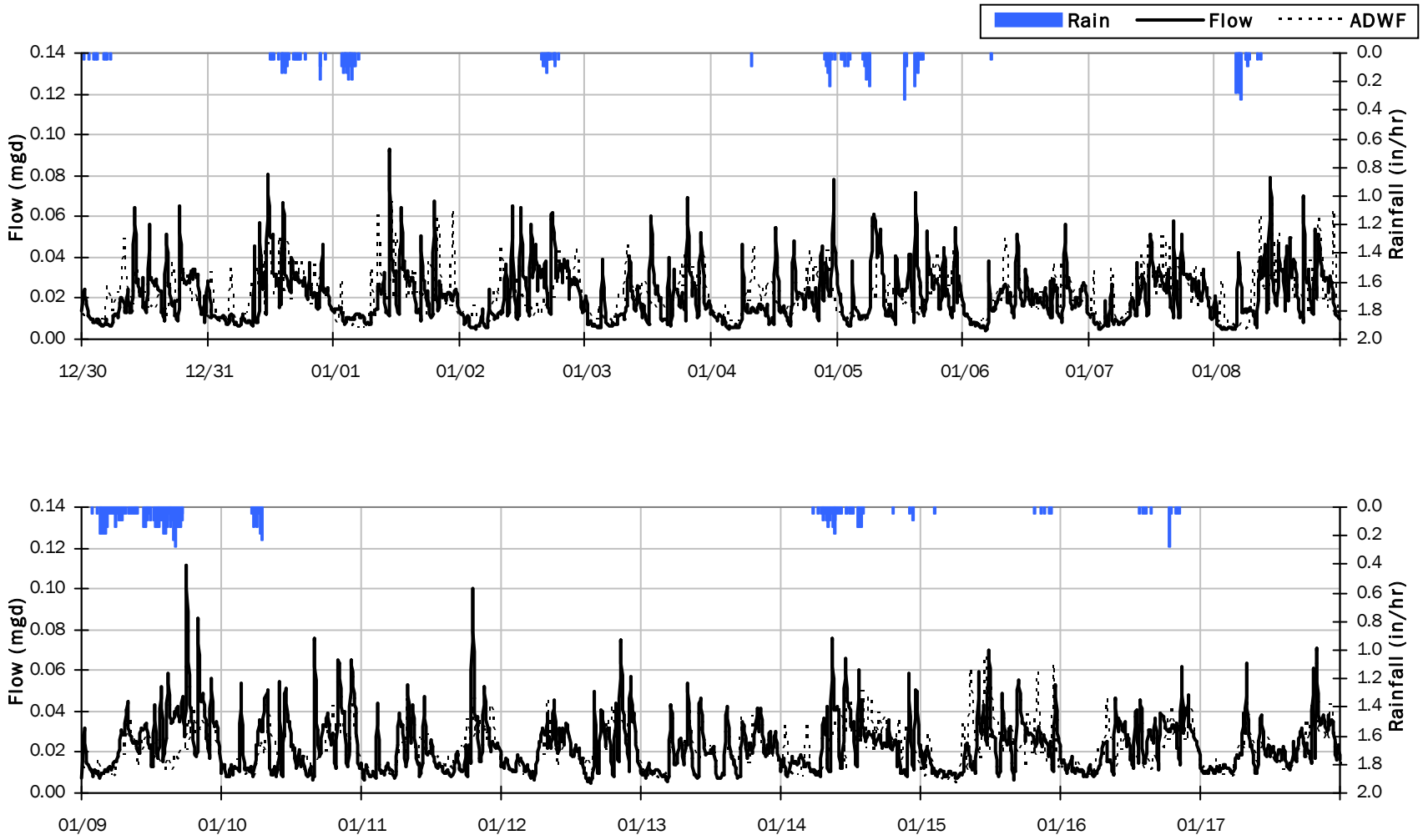
Period Rainfall: 2.16 inches Period Avg Flow: 0.021 mgd Period Peak Flow: 0.116 mgd Period Min Flow: 0.004 mgd



FM01B

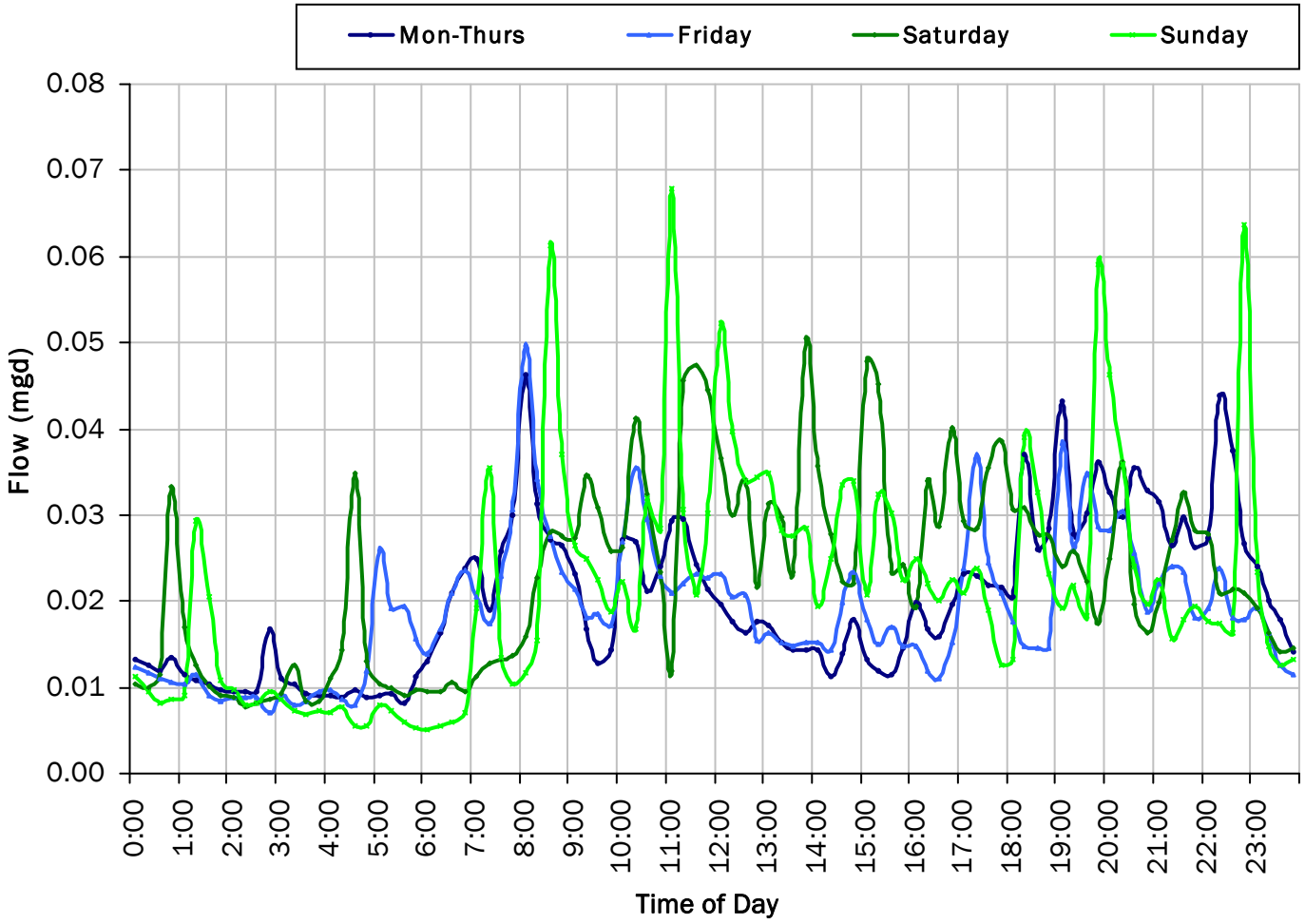
Flow Summary: 12/30/2022 to 1/17/2023

Period Rainfall: 4.40 inches Period Avg Flow: 0.022 mgd Period Peak Flow: 0.111 mgd Period Min Flow: 0.004 mgd



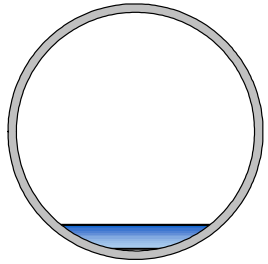
FM01B

Average Dry Weather Flow Hydrographs



ADWF:

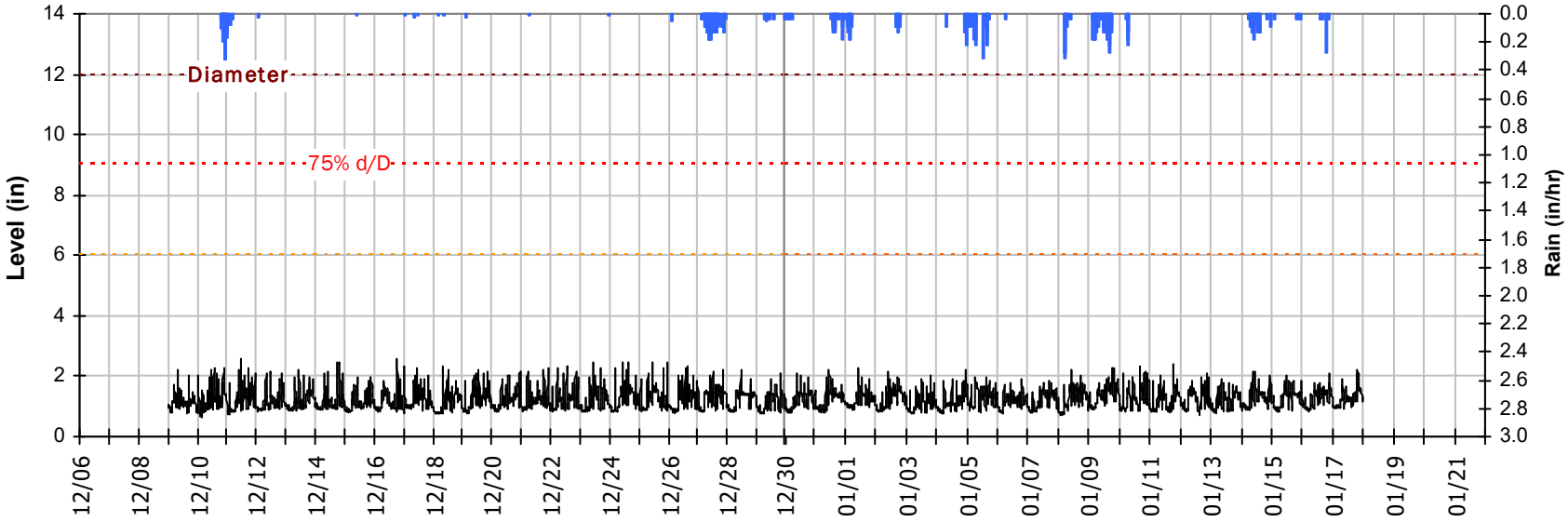
0.021 *mgd*

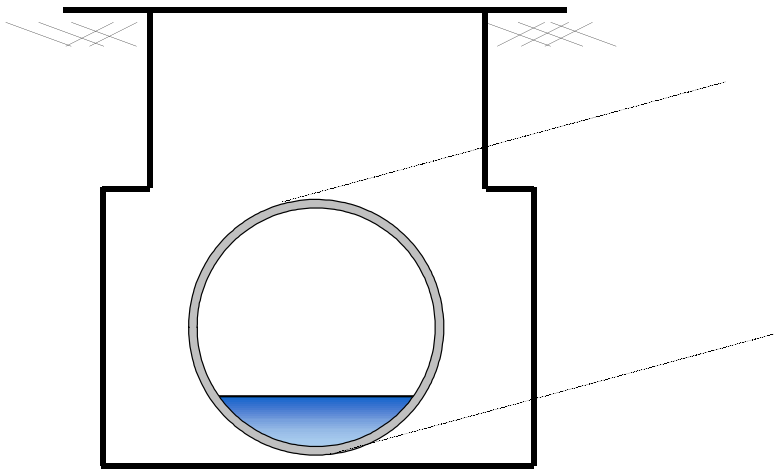


FM01B

Site Capacity and Surcharge Summary

Realtime Flow Levels with Rainfall Data over Peak Level Period



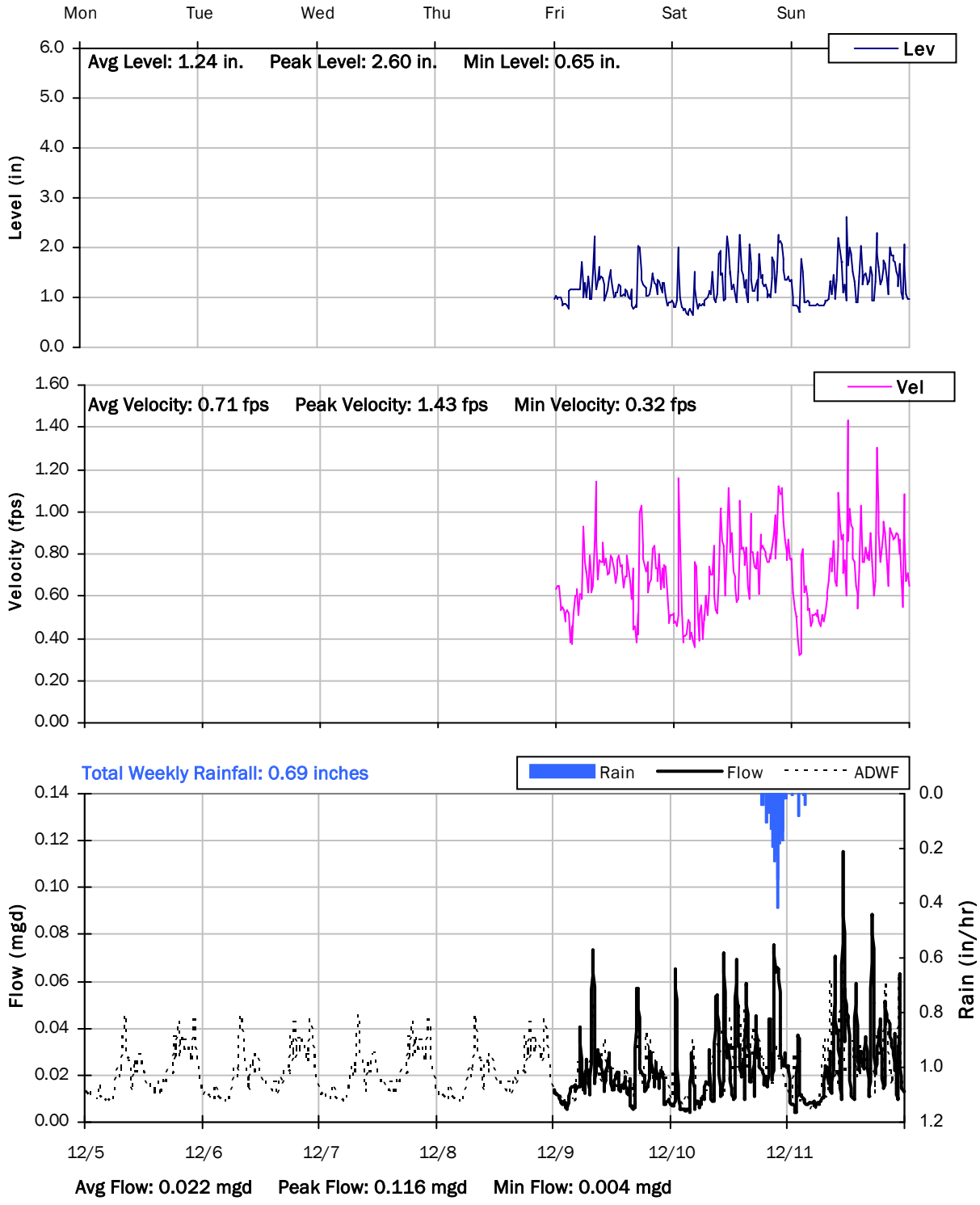


Pipe Diameter:	12	*inches*
Peak Measured Level:	2.60	*inches*
Peak d/D Ratio:	0.22	

FM01B

Weekly Level, Velocity and Flow Hydrographs

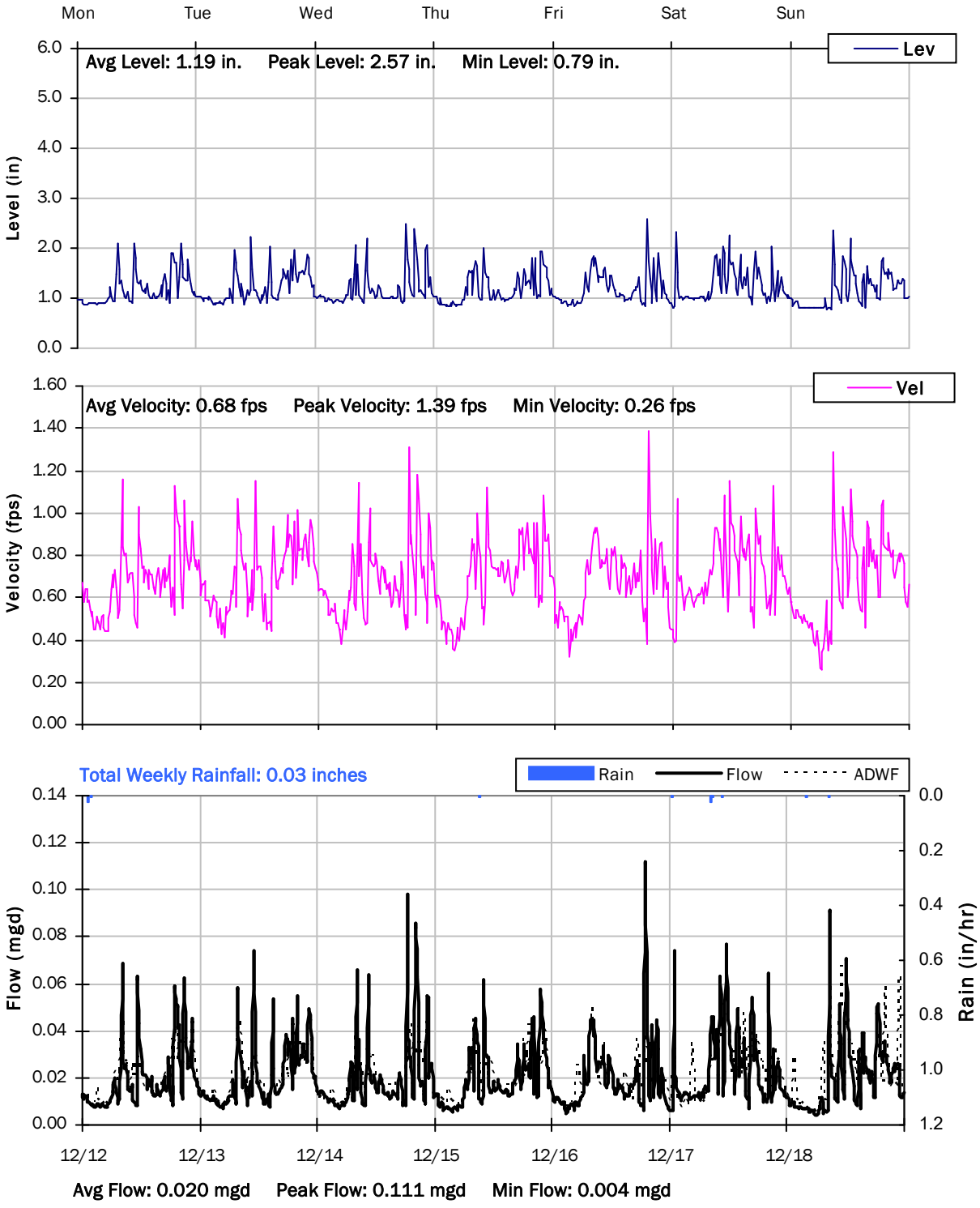
12/5/2022 to 12/12/2022



FM01B

Weekly Level, Velocity and Flow Hydrographs

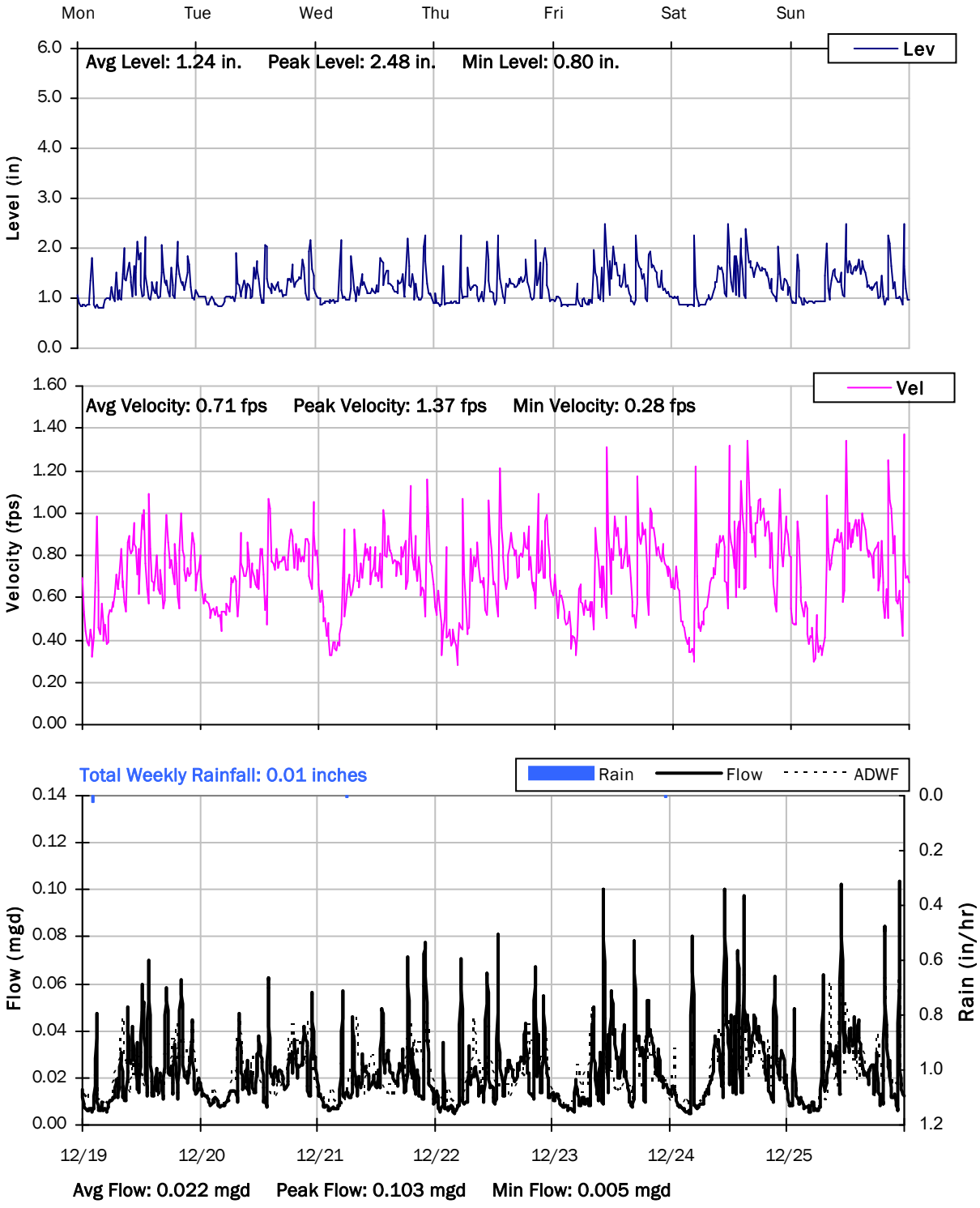
12/12/2022 to 12/19/2022



FM01B

Weekly Level, Velocity and Flow Hydrographs

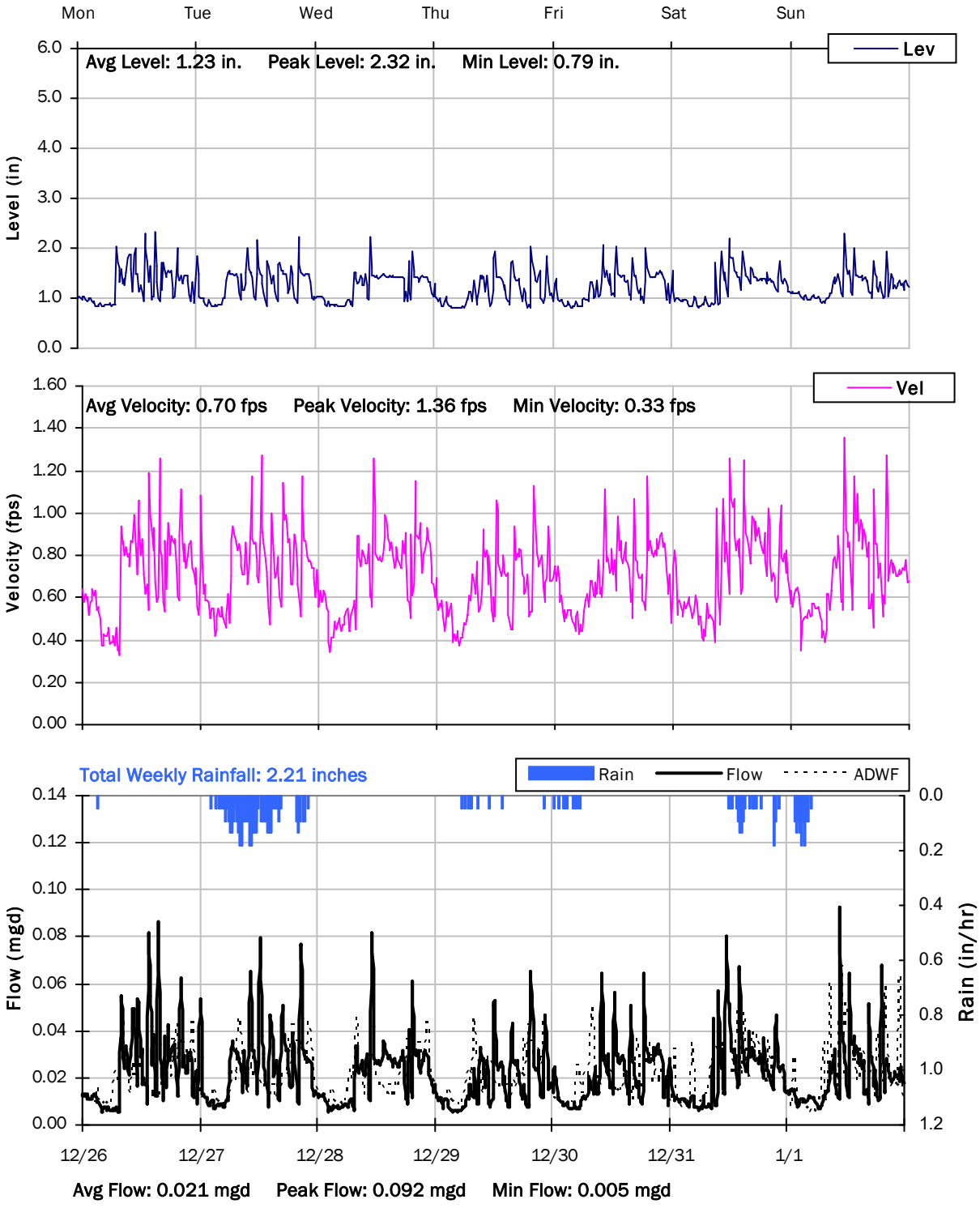
12/19/2022 to 12/26/2022



FM01B

Weekly Level, Velocity and Flow Hydrographs

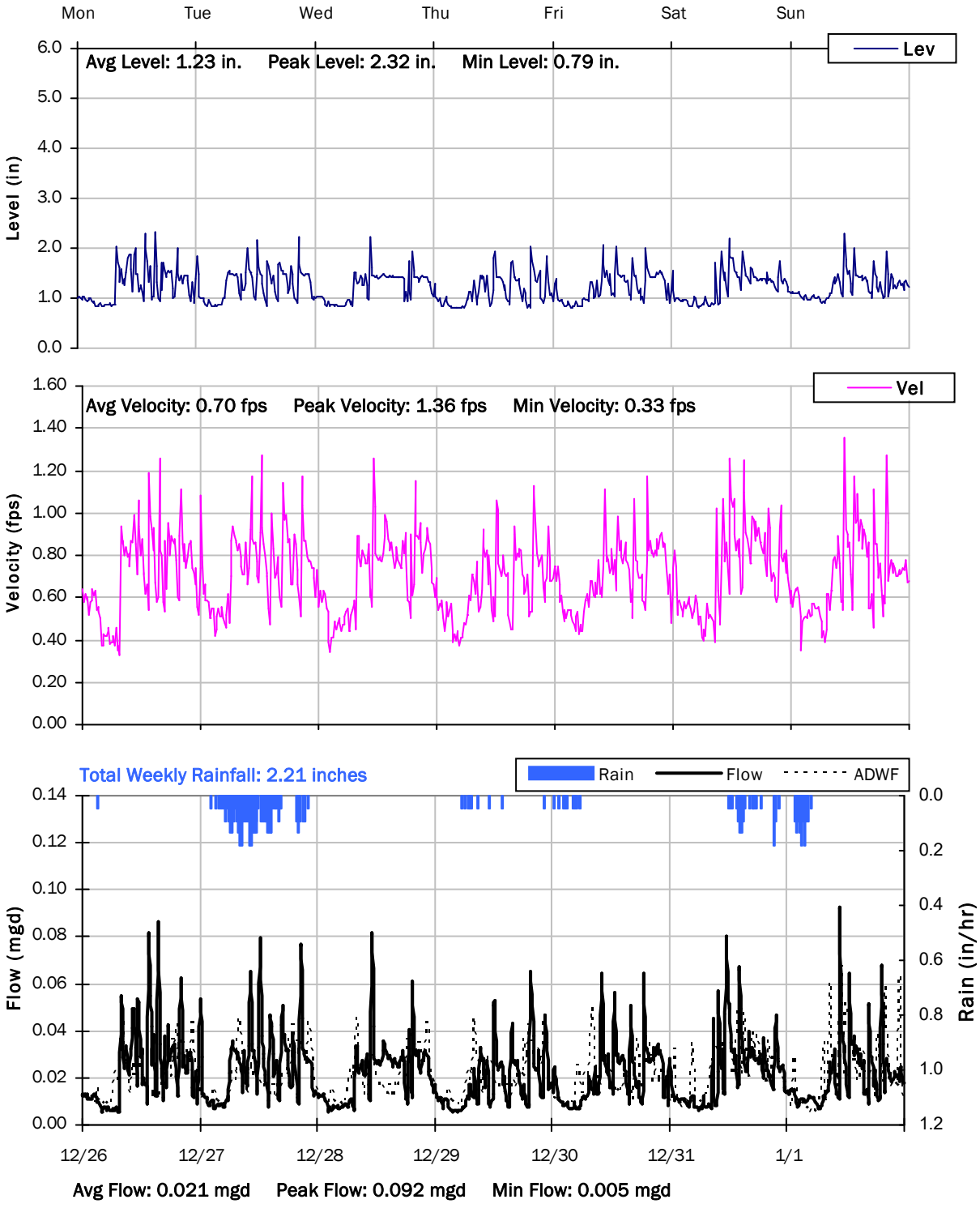
12/26/2022 to 1/2/2023



FM01B

Weekly Level, Velocity and Flow Hydrographs

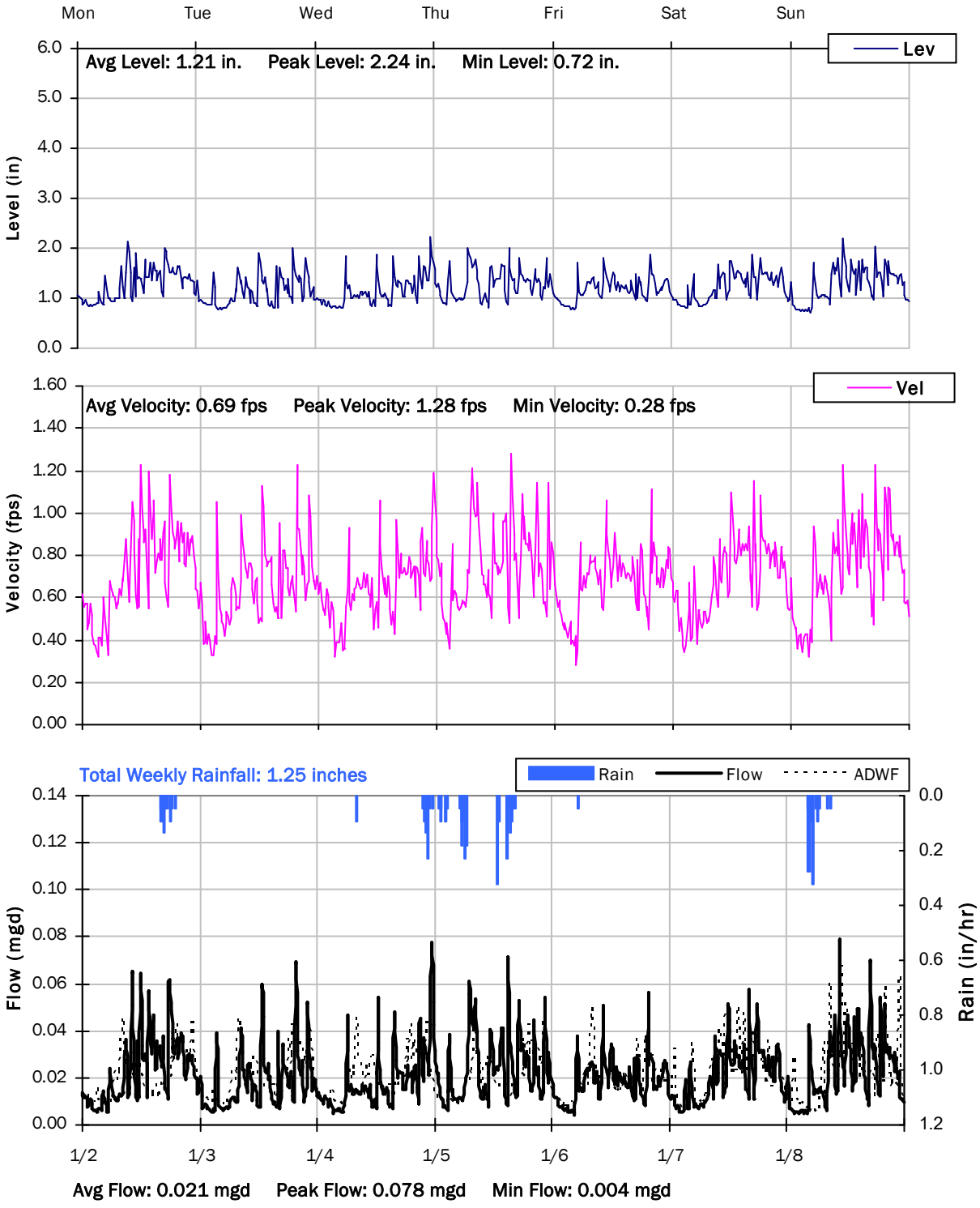
12/26/2022 to 1/2/2023



FM01B

Weekly Level, Velocity and Flow Hydrographs

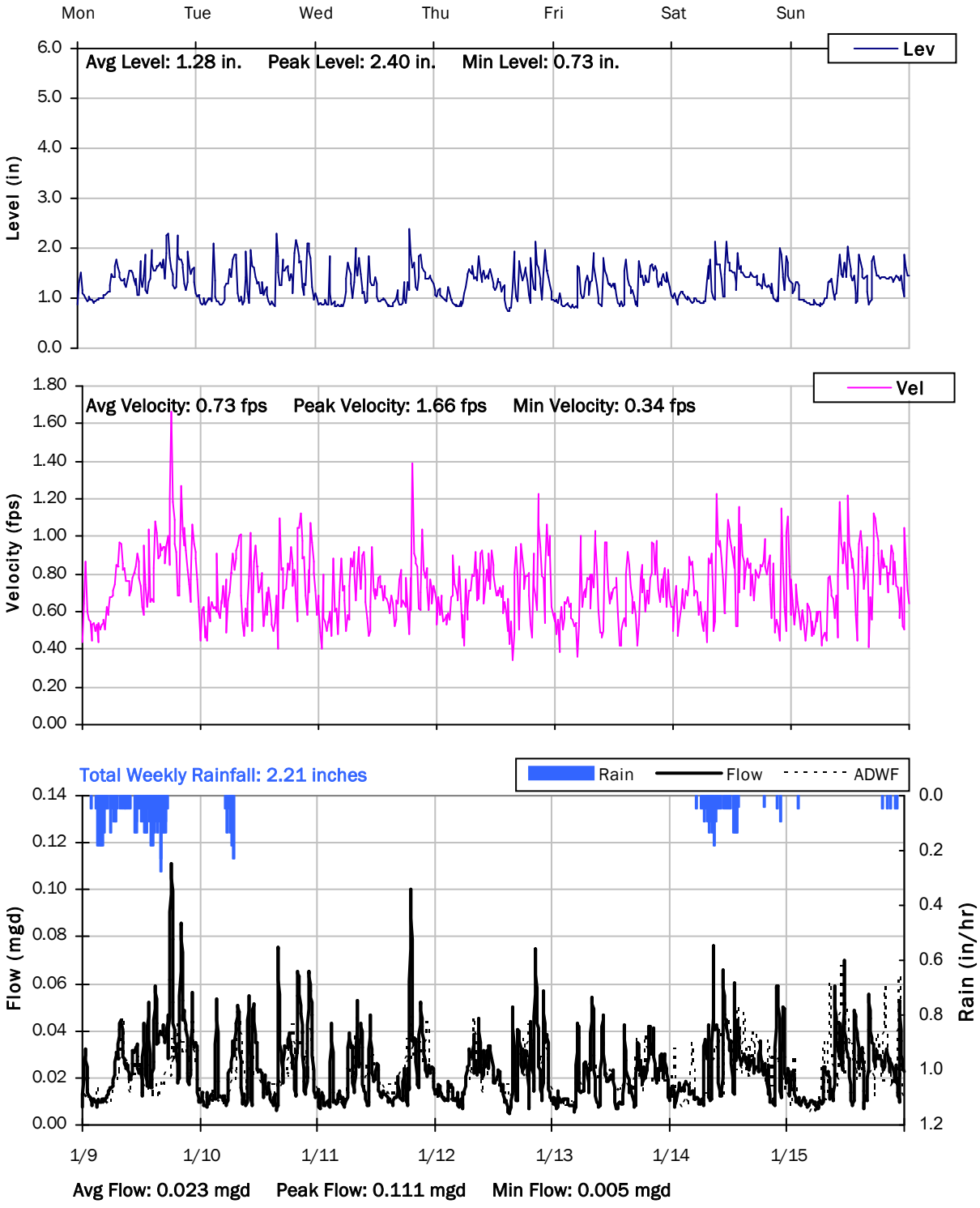
1/2/2023 to 1/9/2023



FM01B

Weekly Level, Velocity and Flow Hydrographs

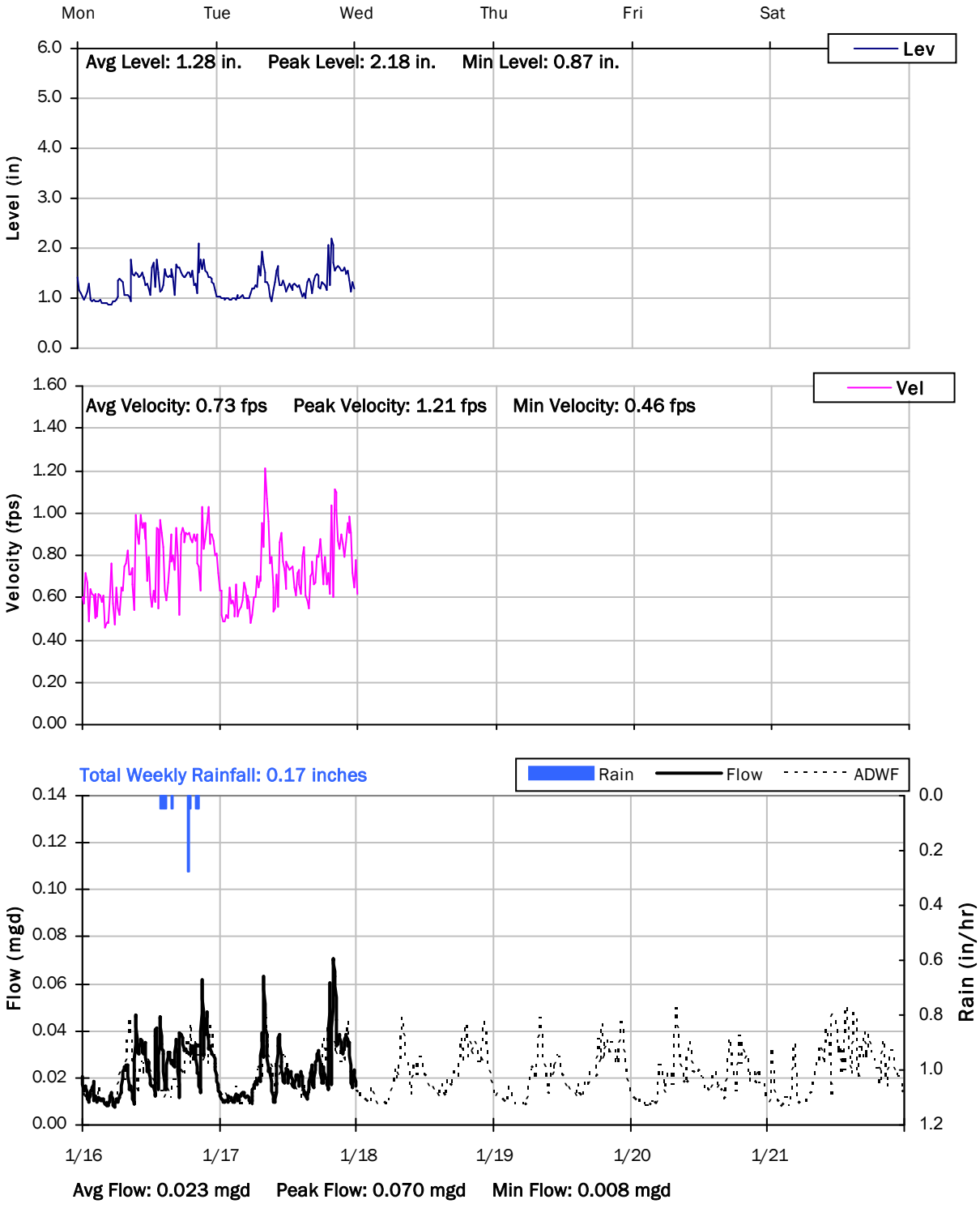
1/9/2023 to 1/16/2023



FM01B

Weekly Level, Velocity and Flow Hydrographs

1/16/2023 to 1/22/2023



Monitoring Site: FM01C

Selma-Kingsburg-Fowler Sanitation District

Sanitary Sewer Flow Monitoring

December 09, 2022 - January 17, 2023

Location: 381 E South Ave

Data Summary Report

Vicinity Map: FM01C

FM02

Site Information MH ID: 2000-5100

Location: 10273 Golden State Blvd

Coordinates: 119.6366° W, 36.5884° N

Rim Elevation: 312.68 feet

Expected Pipe Diameter: 33 inches

Measured Pipe Diameter: 33 inches

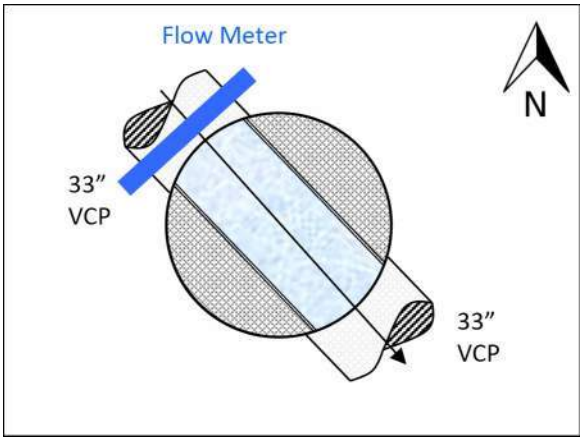
ADWF: 1.040 mgd

Peak Measured Flow: 3.350 mgd

Sediment: None

Satellite Map

Sanitary Map



Flow Sketch

Street View

Plan View

FM01C

Additional Site Photos

Effluent Pipe

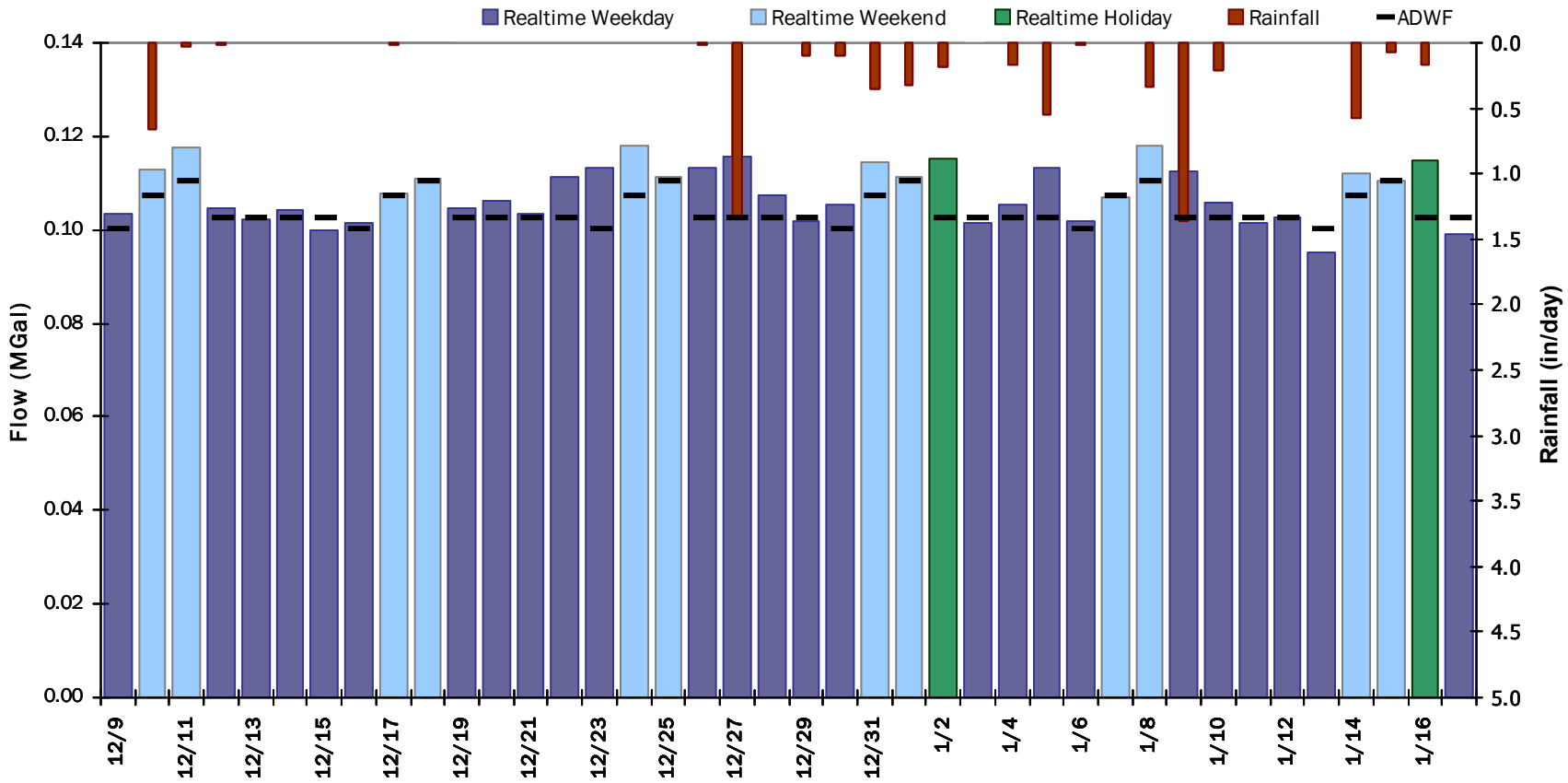
Influent Pipe

FM01C

Period Flow Summary: Daily Flow Totals

Avg Daily Flow: 0.108 MGal Peak Daily Flow: 0.118 MGal Min Daily Flow: 0.095 MGal

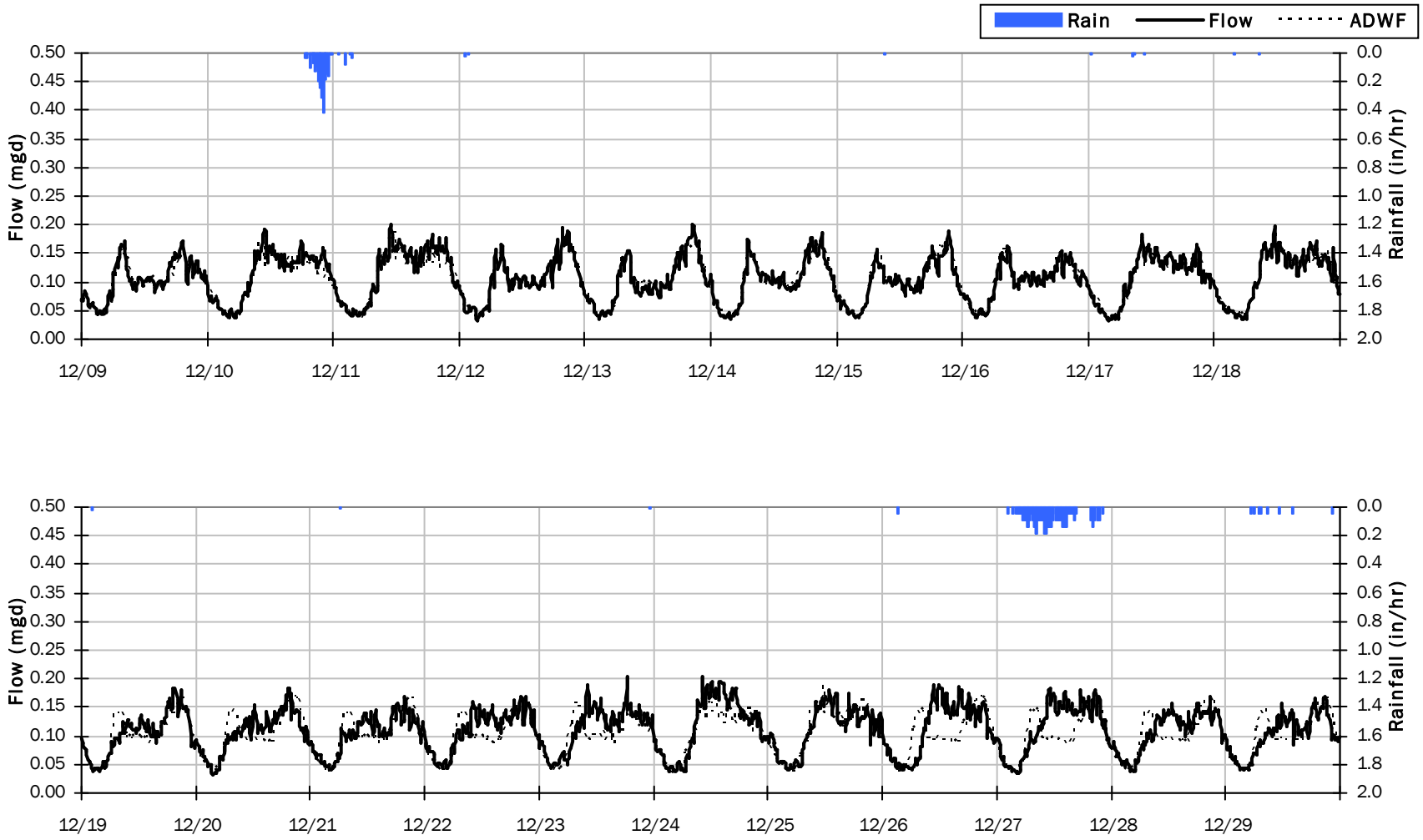
Total Rainfall: 6.57 inches



FM01C

Flow Summary: 12/9/2022 to 12/29/2022

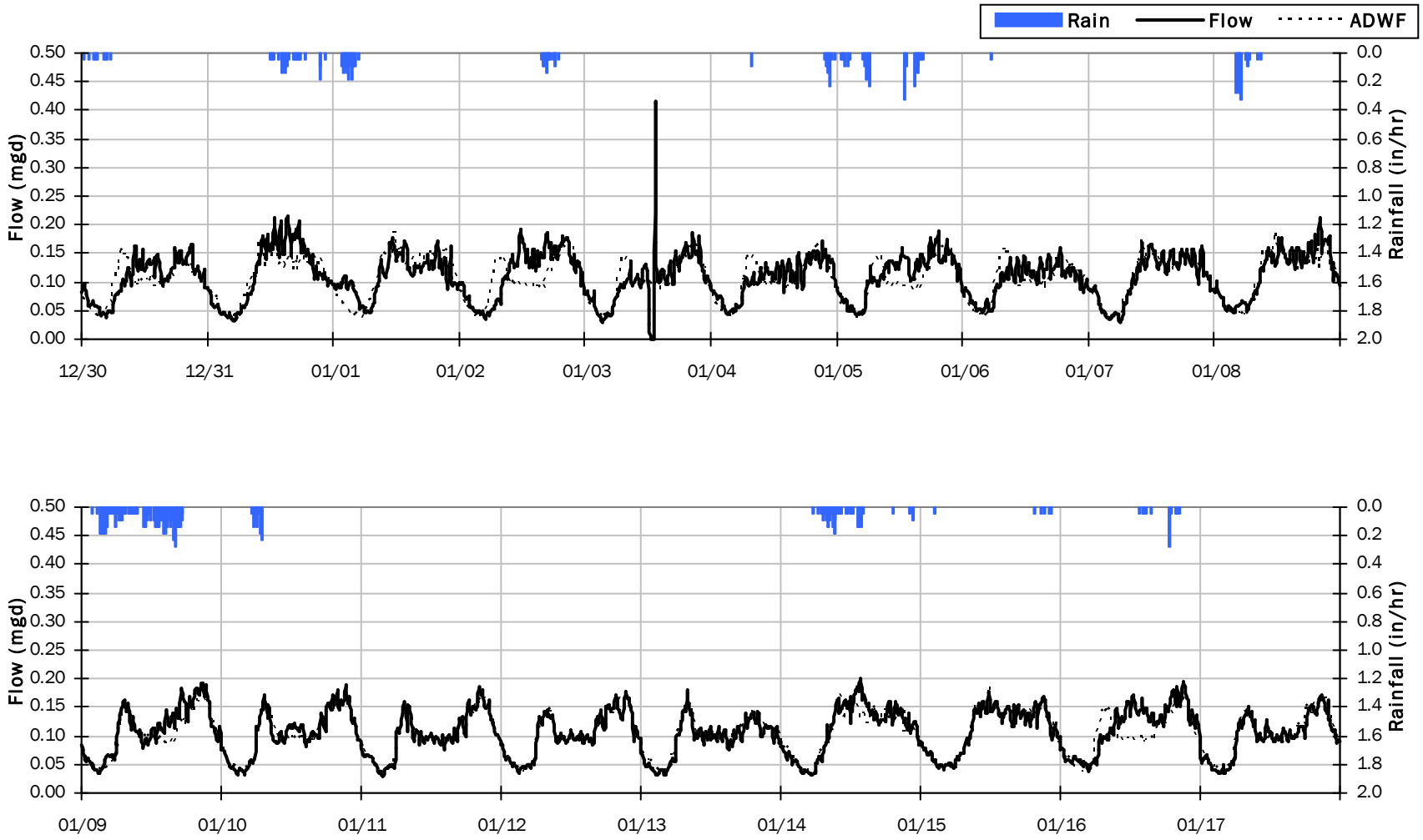
Period Rainfall: 2.16 inches Period Avg Flow: 0.108 mgd Period Peak Flow: 0.205 mgd Period Min Flow: 0.031 mgd



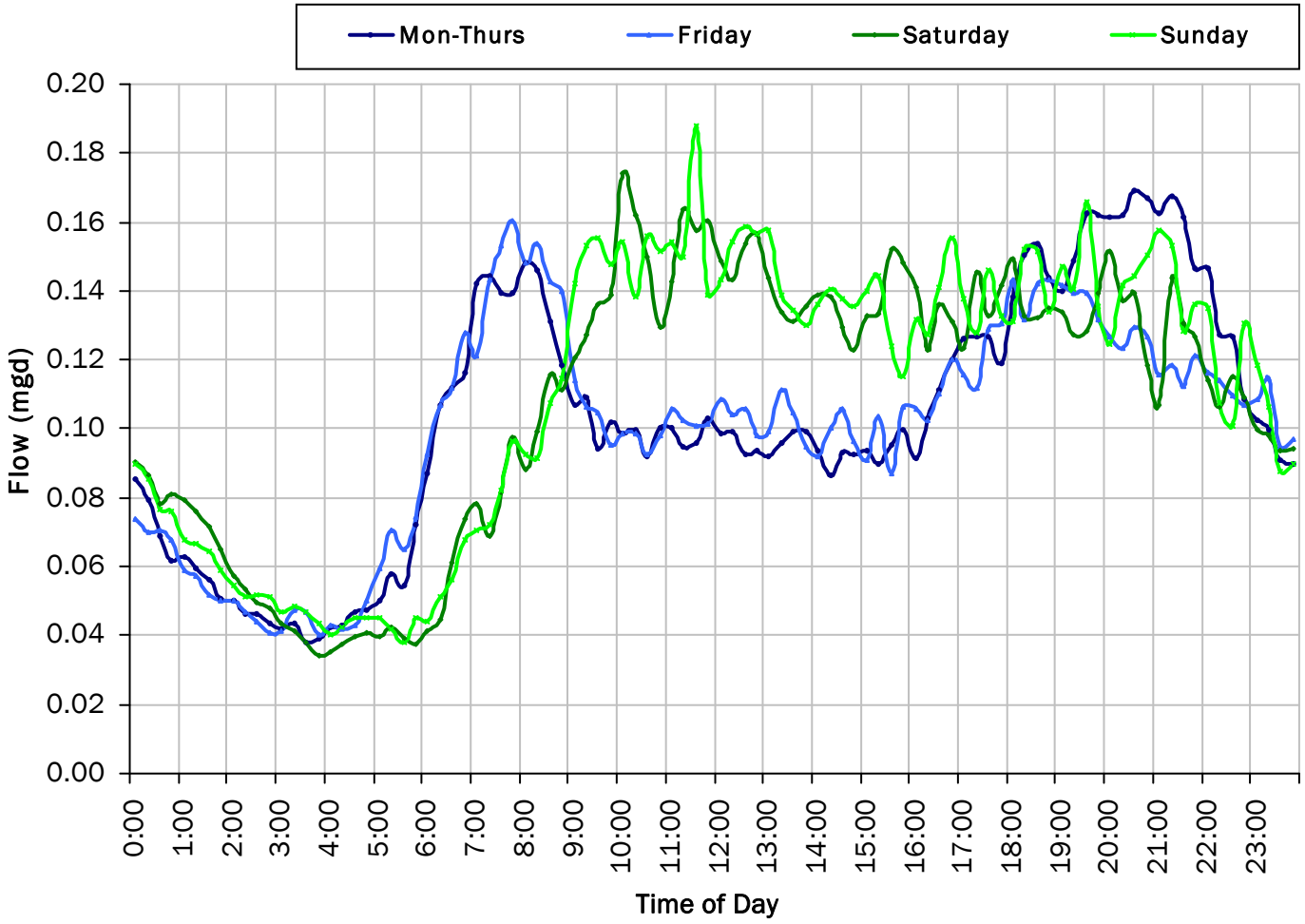
FM01C

Flow Summary: 12/30/2022 to 1/17/2023

Period Rainfall: 4.40 inches Period Avg Flow: 0.108 mgd Period Peak Flow: 0.412 mgd Period Min Flow: 0.000 mgd

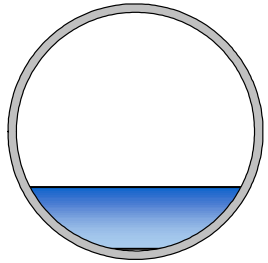


FM01C
Average Dry Weather Flow Hydrographs



ADWF:

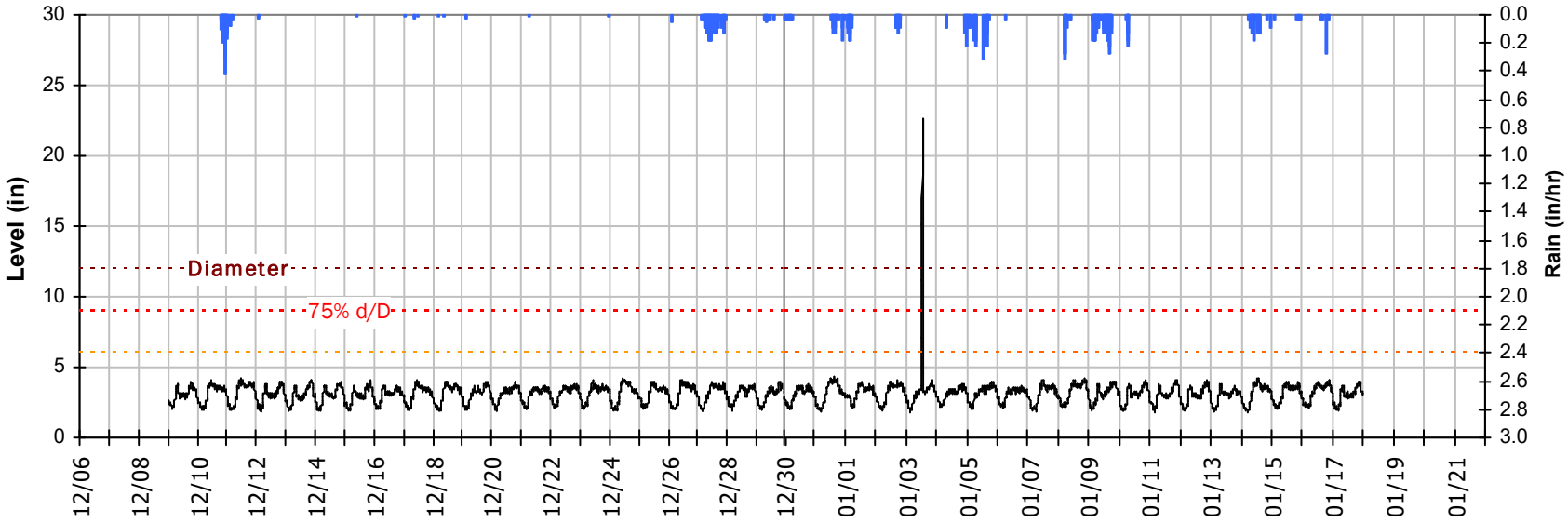
0.104 *mgd*

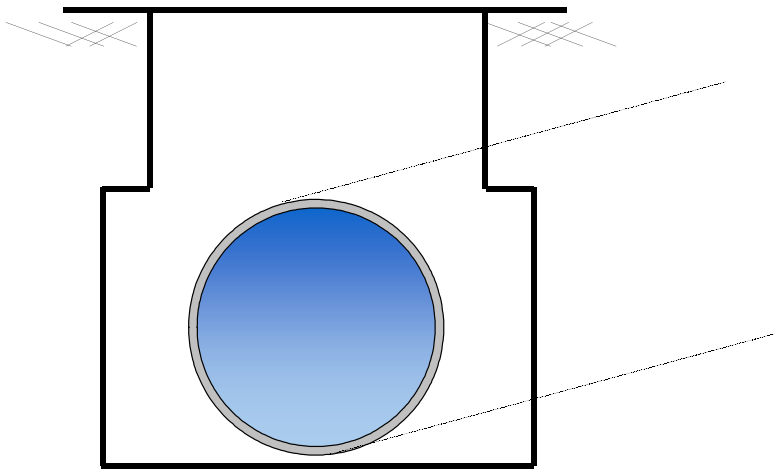


FM01C

Site Capacity and Surcharge Summary

Realtime Flow Levels with Rainfall Data over Peak Level Period





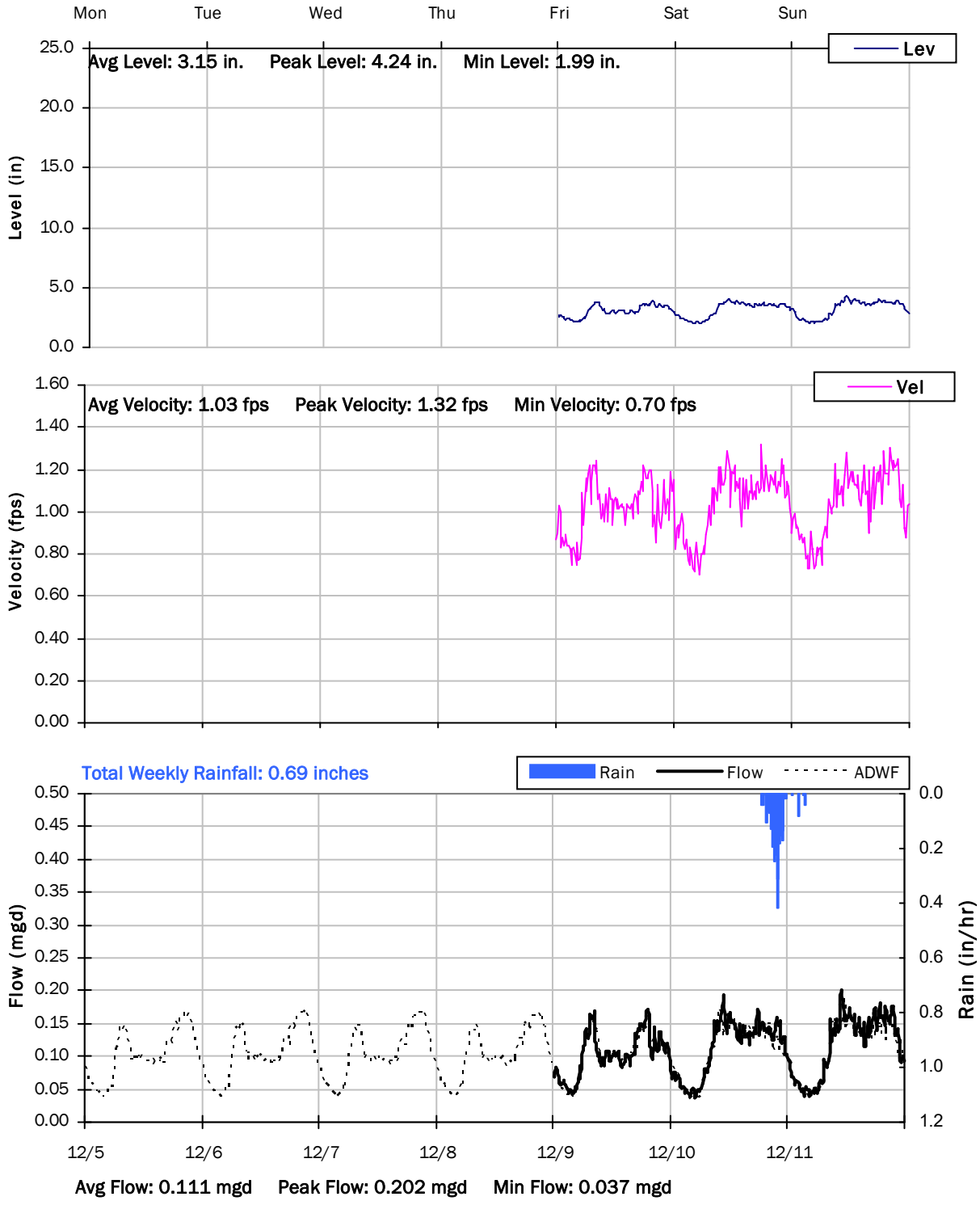
Pipe Diameter:	12	*inches*
Peak Measured Level:	22.7	*inches*
Peak d/D Ratio:	1.89	

Surcharged 10.7 inches over crown

FM01C

Weekly Level, Velocity and Flow Hydrographs

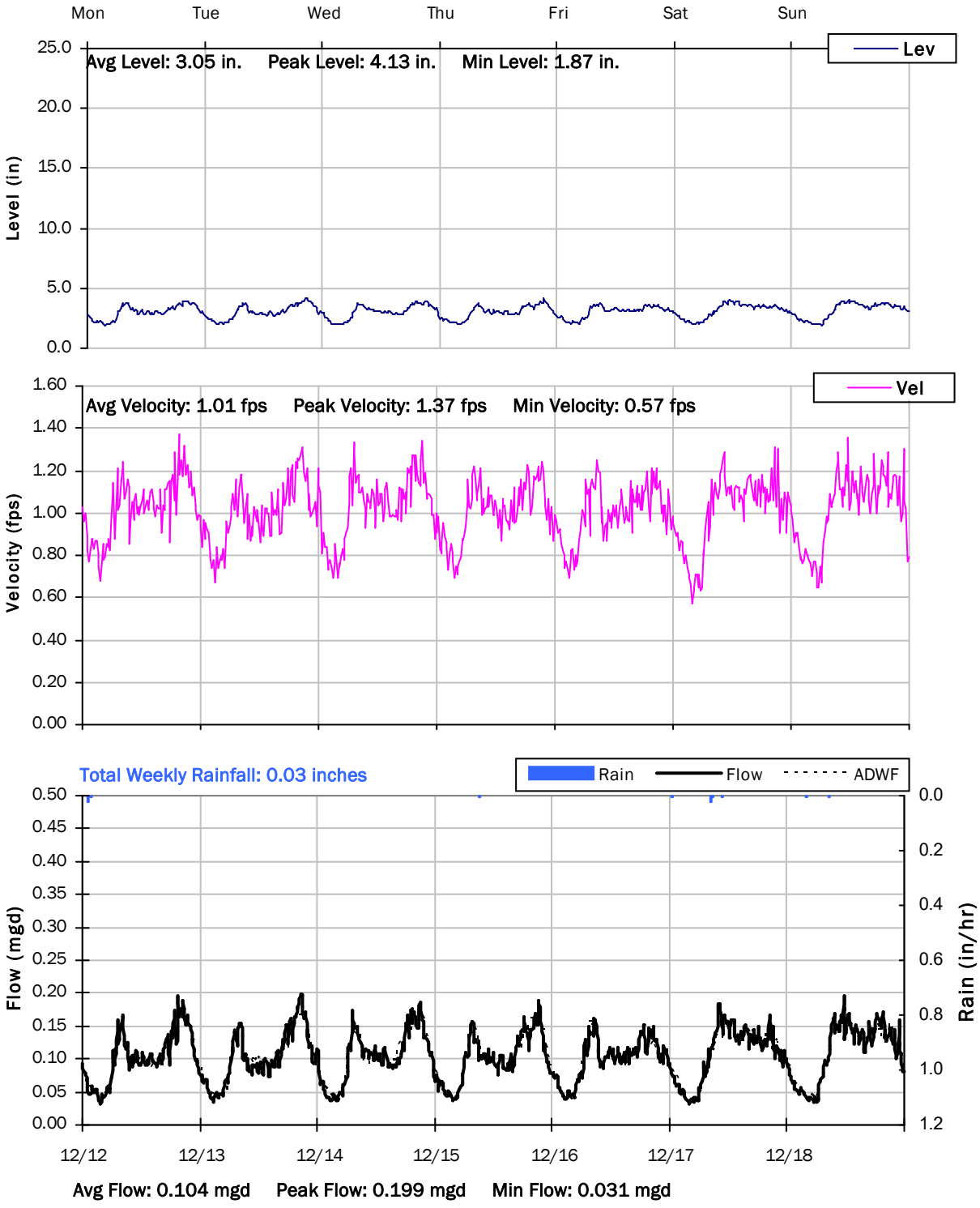
12/5/2022 to 12/12/2022



FM01C

Weekly Level, Velocity and Flow Hydrographs

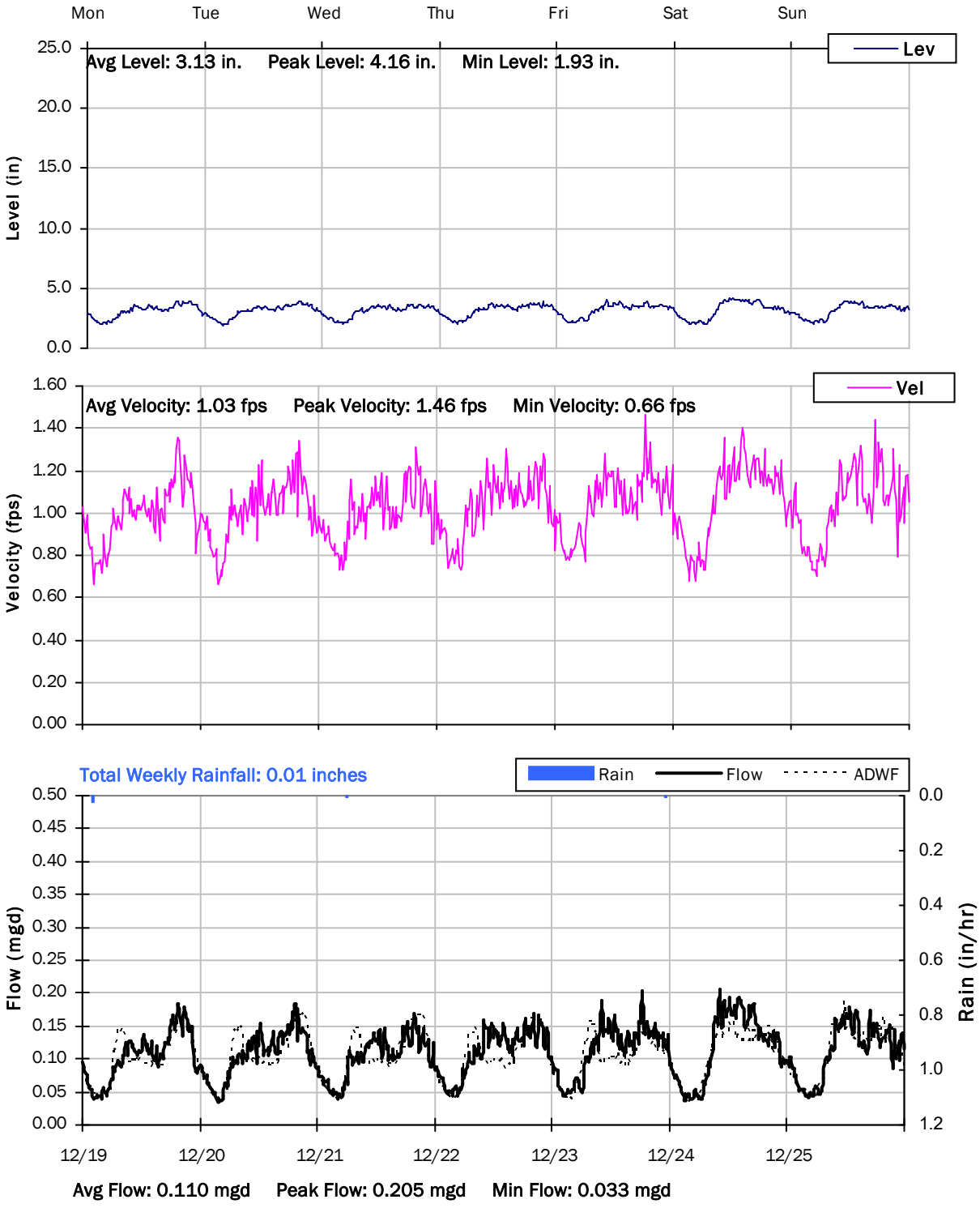
12/12/2022 to 12/19/2022



FM01C

Weekly Level, Velocity and Flow Hydrographs

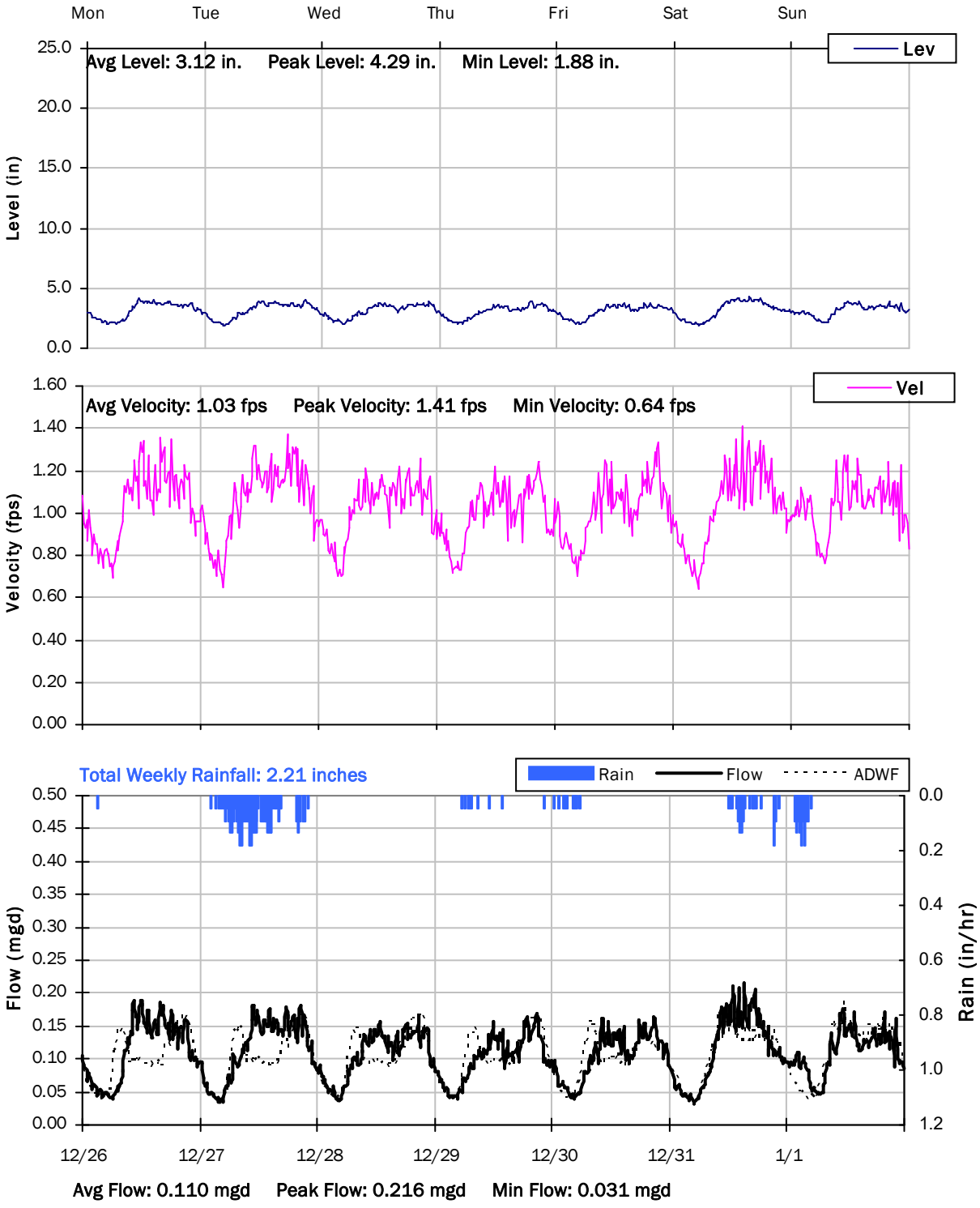
12/19/2022 to 12/26/2022



FM01C

Weekly Level, Velocity and Flow Hydrographs

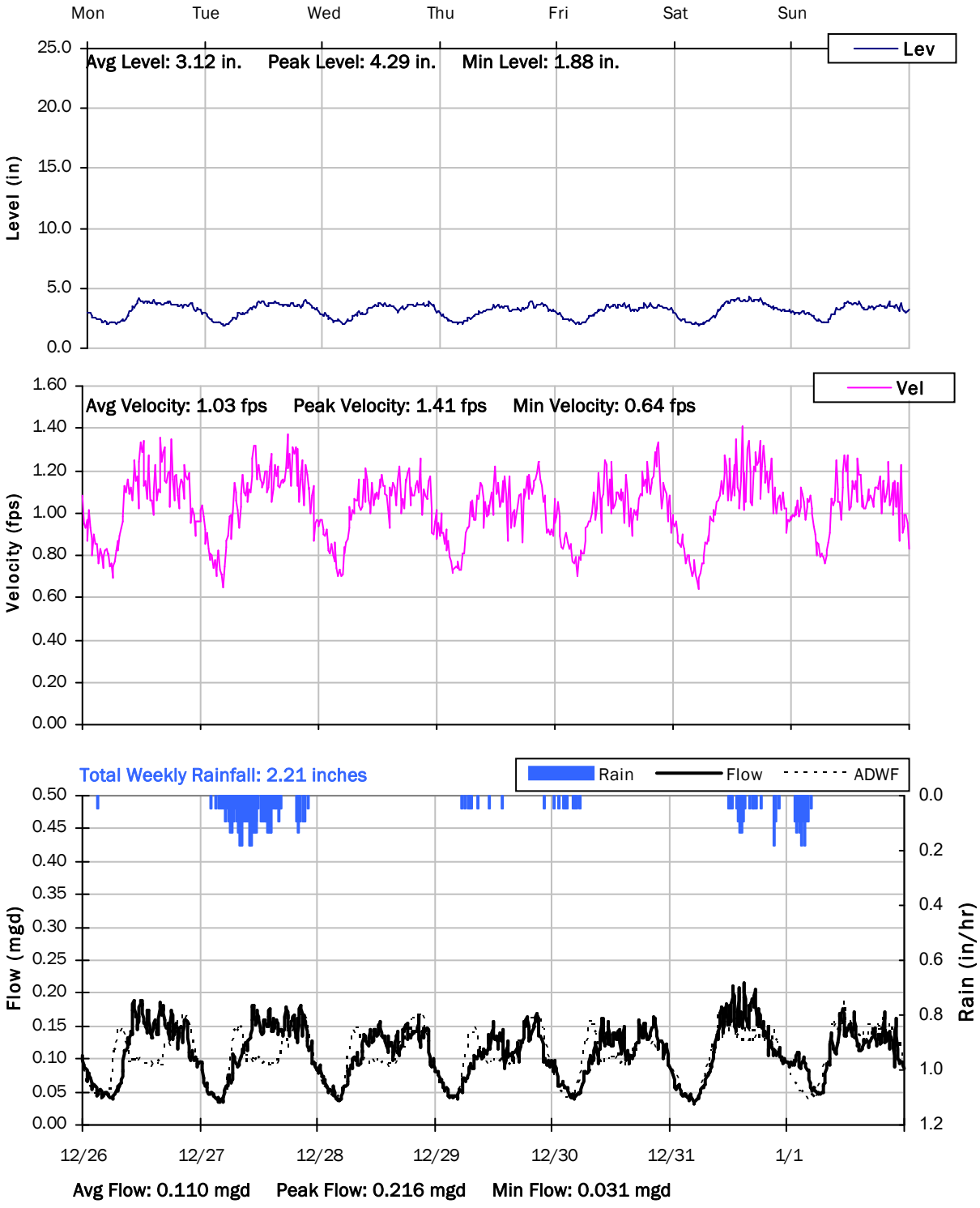
12/26/2022 to 1/2/2023



FM01C

Weekly Level, Velocity and Flow Hydrographs

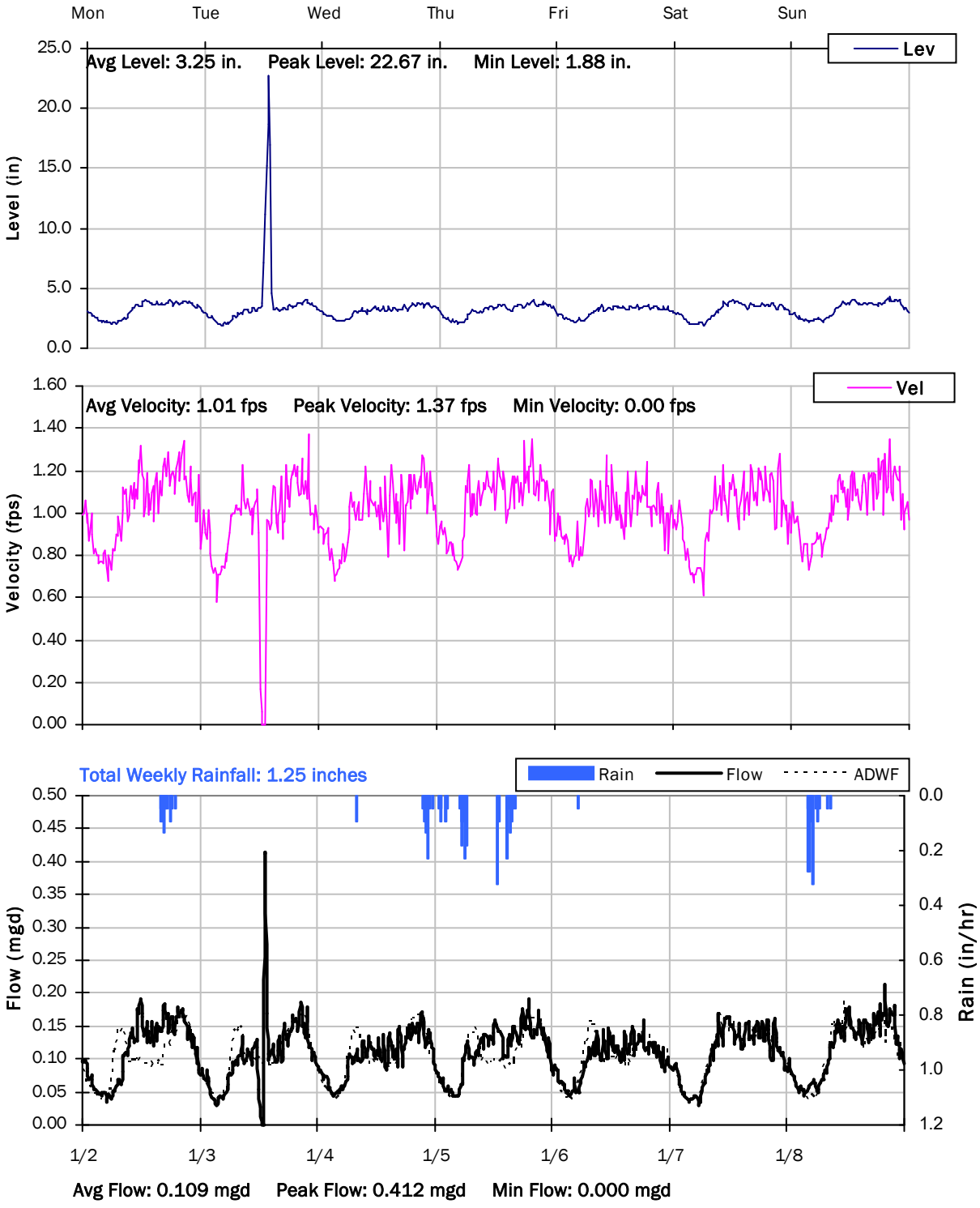
12/26/2022 to 1/2/2023



FM01C

Weekly Level, Velocity and Flow Hydrographs

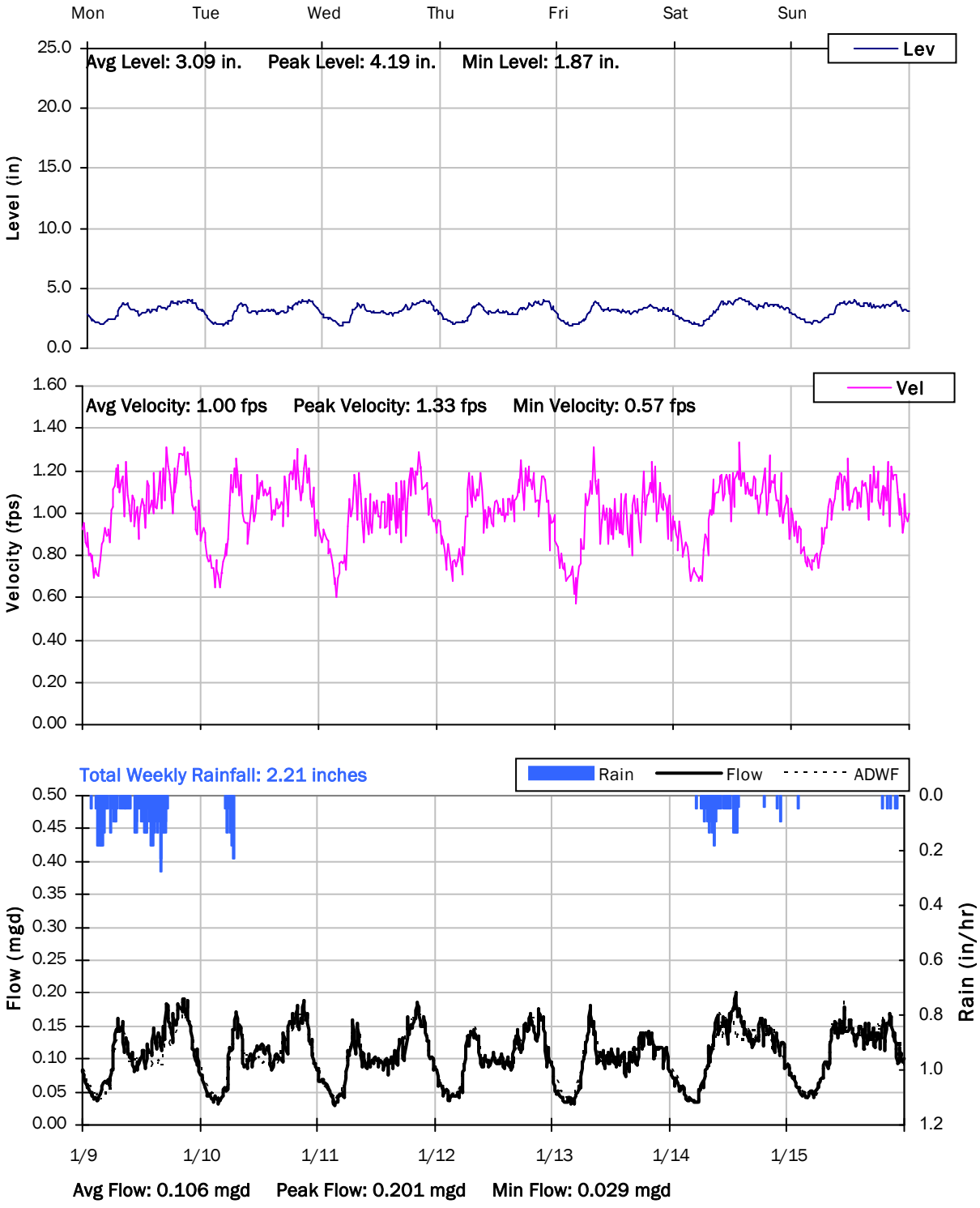
1/2/2023 to 1/9/2023



FM01C

Weekly Level, Velocity and Flow Hydrographs

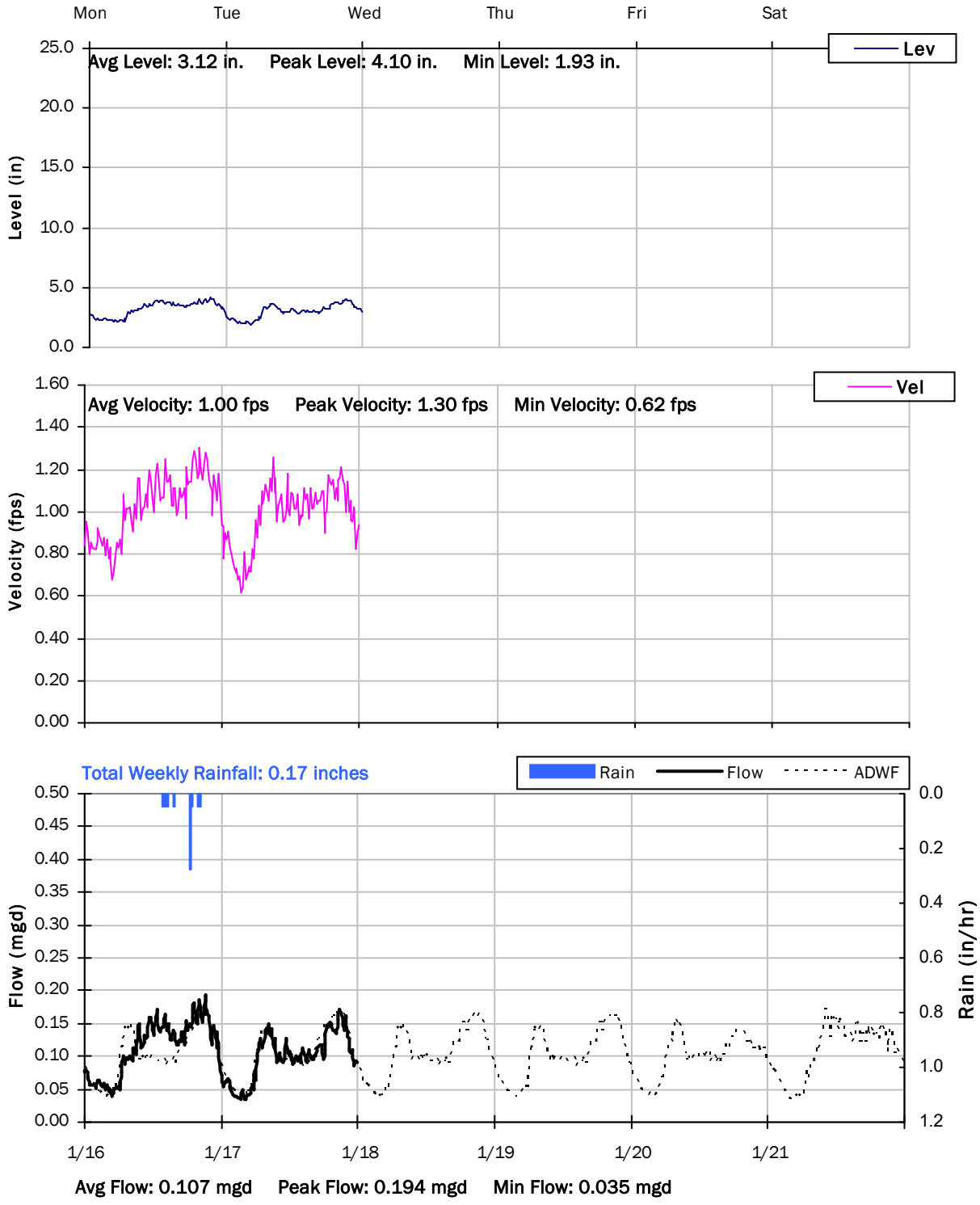
1/9/2023 to 1/16/2023



FM01C

Weekly Level, Velocity and Flow Hydrographs

1/16/2023 to 1/22/2023



Monitoring Site: FM02

Selma-Kingsburg-Fowler Sanitation District

Sanitary Sewer Flow Monitoring

December 09, 2022 - January 17, 2023

Location: 10273 Golden State Blvd

Data Summary Report

Vicinity Map: FM02

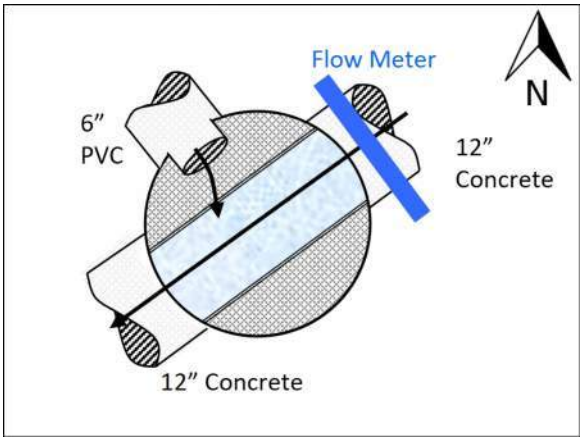
FM03

Site Information MH ID: 2N00-0100

Location:	Intersection of E Front St & North St
Coordinates:	119.6141° W, 36.5692° N
Rim Elevation:	309.03 feet
Expected Pipe Diameter:	12 inches
Measured Pipe Diameter:	12 inches
ADWF:	0.218 mgd
Peak Measured Flow:	0.526 mgd
Sediment:	1 inches

Satellite Map

Sanitary Map



Flow Sketch

Street View

Plan View

FM02

Additional Site Photos

Effluent Pipe

Influent Pipe

FM02

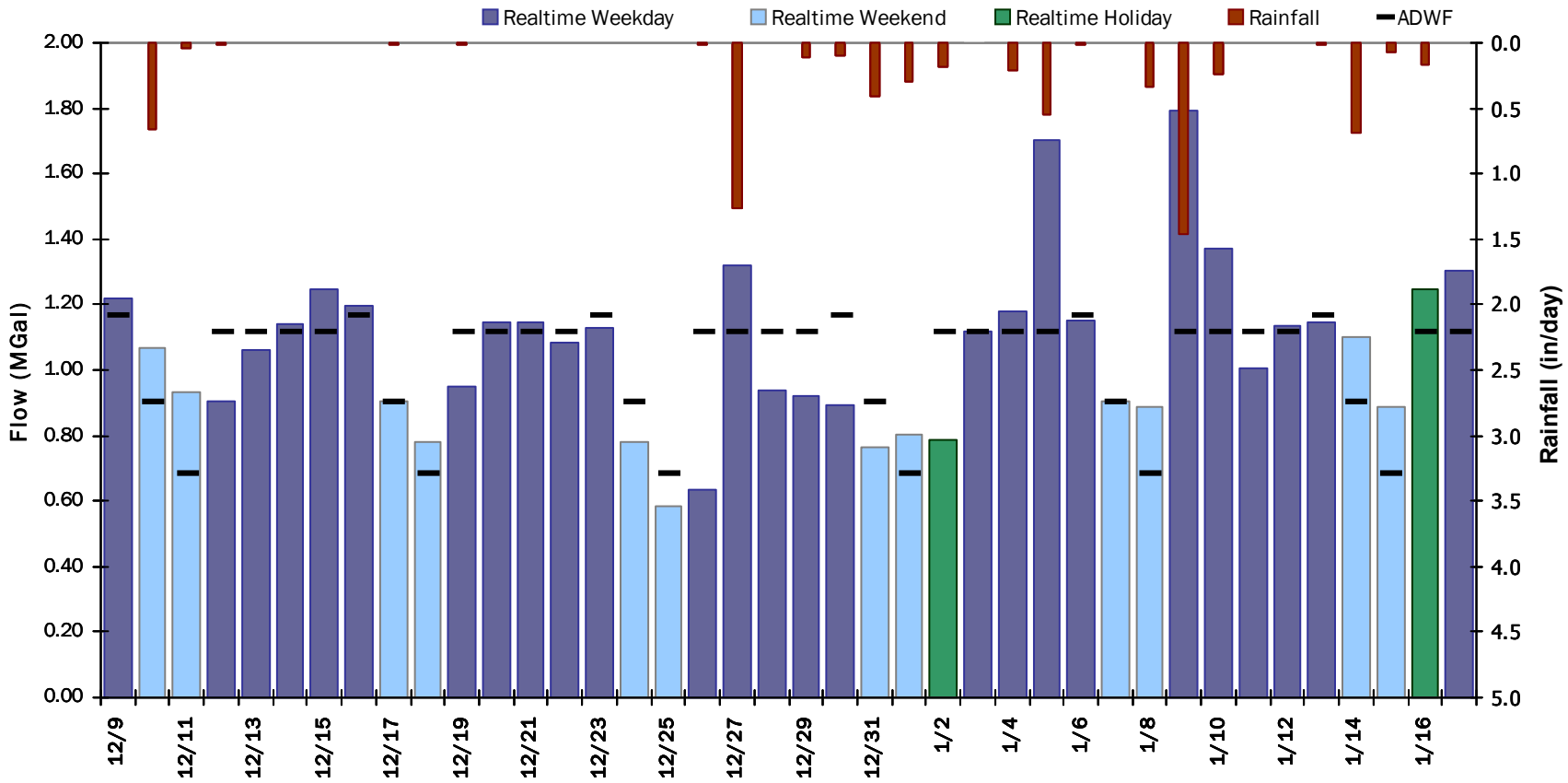
Additional Site Photos

FM02

Period Flow Summary: Daily Flow Totals

Avg Daily Flow: 1.057 MGal Peak Daily Flow: 1.794 MGal Min Daily Flow: 0.587 MGal

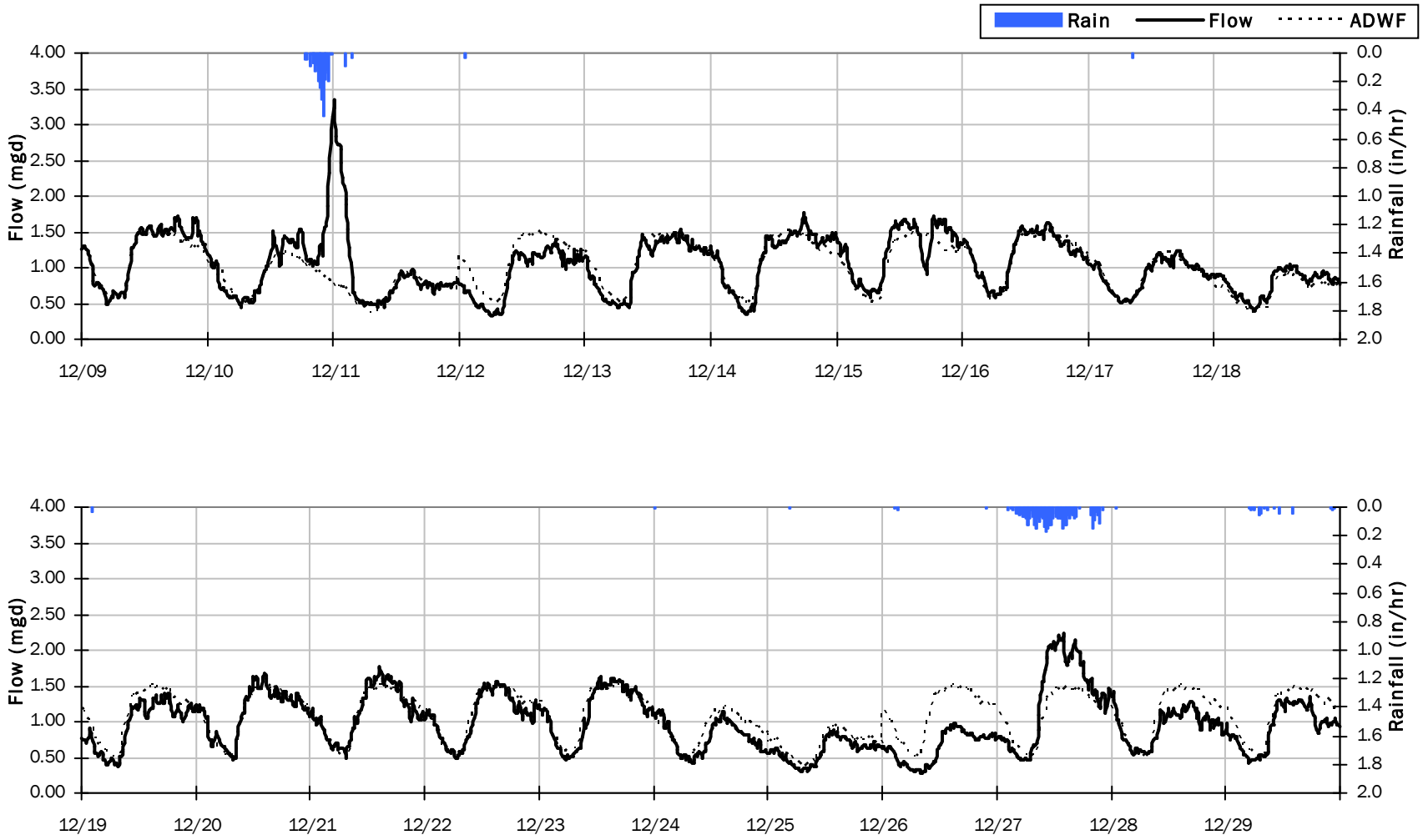
Total Rainfall: 6.85 inches



FM02

Flow Summary: 12/9/2022 to 12/29/2022

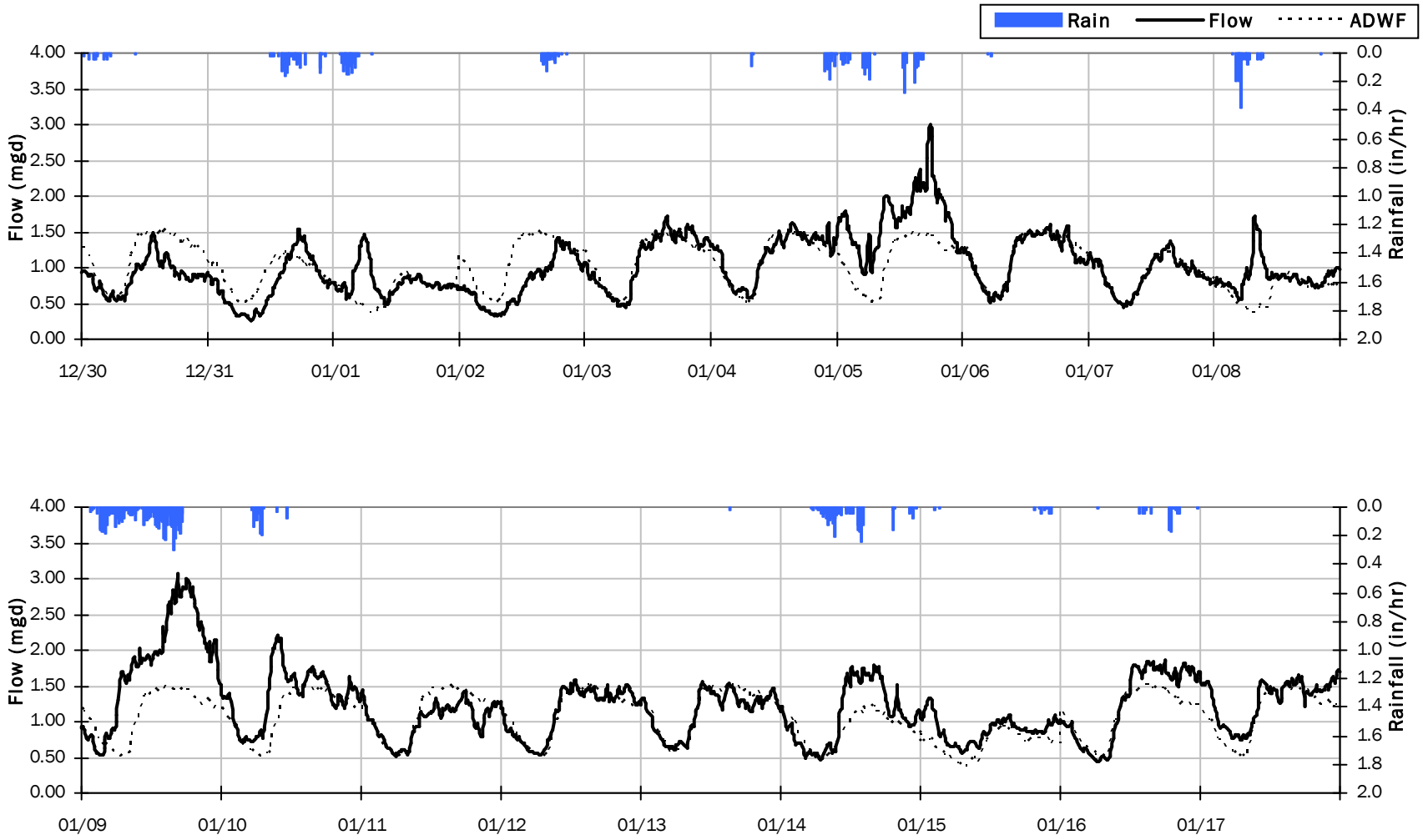
Period Rainfall: 2.13 inches Period Avg Flow: 1.005 mgd Period Peak Flow: 3.350 mgd Period Min Flow: 0.290 mgd



FM02

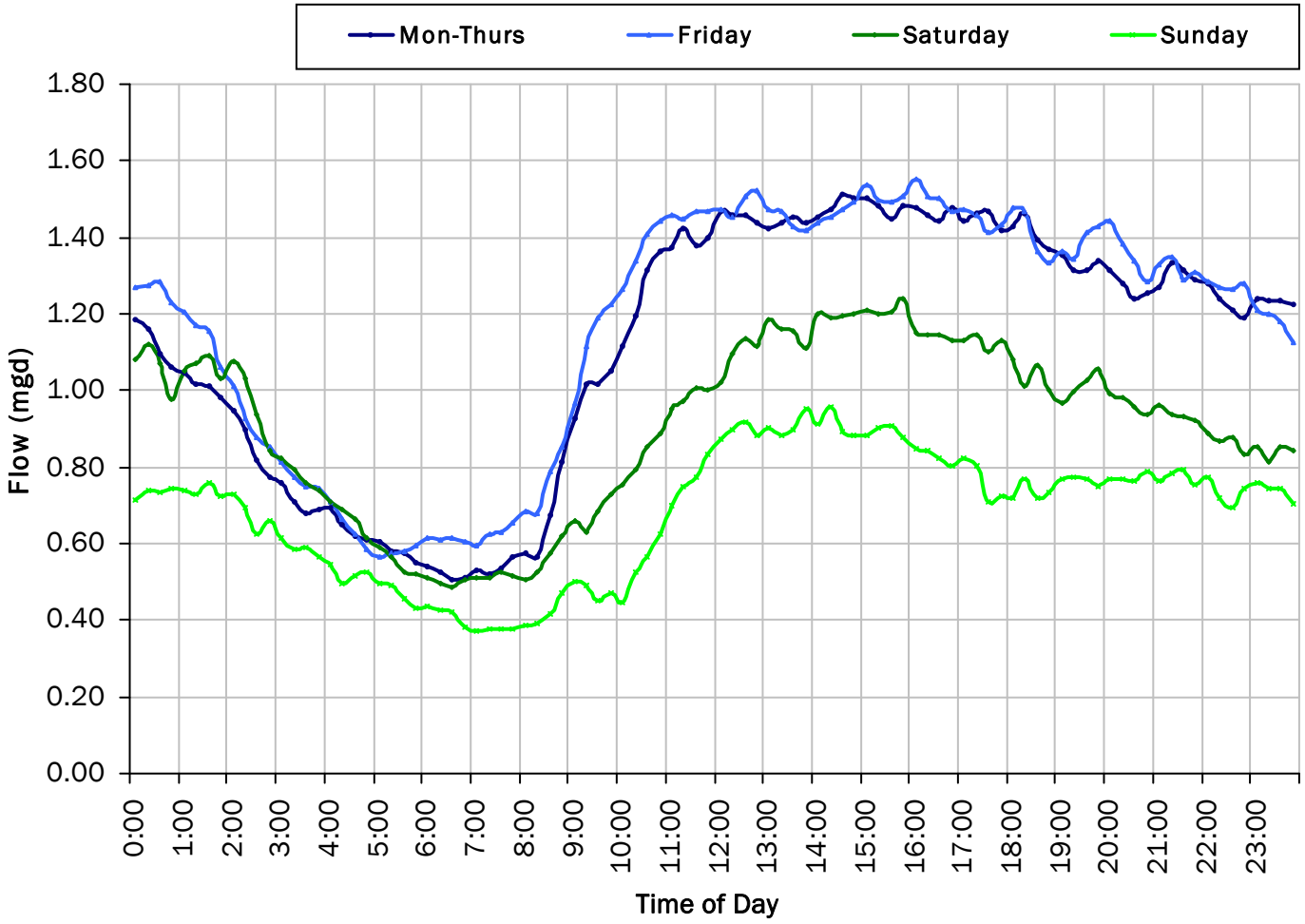
Flow Summary: 12/30/2022 to 1/17/2023

Period Rainfall: 4.72 inches Period Avg Flow: 1.115 mgd Period Peak Flow: 3.060 mgd Period Min Flow: 0.260 mgd



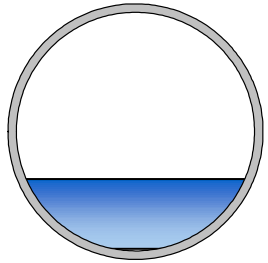
FM02

Average Dry Weather Flow Hydrographs



ADWF:

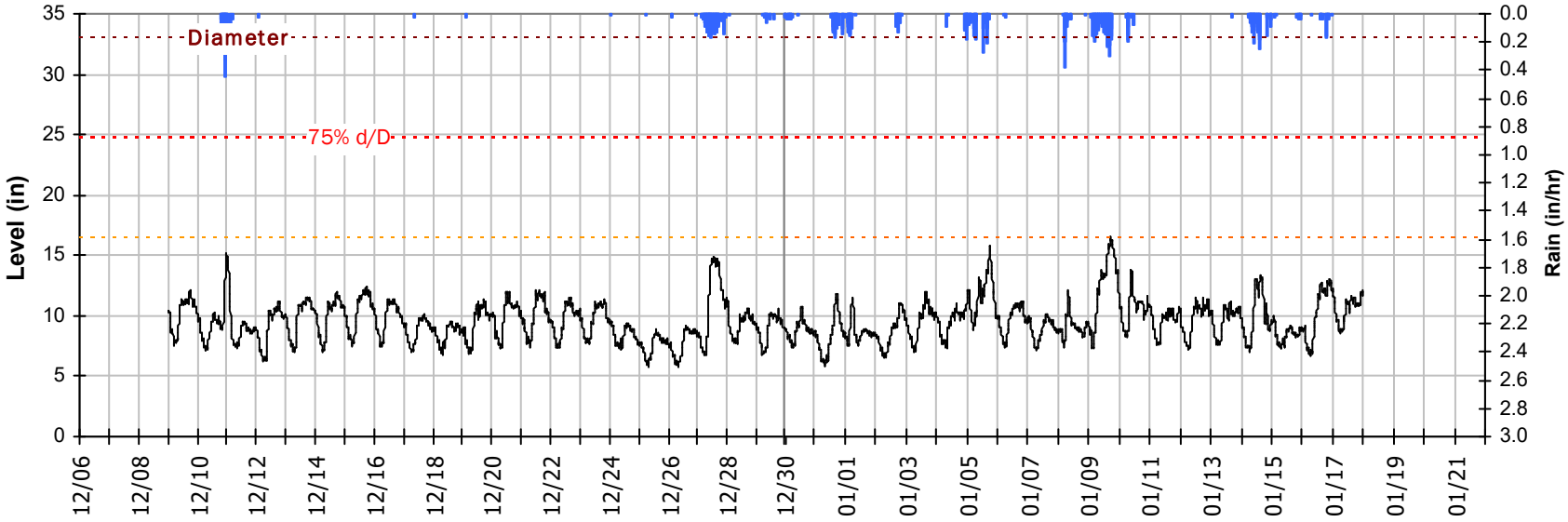
1.040 *mgd*

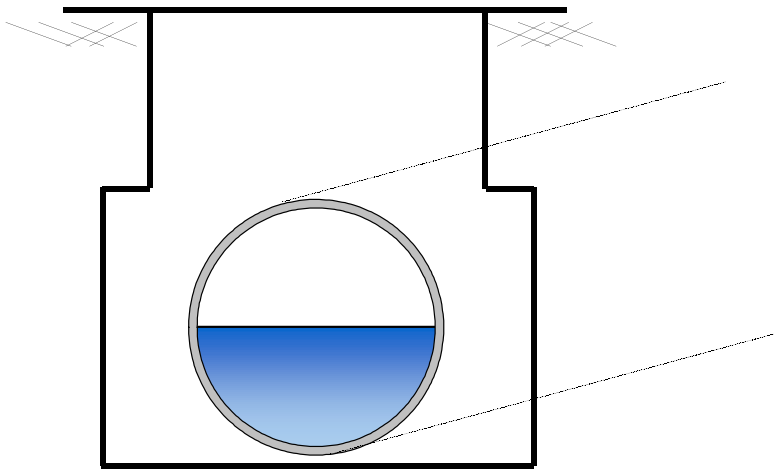


FM02

Site Capacity and Surcharge Summary

Realtime Flow Levels with Rainfall Data over Peak Level Period



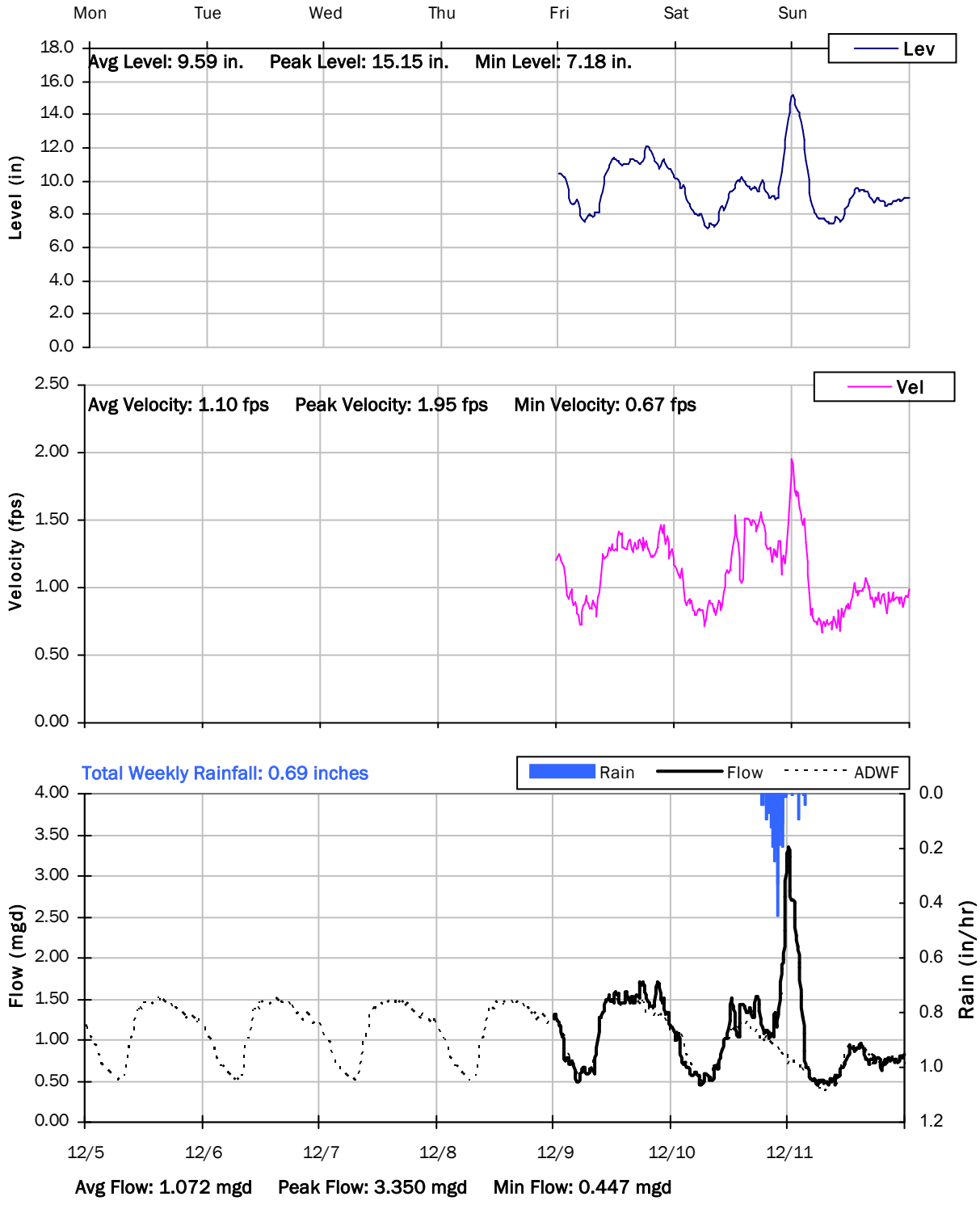


Pipe Diameter:	33	*inches*
Peak Measured Level:	16.5	*inches*
Peak d/D Ratio:	0.50	

FM02

Weekly Level, Velocity and Flow Hydrographs

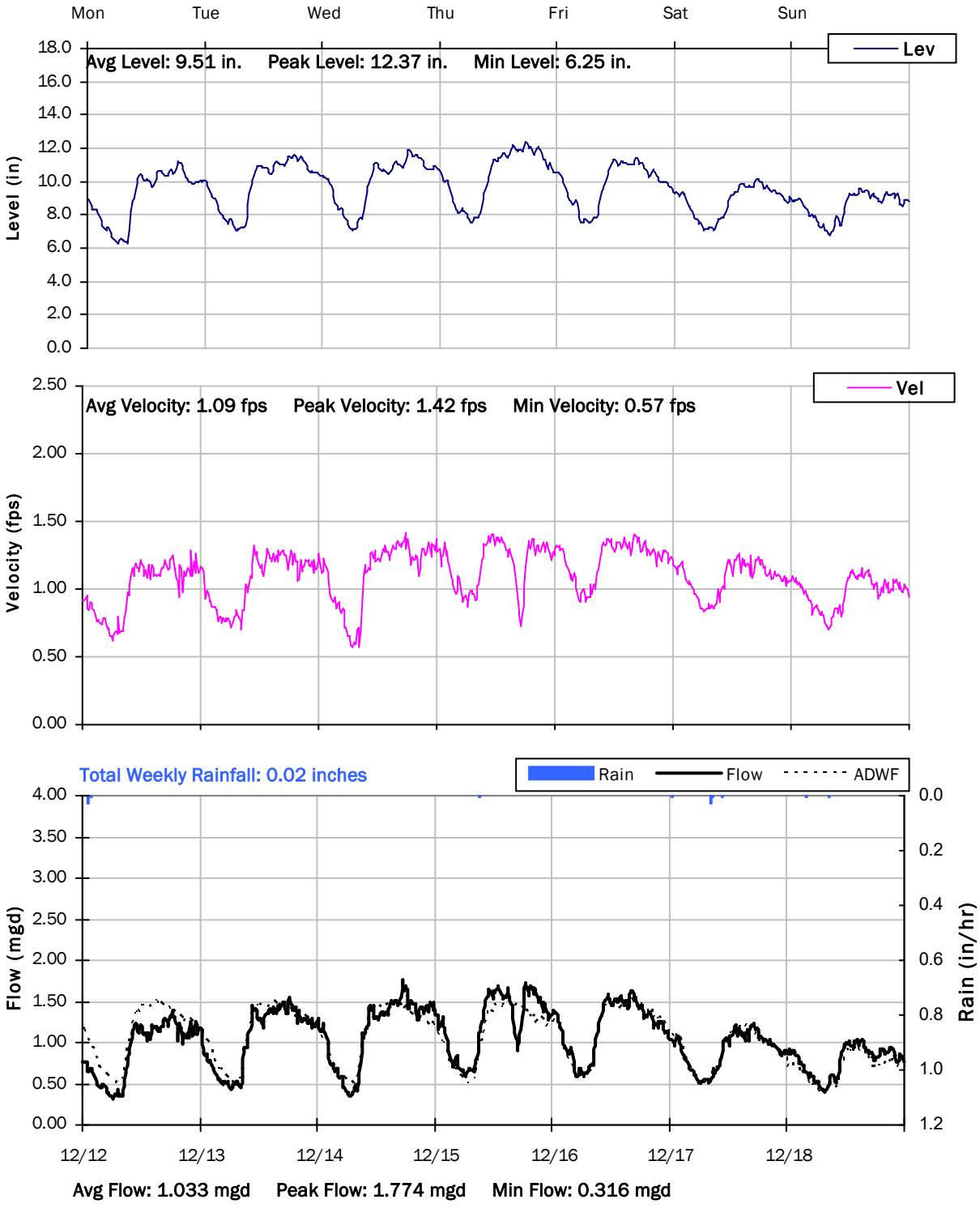
12/5/2022 to 12/12/2022



FM02

Weekly Level, Velocity and Flow Hydrographs

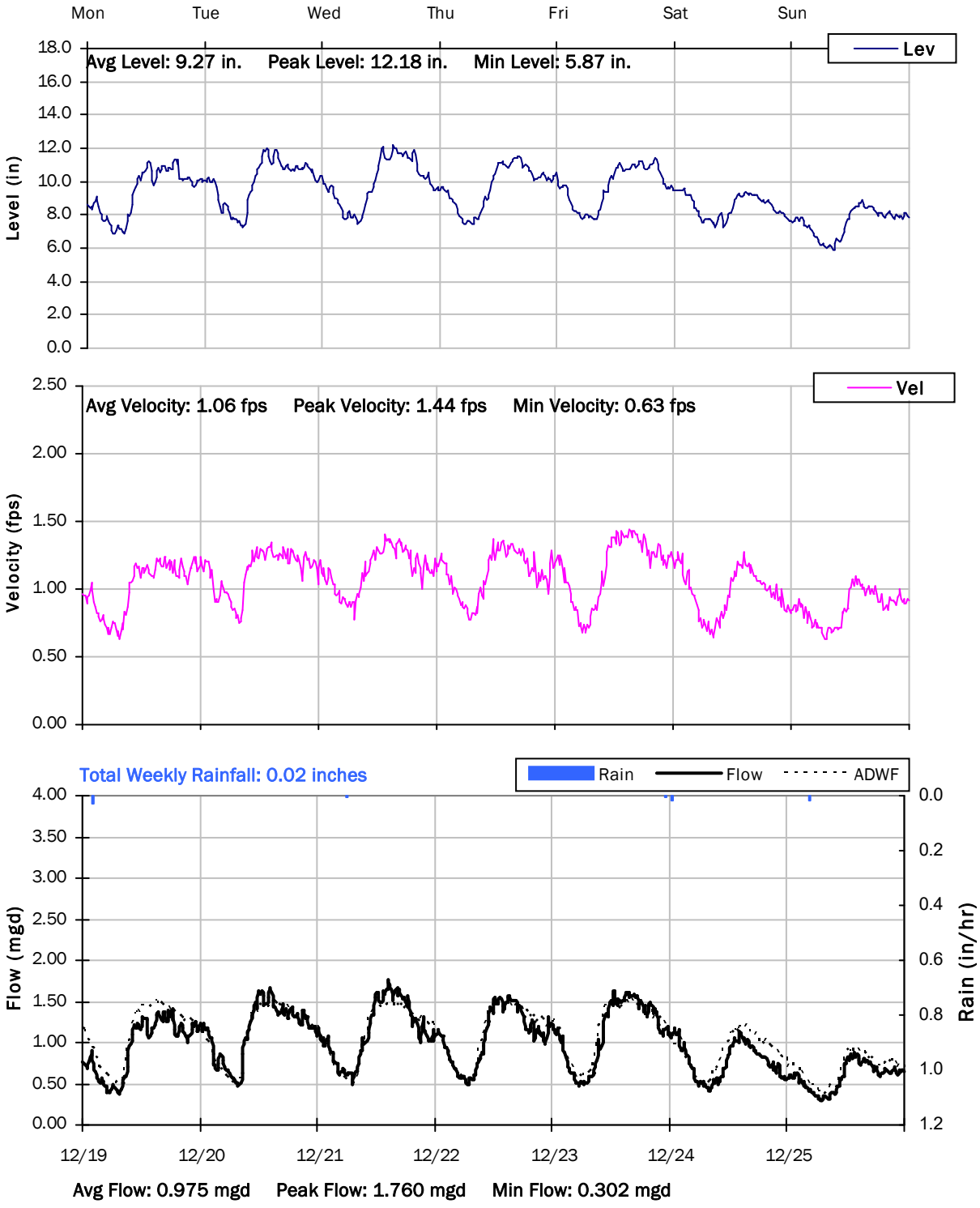
12/12/2022 to 12/19/2022



FM02

Weekly Level, Velocity and Flow Hydrographs

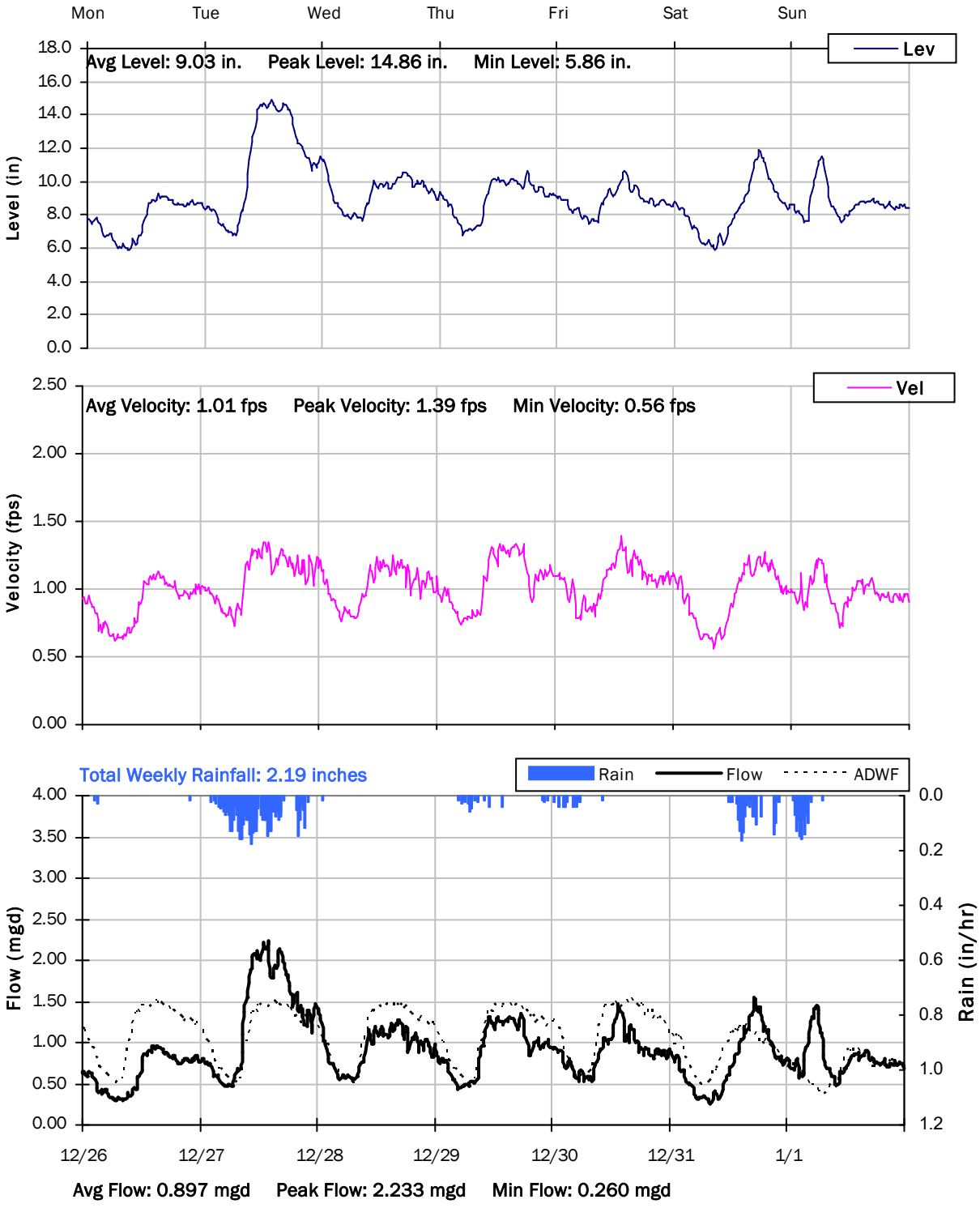
12/19/2022 to 12/26/2022



FM02

Weekly Level, Velocity and Flow Hydrographs

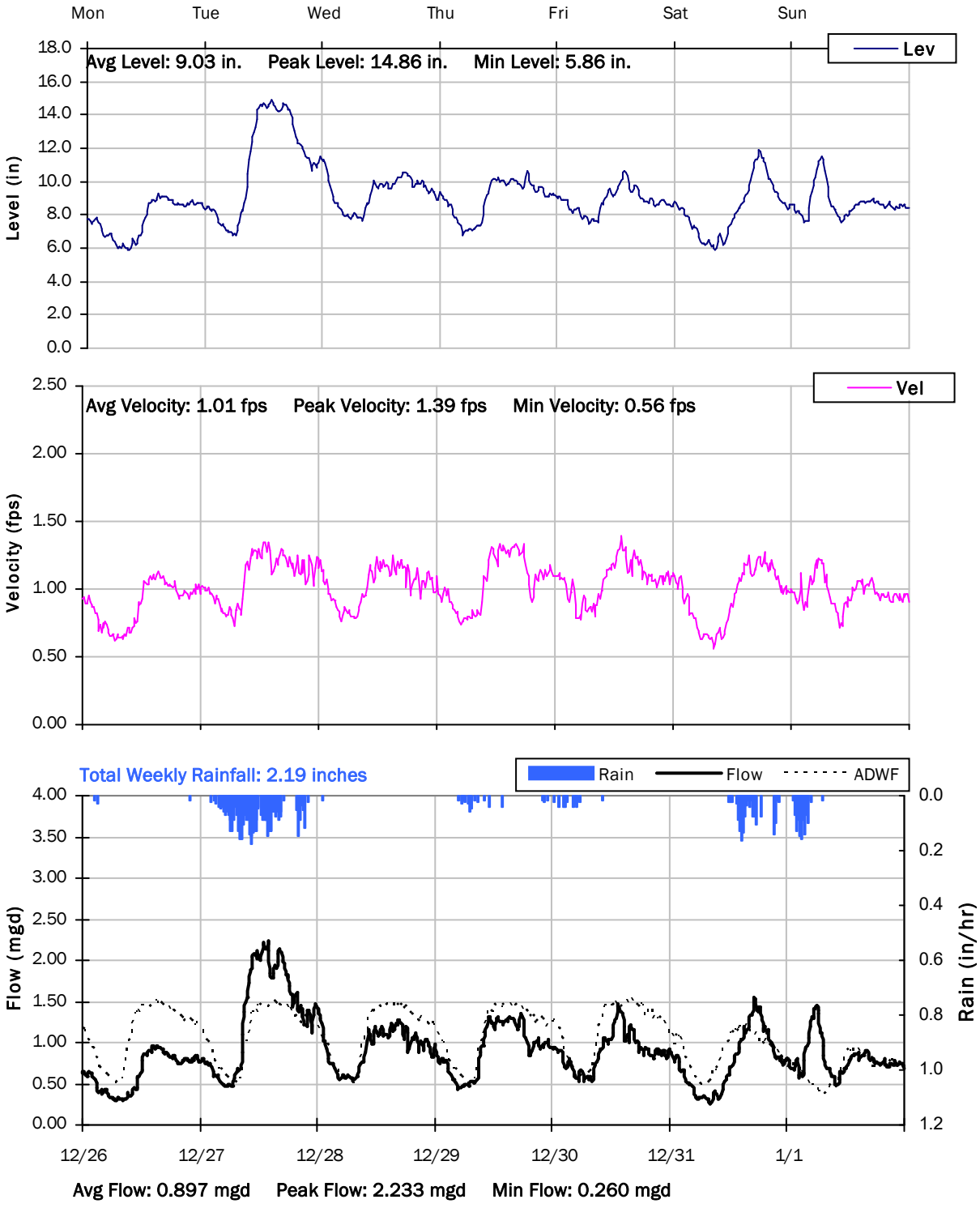
12/26/2022 to 1/2/2023



FM02

Weekly Level, Velocity and Flow Hydrographs

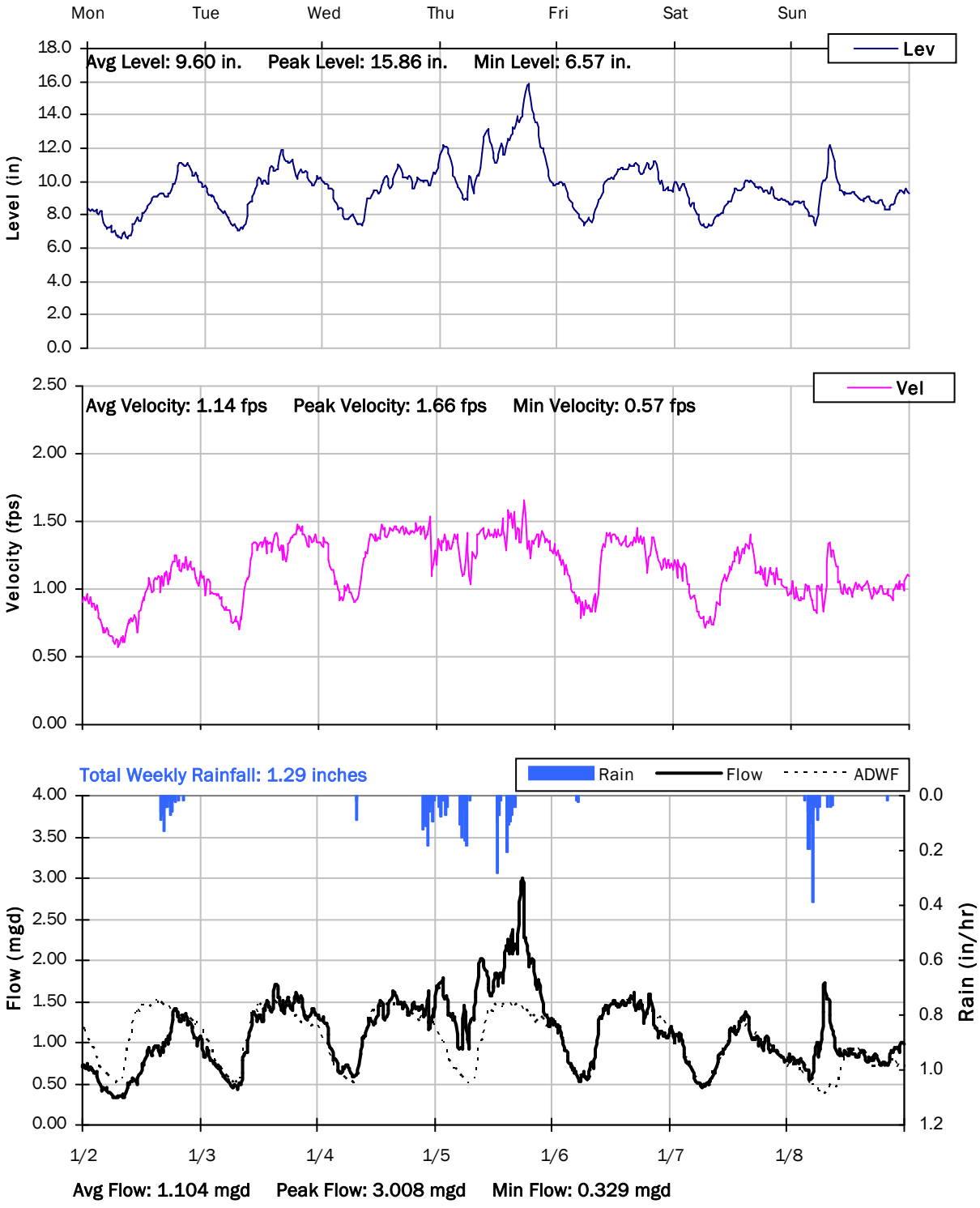
12/26/2022 to 1/2/2023



FM02

Weekly Level, Velocity and Flow Hydrographs

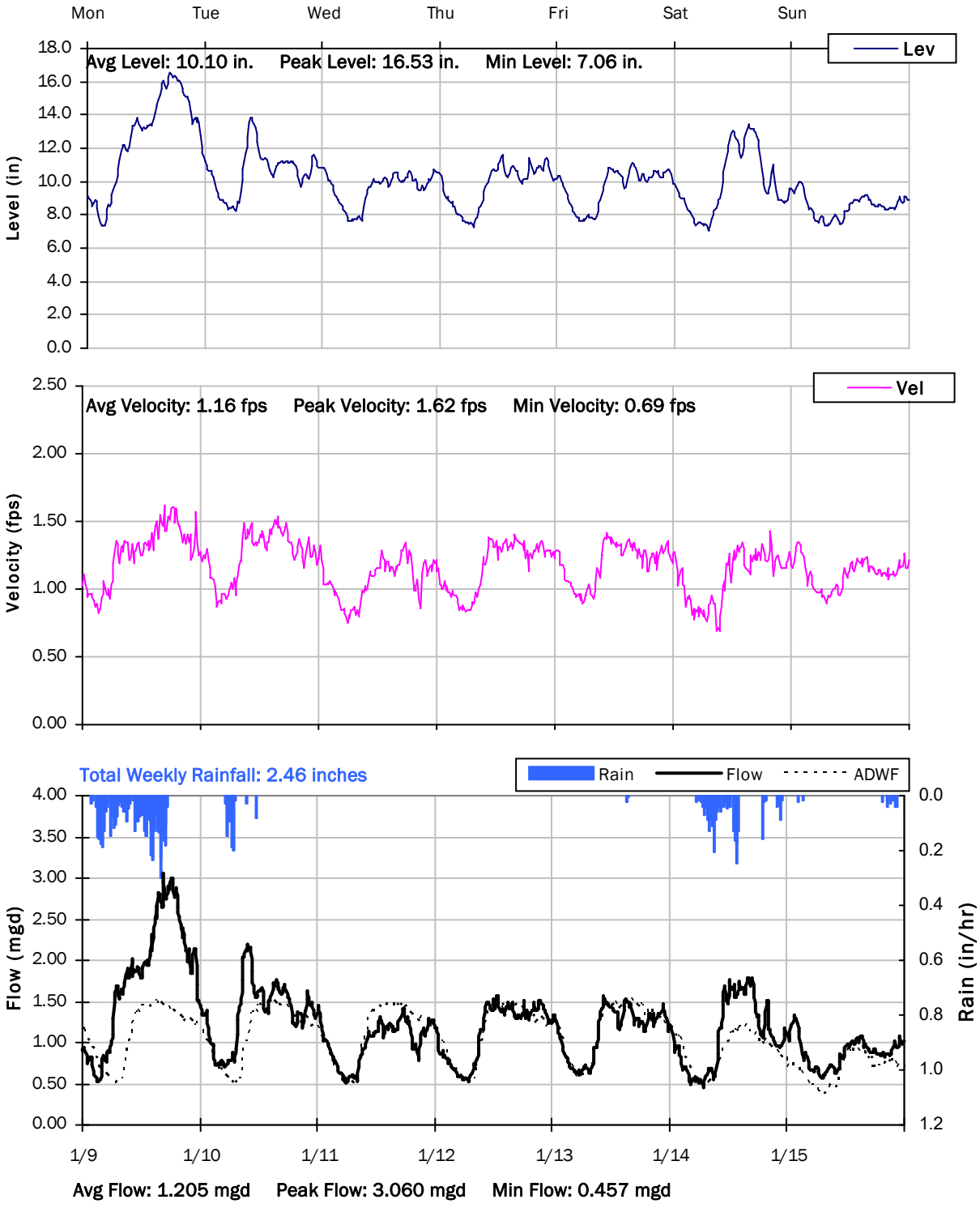
1/2/2023 to 1/9/2023



FM02

Weekly Level, Velocity and Flow Hydrographs

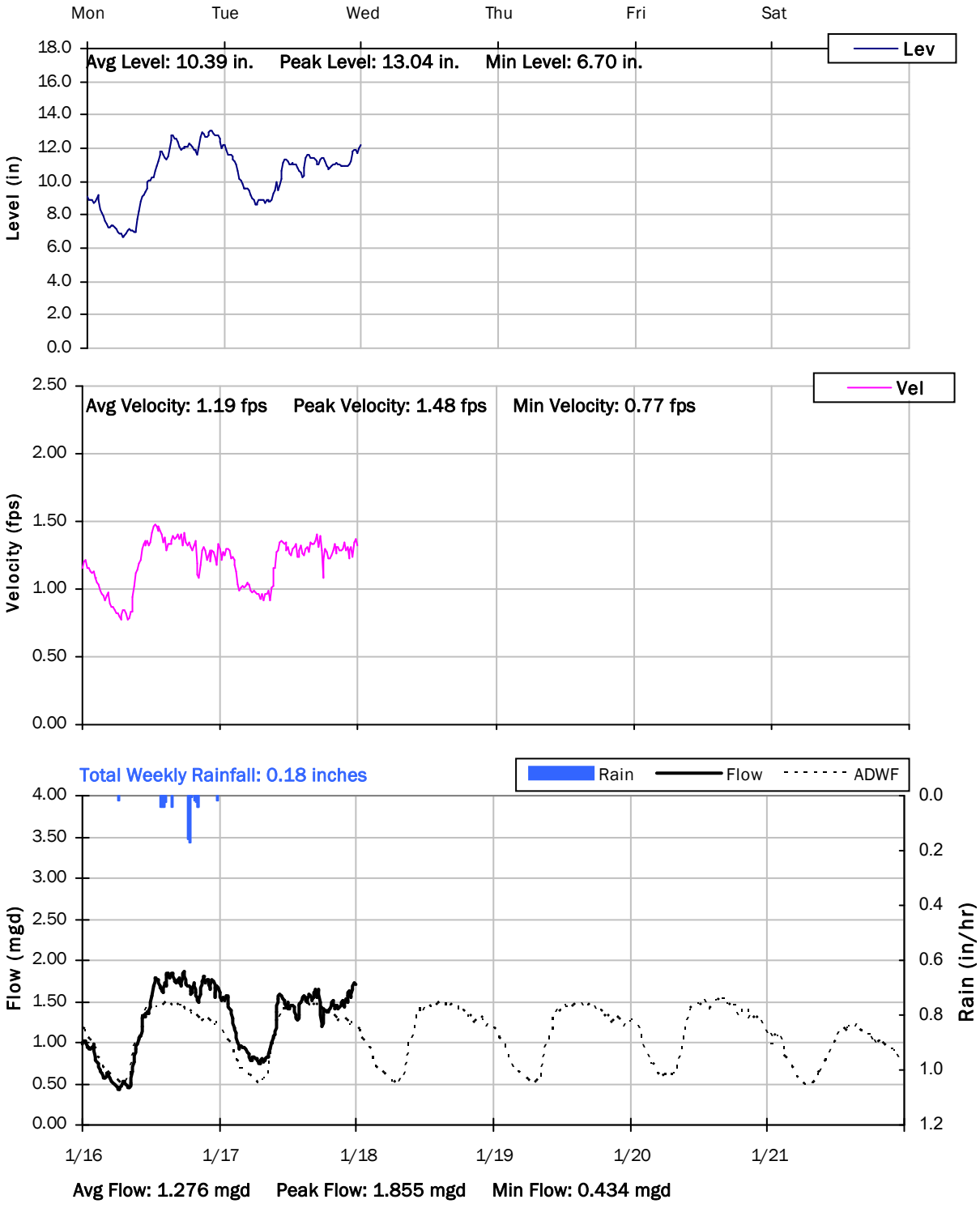
1/9/2023 to 1/16/2023



FM02

Weekly Level, Velocity and Flow Hydrographs

1/16/2023 to 1/22/2023



Monitoring Site: FM03

Selma-Kingsburg-Fowler Sanitation District

Sanitary Sewer Flow Monitoring

December 09, 2022 - January 17, 2023

Location: Intersection of E Front St & North St

Data Summary Report

Vicinity Map: FM03

FM04

Site Information MH ID: 2000-2600

Location: Intersection of Park St & Golden State Blvd

Coordinates: 119.6065° W, 36.5613° N

Rim Elevation: 306.76 feet

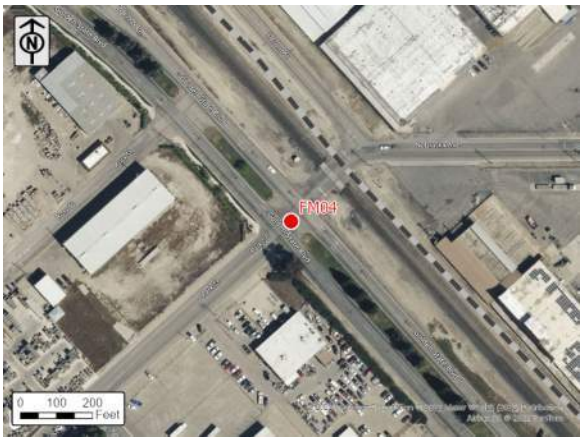
Expected Pipe Diameter: 24 inches

Measured Pipe Diameter: 24 inches

ADWF: 0.420 mgd

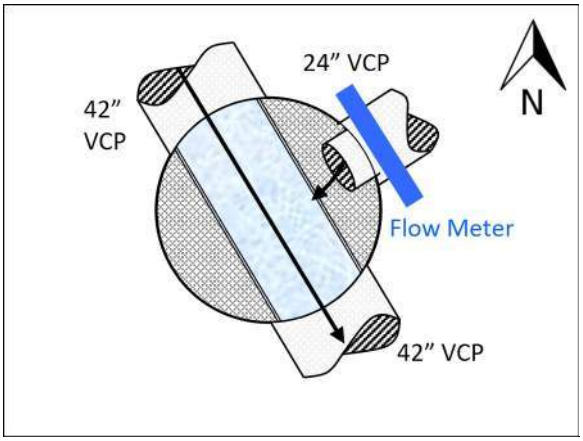
Peak Measured Flow: 0.907 mgd

Sediment: None



Satellite Map

Sanitary Map



Flow Sketch

Street View

Plan View

FM03

Additional Site Photos

Effluent Pipe

Northwest Influent Pipe

FM03

Additional Site Photos

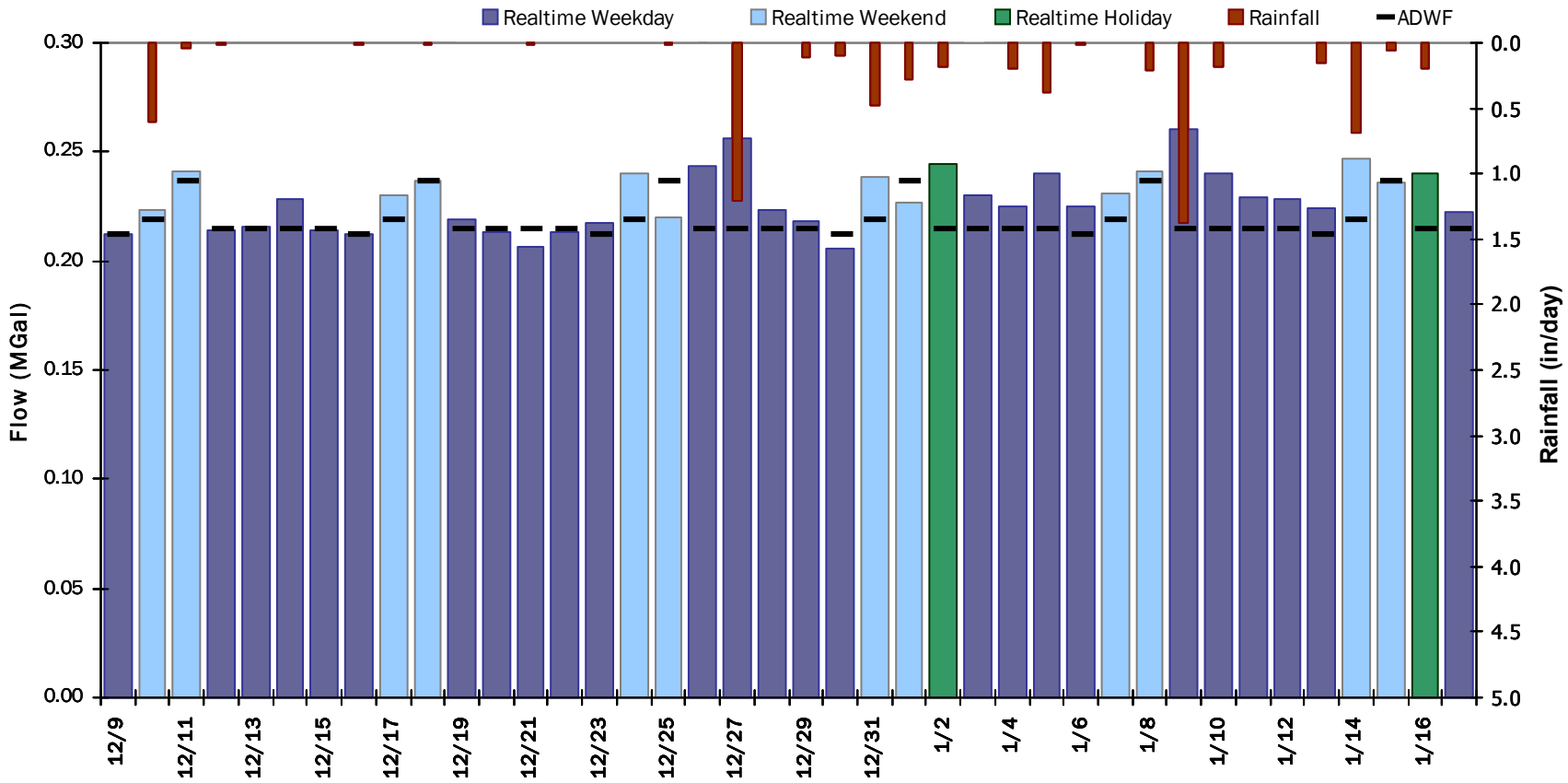
Mounted Northeast Influent Pipe

FM03

Period Flow Summary: Daily Flow Totals

Avg Daily Flow: 0.228 MGal Peak Daily Flow: 0.260 MGal Min Daily Flow: 0.206 MGal

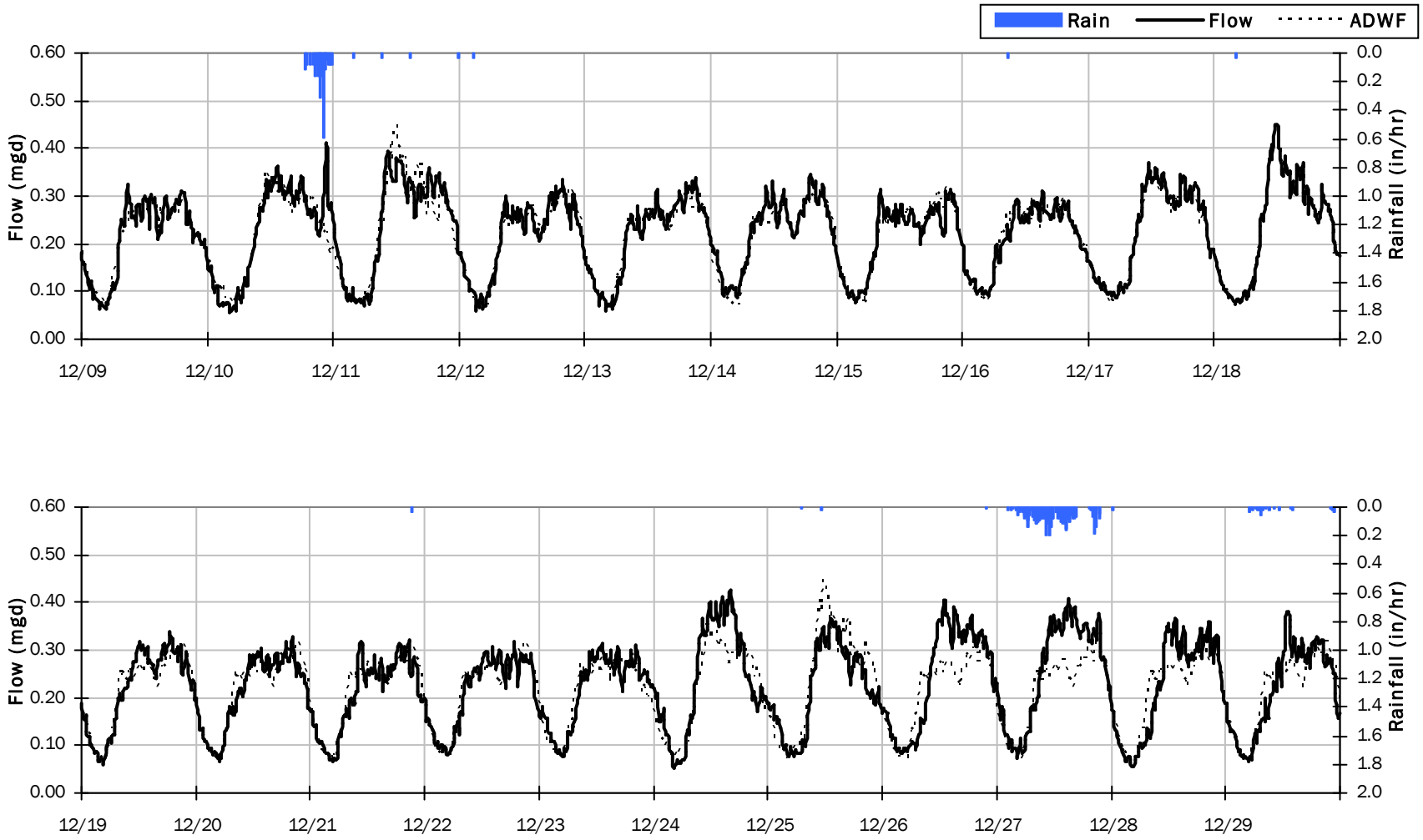
Total Rainfall: 6.53 inches



FM03

Flow Summary: 12/9/2022 to 12/29/2022

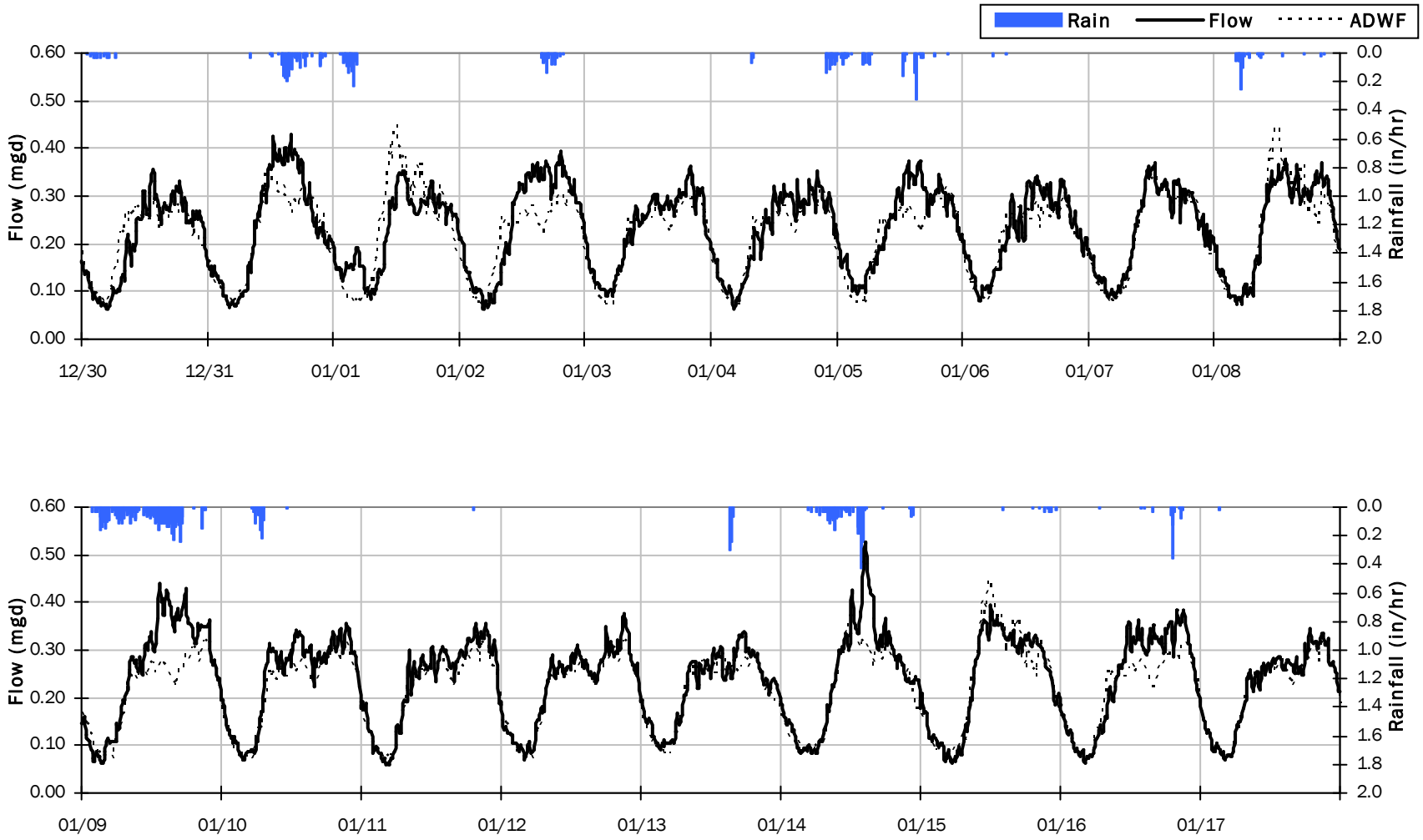
Period Rainfall: 2.03 inches Period Avg Flow: 0.224 mgd Period Peak Flow: 0.451 mgd Period Min Flow: 0.054 mgd



FM03

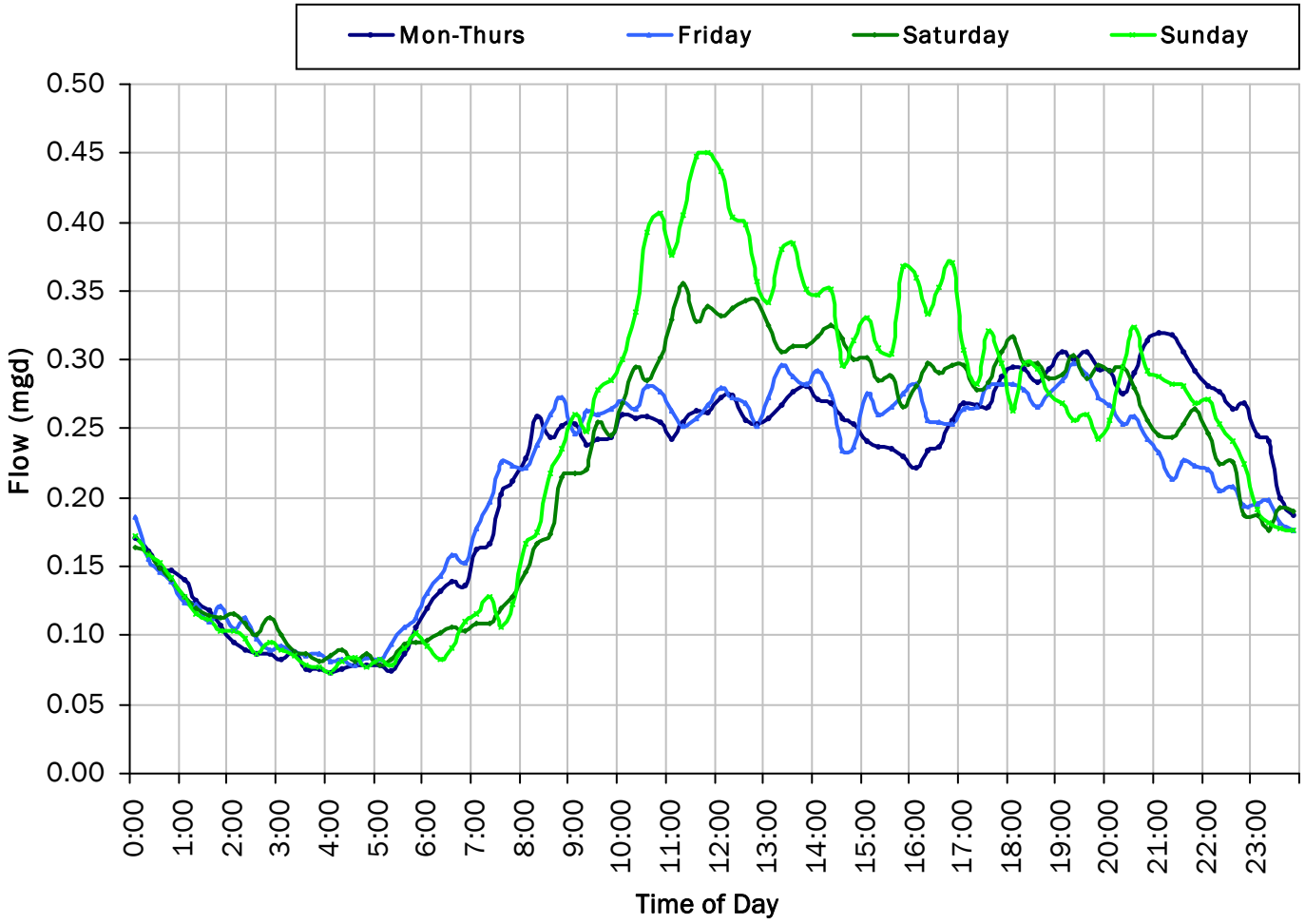
Flow Summary: 12/30/2022 to 1/17/2023

Period Rainfall: 4.50 inches Period Avg Flow: 0.233 mgd Period Peak Flow: 0.526 mgd Period Min Flow: 0.059 mgd



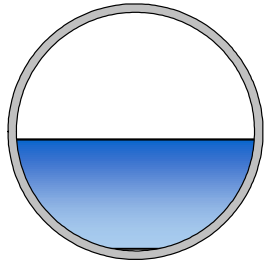
FM03

Average Dry Weather Flow Hydrographs



ADWF:

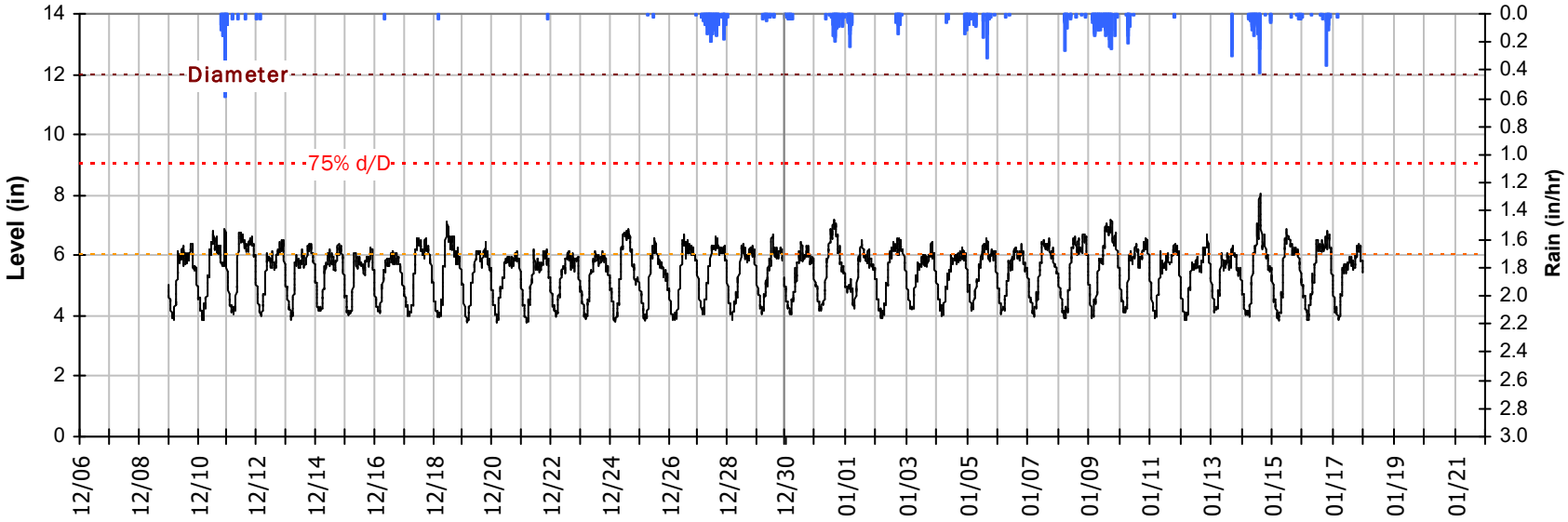
0.218 *mgd*

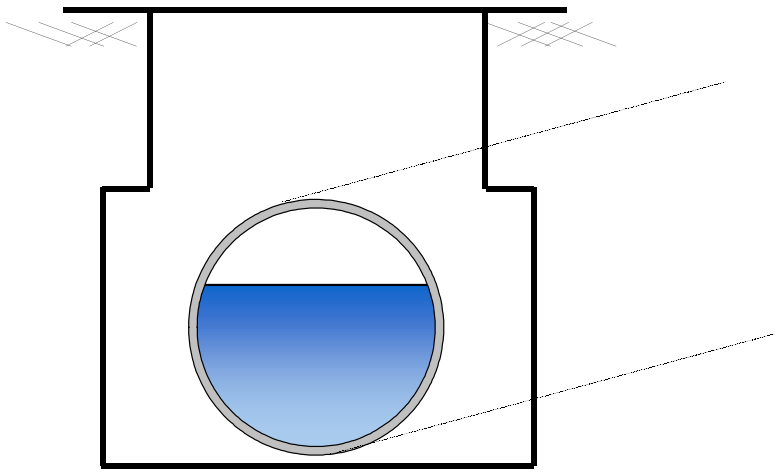


FM03

Site Capacity and Surcharge Summary

Realtime Flow Levels with Rainfall Data over Peak Level Period



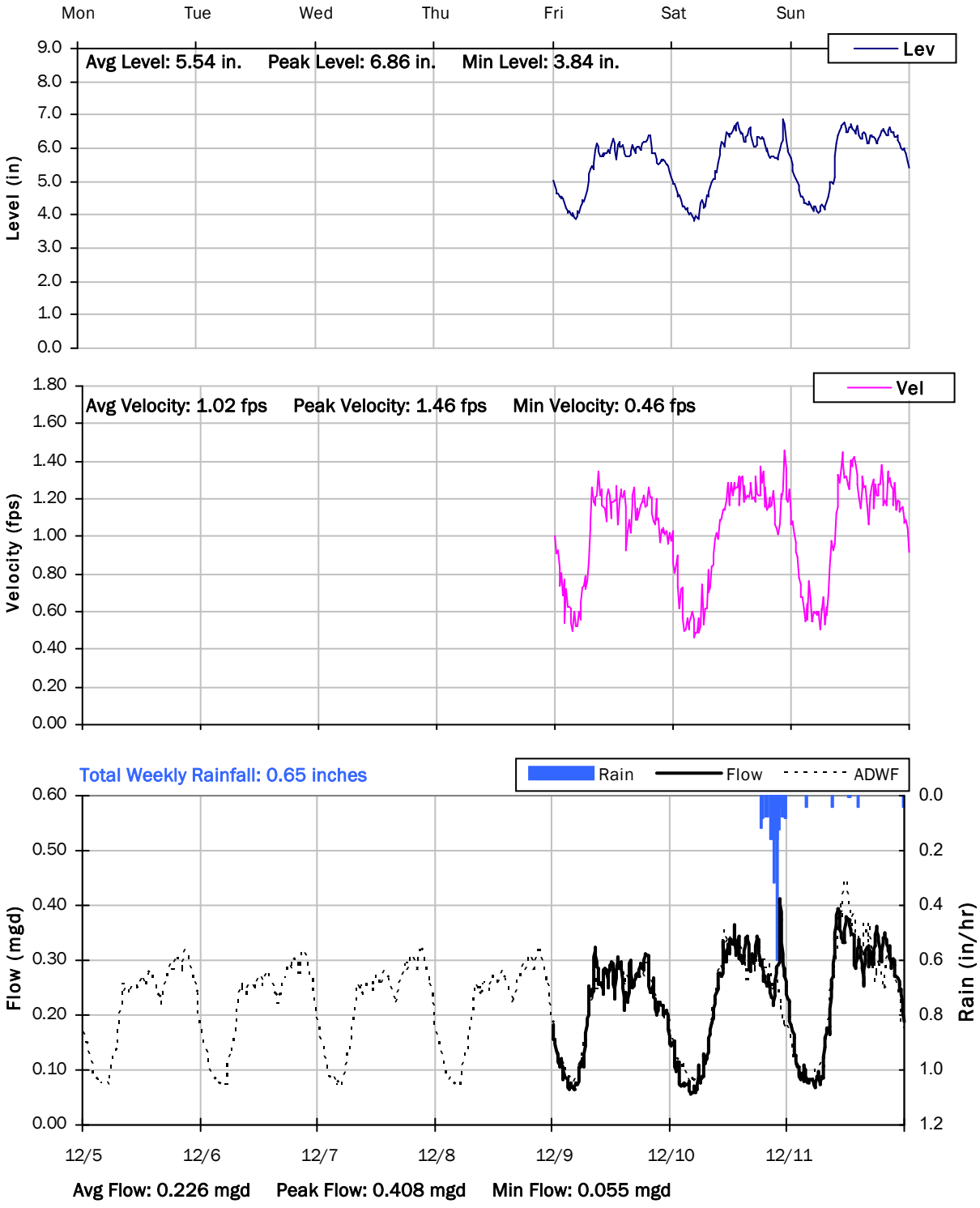


Pipe Diameter:	12	*inches*
Peak Measured Level:	8.03	*inches*
Peak d/D Ratio:	0.67	

FM03

Weekly Level, Velocity and Flow Hydrographs

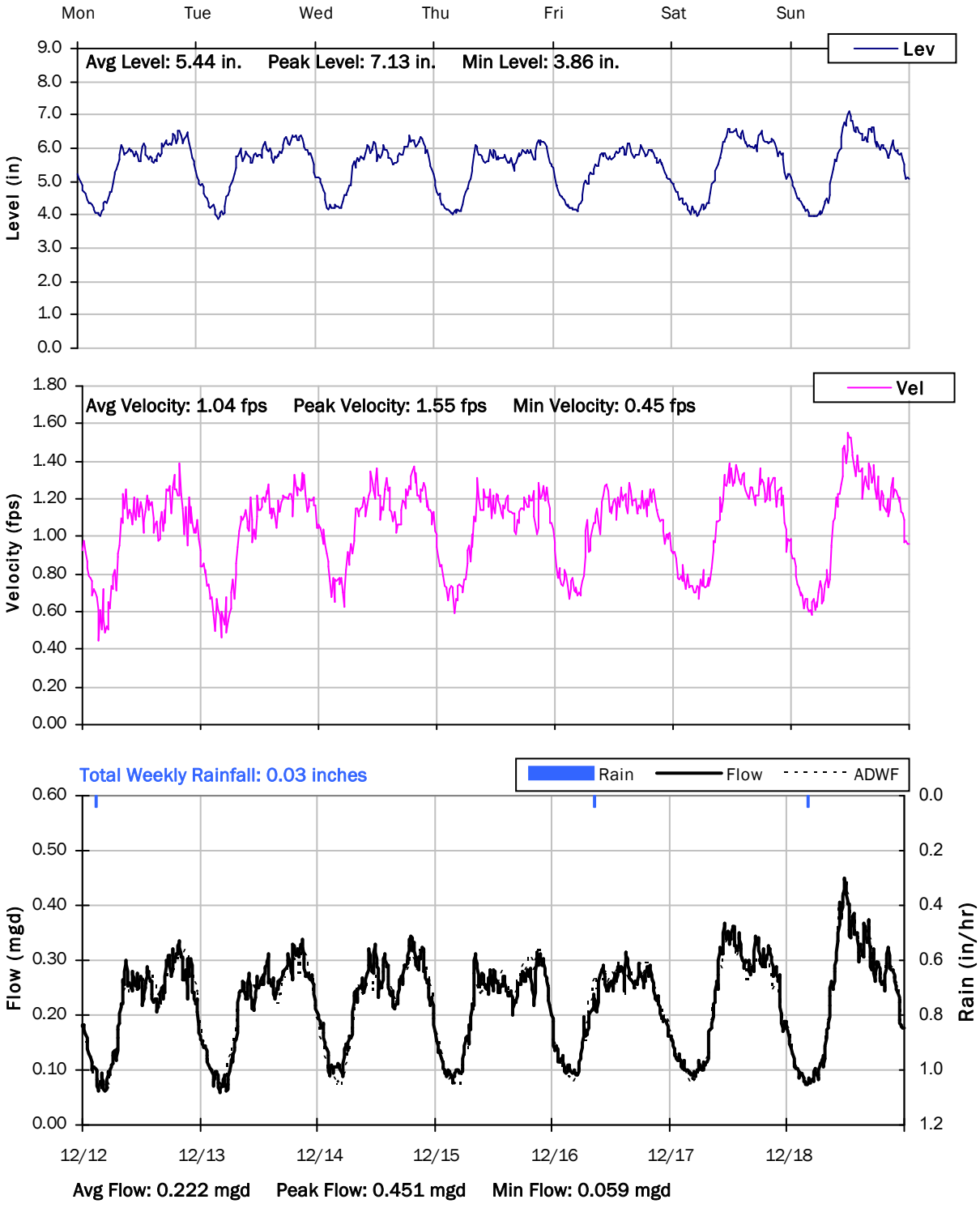
12/5/2022 to 12/12/2022



FM03

Weekly Level, Velocity and Flow Hydrographs

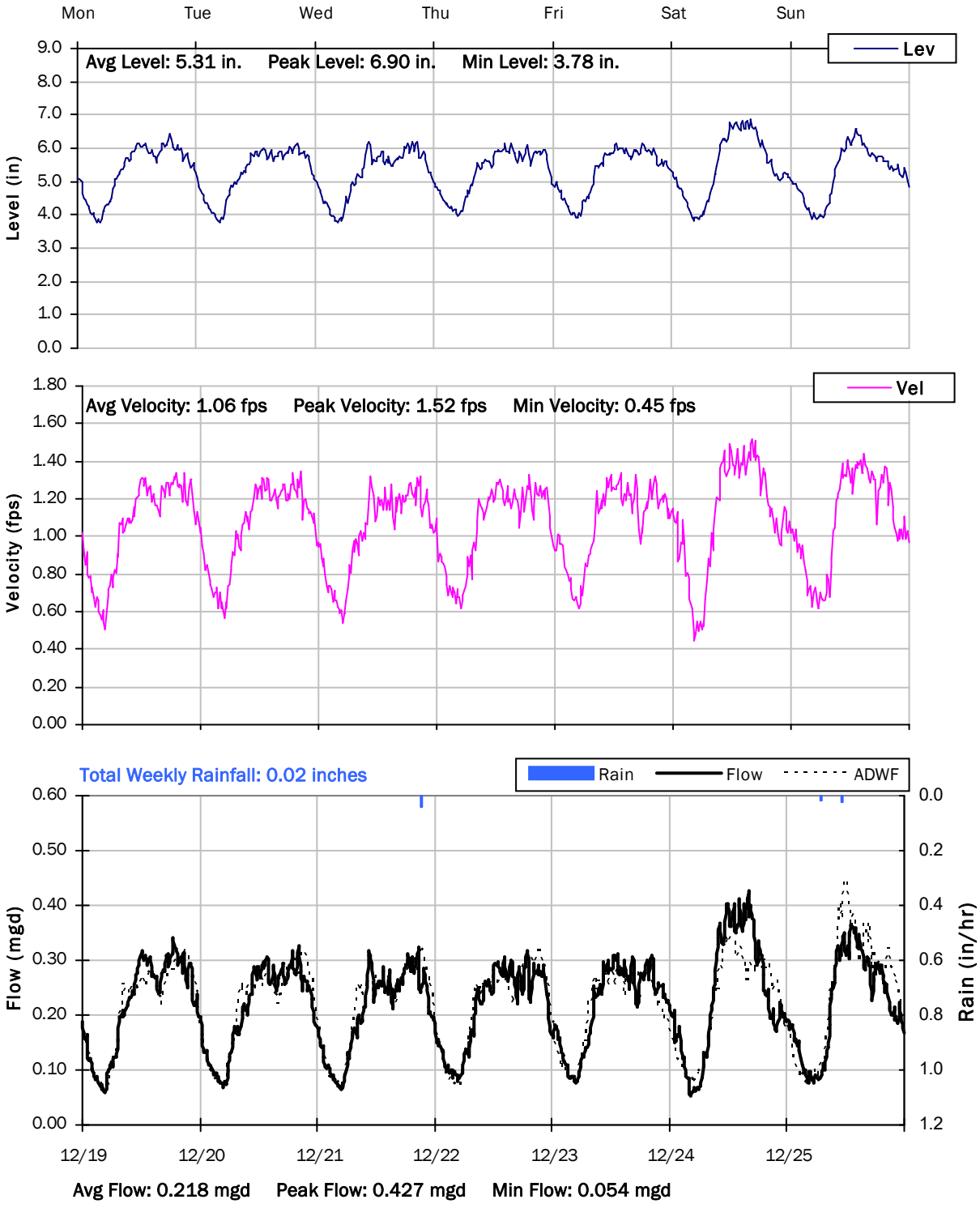
12/12/2022 to 12/19/2022



FM03

Weekly Level, Velocity and Flow Hydrographs

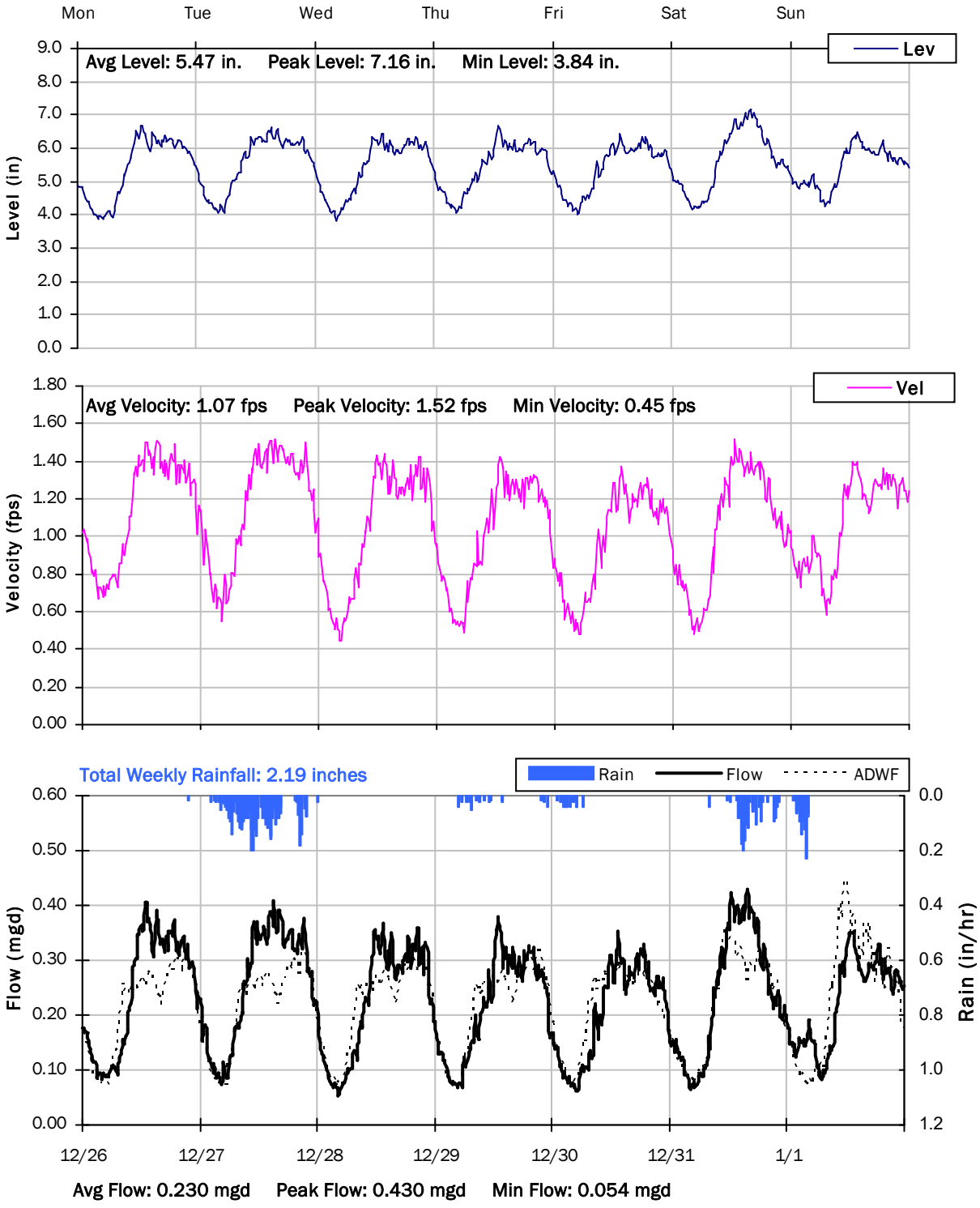
12/19/2022 to 12/26/2022



FM03

Weekly Level, Velocity and Flow Hydrographs

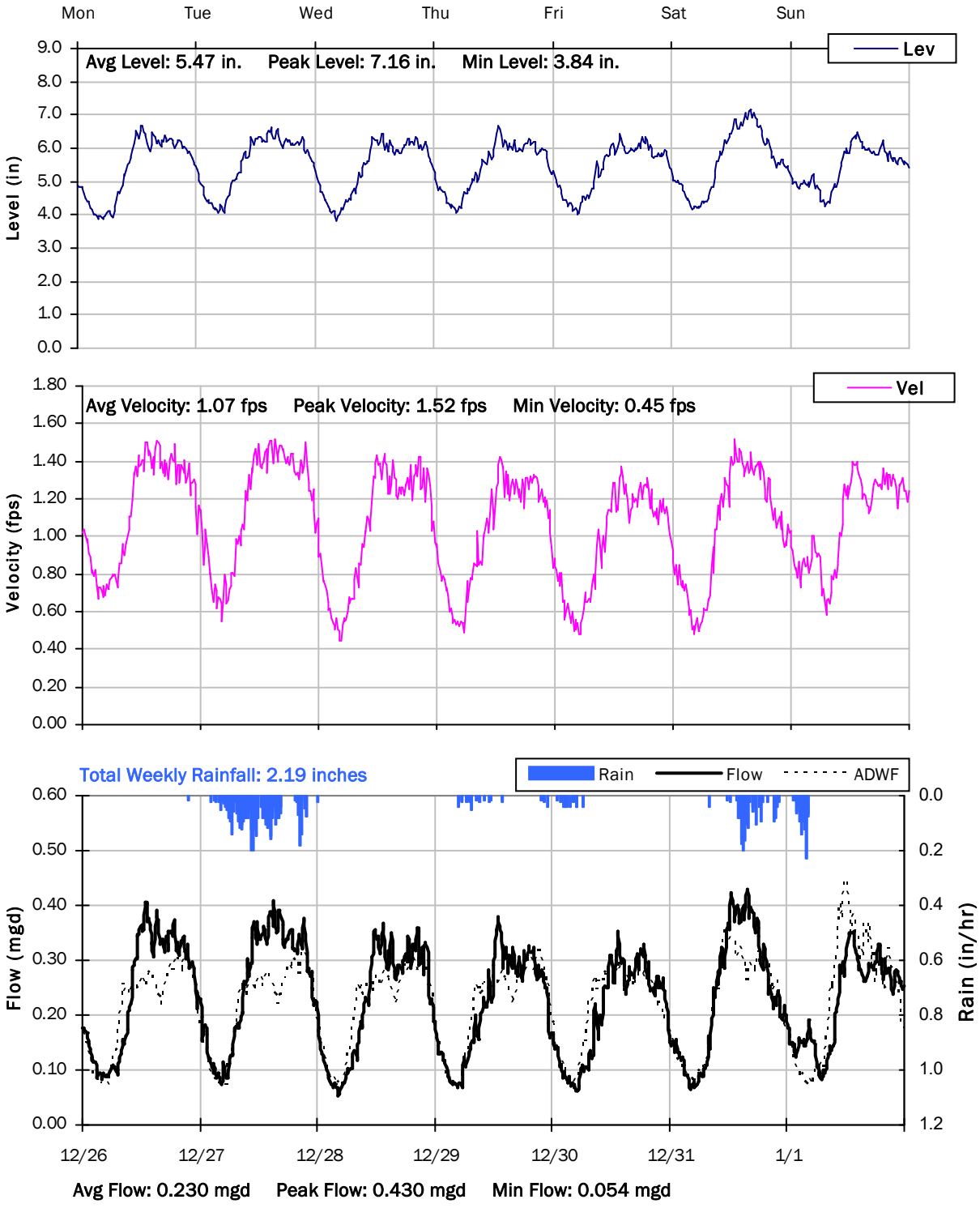
12/26/2022 to 1/2/2023



FM03

Weekly Level, Velocity and Flow Hydrographs

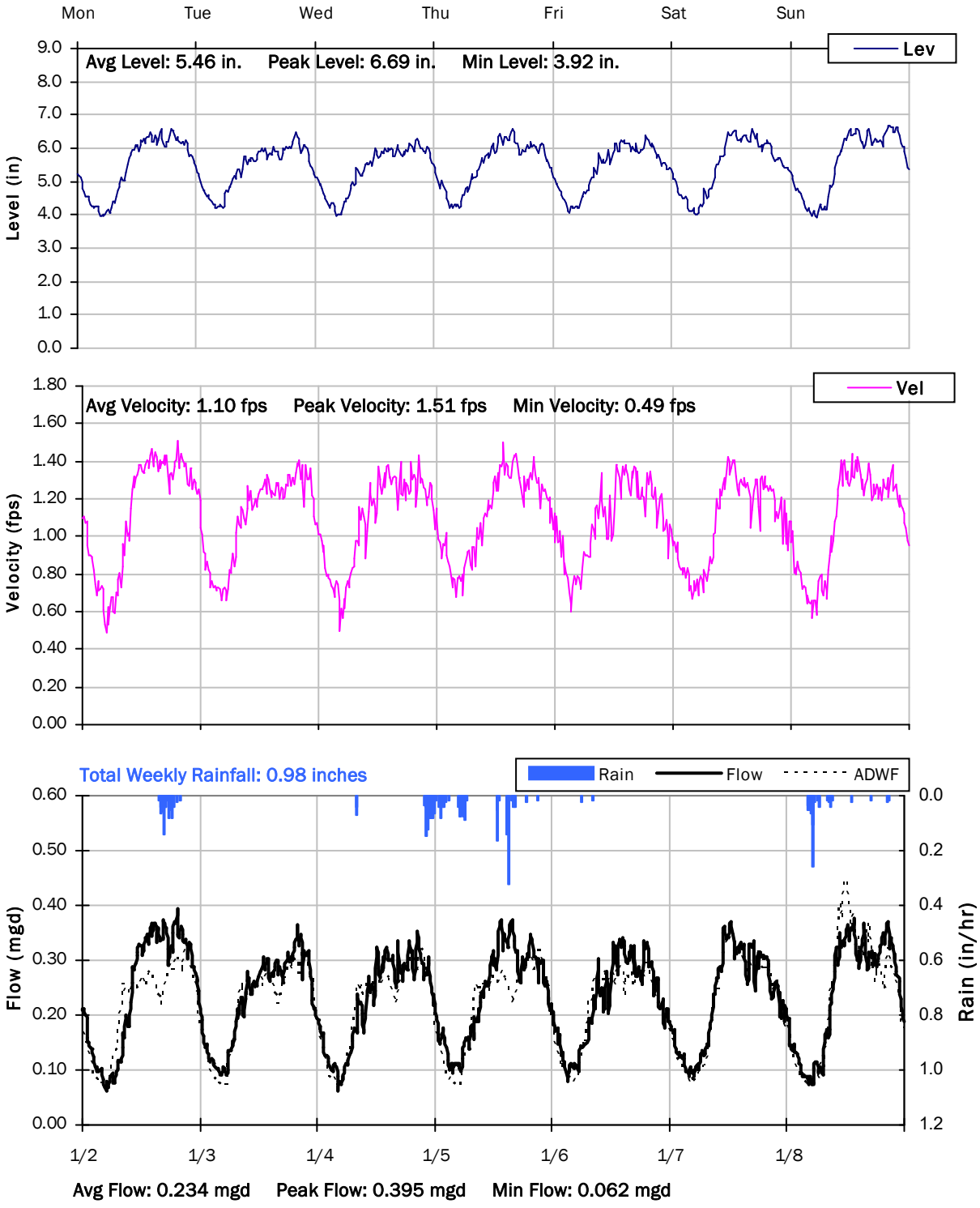
12/26/2022 to 1/2/2023



FM03

Weekly Level, Velocity and Flow Hydrographs

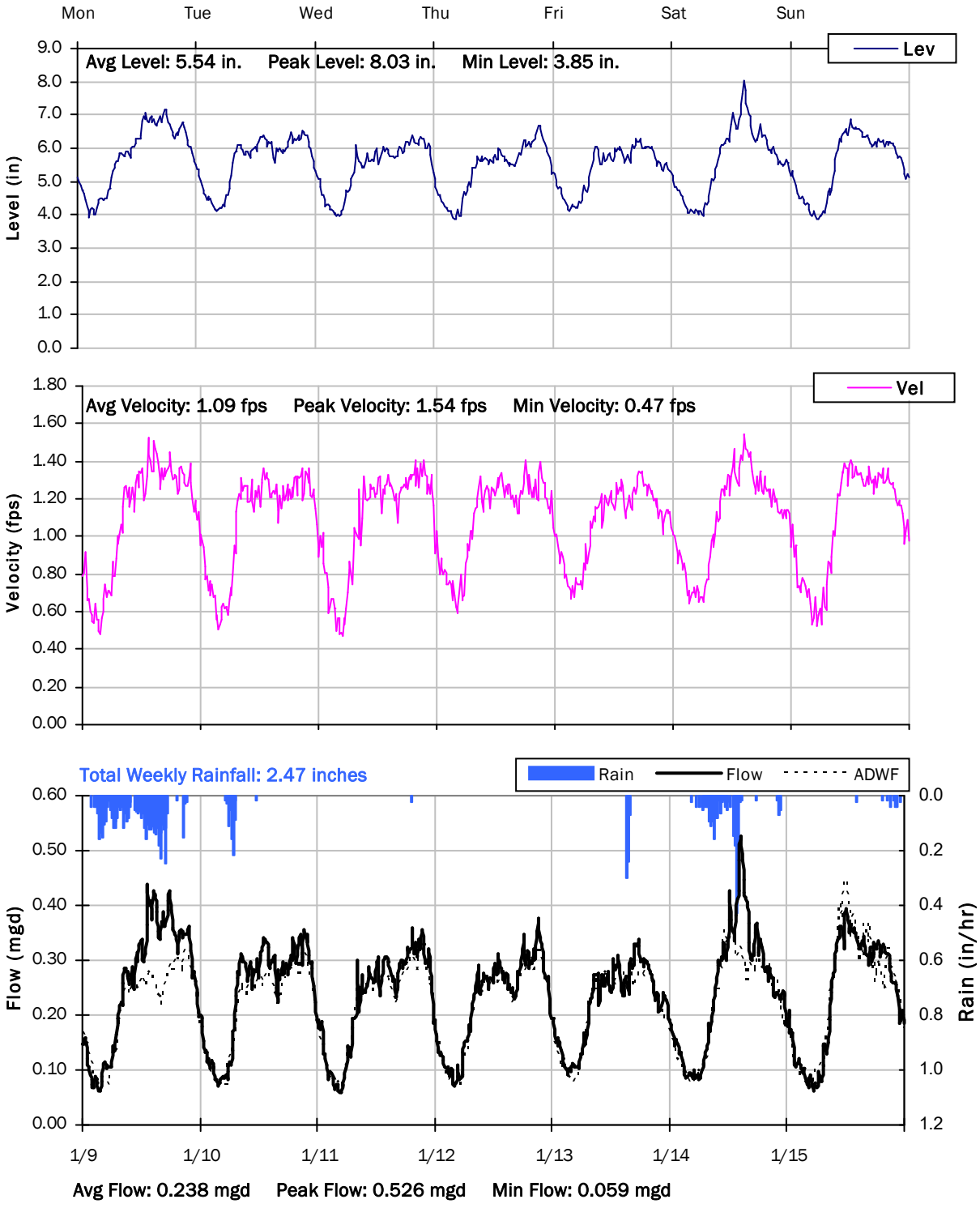
1/2/2023 to 1/9/2023



FM03

Weekly Level, Velocity and Flow Hydrographs

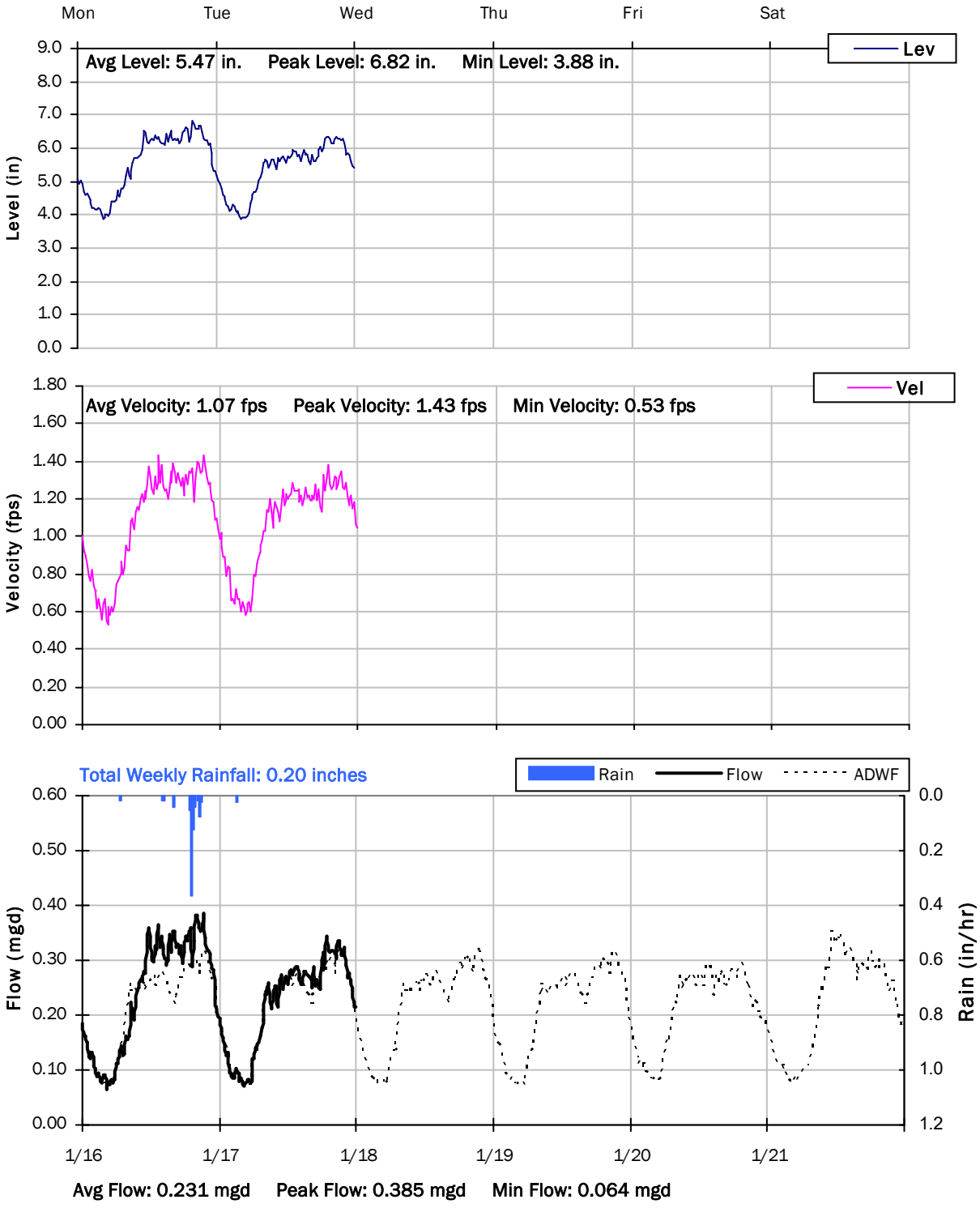
1/9/2023 to 1/16/2023



FM03

Weekly Level, Velocity and Flow Hydrographs

1/16/2023 to 1/22/2023



Monitoring Site: FM04

Selma-Kingsburg-Fowler Sanitation District

Sanitary Sewer Flow Monitoring

December 09, 2022 - January 17, 2023

Location: Intersection of Park St & Golden State Blvd

Data Summary Report

Vicinity Map: FM04

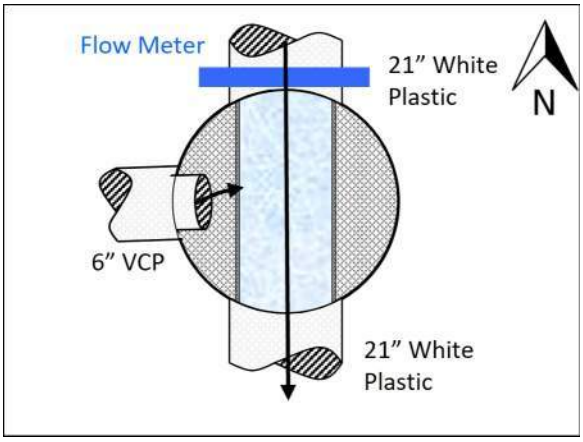
FM06

Site Information MH ID: 6000-3800

Location:	Intersection of Valley View St & McCall Ave
Coordinates:	119.6110° W, 36.5579° N
Rim Elevation:	306.88 feet
Expected Pipe Diameter:	21 inches
Measured Pipe Diameter:	21 inches
ADWF:	0.504 mgd
Peak Measured Flow:	1.616 mgd
Sediment:	None

Satellite Map

Sanitary Map



Flow Sketch

Street View

Plan View

FM04

Additional Site Photos

Effluent Pipe

Northwest Influent Pipe

FM04

Additional Site Photos

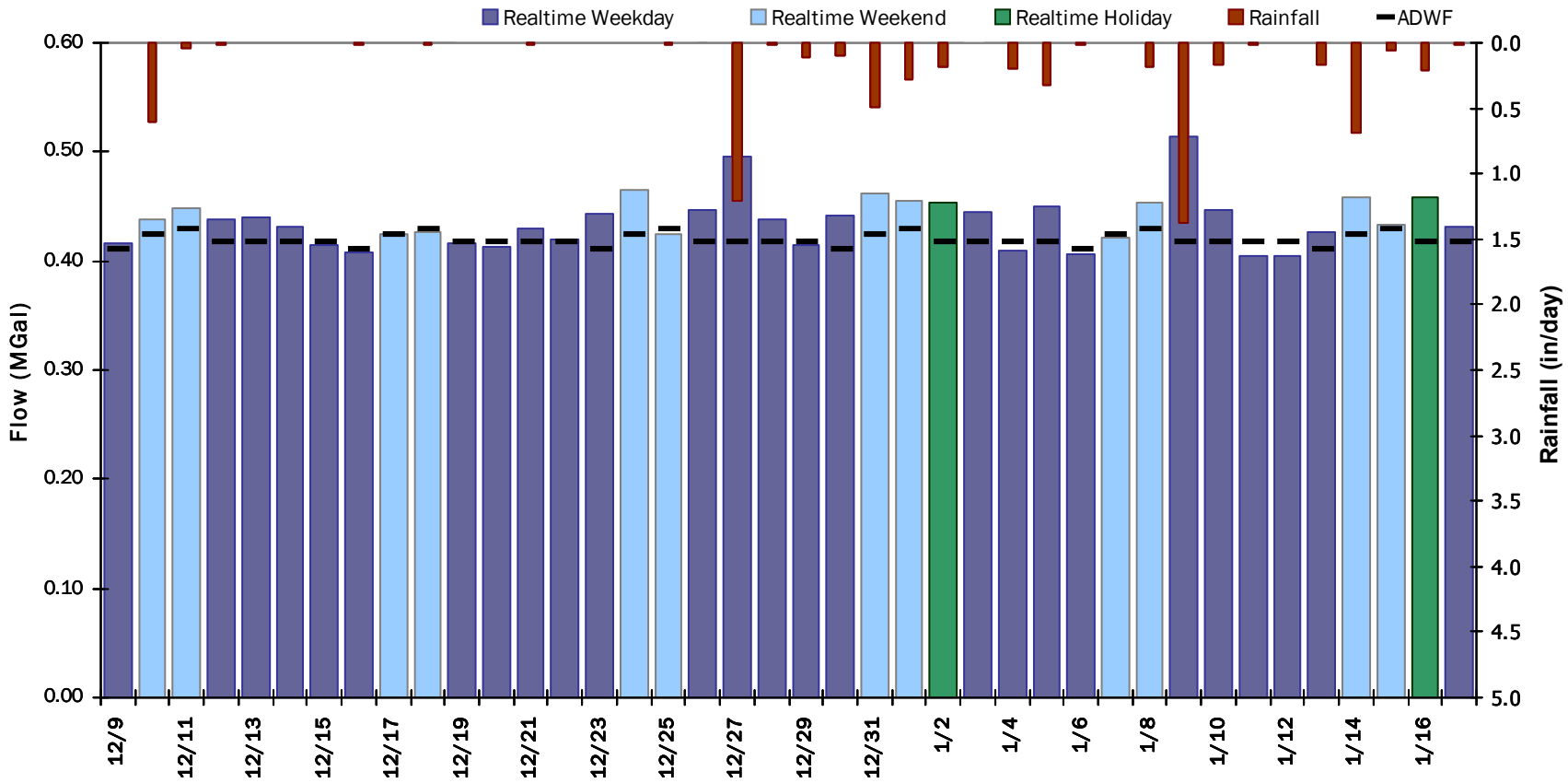
Mounted Northeast Influent Pipe

FM04

Period Flow Summary: Daily Flow Totals

Avg Daily Flow: 0.437 MGal Peak Daily Flow: 0.514 MGal Min Daily Flow: 0.404 MGal

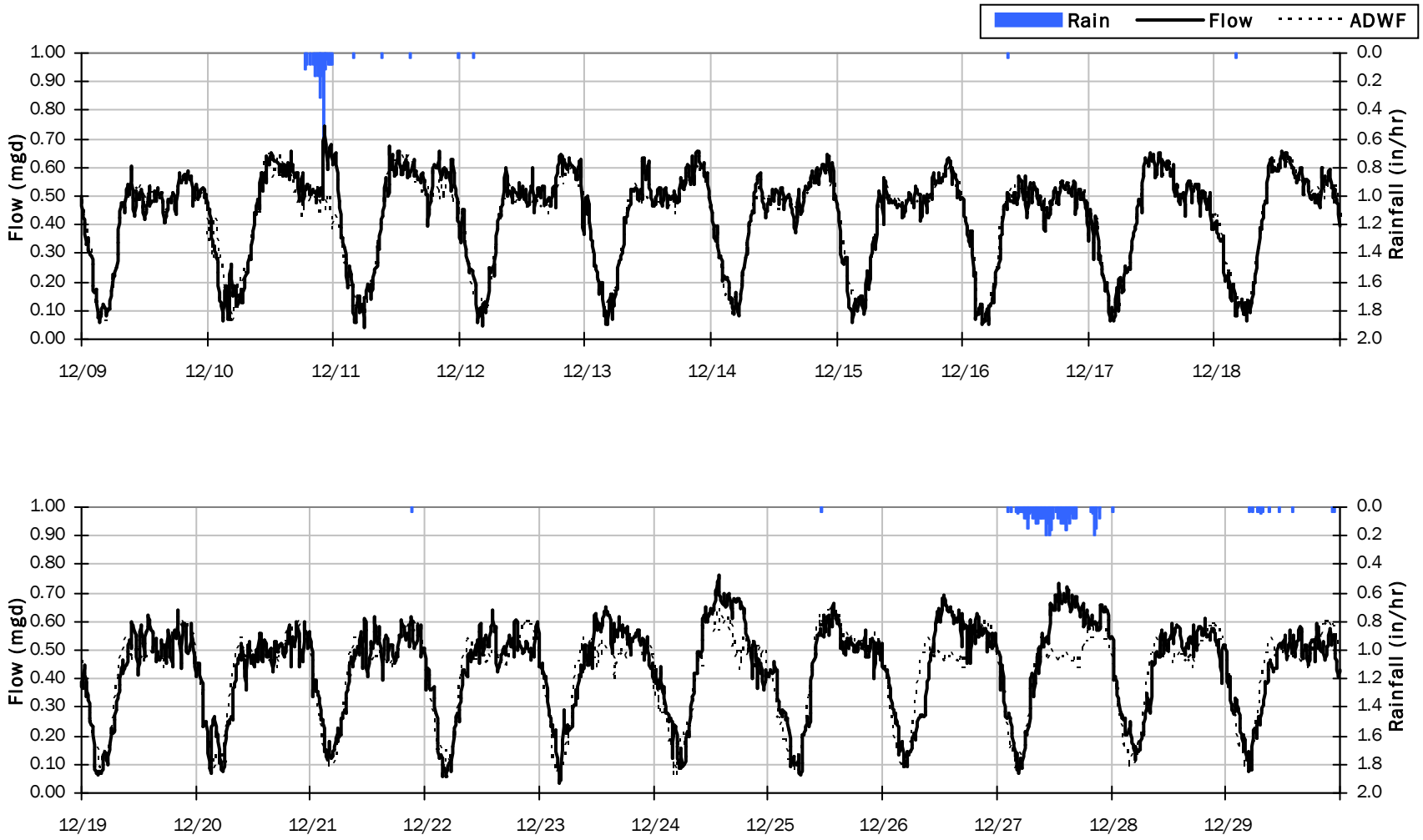
Total Rainfall: 6.46 inches



FM04

Flow Summary: 12/9/2022 to 12/29/2022

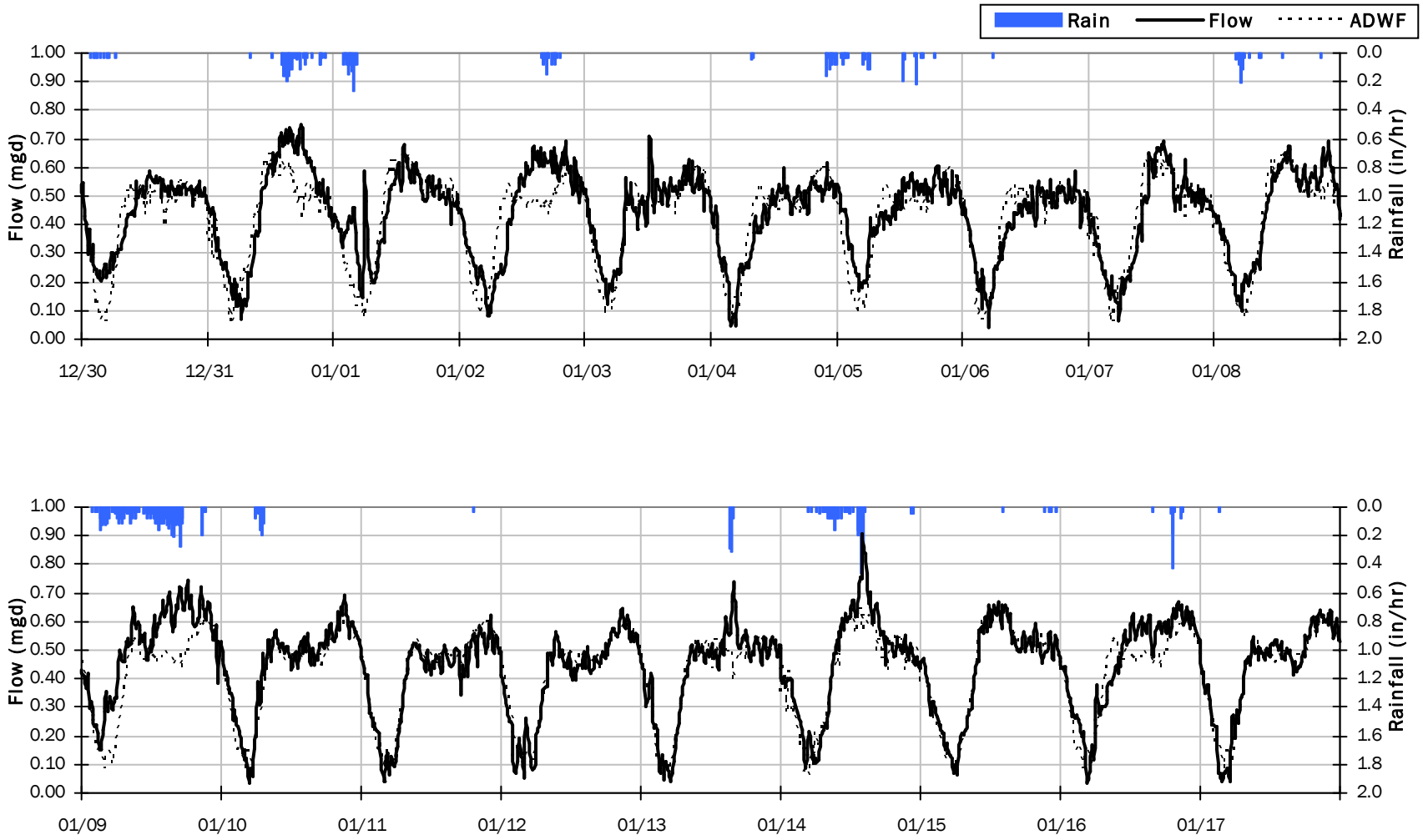
Period Rainfall: 2.02 inches Period Avg Flow: 0.433 mgd Period Peak Flow: 0.761 mgd Period Min Flow: 0.036 mgd



FM04

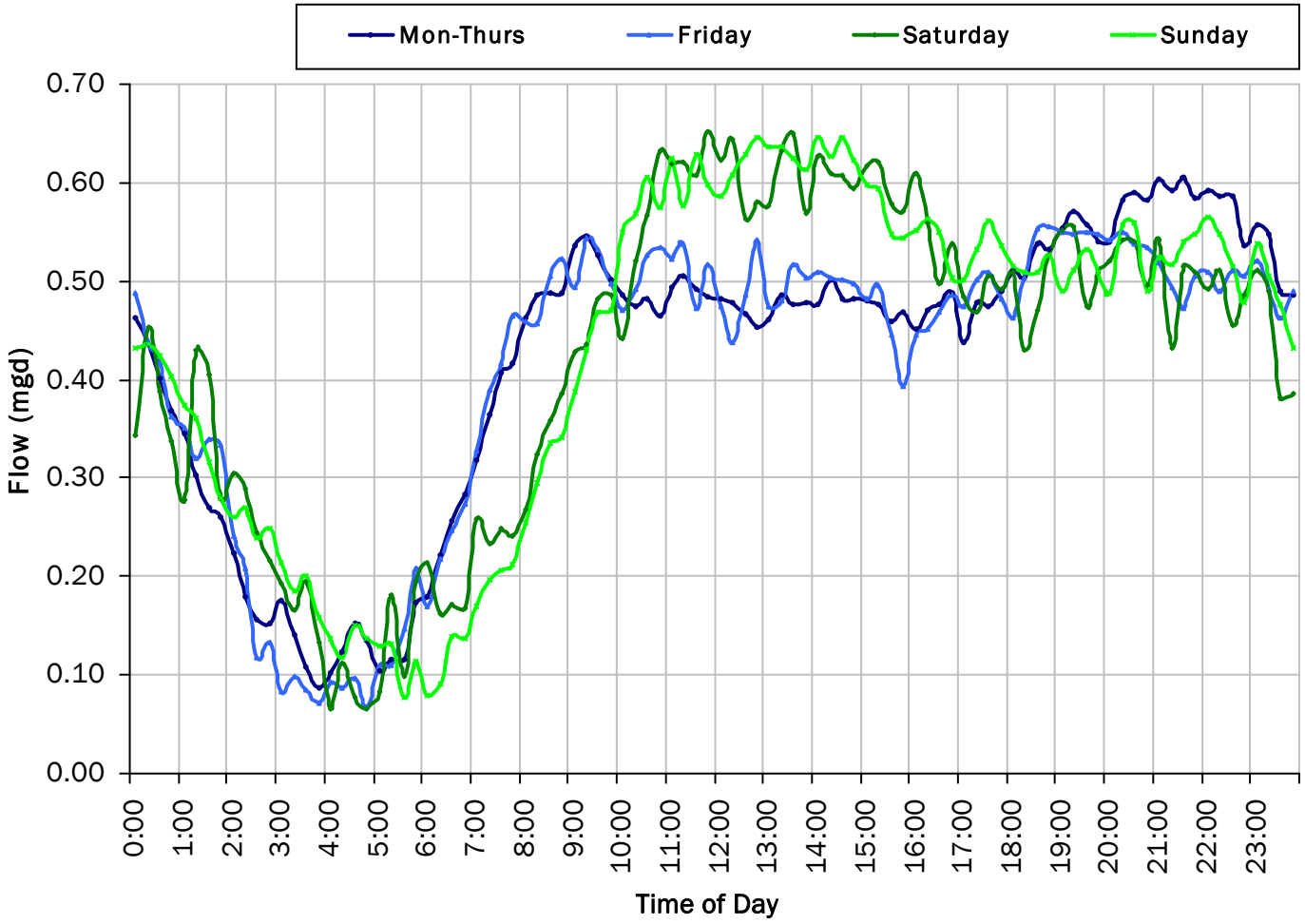
Flow Summary: 12/30/2022 to 1/17/2023

Period Rainfall: 4.43 inches Period Avg Flow: 0.441 mgd Period Peak Flow: 0.907 mgd Period Min Flow: 0.034 mgd



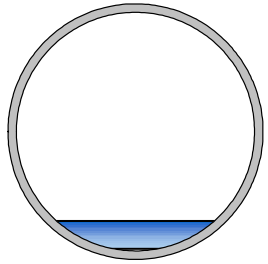
FM04

Average Dry Weather Flow Hydrographs



ADWF:

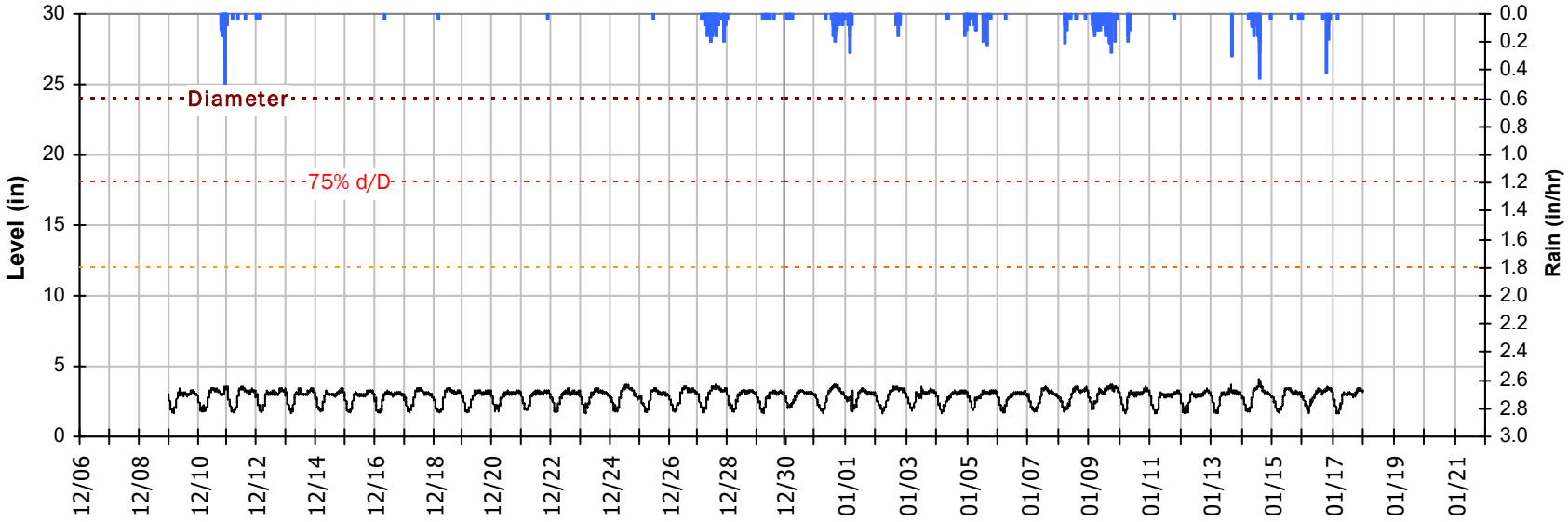
0.420 *mgd*

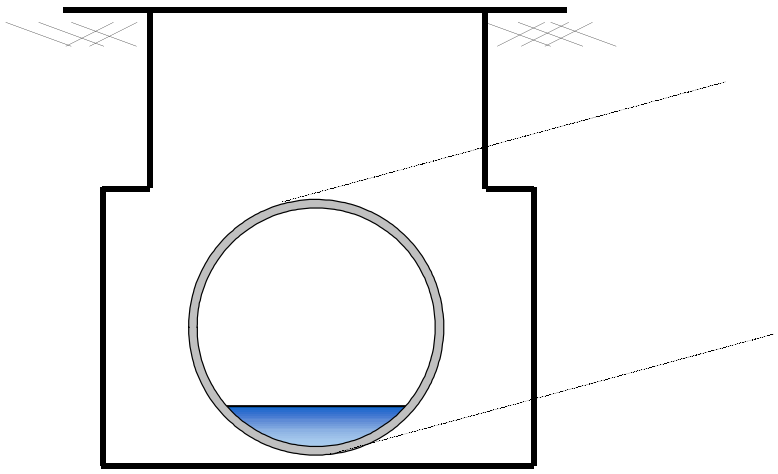


FM04

Site Capacity and Surcharge Summary

Realtime Flow Levels with Rainfall Data over Peak Level Period



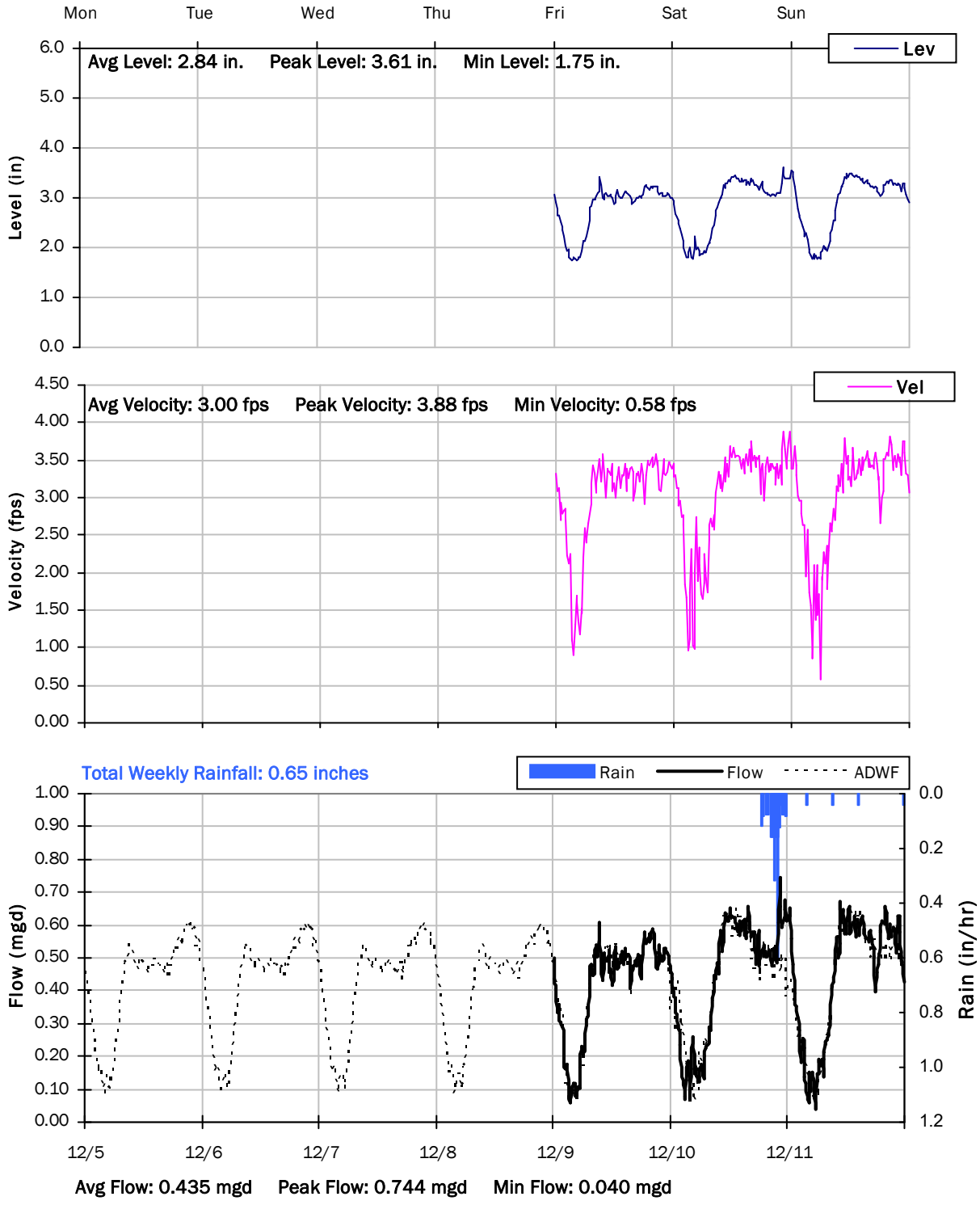


Pipe Diameter:	24	*inches*
Peak Measured Level:	4.04	*inches*
Peak d/D Ratio:	0.17	

FM04

Weekly Level, Velocity and Flow Hydrographs

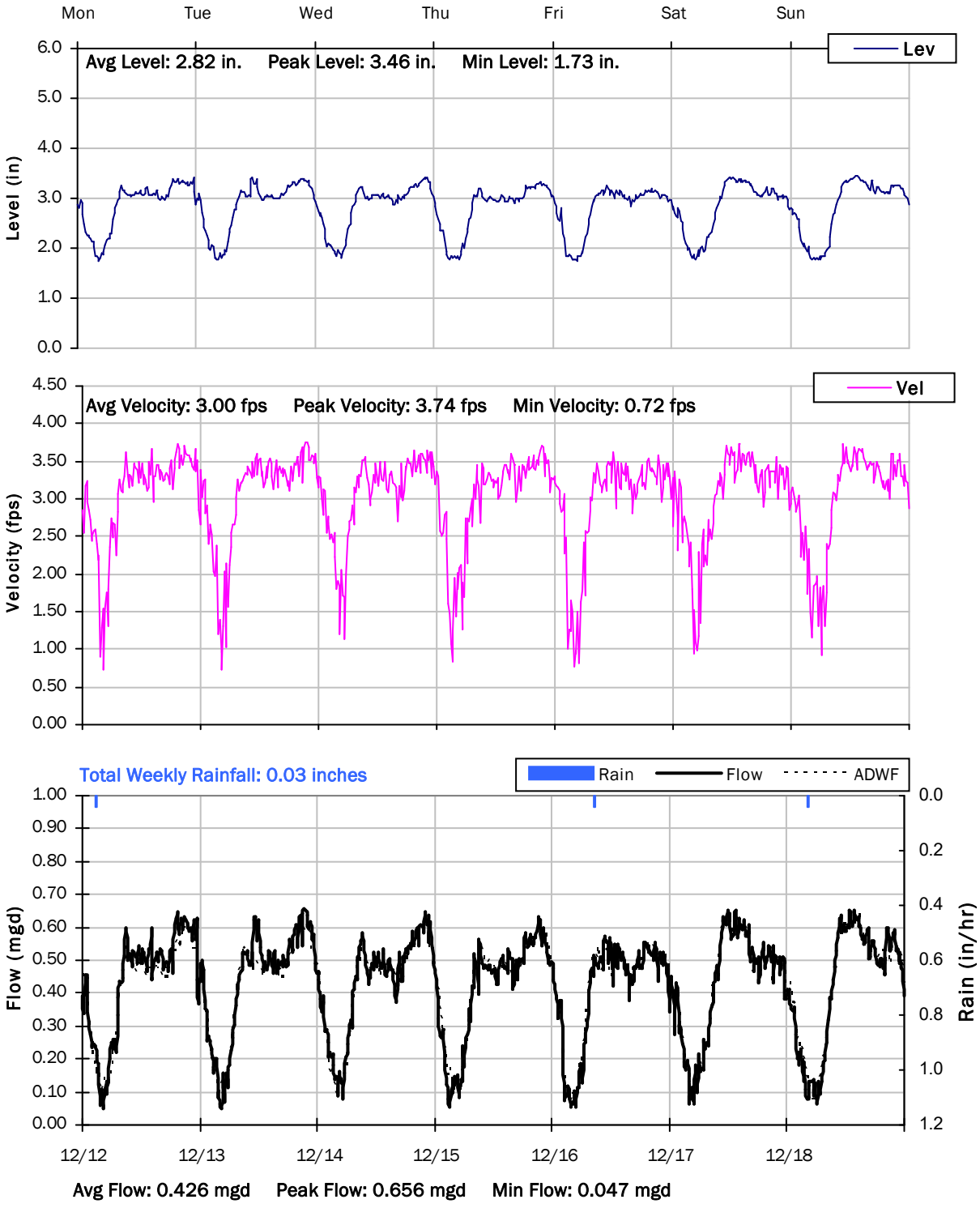
12/5/2022 to 12/12/2022



FM04

Weekly Level, Velocity and Flow Hydrographs

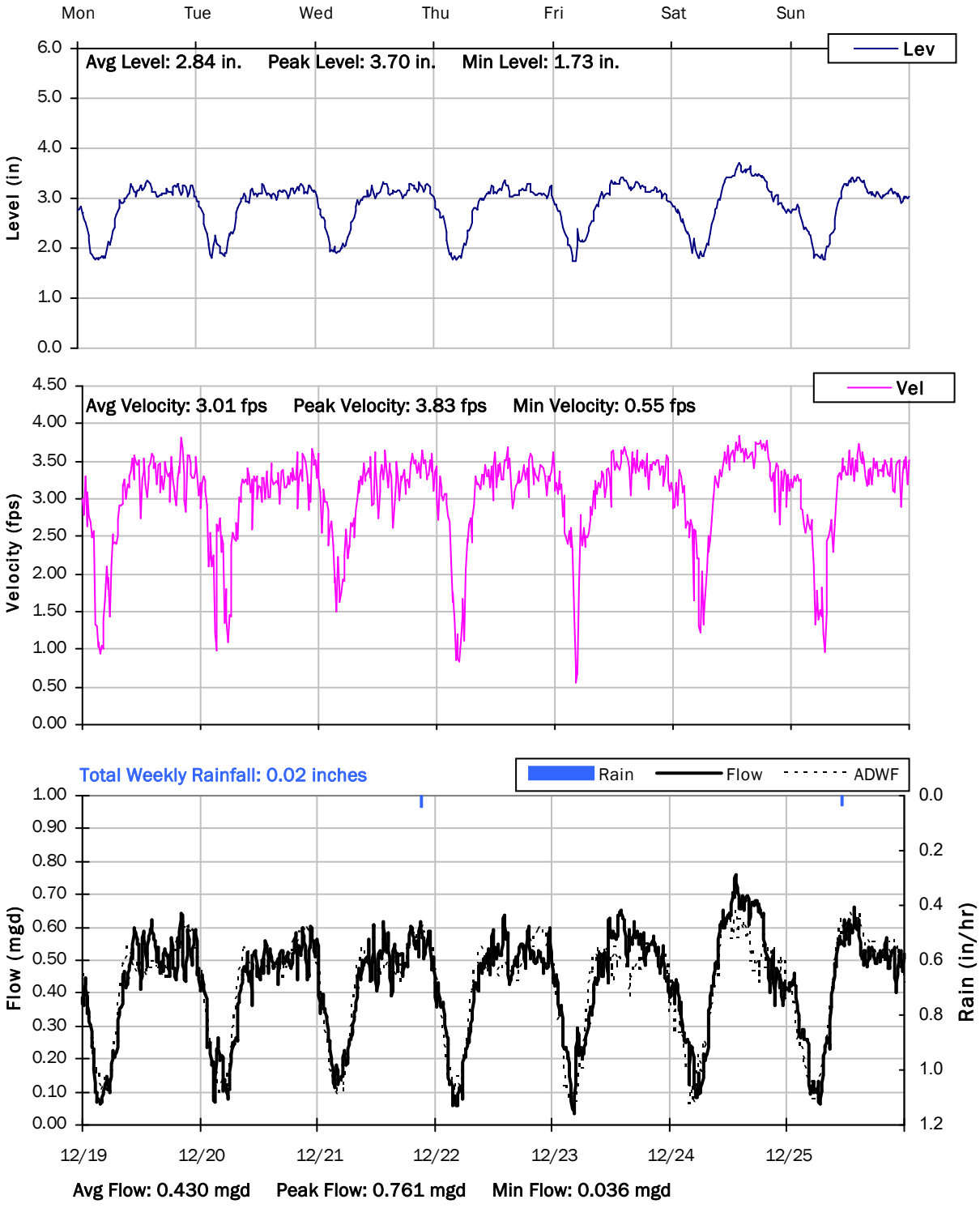
12/12/2022 to 12/19/2022



FM04

Weekly Level, Velocity and Flow Hydrographs

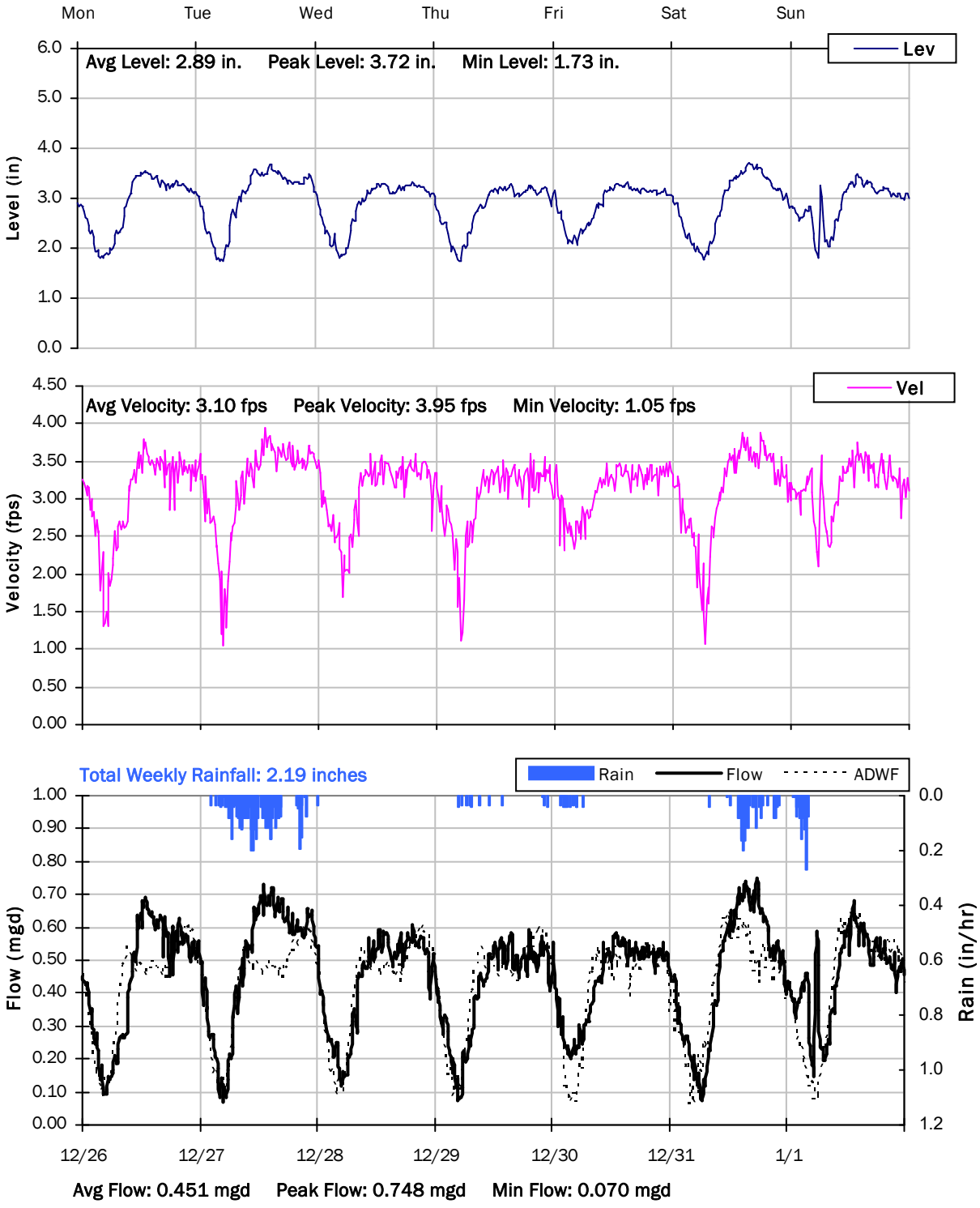
12/19/2022 to 12/26/2022



FM04

Weekly Level, Velocity and Flow Hydrographs

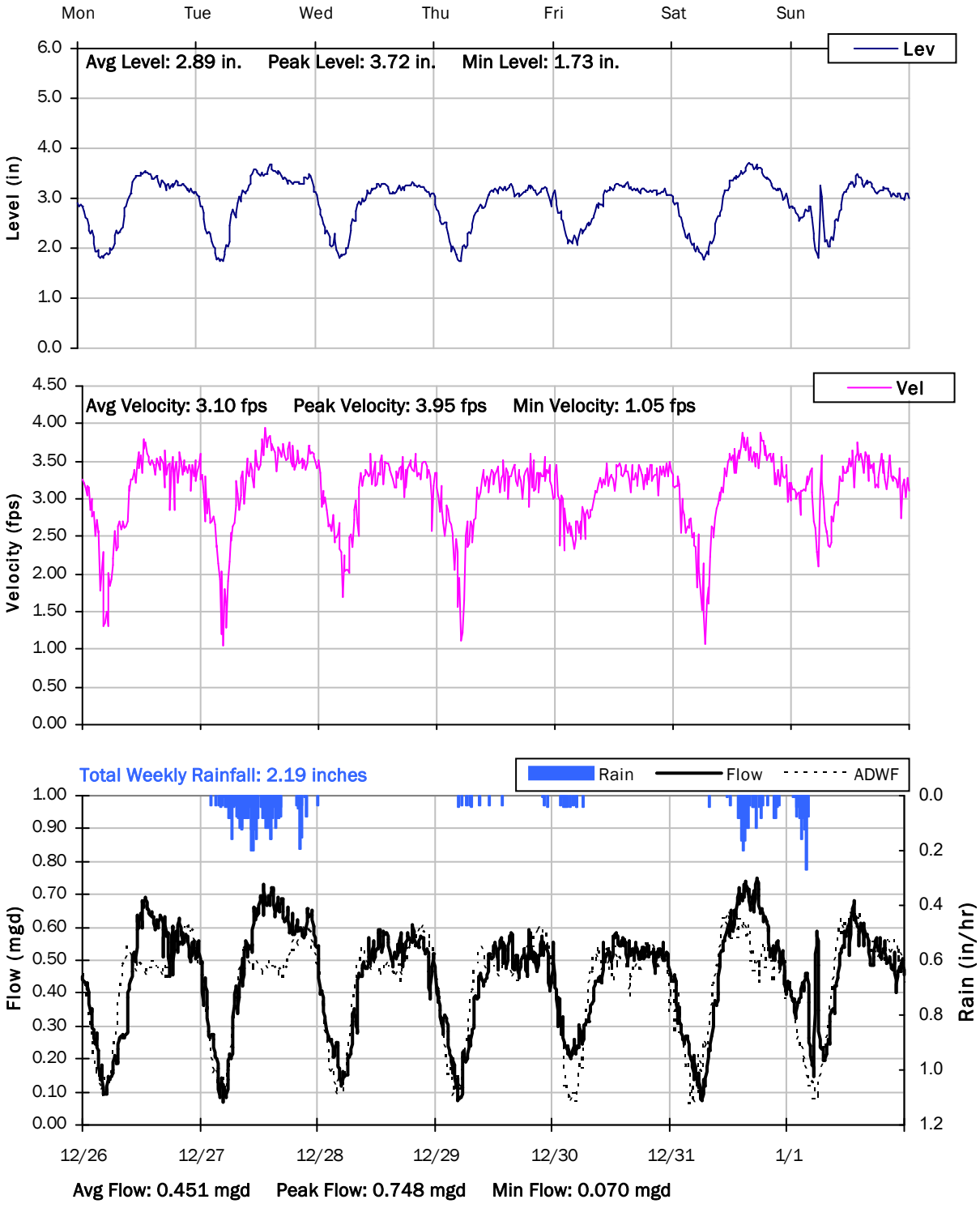
12/26/2022 to 1/2/2023



FM04

Weekly Level, Velocity and Flow Hydrographs

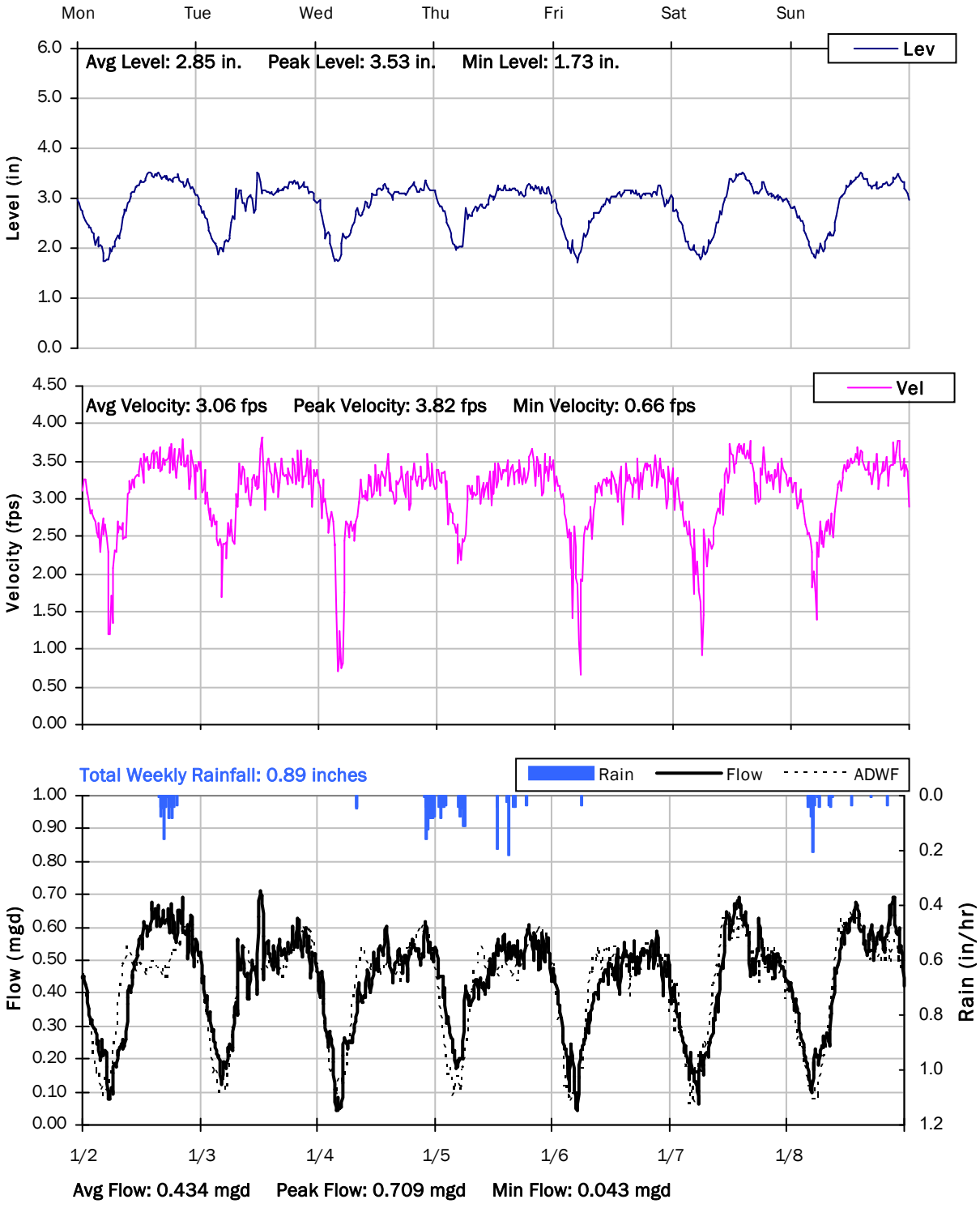
12/26/2022 to 1/2/2023



FM04

Weekly Level, Velocity and Flow Hydrographs

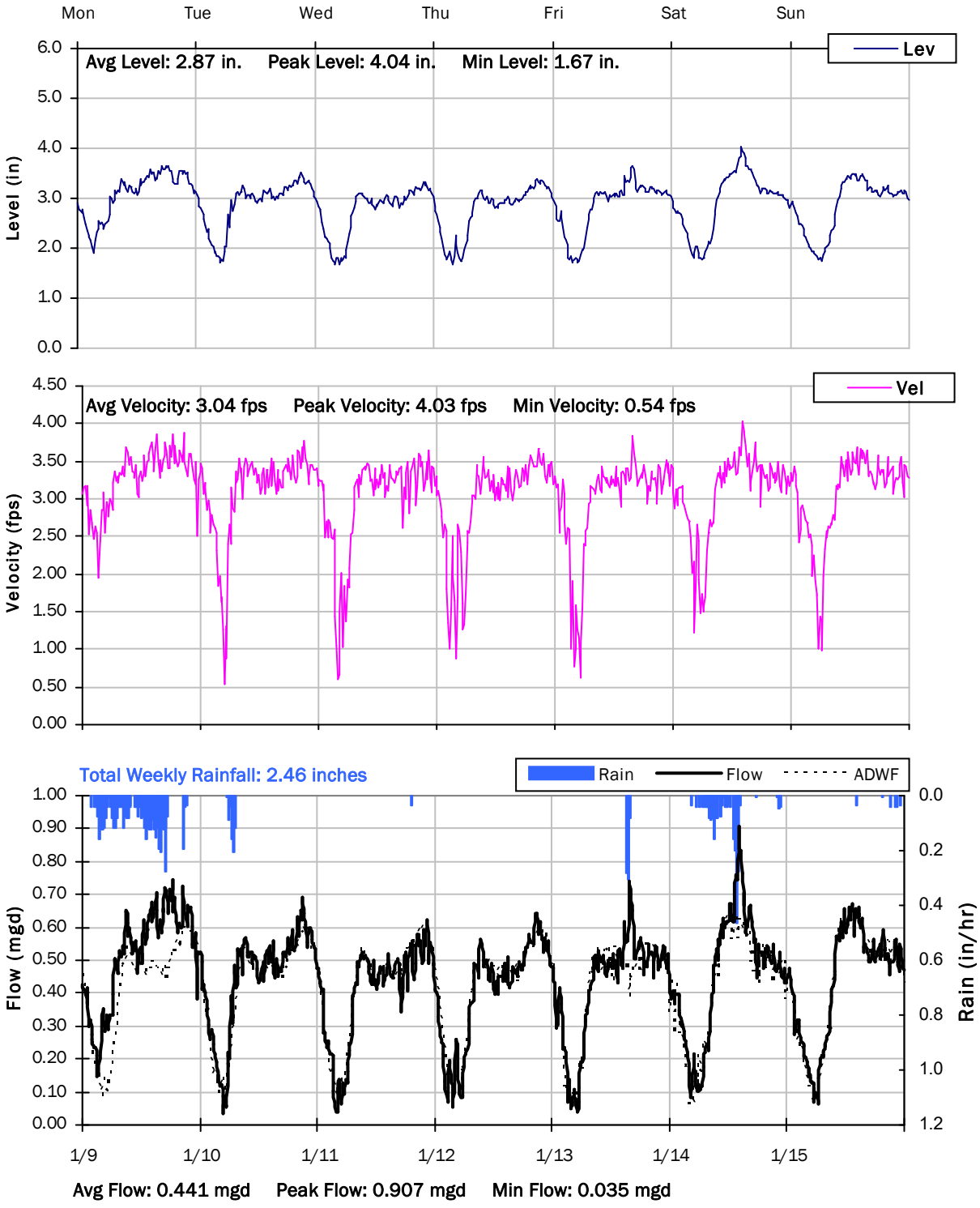
1/2/2023 to 1/9/2023



FM04

Weekly Level, Velocity and Flow Hydrographs

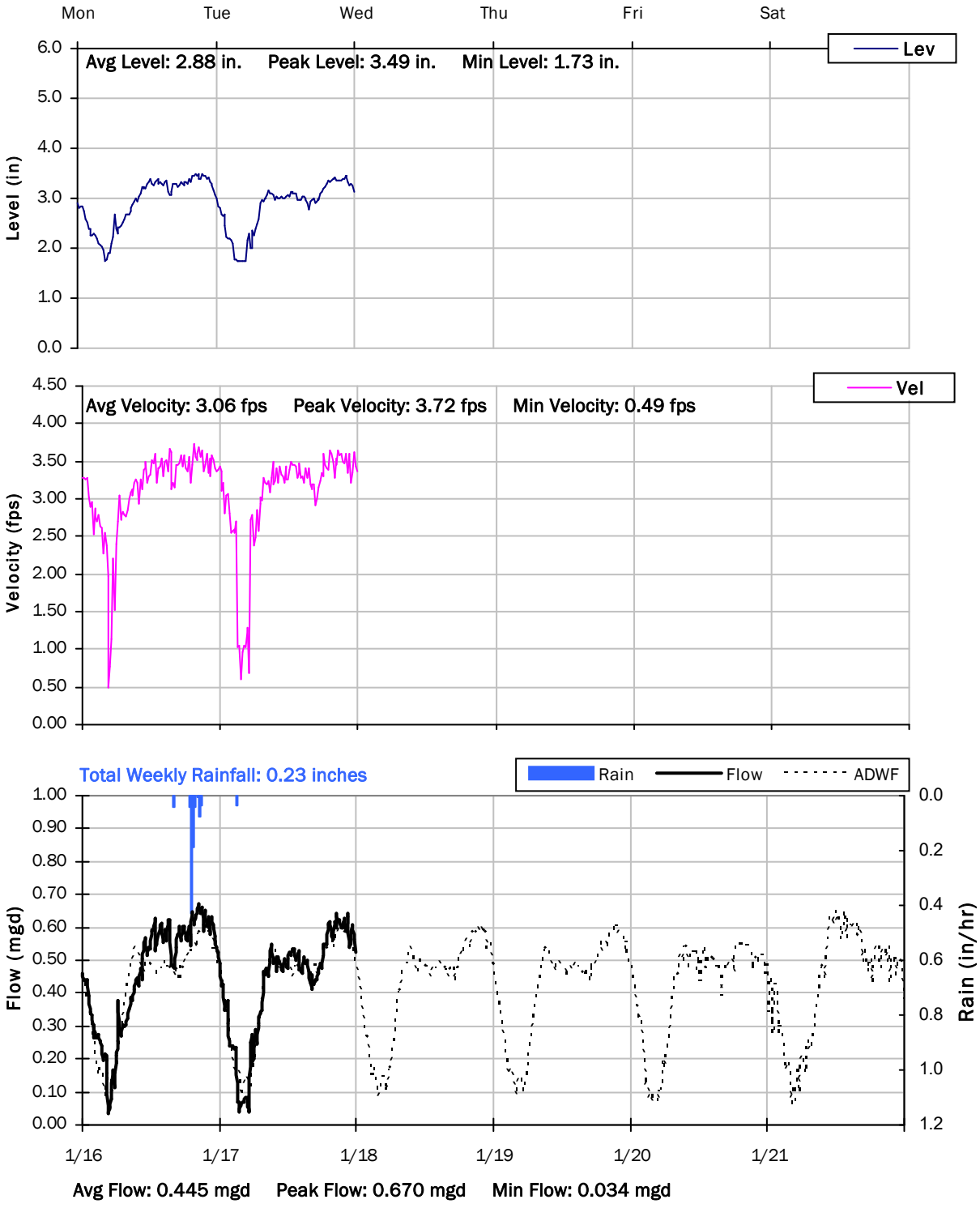
1/9/2023 to 1/16/2023



FM04

Weekly Level, Velocity and Flow Hydrographs

1/16/2023 to 1/22/2023



Monitoring Site: FM06

Selma-Kingsburg-Fowler Sanitation District

Sanitary Sewer Flow Monitoring

December 09, 2022 - January 17, 2023

Location: Intersection of Valley View St & McCall Ave

Data Summary Report

Vicinity Map: FM06

FM06A

Site Information MH ID: 6000-3900

Location: Backyard behind 1851 McCall Ave

Coordinates: 119.6109° W, 36.5590° N

Rim Elevation: 307.37 feet

Expected Pipe Diameter: 12 inches

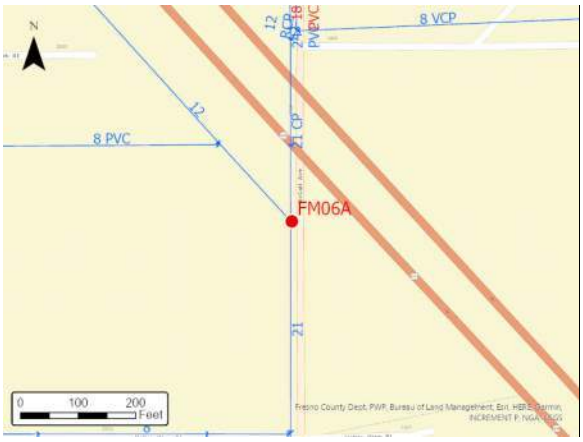
Measured Pipe Diameter: 12 inches

ADWF: 0.130 mgd

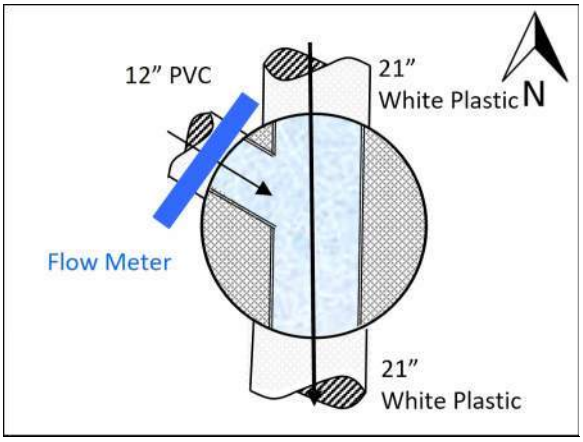
Peak Measured Flow: 0.471 mgd

Sediment: None

Satellite Map



Sanitary Map



Flow Sketch

Street View

Plan View

FM06

Additional Site Photos

Effluent Pipe

West Influent Pipe

FM06

Additional Site Photos

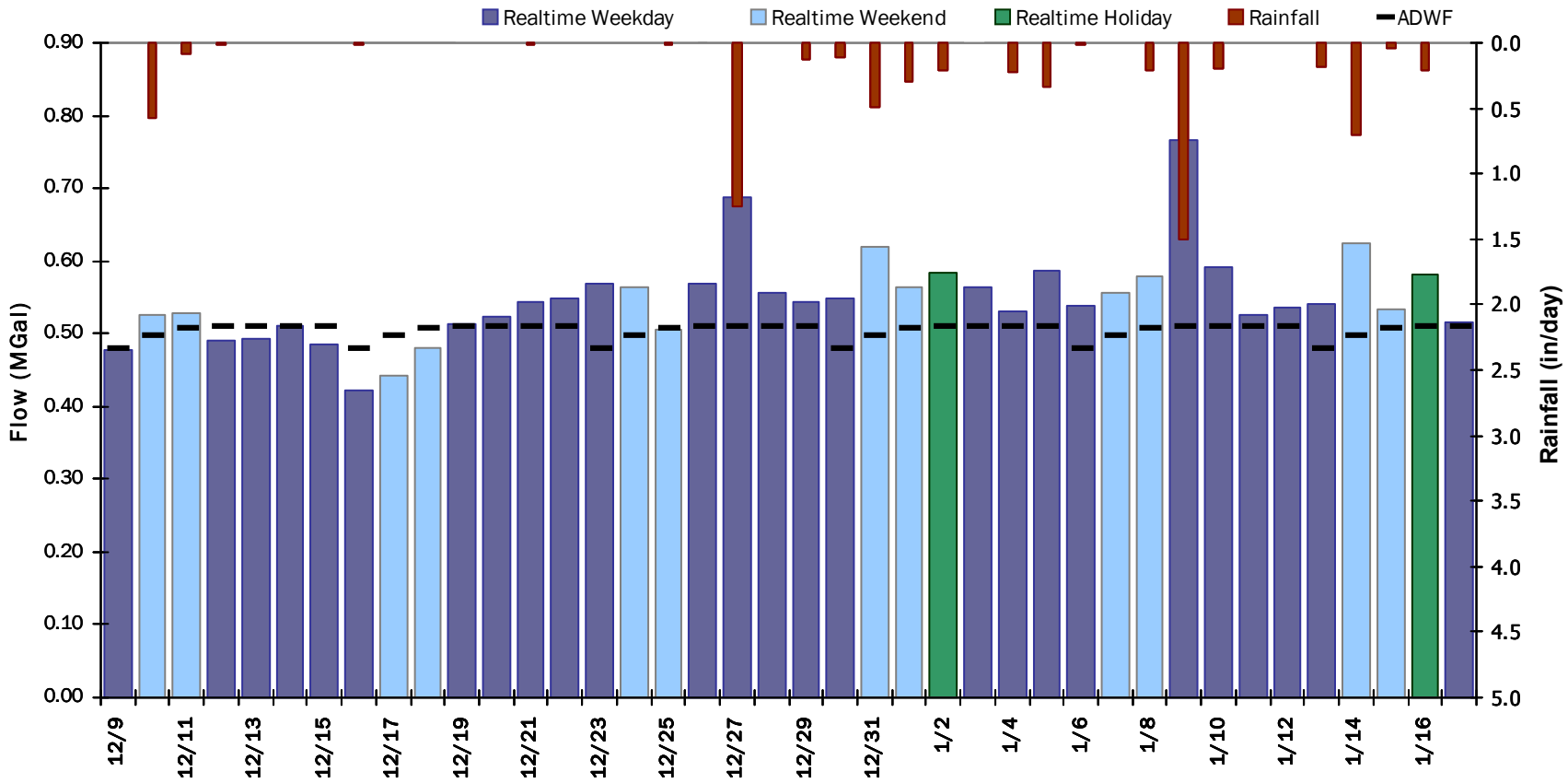
Mounted North Influent Pipe

FM06

Period Flow Summary: Daily Flow Totals

Avg Daily Flow: 0.547 MGal Peak Daily Flow: 0.765 MGal Min Daily Flow: 0.423 MGal

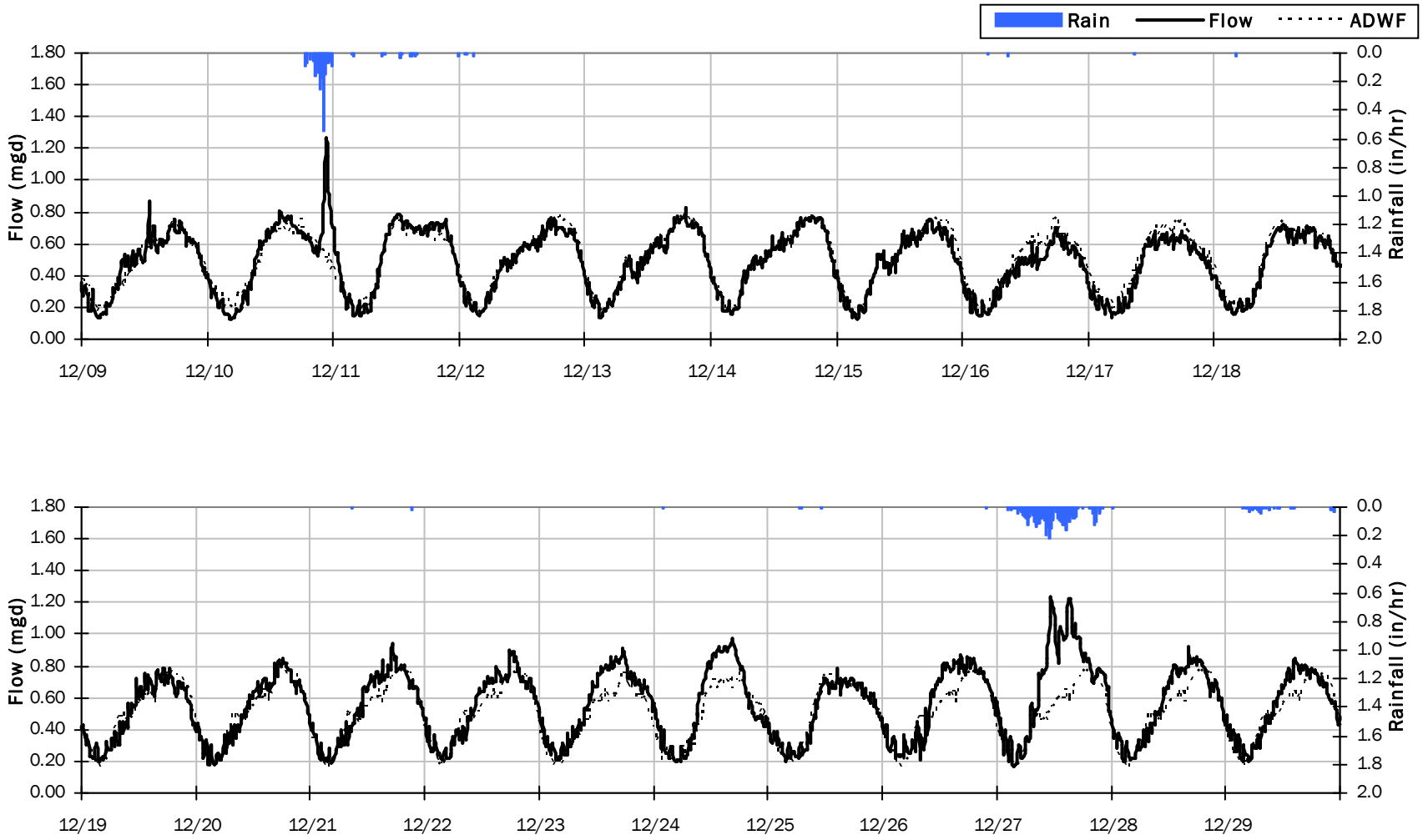
Total Rainfall: 6.84 inches



FM06

Flow Summary: 12/9/2022 to 12/29/2022

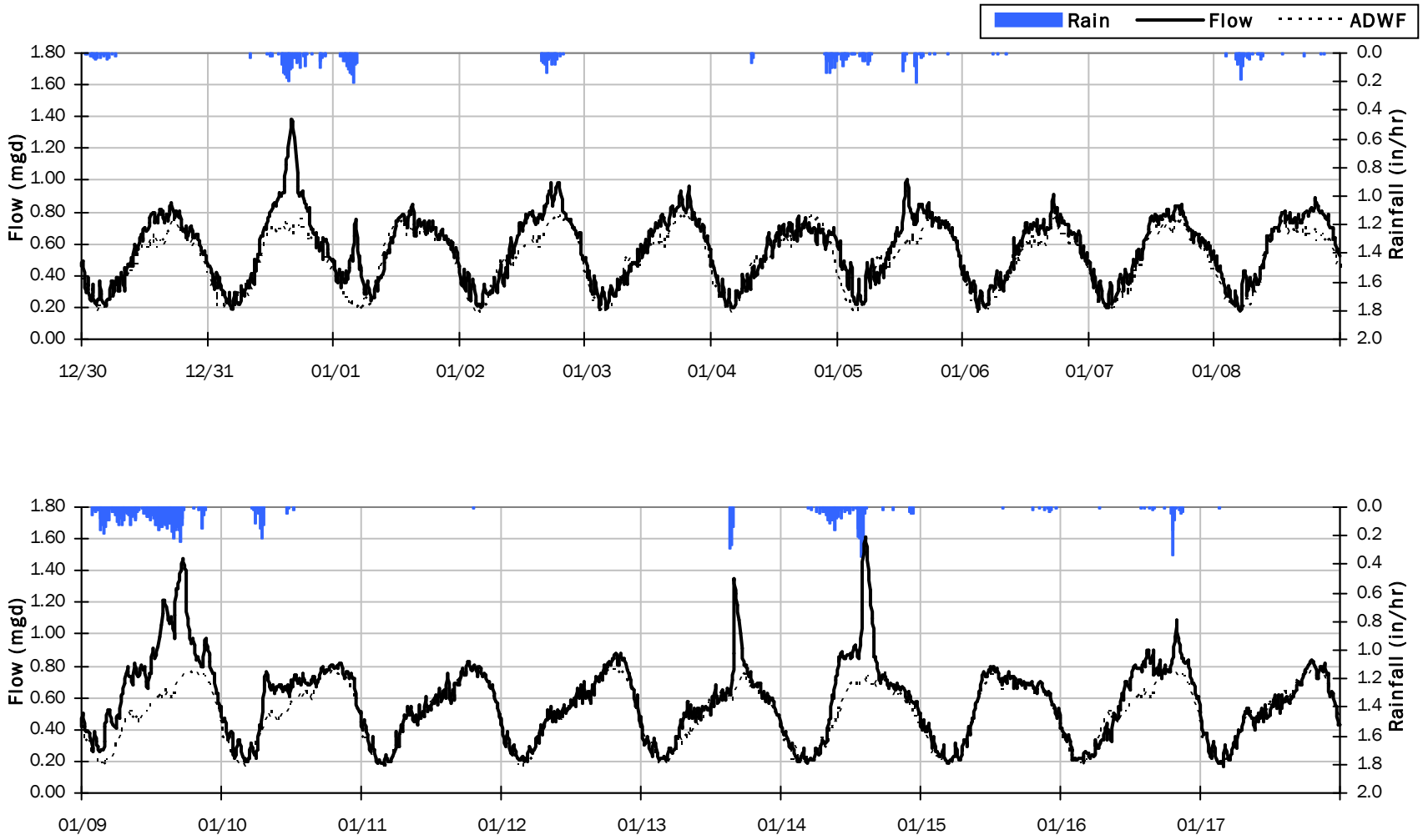
Period Rainfall: 2.11 inches Period Avg Flow: 0.523 mgd Period Peak Flow: 1.258 mgd Period Min Flow: 0.122 mgd



FM06

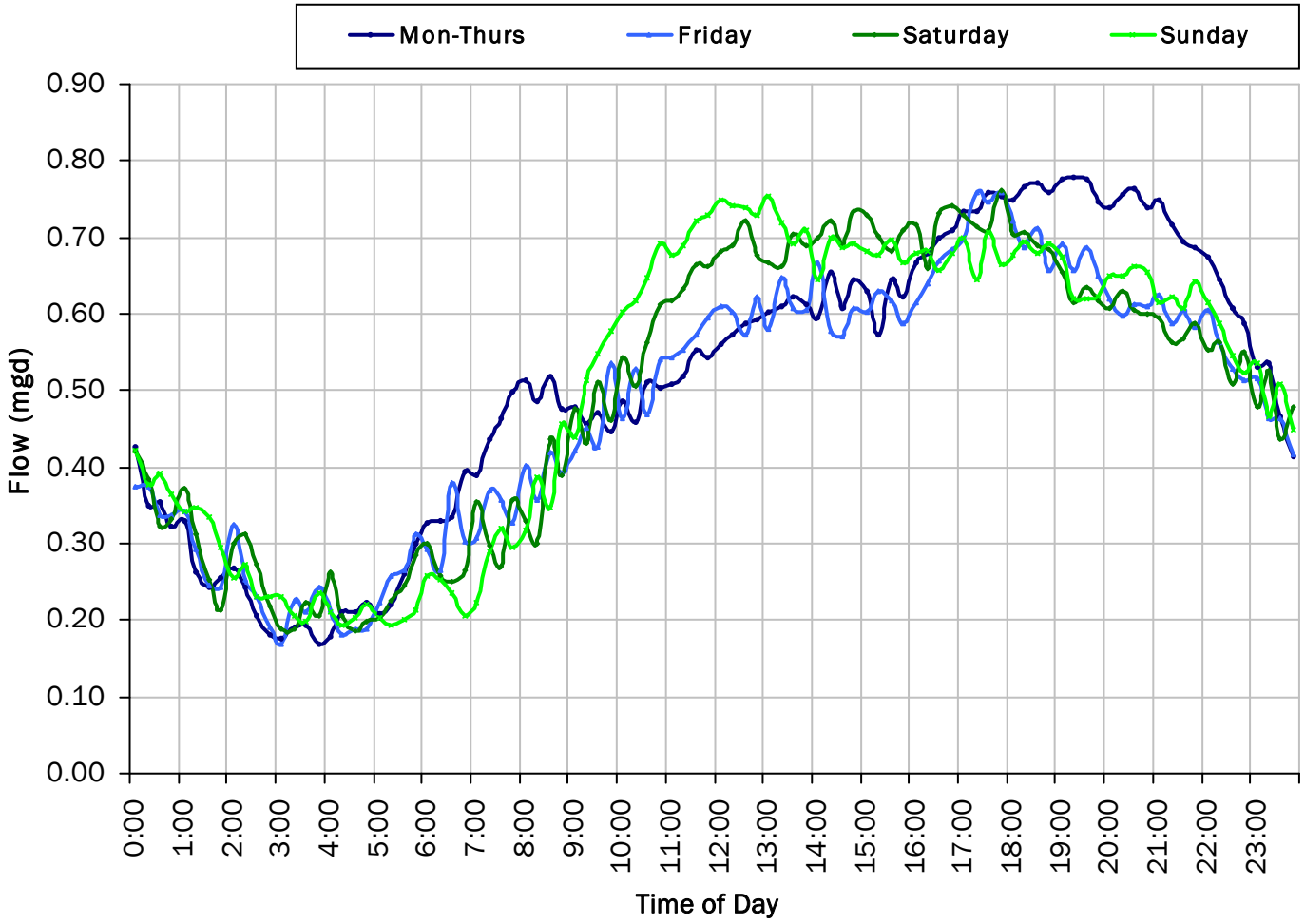
Flow Summary: 12/30/2022 to 1/17/2023

Period Rainfall: 4.73 inches Period Avg Flow: 0.573 mgd Period Peak Flow: 1.616 mgd Period Min Flow: 0.168 mgd



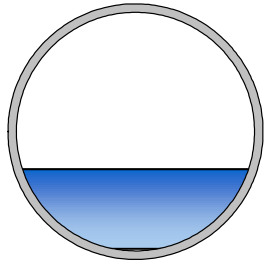
FM06

Average Dry Weather Flow Hydrographs



ADWF:

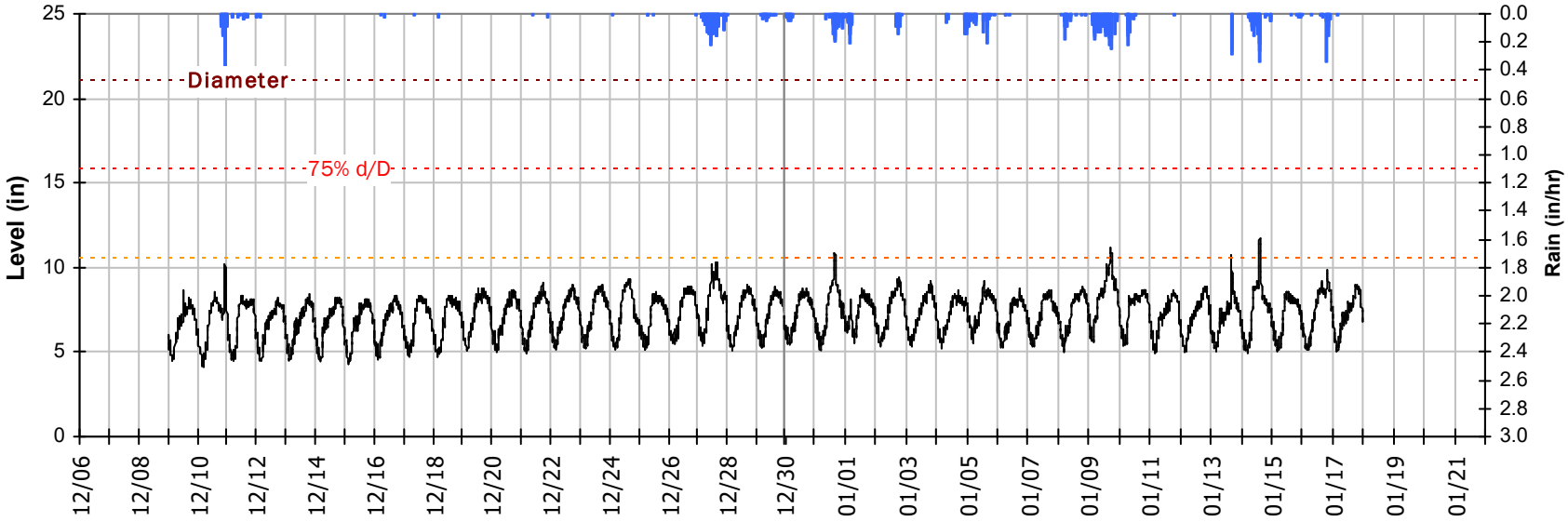
0.504 *mgd*

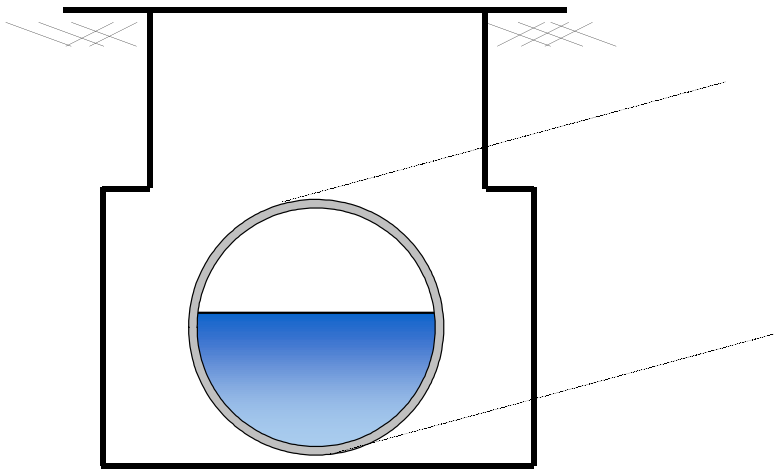


FM06

Site Capacity and Surcharge Summary

Realtime Flow Levels with Rainfall Data over Peak Level Period



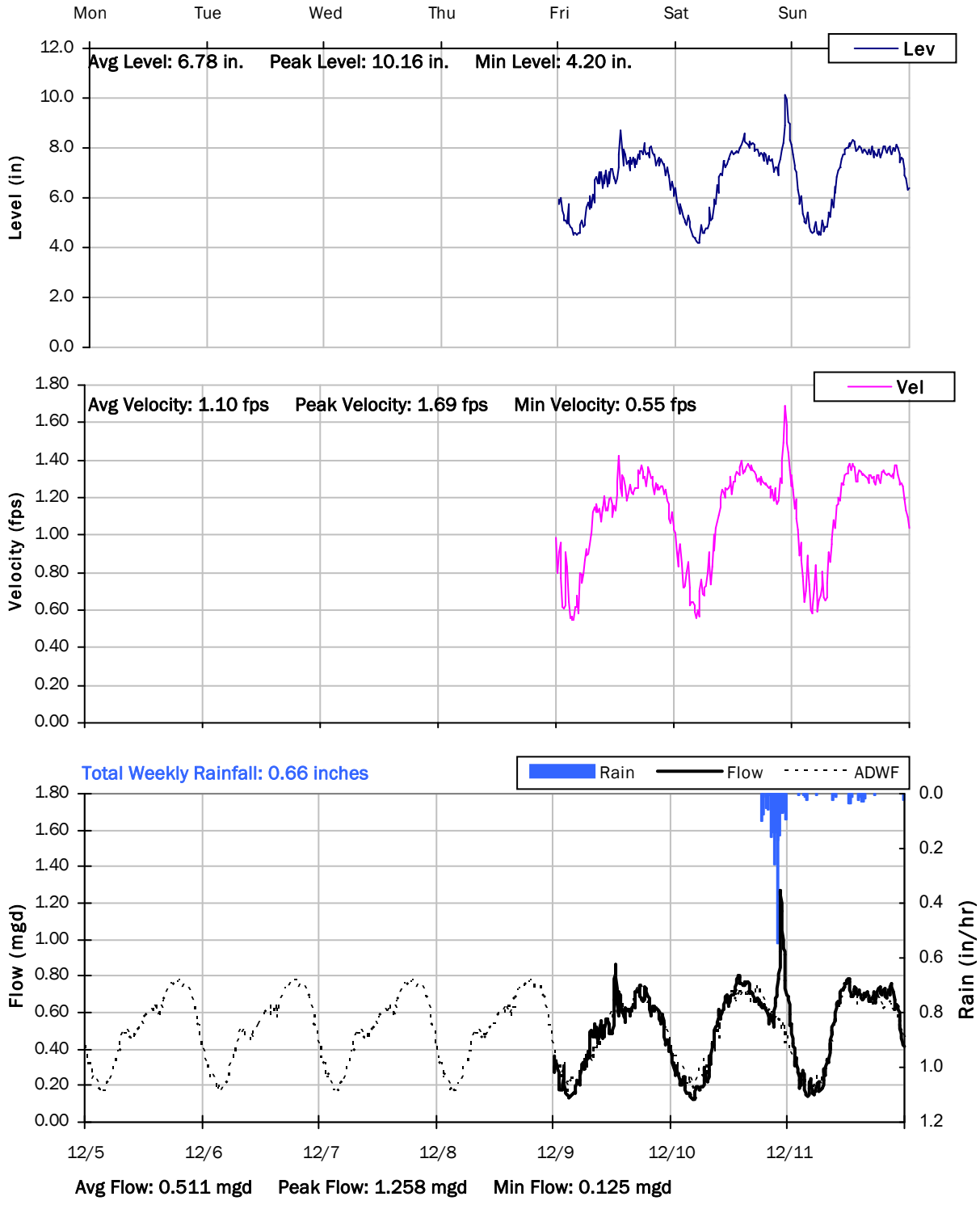


Pipe Diameter:	21	*inches*
Peak Measured Level:	11.8	*inches*
Peak d/D Ratio:	0.56	

FM06

Weekly Level, Velocity and Flow Hydrographs

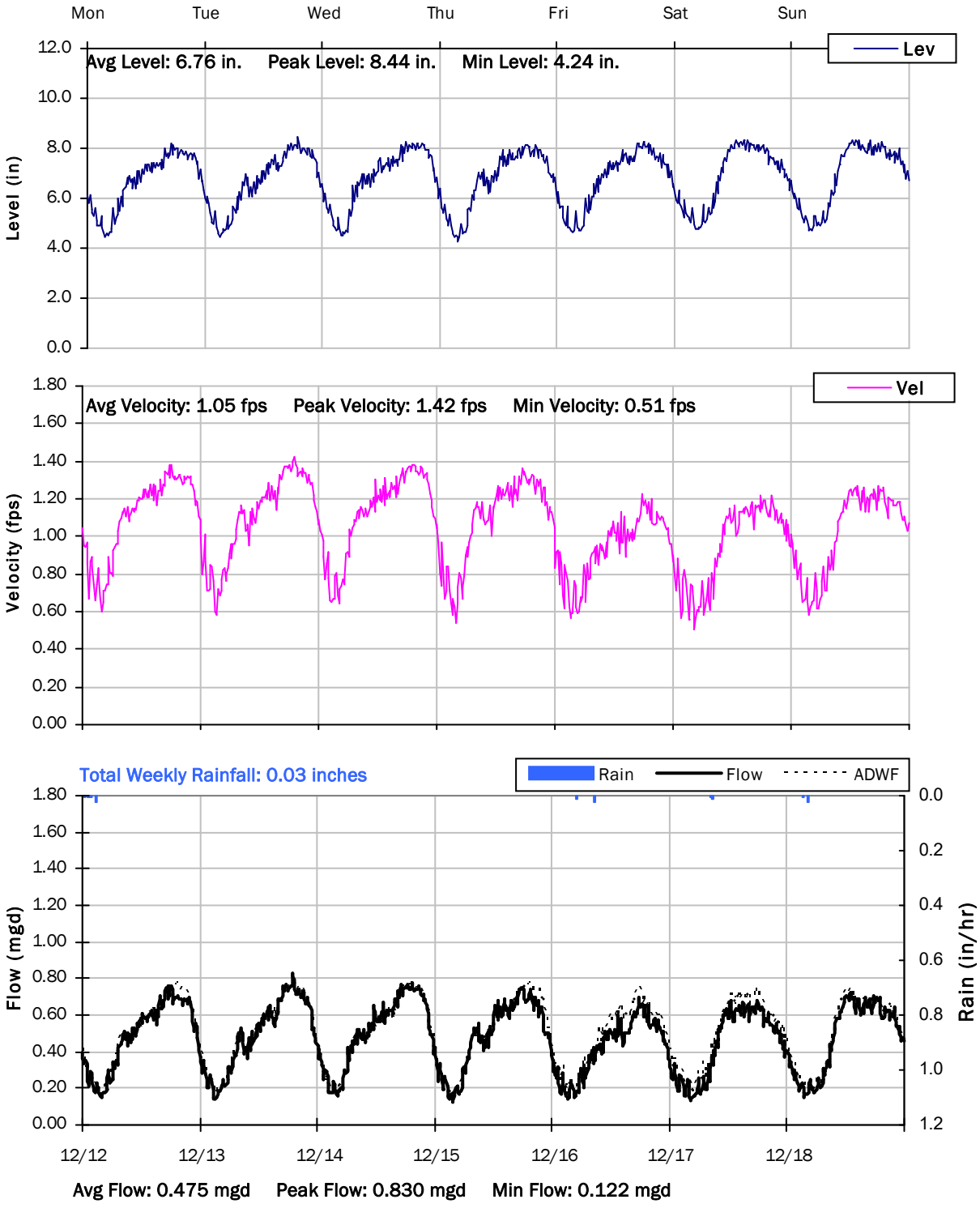
12/5/2022 to 12/12/2022



FM06

Weekly Level, Velocity and Flow Hydrographs

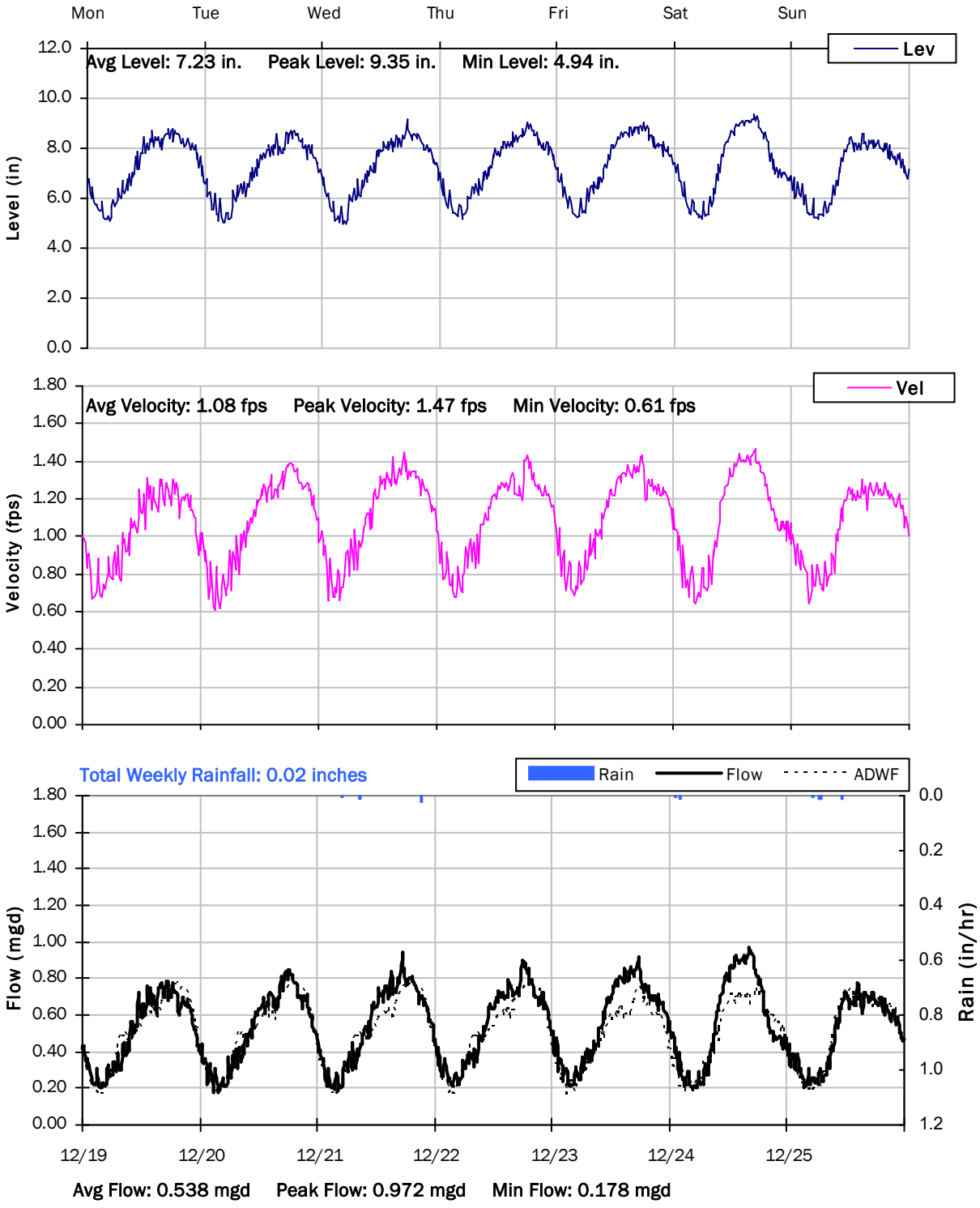
12/12/2022 to 12/19/2022



FM06

Weekly Level, Velocity and Flow Hydrographs

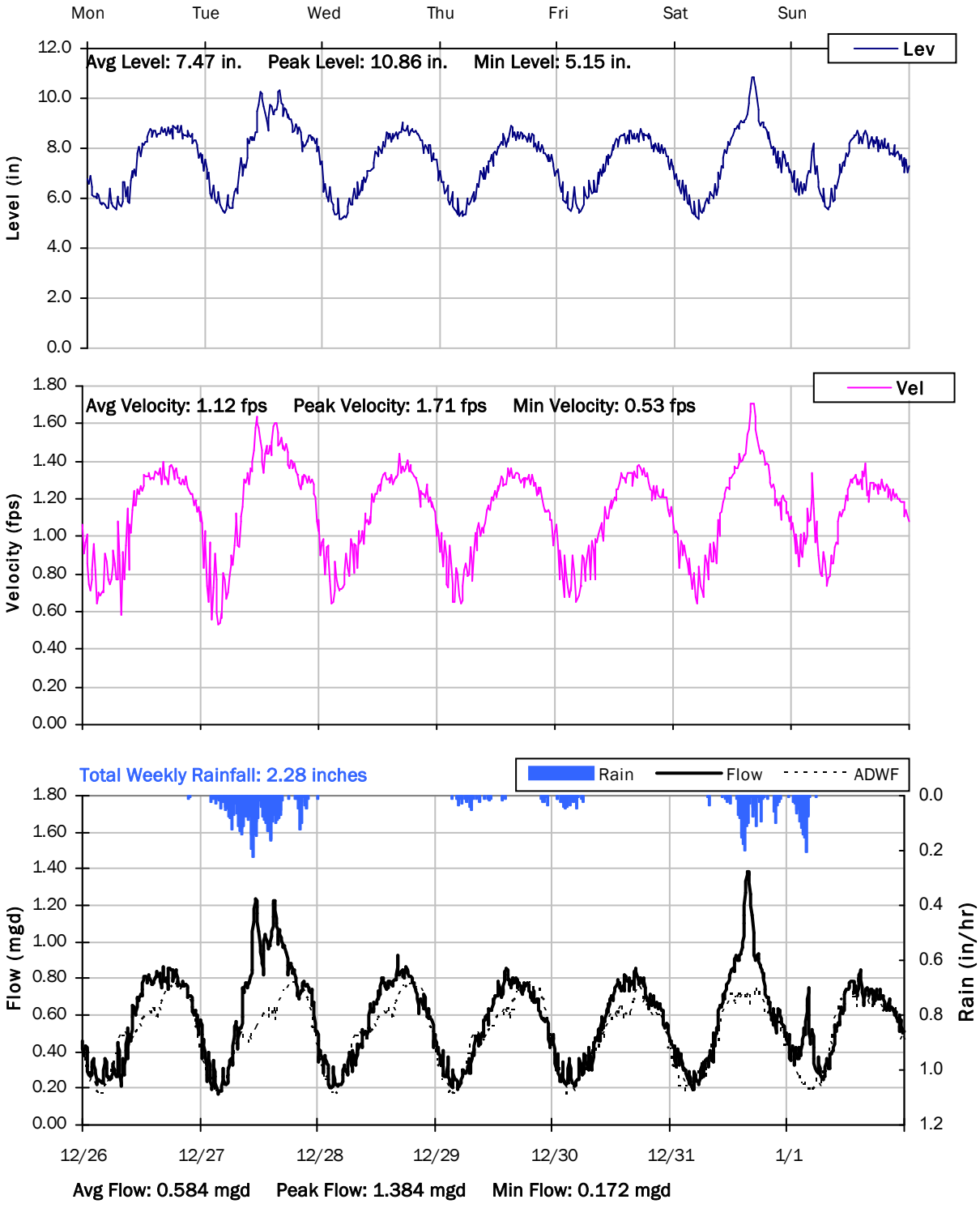
12/19/2022 to 12/26/2022



FM06

Weekly Level, Velocity and Flow Hydrographs

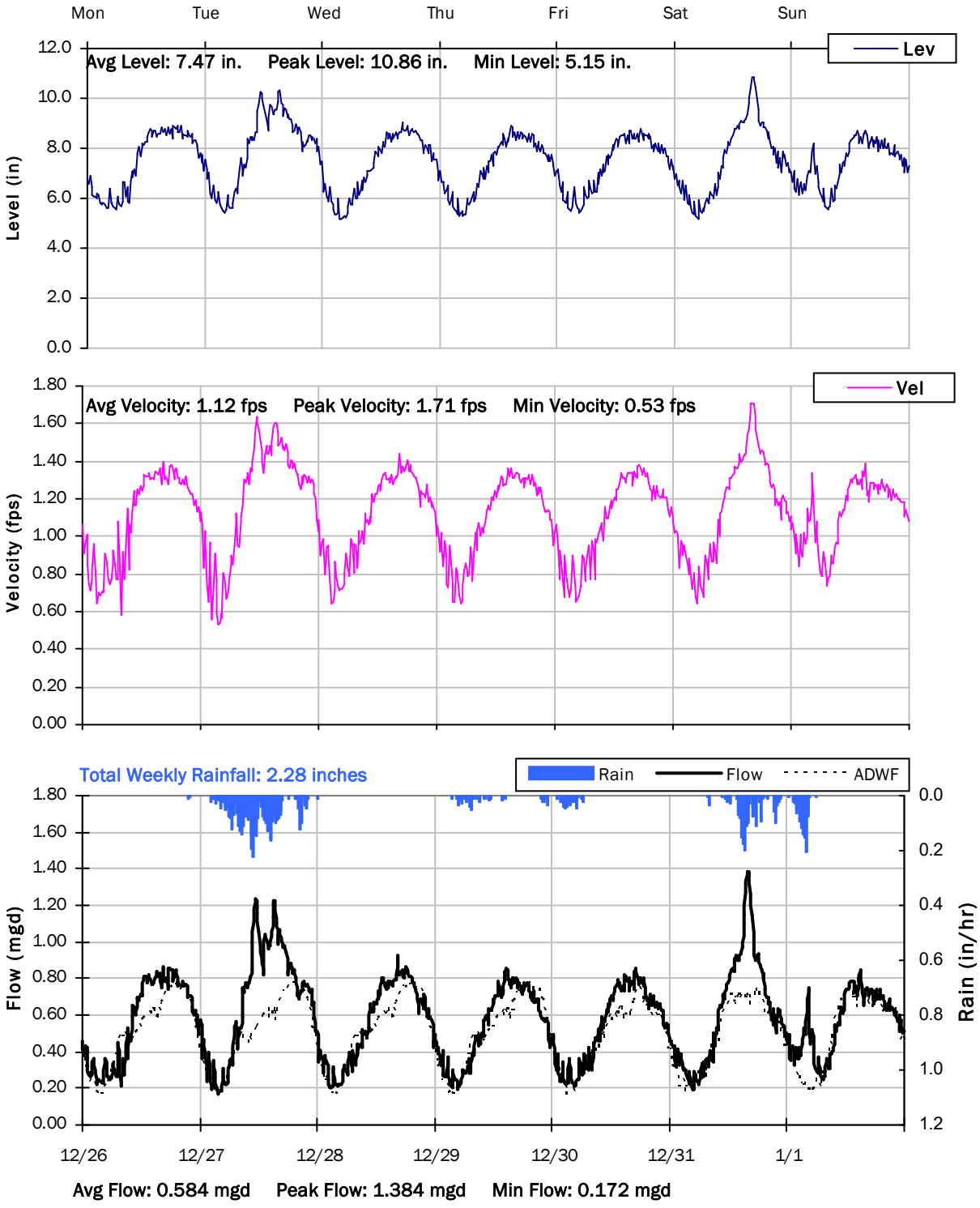
12/26/2022 to 1/2/2023



FM06

Weekly Level, Velocity and Flow Hydrographs

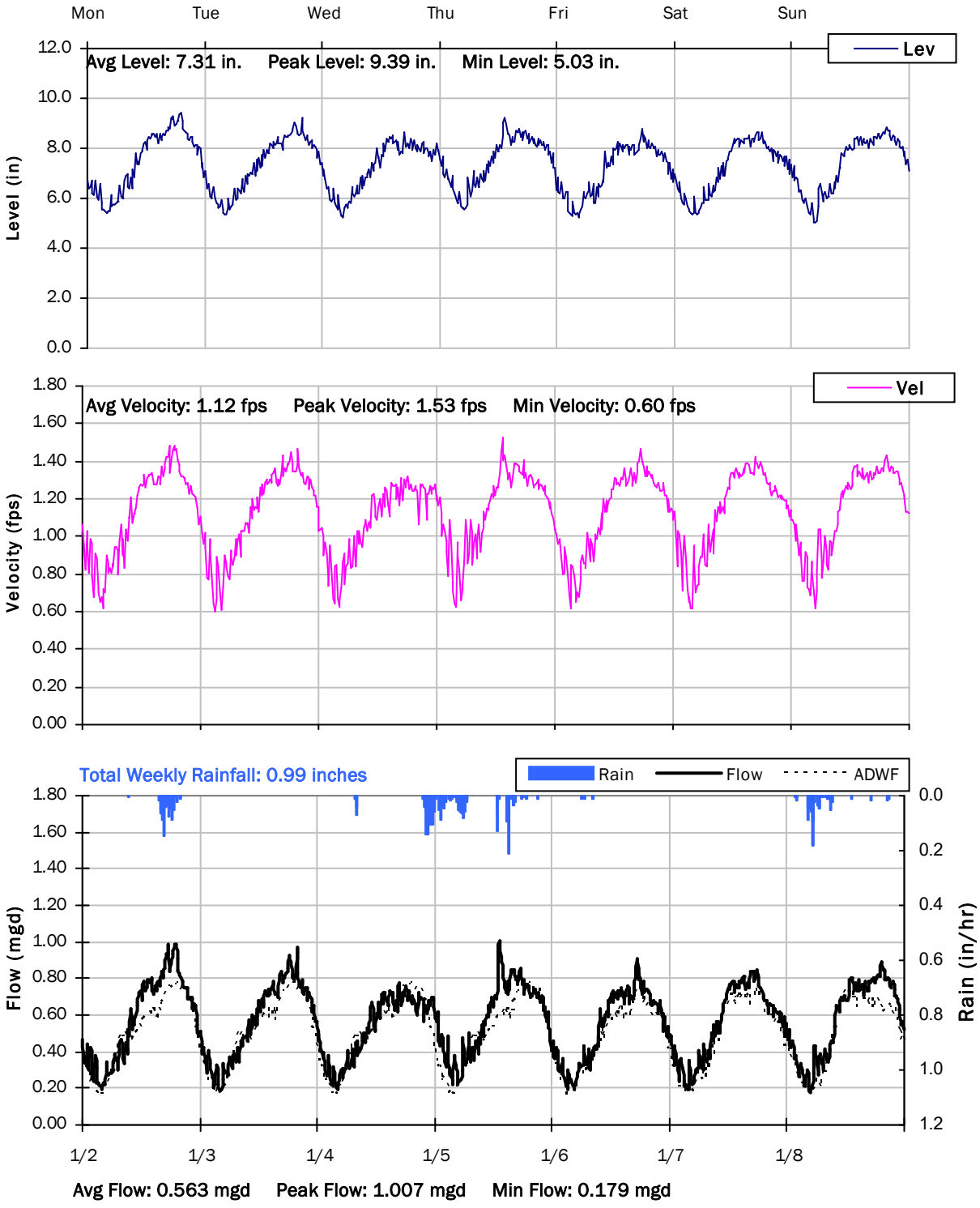
12/26/2022 to 1/2/2023



FM06

Weekly Level, Velocity and Flow Hydrographs

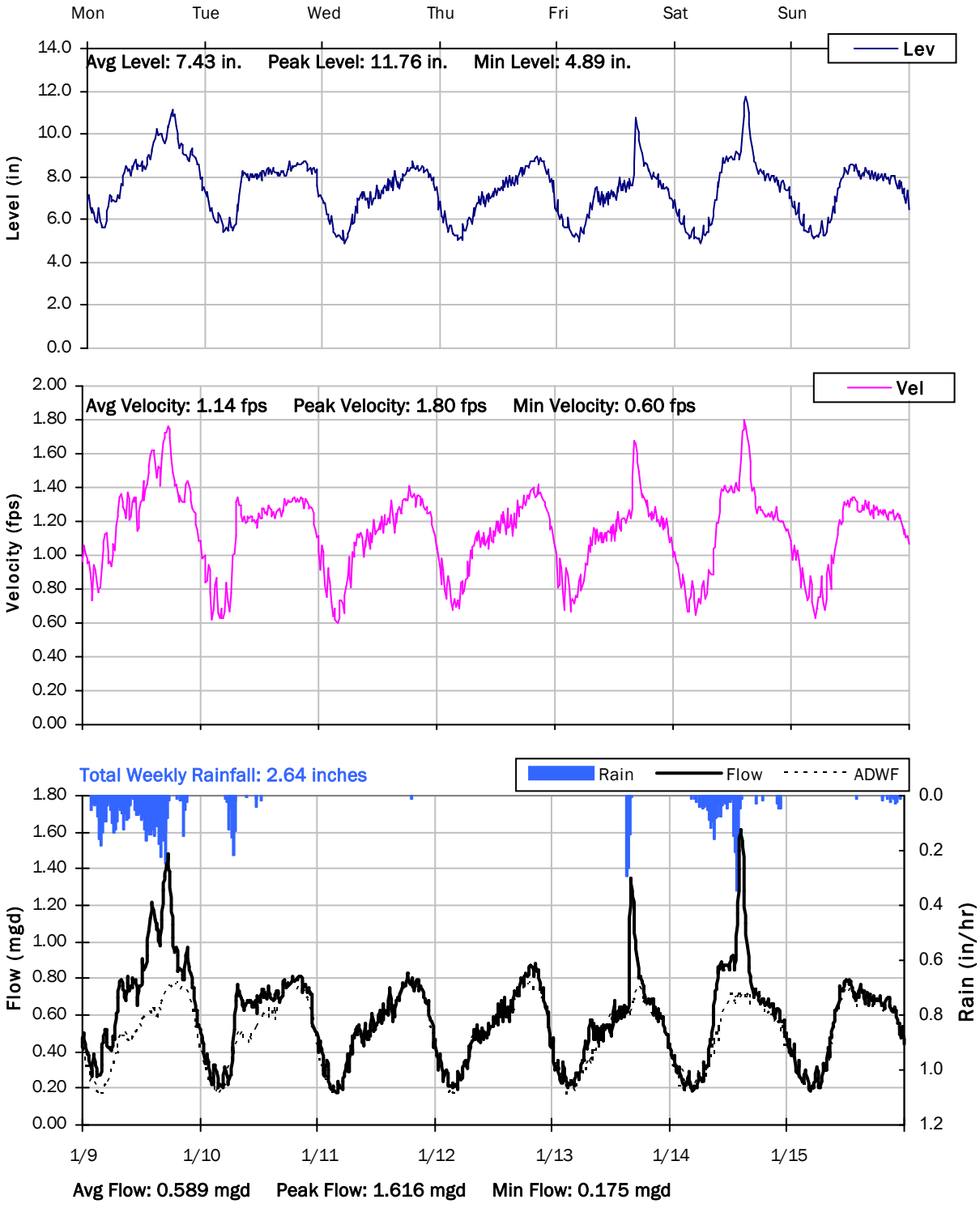
1/2/2023 to 1/9/2023



FM06

Weekly Level, Velocity and Flow Hydrographs

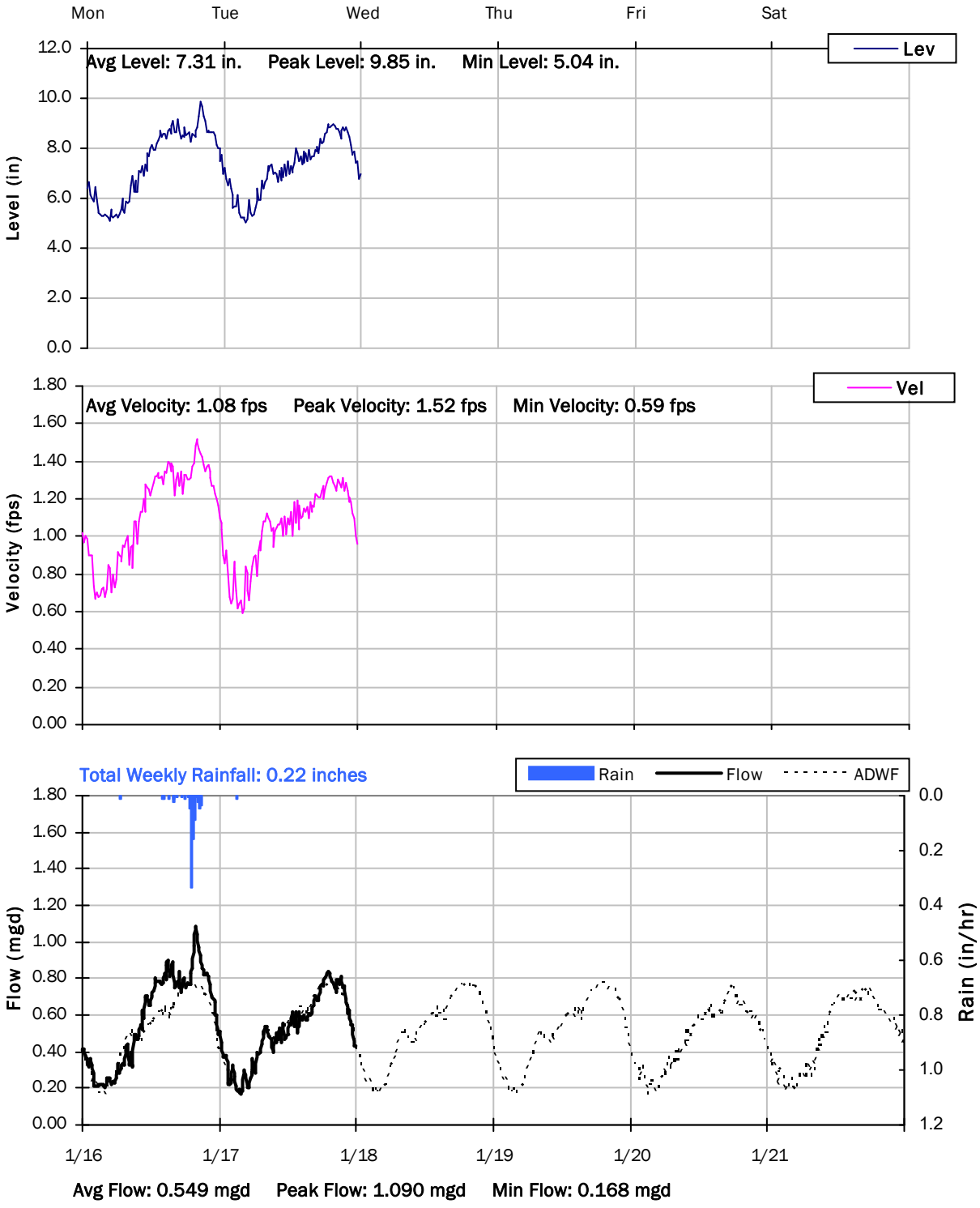
1/9/2023 to 1/16/2023



FM06

Weekly Level, Velocity and Flow Hydrographs

1/16/2023 to 1/22/2023



Monitoring Site: FM06A

Selma-Kingsburg-Fowler Sanitation District

Sanitary Sewer Flow Monitoring

December 09, 2022 - January 17, 2023

Location: Backyard behind 1851 McCall Ave

Data Summary Report

Vicinity Map: FM06A

FM06B

Site Information MH ID: 2K00-0200

Location: 2630 Floral Ave

Coordinates: 119.6214° W, 36.5763° N

Rim Elevation: 308.73 feet

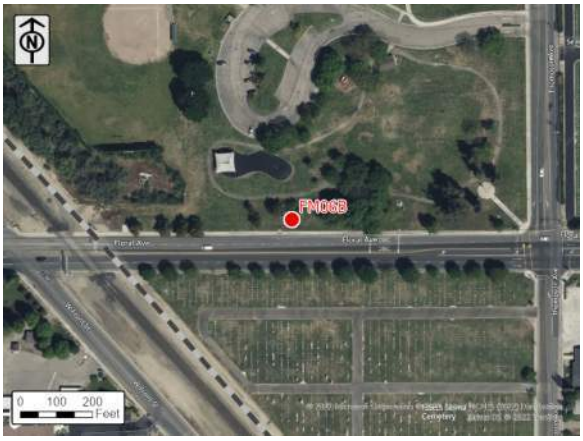
Expected Pipe Diameter: 12 inches

Measured Pipe Diameter: 12 inches

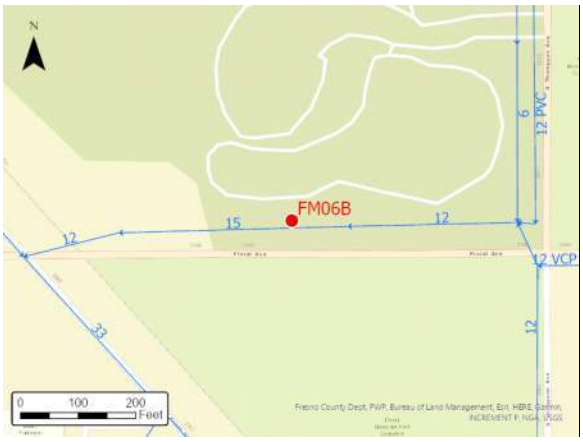
ADWF: 0.158 mgd

Peak Measured Flow: 0.520 mgd

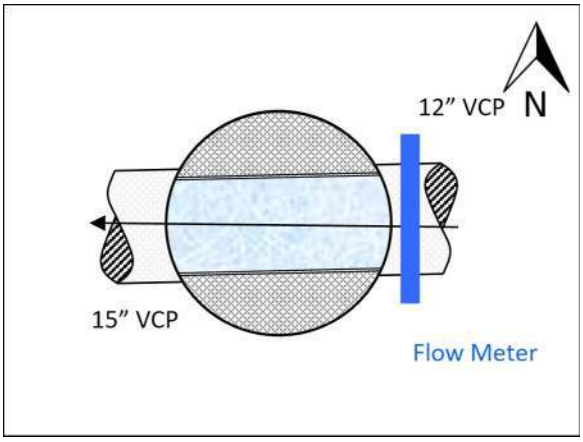
Sediment: None



Satellite Map



Sanitary Map



Flow Sketch

Street View

Plan View

FM06A

Additional Site Photos

Effluent Pipe

Mounted Northwest Influent Pipe

FM06A

Additional Site Photos

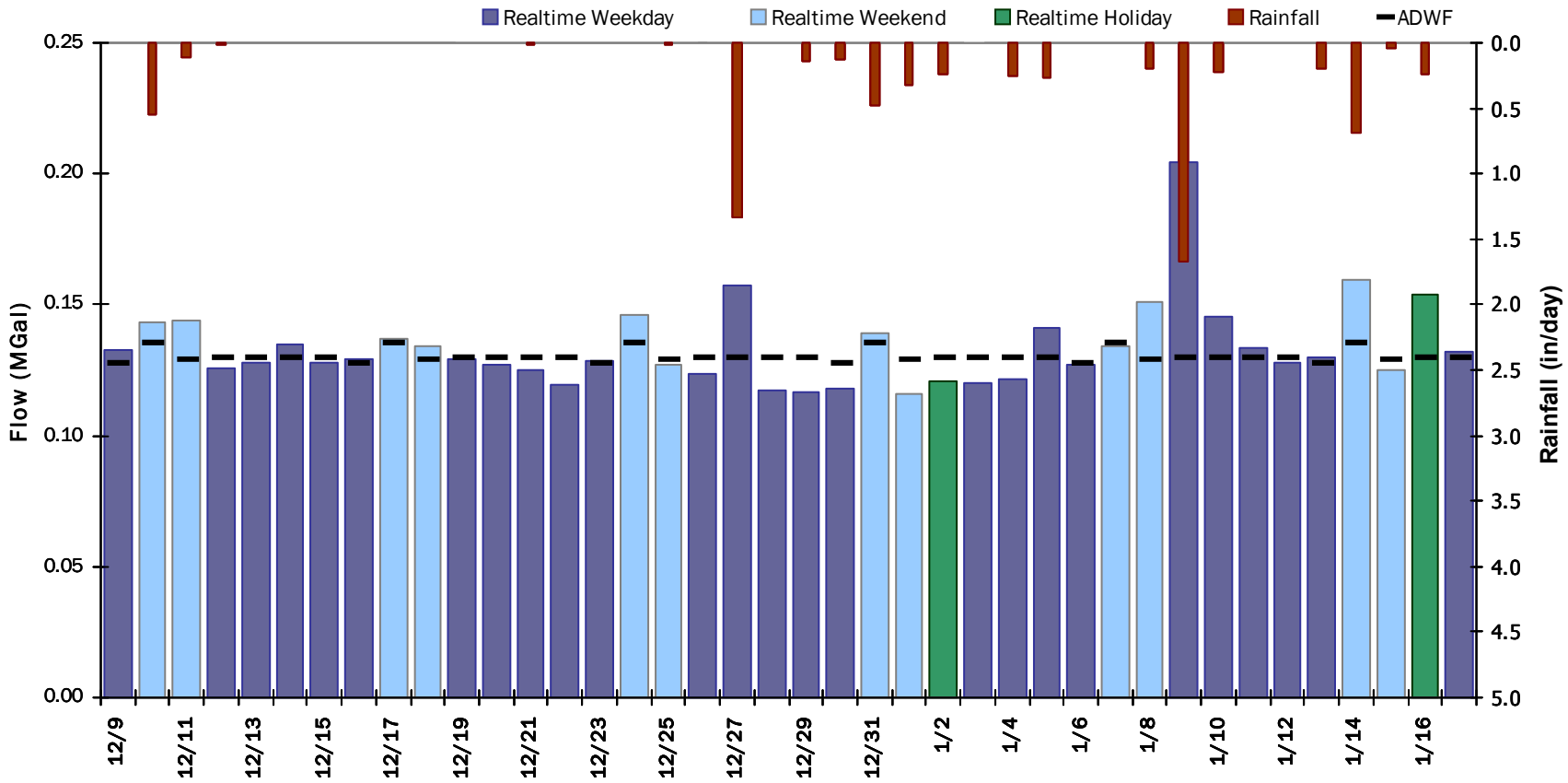
North Influent Pipe

FM06A

Period Flow Summary: Daily Flow Totals

Avg Daily Flow: 0.134 MGal Peak Daily Flow: 0.205 MGal Min Daily Flow: 0.116 MGal

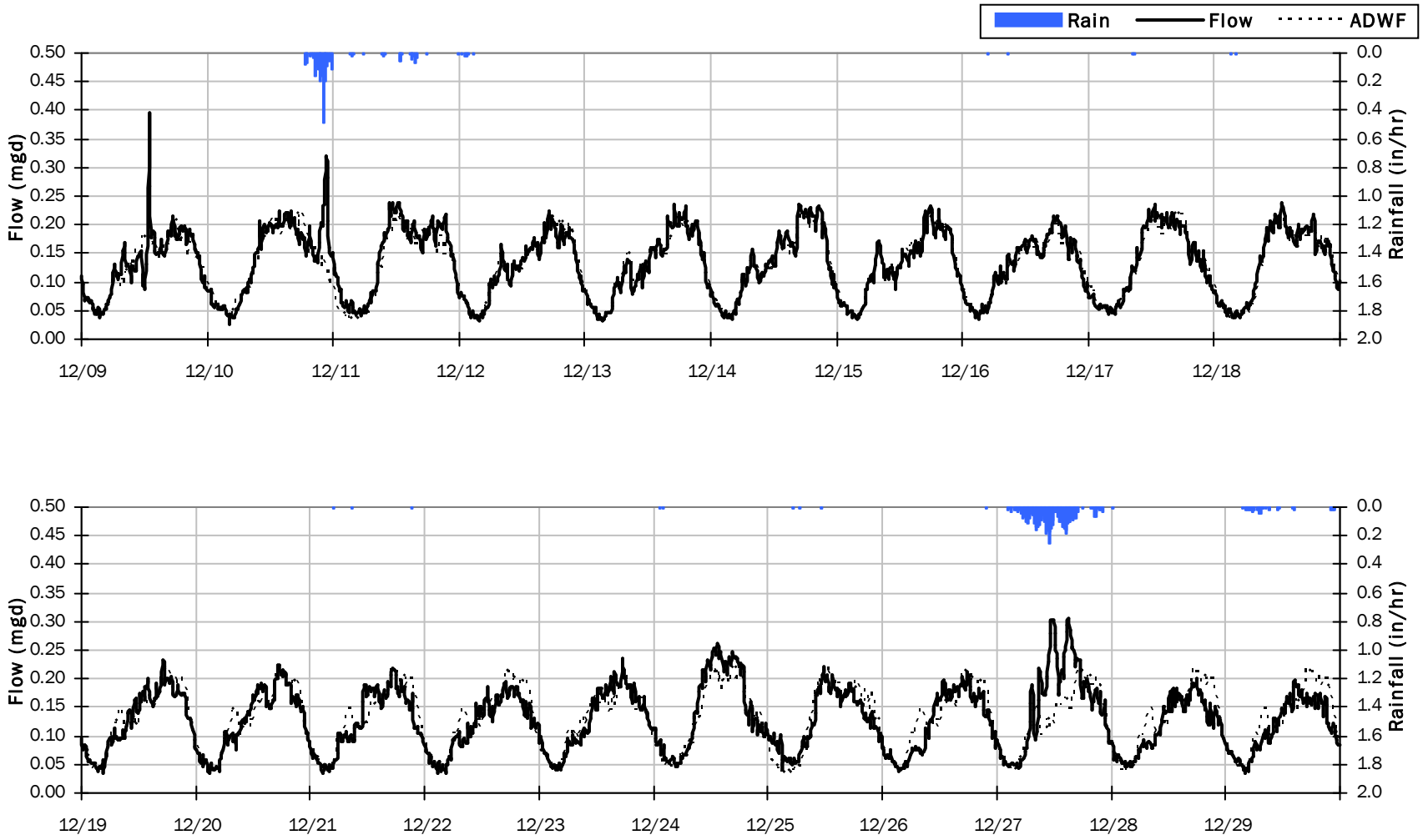
Total Rainfall: 7.18 inches



FM06A

Flow Summary: 12/9/2022 to 12/29/2022

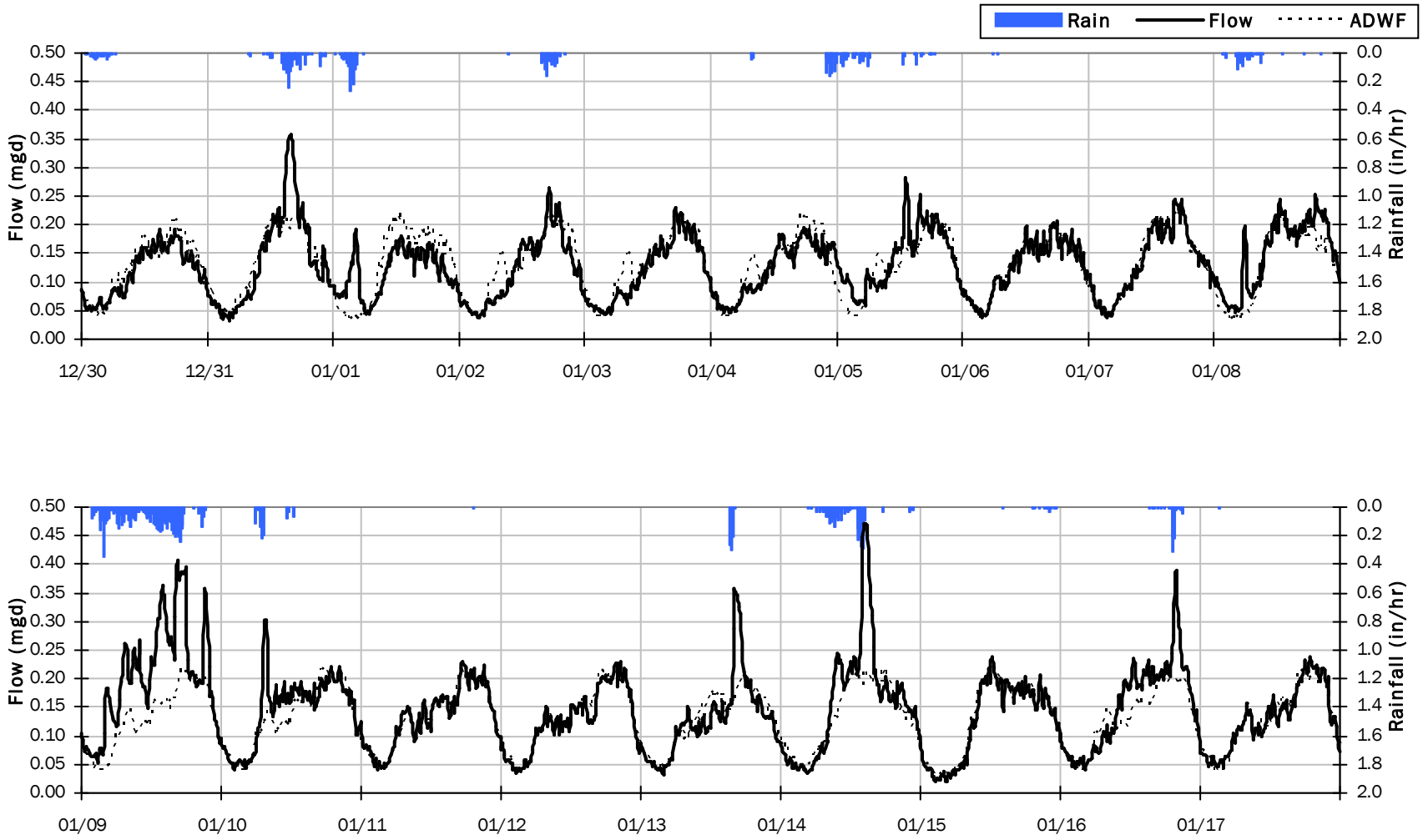
Period Rainfall: 2.21 inches Period Avg Flow: 0.131 mgd Period Peak Flow: 0.395 mgd Period Min Flow: 0.027 mgd



FM06A

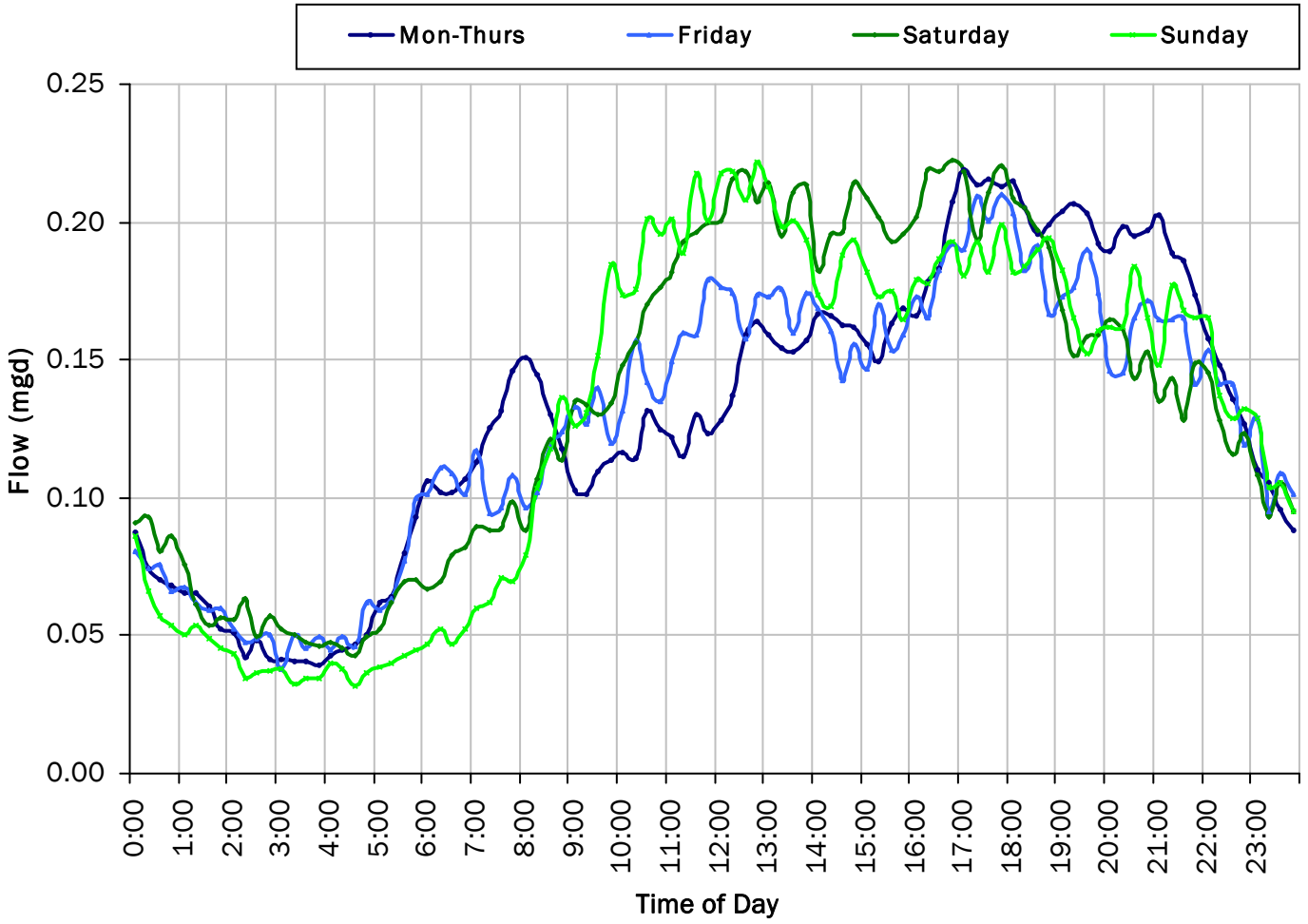
Flow Summary: 12/30/2022 to 1/17/2023

Period Rainfall: 4.97 inches Period Avg Flow: 0.137 mgd Period Peak Flow: 0.471 mgd Period Min Flow: 0.019 mgd



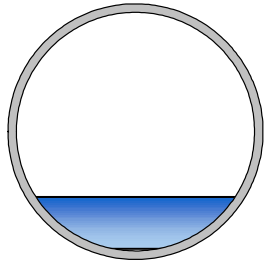
FM06A

Average Dry Weather Flow Hydrographs



ADWF:

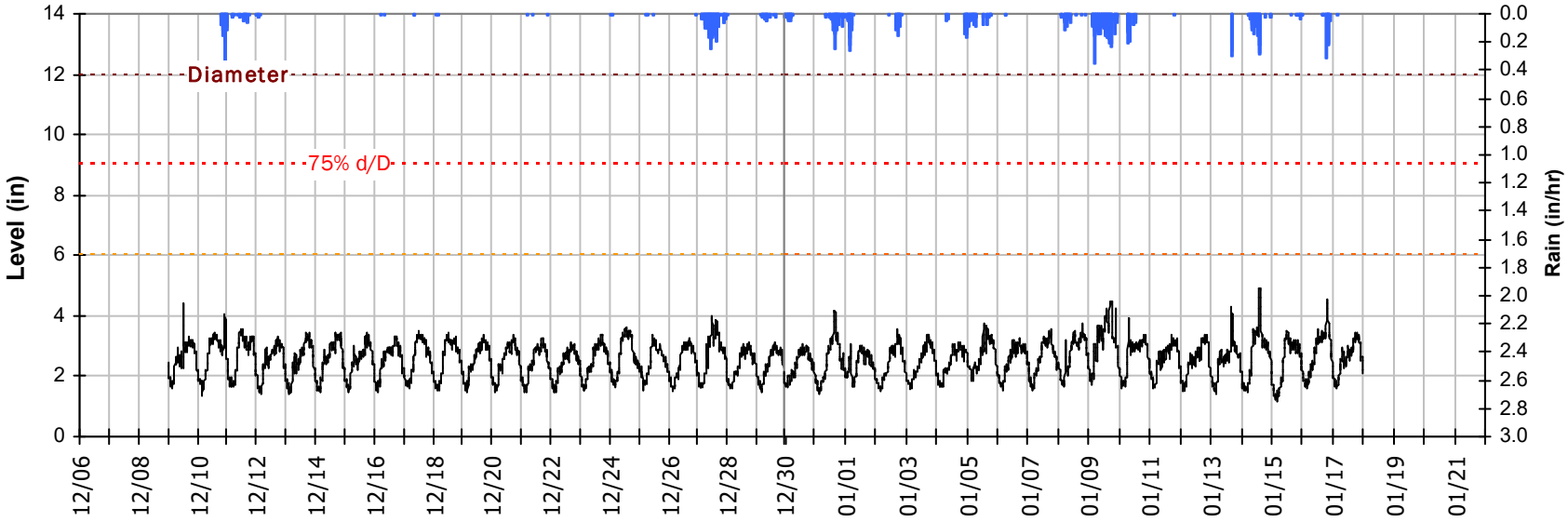
0.130 *mgd*

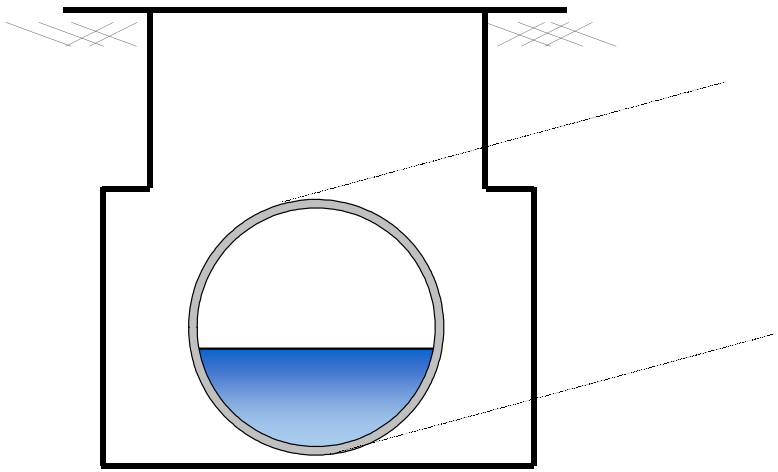


FM06A

Site Capacity and Surcharge Summary

Realtime Flow Levels with Rainfall Data over Peak Level Period



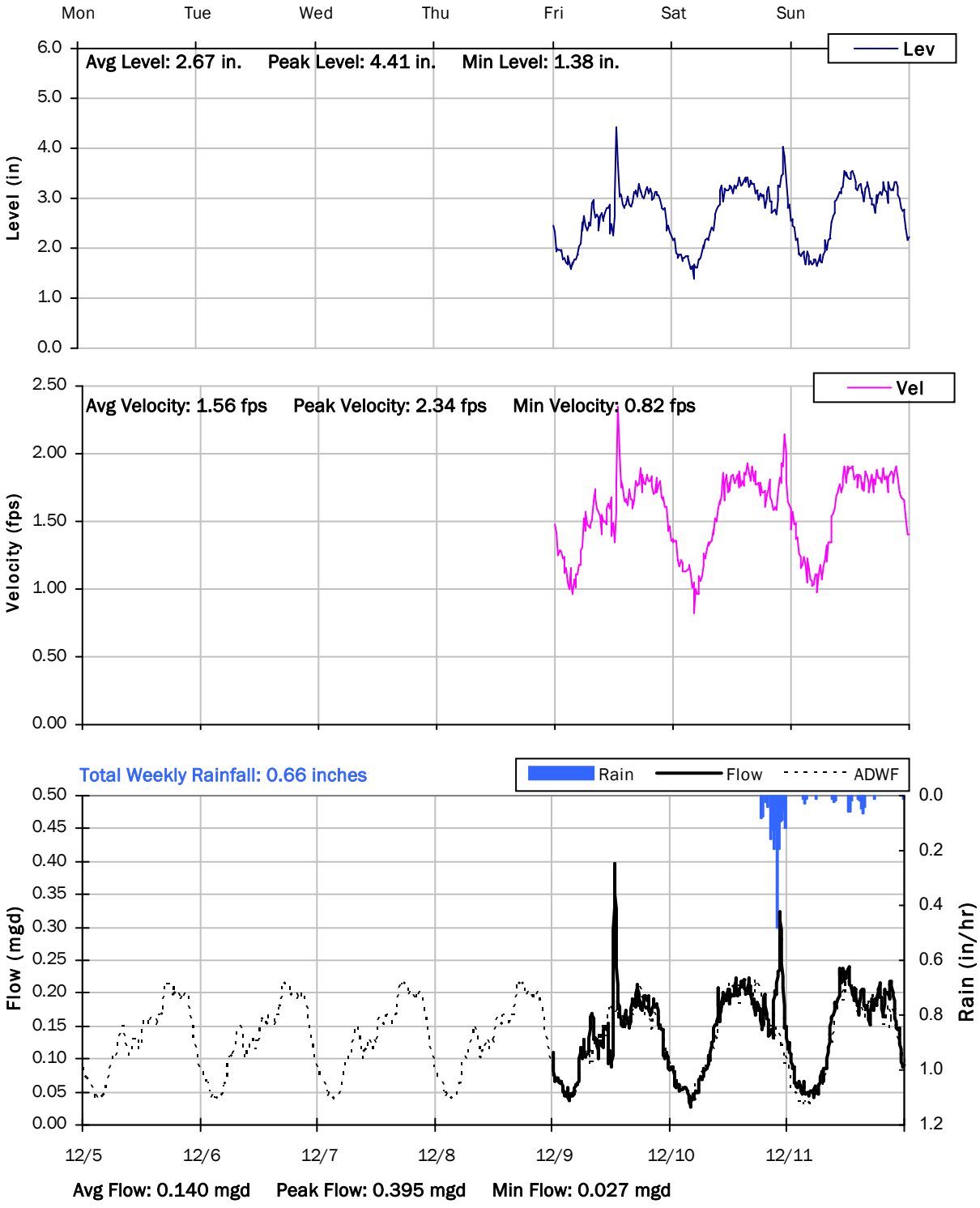


Pipe Diameter:	12	*inches*
Peak Measured Level:	4.92	*inches*
Peak d/D Ratio:	0.41	

FM06A

Weekly Level, Velocity and Flow Hydrographs

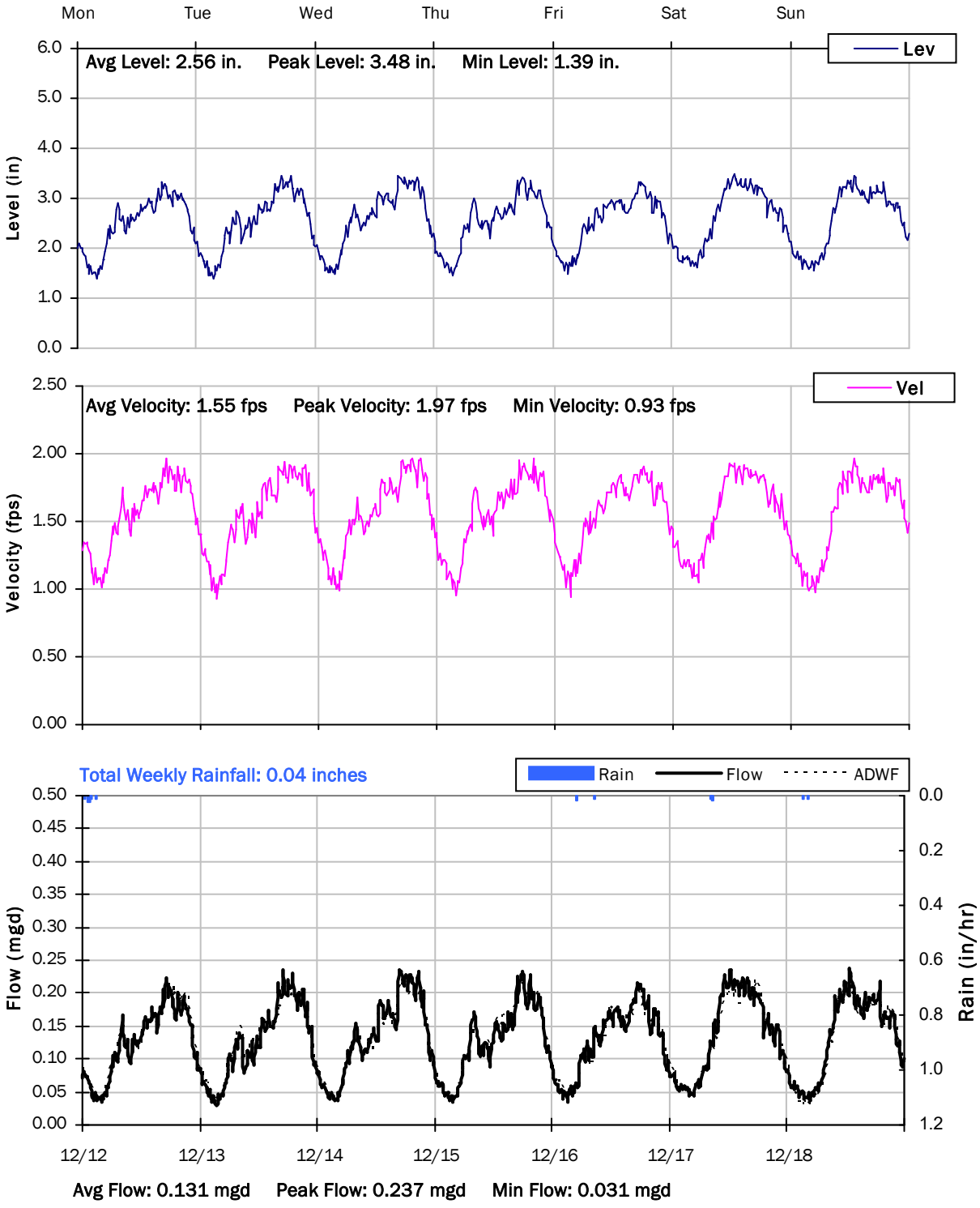
12/5/2022 to 12/12/2022



FM06A

Weekly Level, Velocity and Flow Hydrographs

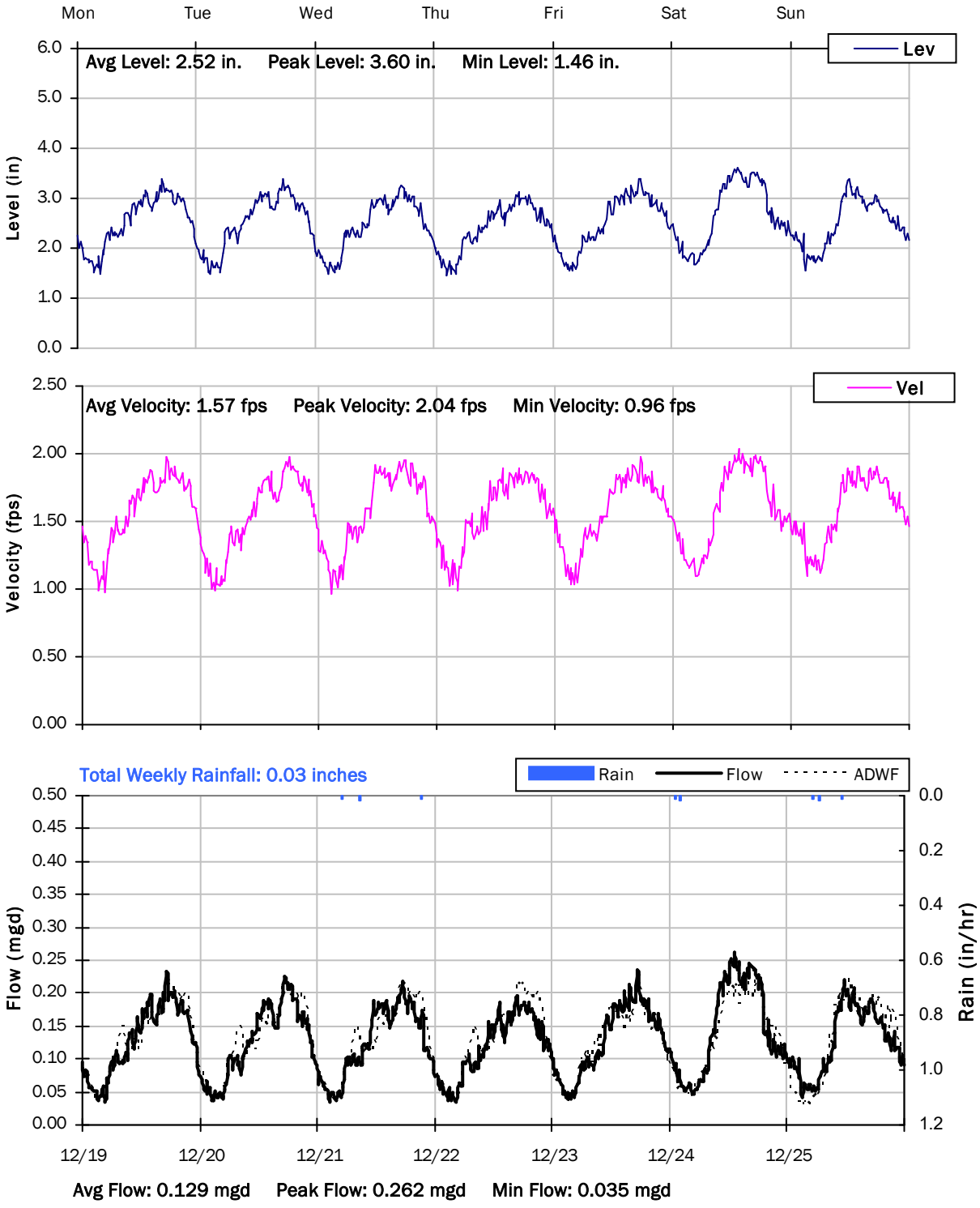
12/12/2022 to 12/19/2022



FM06A

Weekly Level, Velocity and Flow Hydrographs

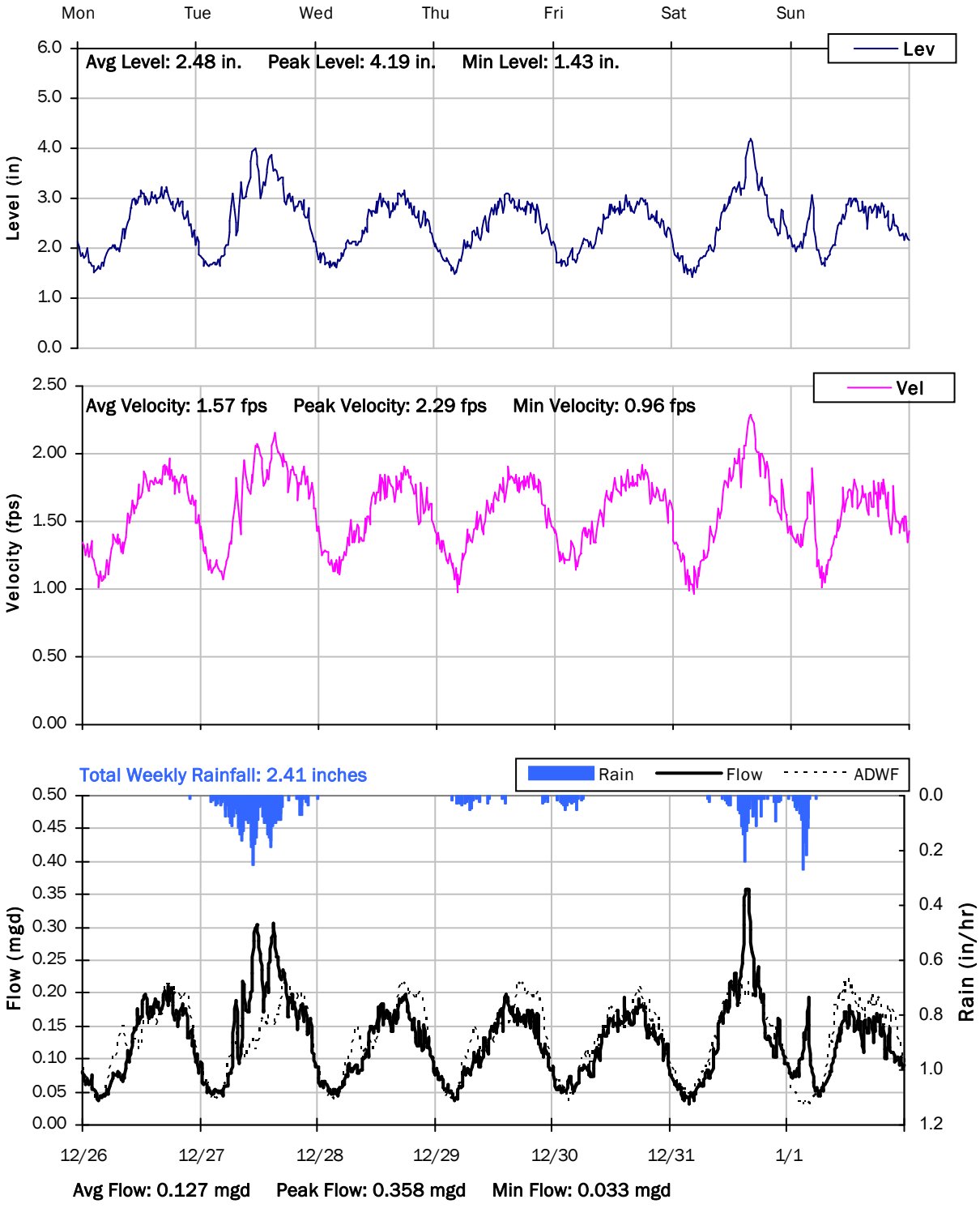
12/19/2022 to 12/26/2022



FM06A

Weekly Level, Velocity and Flow Hydrographs

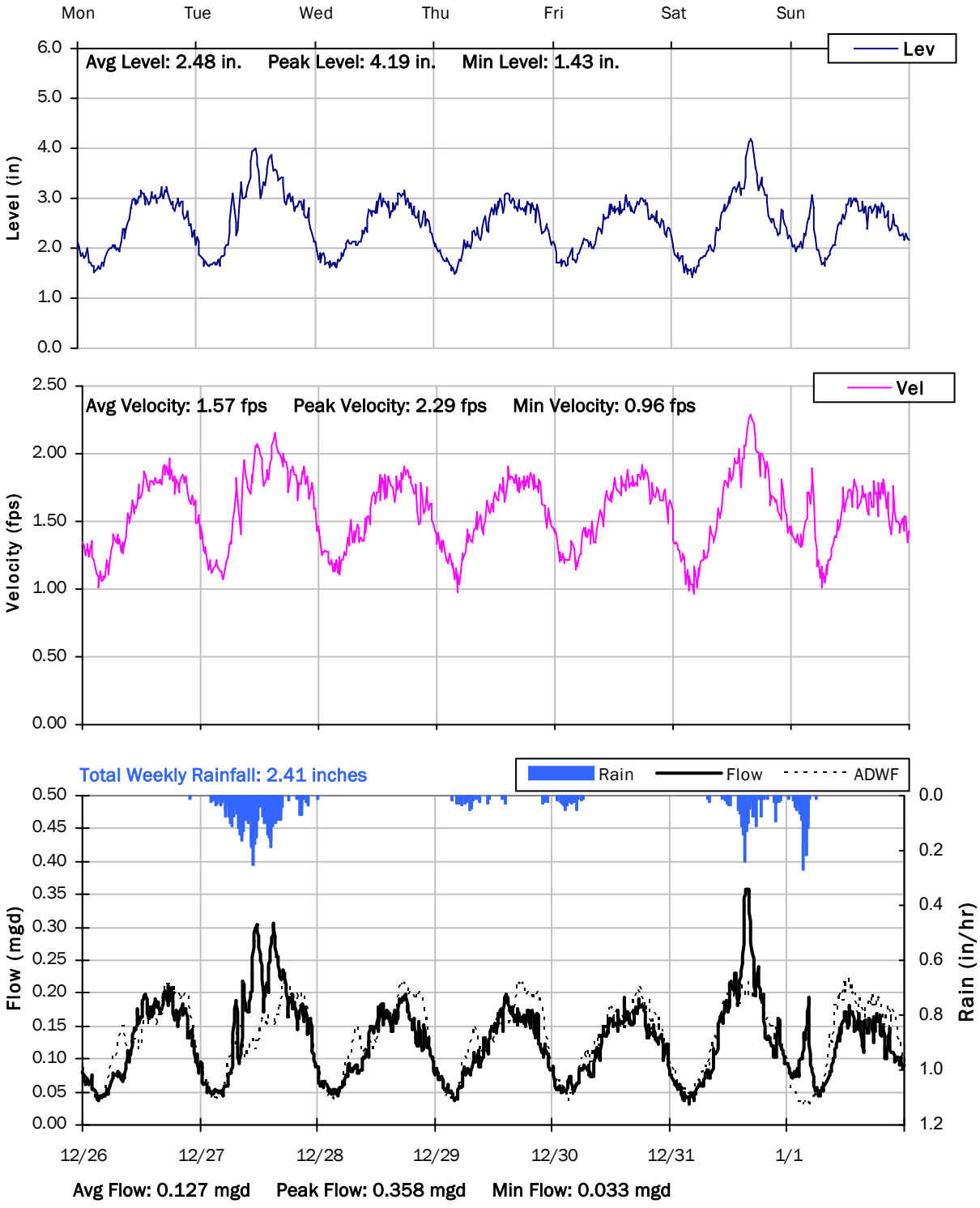
12/26/2022 to 1/2/2023



FM06A

Weekly Level, Velocity and Flow Hydrographs

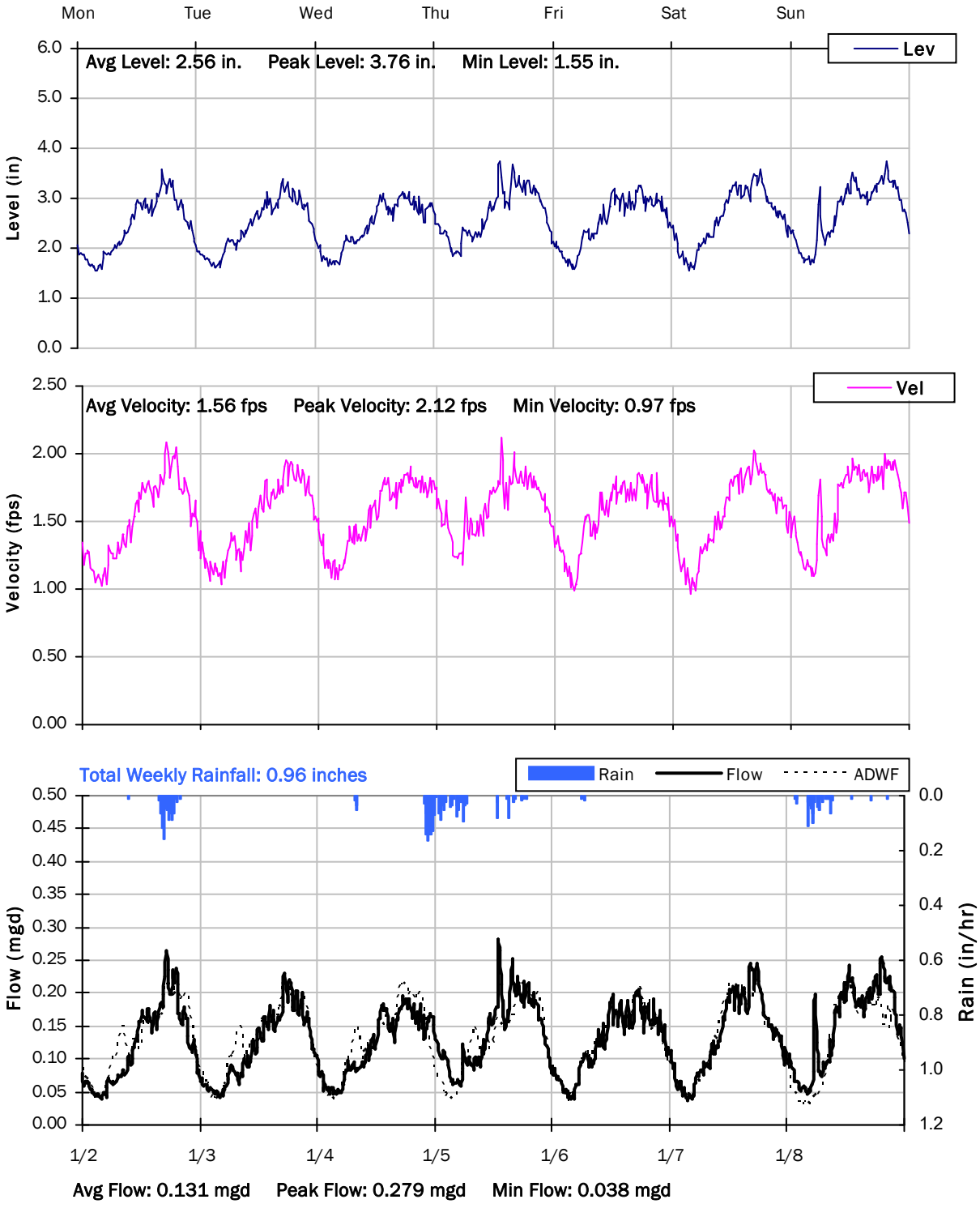
12/26/2022 to 1/2/2023



FM06A

Weekly Level, Velocity and Flow Hydrographs

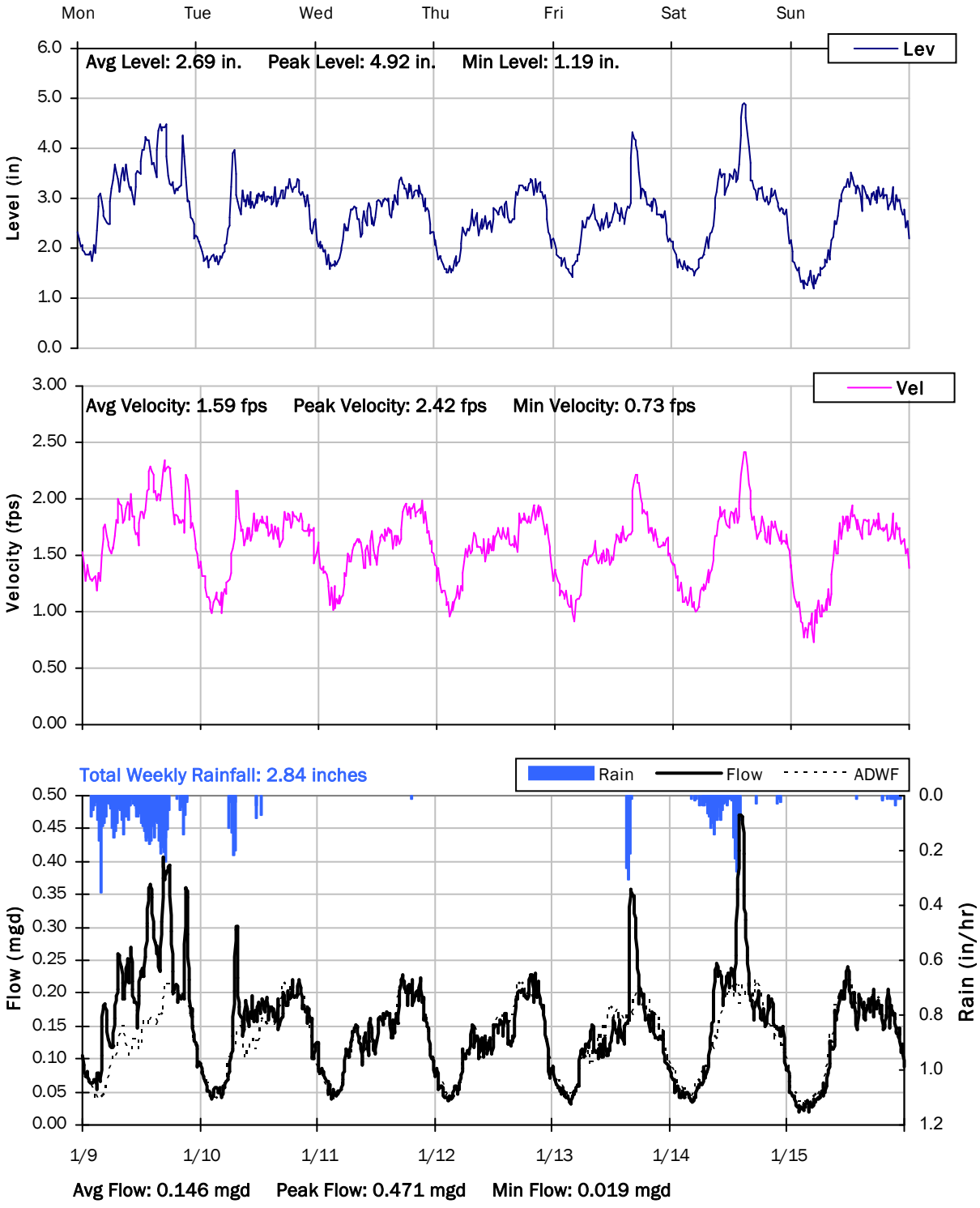
1/2/2023 to 1/9/2023



FM06A

Weekly Level, Velocity and Flow Hydrographs

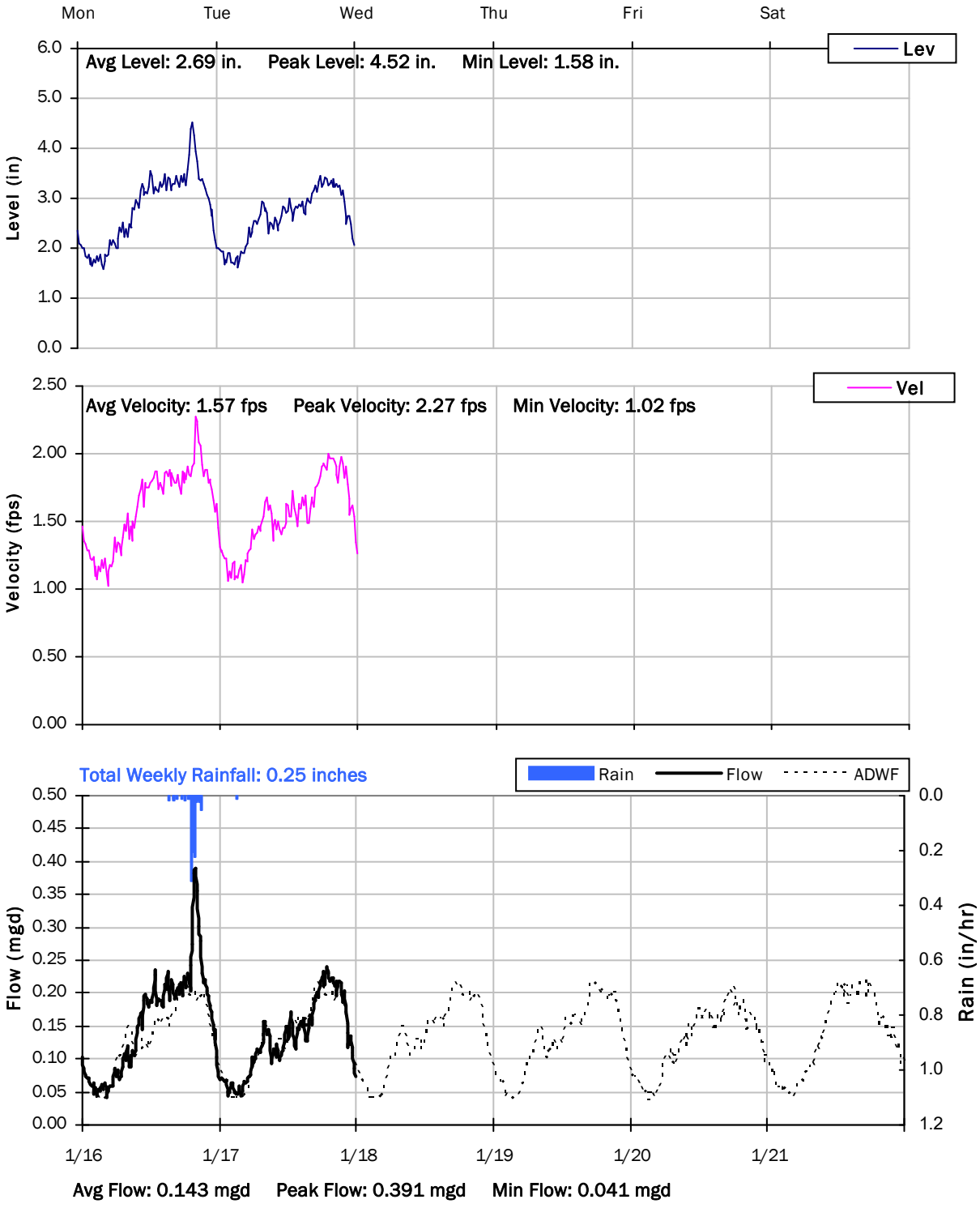
1/9/2023 to 1/16/2023



FM06A

Weekly Level, Velocity and Flow Hydrographs

1/16/2023 to 1/22/2023



Monitoring Site: FM06B

Selma-Kingsburg-Fowler Sanitation District

Sanitary Sewer Flow Monitoring

December 09, 2022 - January 17, 2023

Location: 2630 Floral Ave

Data Summary Report

Vicinity Map: FM06B

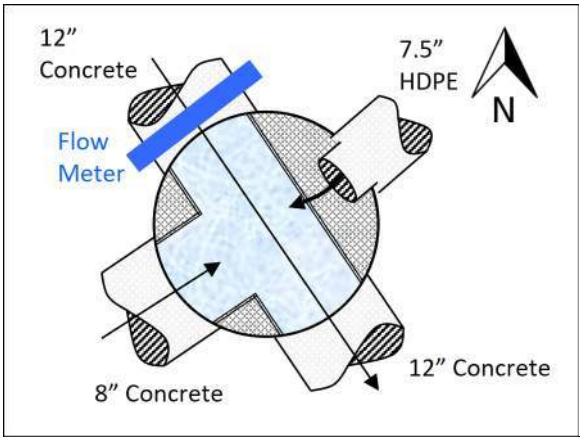
FM06C

Site Information MH ID: 6W00-1100

Location:	Intersection of Young St & Sherman St
Coordinates:	119.6186° W, 36.5679° N
Rim Elevation:	307.44 feet
Expected Pipe Diameter:	12 inches
Measured Pipe Diameter:	12 inches
ADWF:	0.155 mgd
Peak Measured Flow:	0.588 mgd
Sediment:	None

Satellite Map

Sanitary Map



Flow Sketch

Street View

Plan View

FM06B

Additional Site Photos

Effluent Pipe

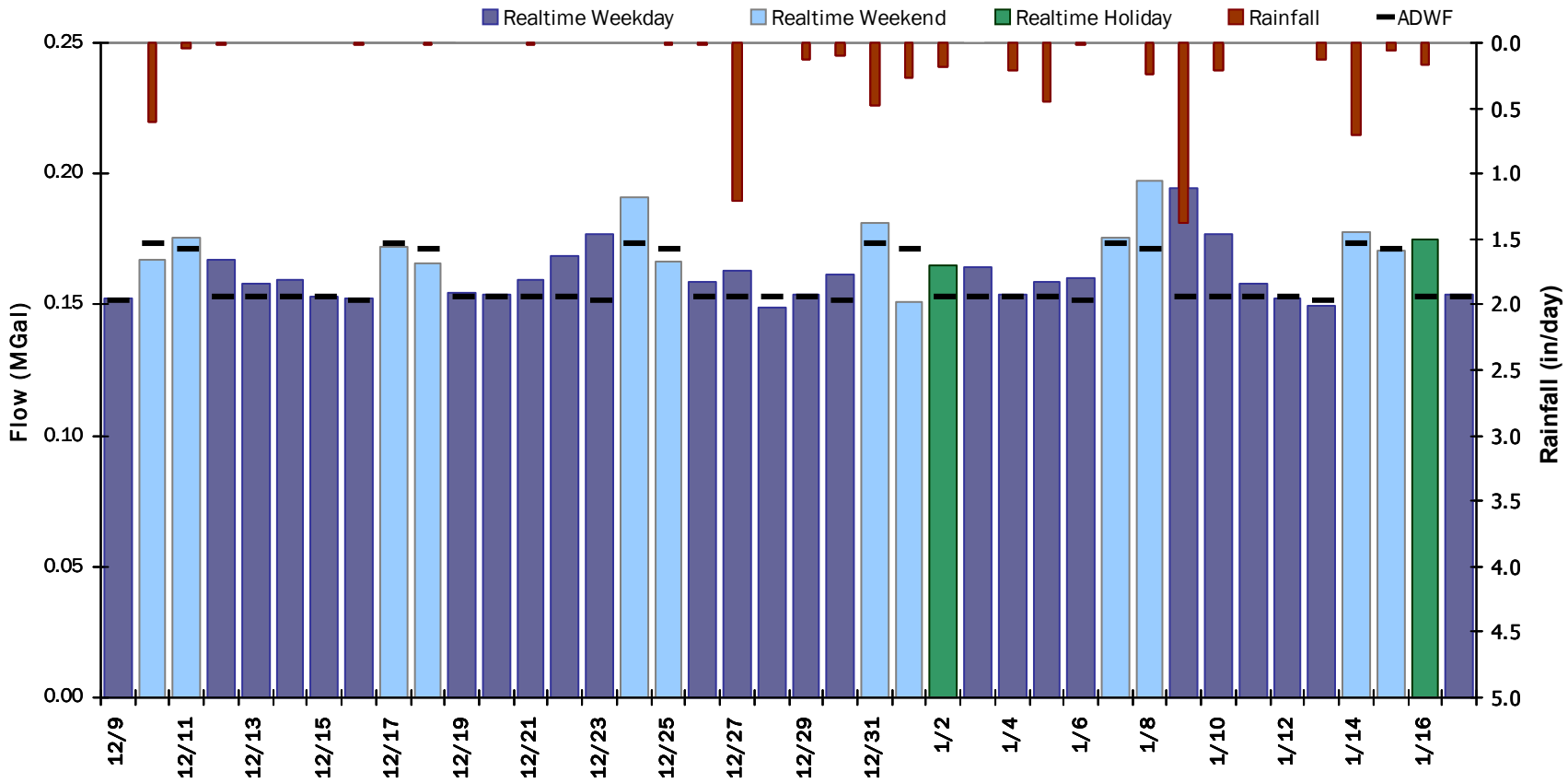
Influent Pipe

FM06B

Period Flow Summary: Daily Flow Totals

Avg Daily Flow: 0.165 MGal Peak Daily Flow: 0.197 MGal Min Daily Flow: 0.149 MGal

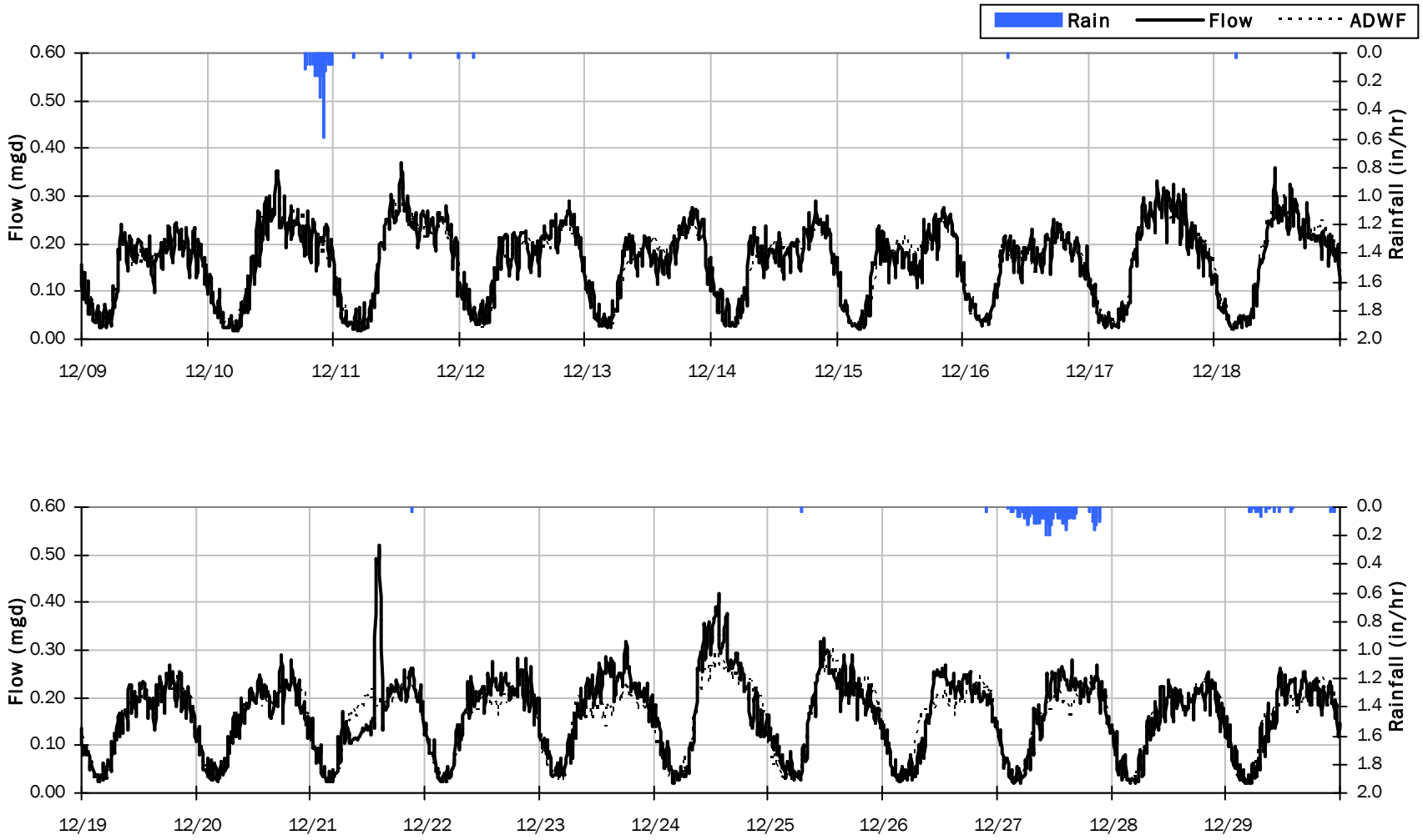
Total Rainfall: 6.64 inches



FM06B

Flow Summary: 12/9/2022 to 12/29/2022

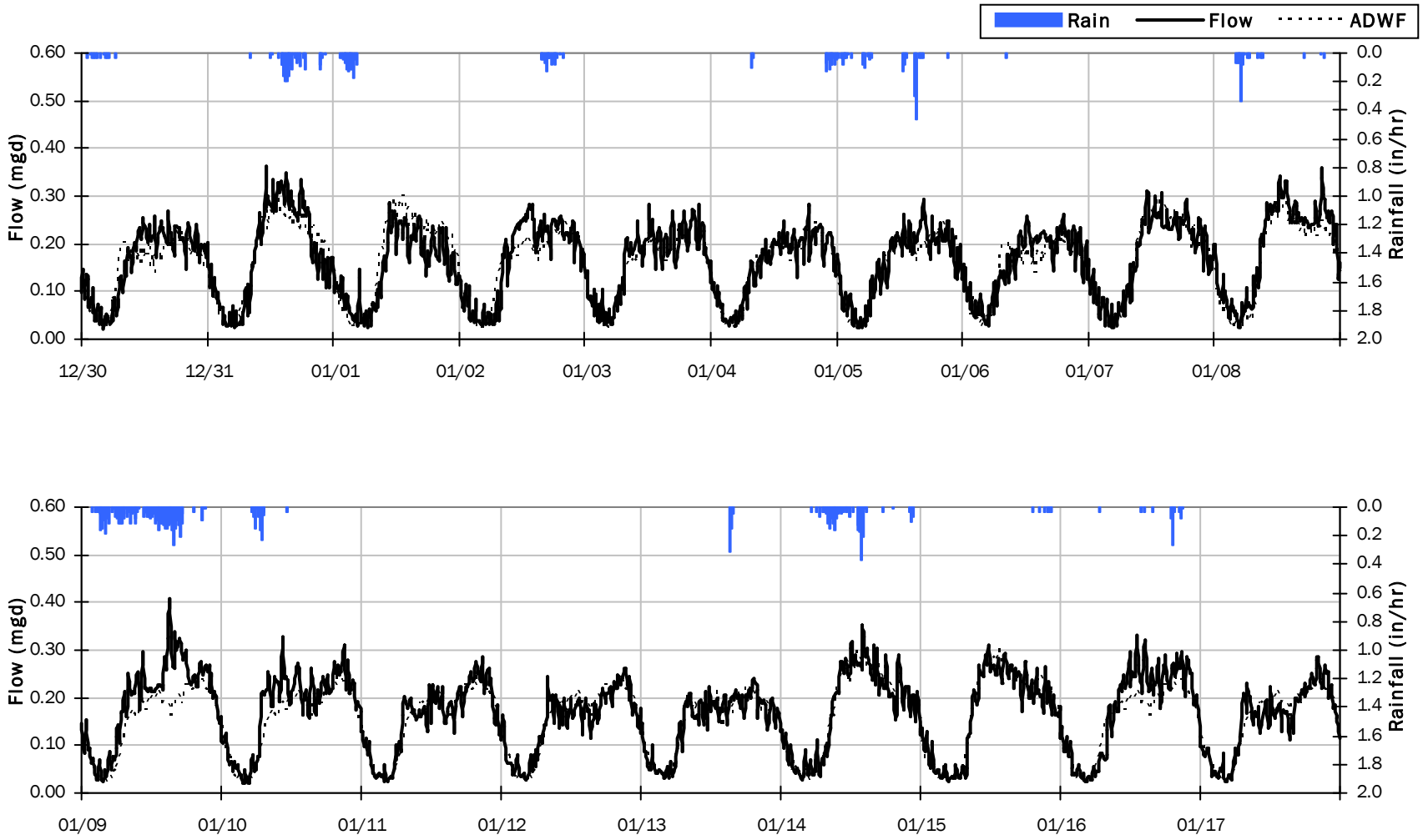
Period Rainfall: 2.04 inches Period Avg Flow: 0.163 mgd Period Peak Flow: 0.520 mgd Period Min Flow: 0.018 mgd



FM06B

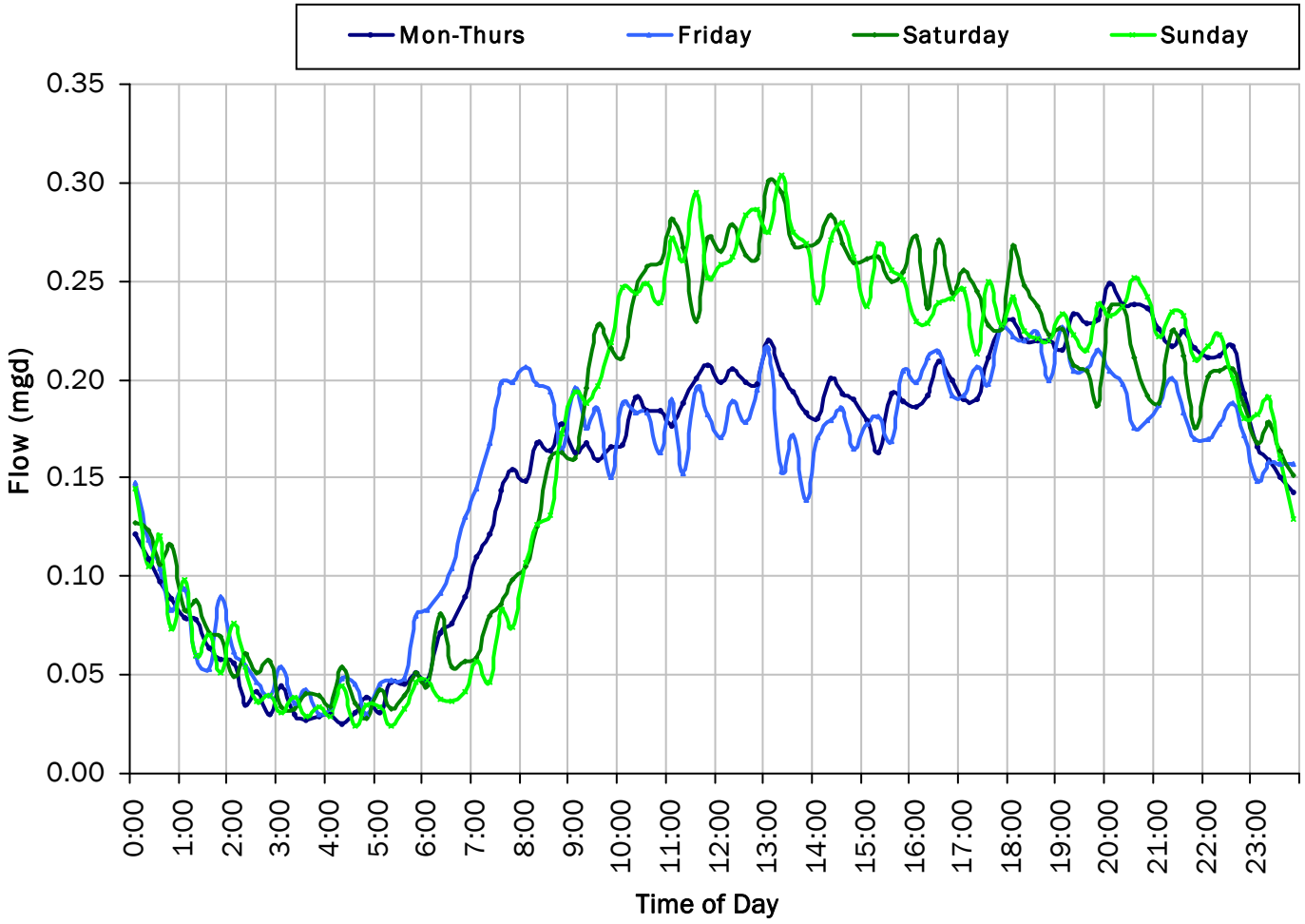
Flow Summary: 12/30/2022 to 1/17/2023

Period Rainfall: 4.60 inches Period Avg Flow: 0.167 mgd Period Peak Flow: 0.407 mgd Period Min Flow: 0.020 mgd



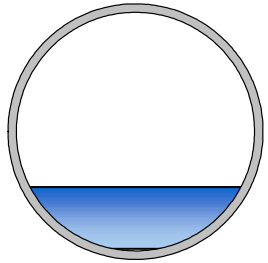
FM06B

Average Dry Weather Flow Hydrographs



ADWF:

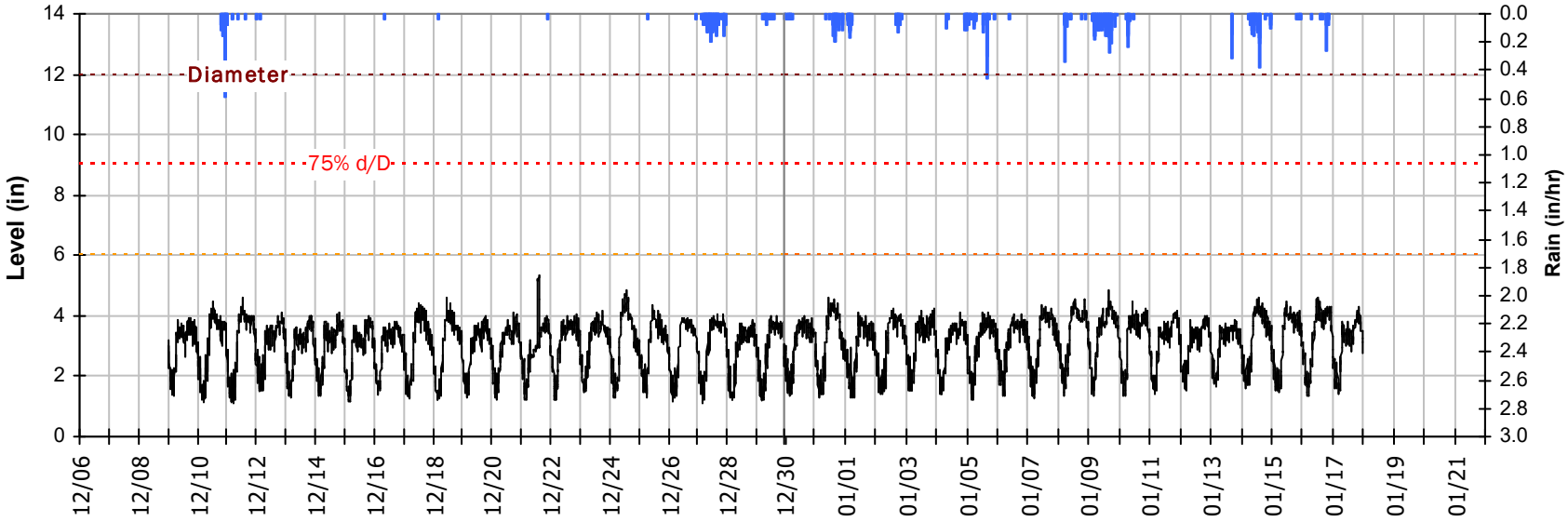
0.158 *mgd*

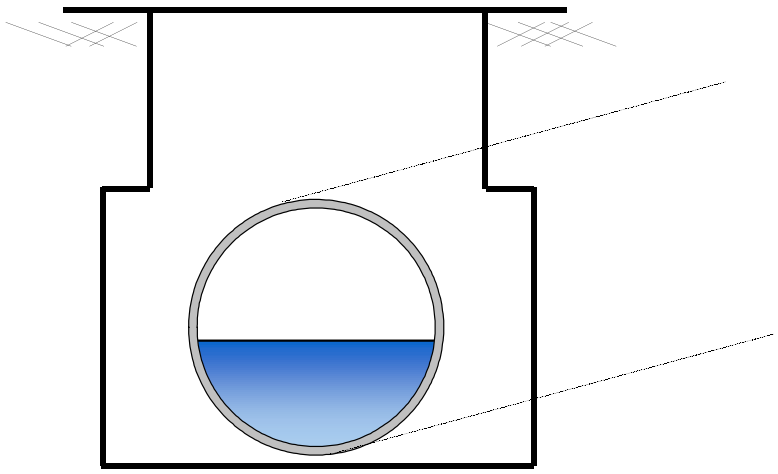


FM06B

Site Capacity and Surcharge Summary

Realtime Flow Levels with Rainfall Data over Peak Level Period



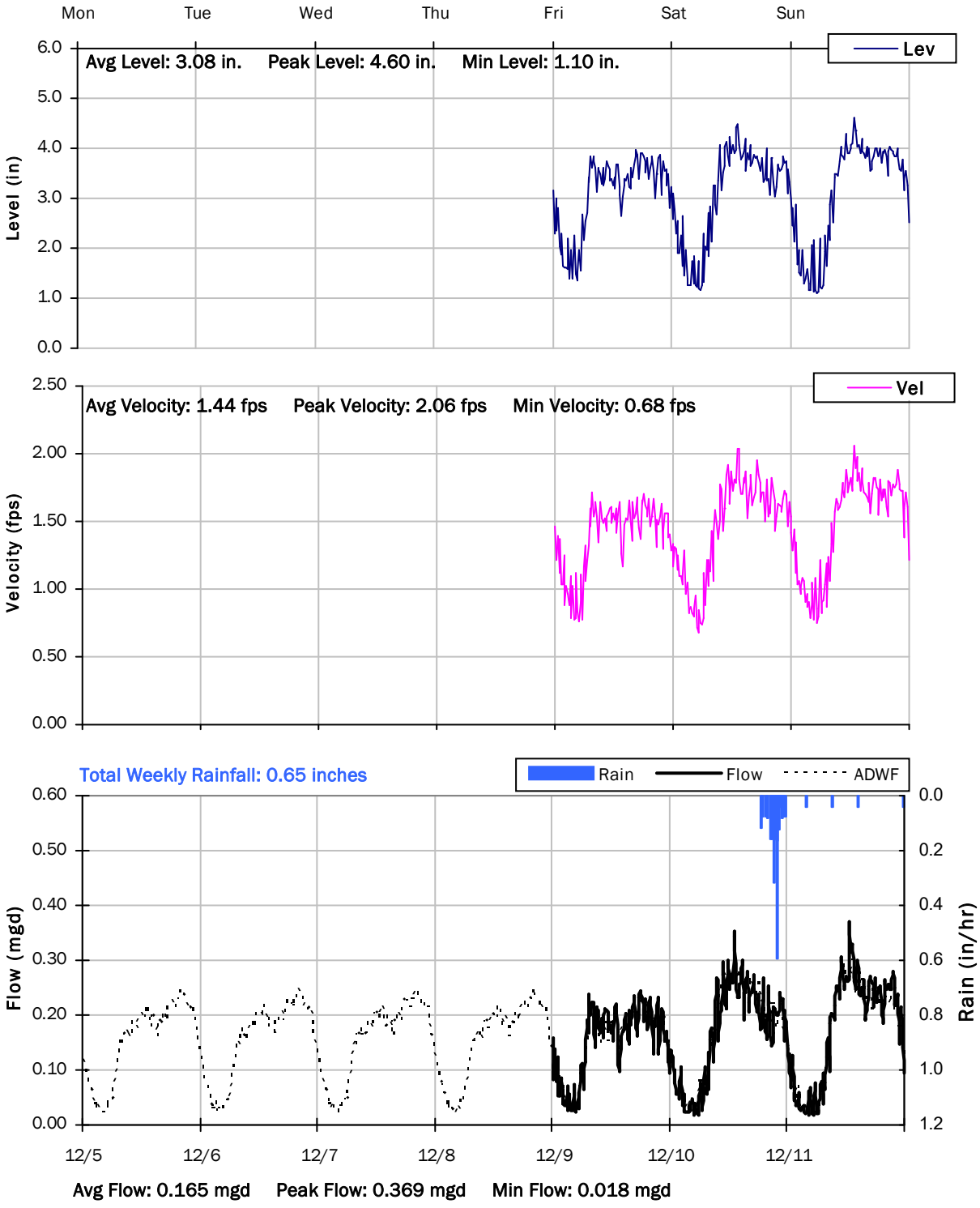


Pipe Diameter:	12	*inches*
Peak Measured Level:	5.33	*inches*
Peak d/D Ratio:	0.44	

FM06B

Weekly Level, Velocity and Flow Hydrographs

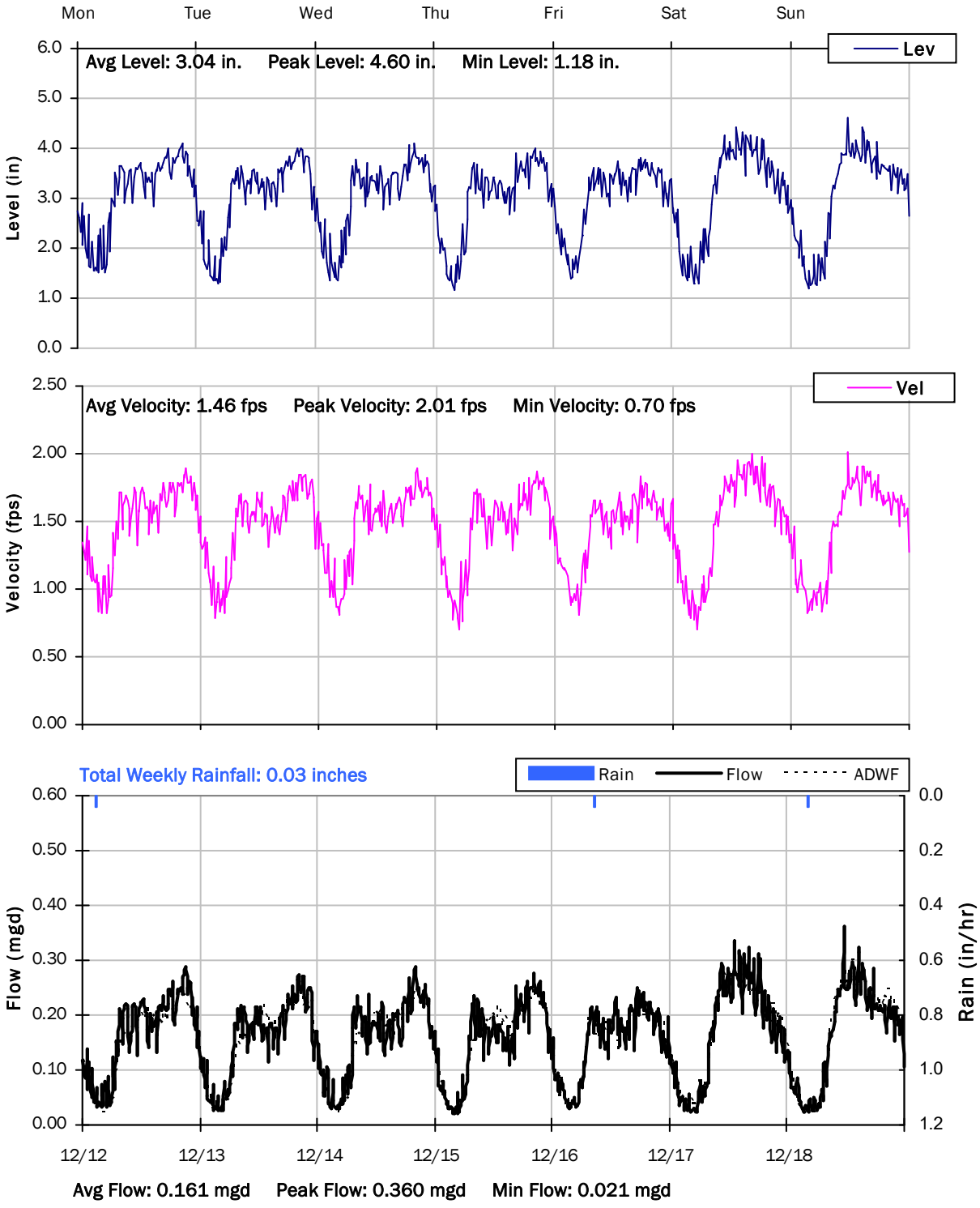
12/5/2022 to 12/12/2022



FM06B

Weekly Level, Velocity and Flow Hydrographs

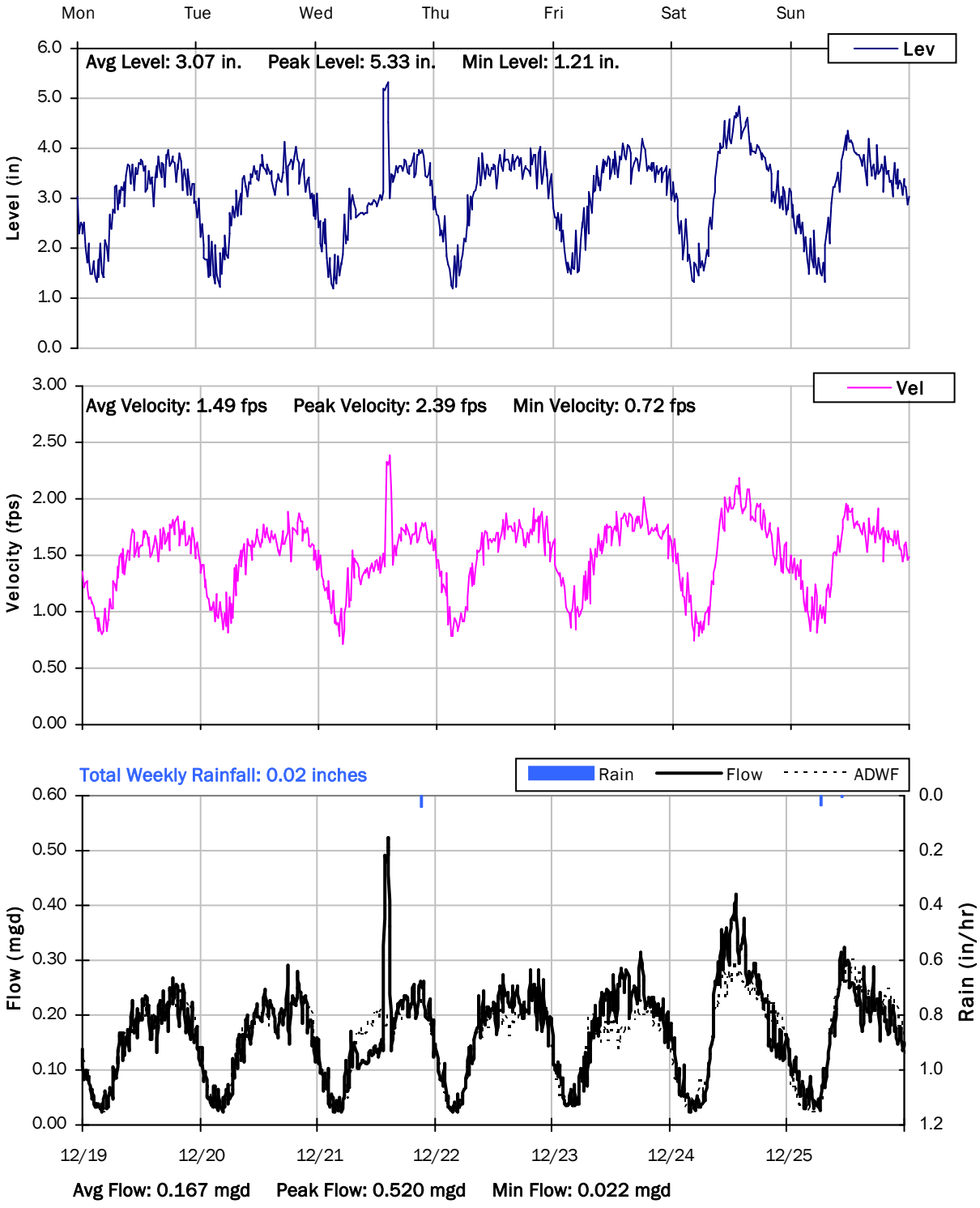
12/12/2022 to 12/19/2022



FM06B

Weekly Level, Velocity and Flow Hydrographs

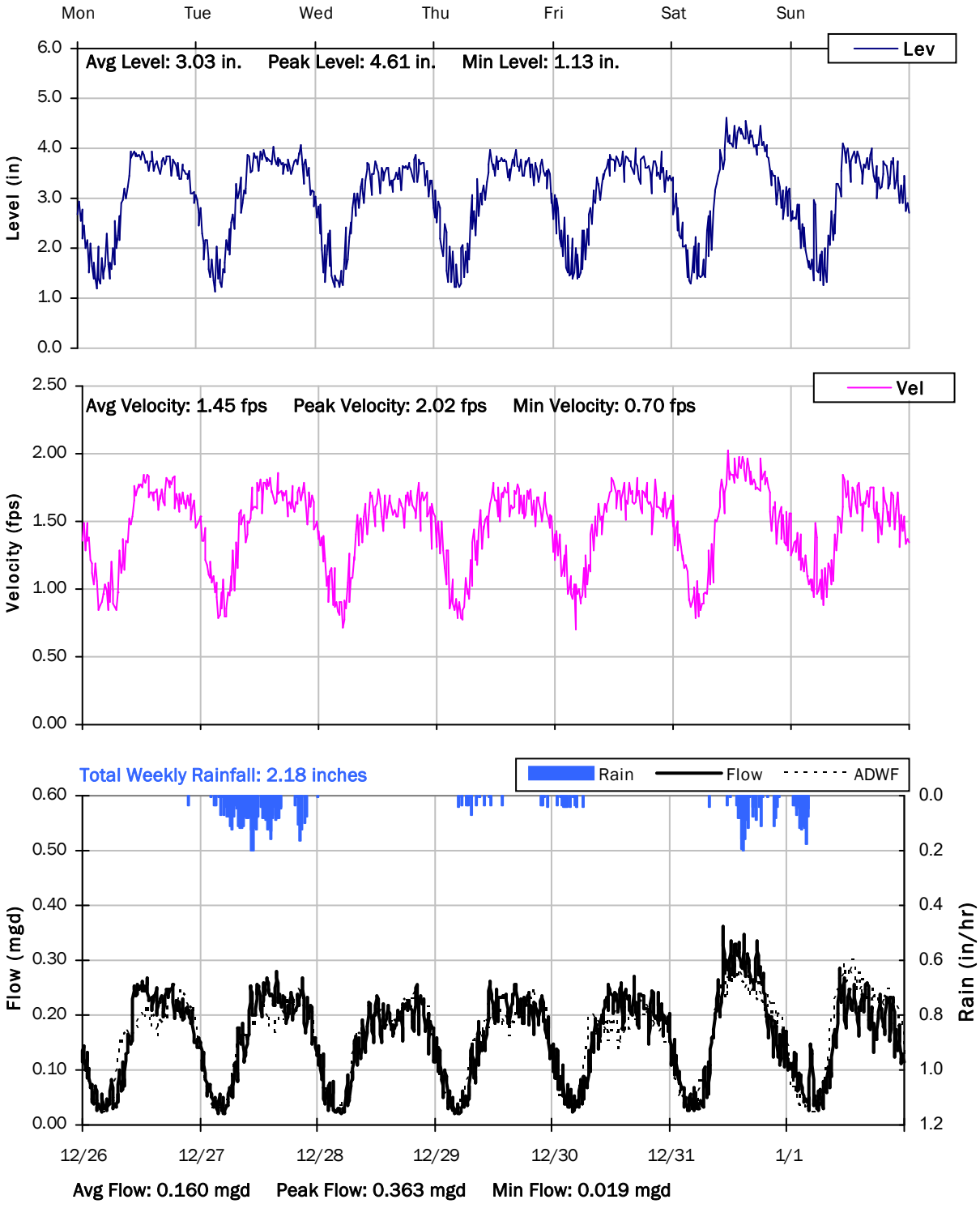
12/19/2022 to 12/26/2022



FM06B

Weekly Level, Velocity and Flow Hydrographs

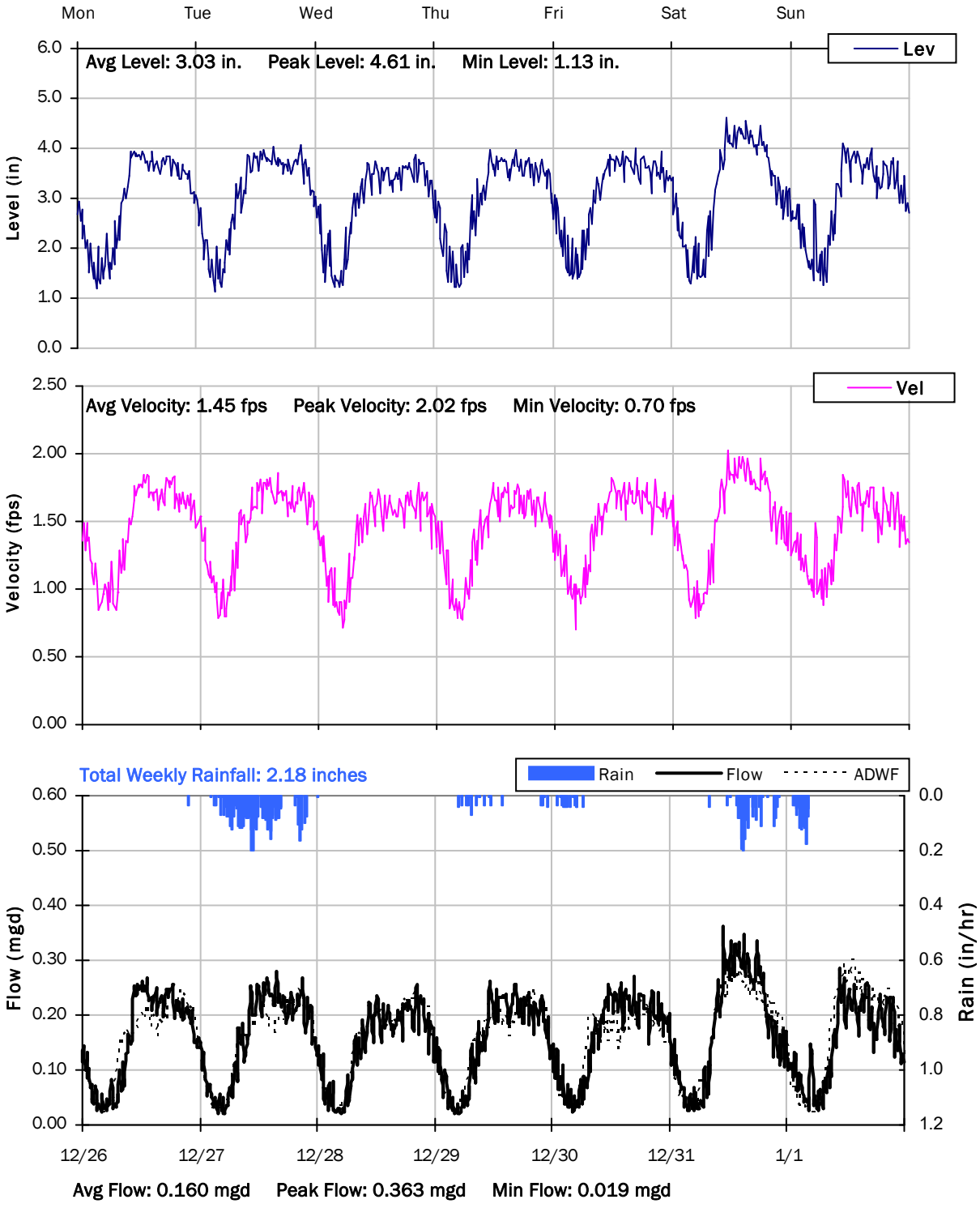
12/26/2022 to 1/2/2023



FM06B

Weekly Level, Velocity and Flow Hydrographs

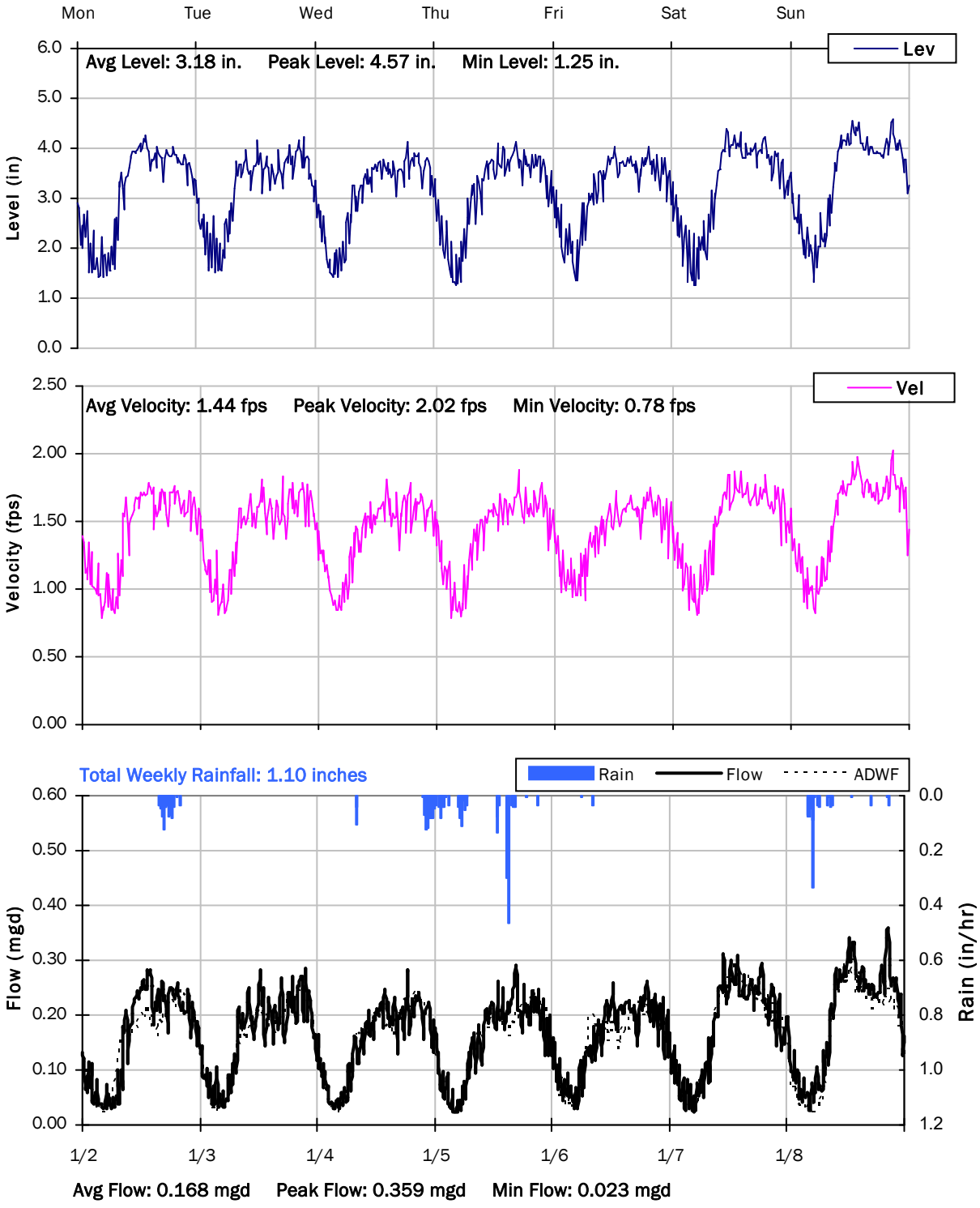
12/26/2022 to 1/2/2023



FM06B

Weekly Level, Velocity and Flow Hydrographs

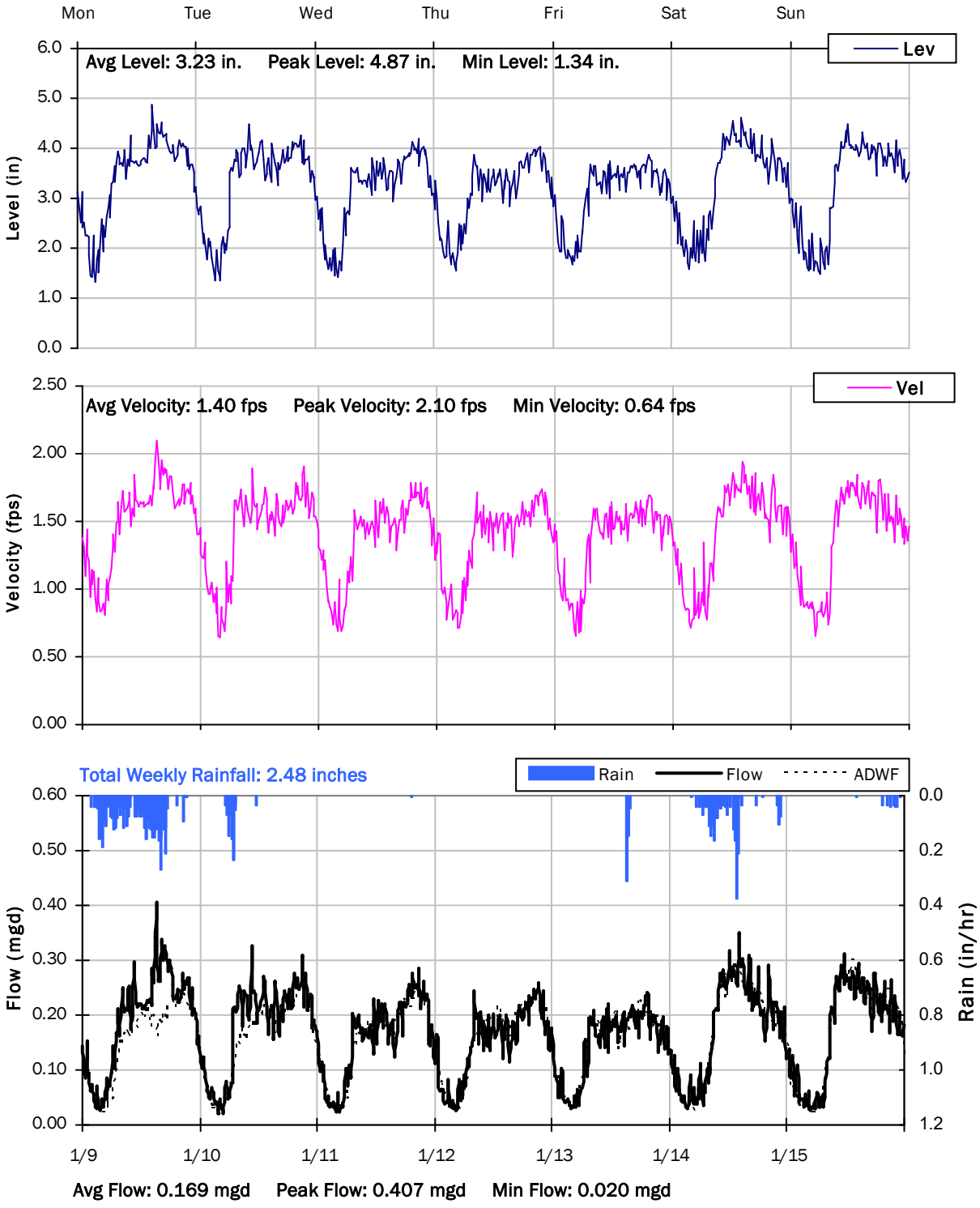
1/2/2023 to 1/9/2023



FM06B

Weekly Level, Velocity and Flow Hydrographs

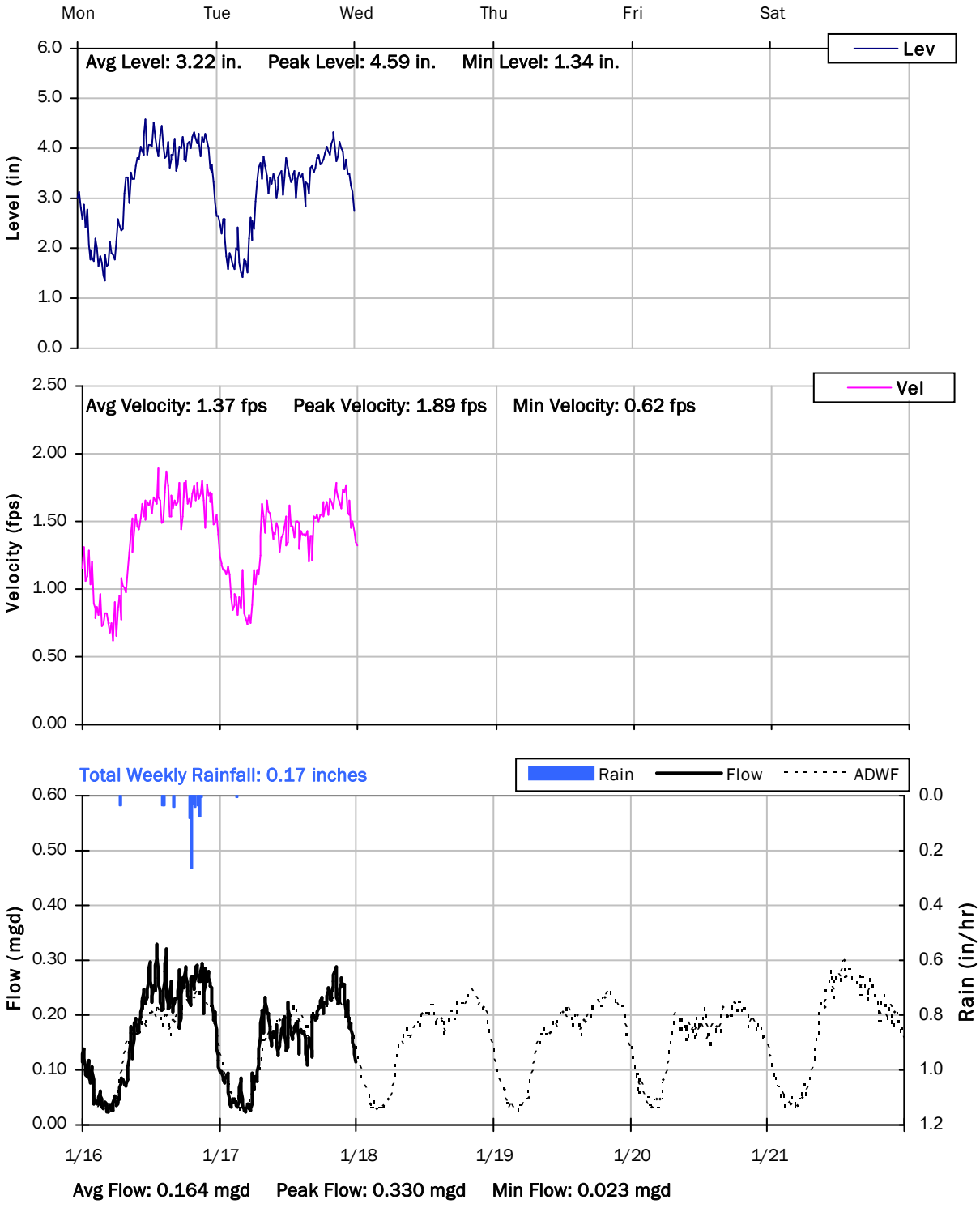
1/9/2023 to 1/16/2023



FM06B

Weekly Level, Velocity and Flow Hydrographs

1/16/2023 to 1/22/2023



Monitoring Site: FM06C

Selma-Kingsburg-Fowler Sanitation District

Sanitary Sewer Flow Monitoring

December 09, 2022 - January 17, 2023

Location: Intersection of Young St & Sherman St

Data Summary Report

Vicinity Map: FM06C

FM07

Site Information MH ID: 1000-1600

Location: 13175 S Amber Ave

Coordinates: 119.5887° W, 36.5429° N

Rim Elevation: 307.34 feet

Expected Pipe Diameter: 42 inches

Measured Pipe Diameter: 41.5 inches

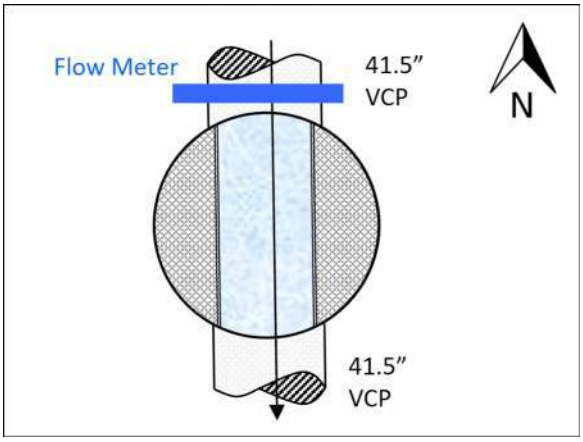
ADWF: 2.089 mgd

Peak Measured Flow: 5.924 mgd

Sediment: None

Satellite Map

Sanitary Map



Flow Sketch

Street View

Plan View

FM06C

Additional Site Photos

Effluent Pipe

Southwest Influent Pipe

FM06C

Additional Site Photos

North Influent Pipe

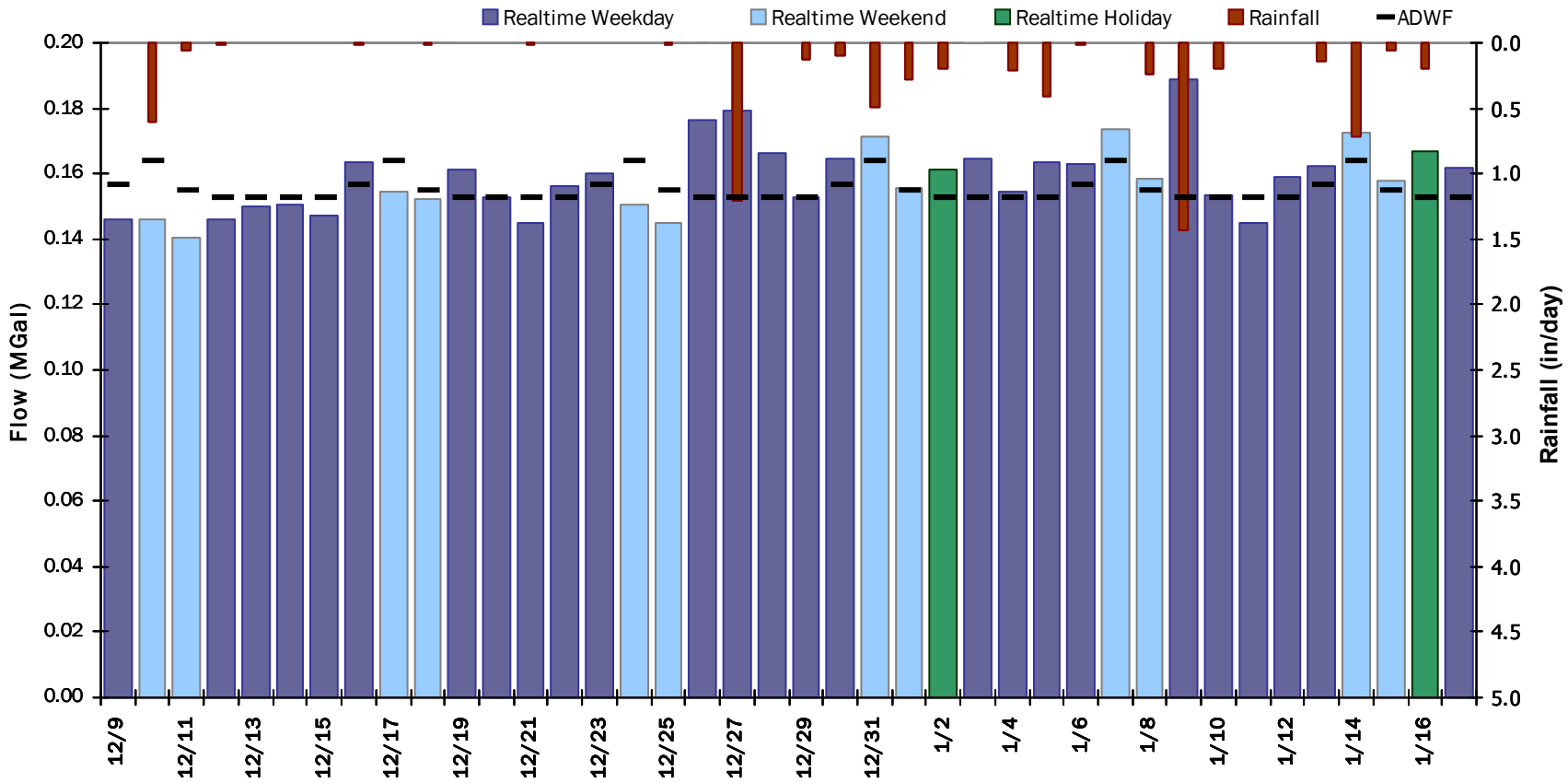
Mounted Northeast Influent Pipe

FM06C

Period Flow Summary: Daily Flow Totals

Avg Daily Flow: 0.158 MGal Peak Daily Flow: 0.189 MGal Min Daily Flow: 0.140 MGal

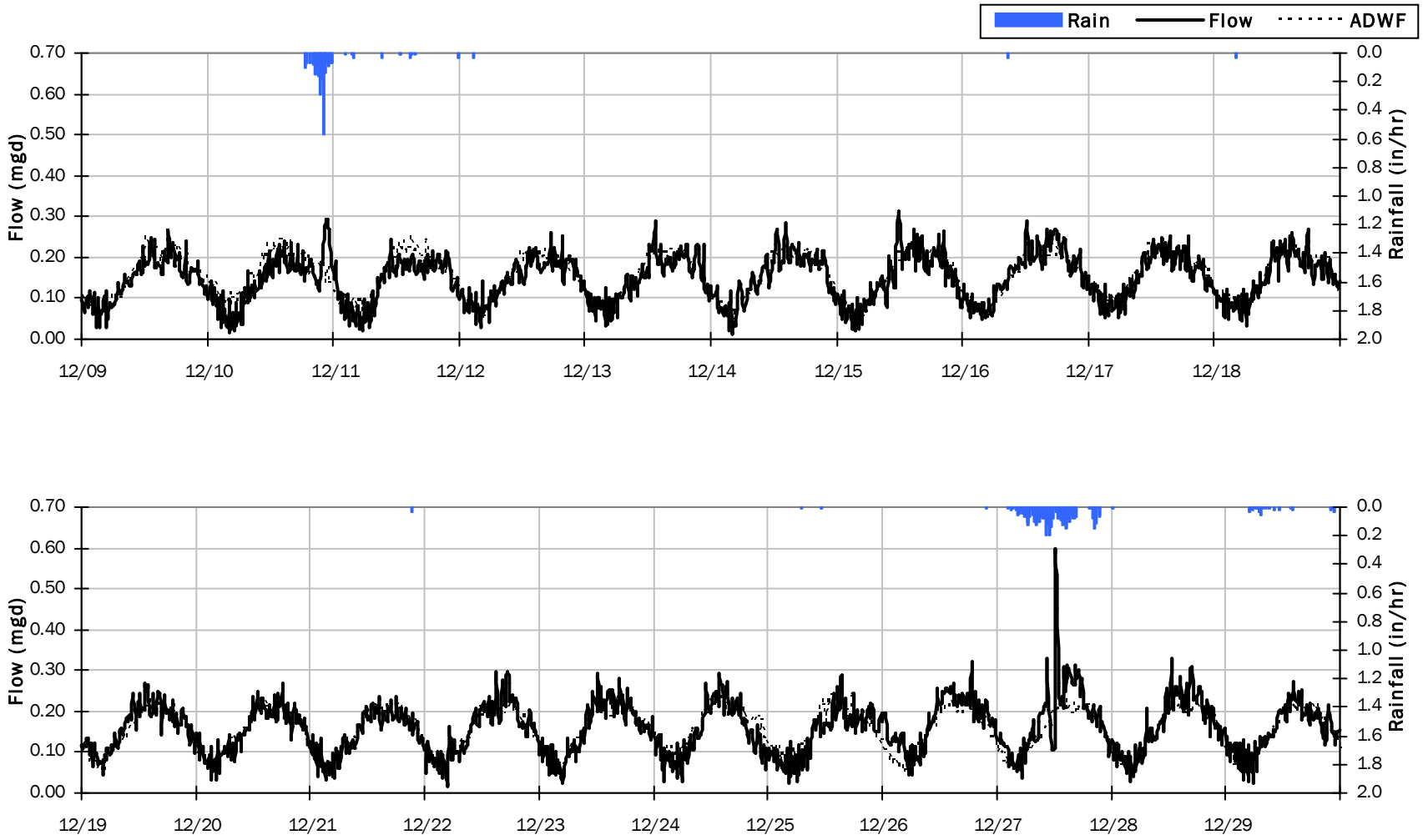
Total Rainfall: 6.70 inches



FM06C

Flow Summary: 12/9/2022 to 12/29/2022

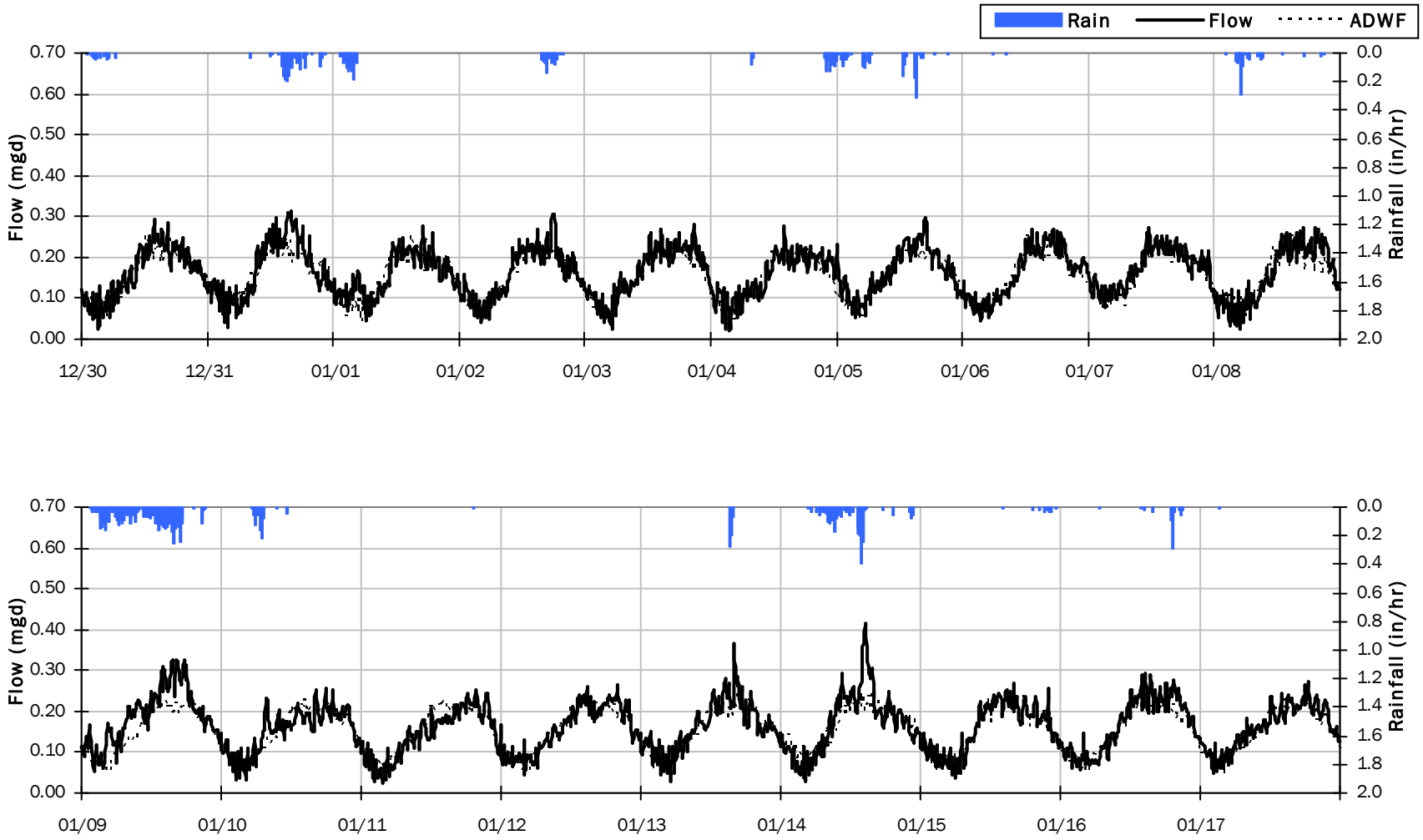
Period Rainfall: 2.05 inches Period Avg Flow: 0.154 mgd Period Peak Flow: 0.588 mgd Period Min Flow: 0.015 mgd



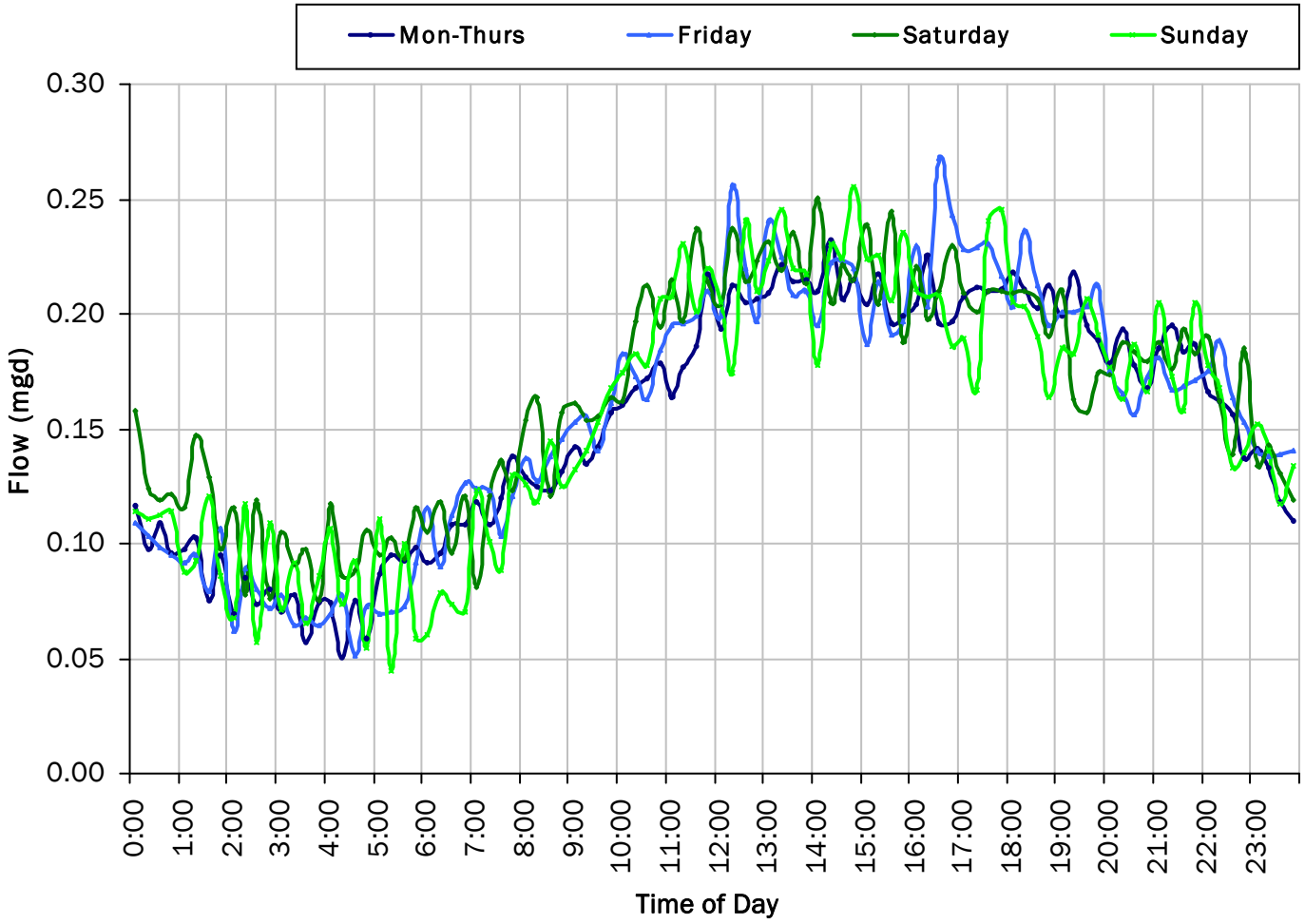
FM06C

Flow Summary: 12/30/2022 to 1/17/2023

Period Rainfall: 4.65 inches Period Avg Flow: 0.163 mgd Period Peak Flow: 0.414 mgd Period Min Flow: 0.022 mgd

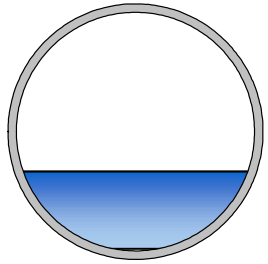


FM06C
Average Dry Weather Flow Hydrographs



ADWF:

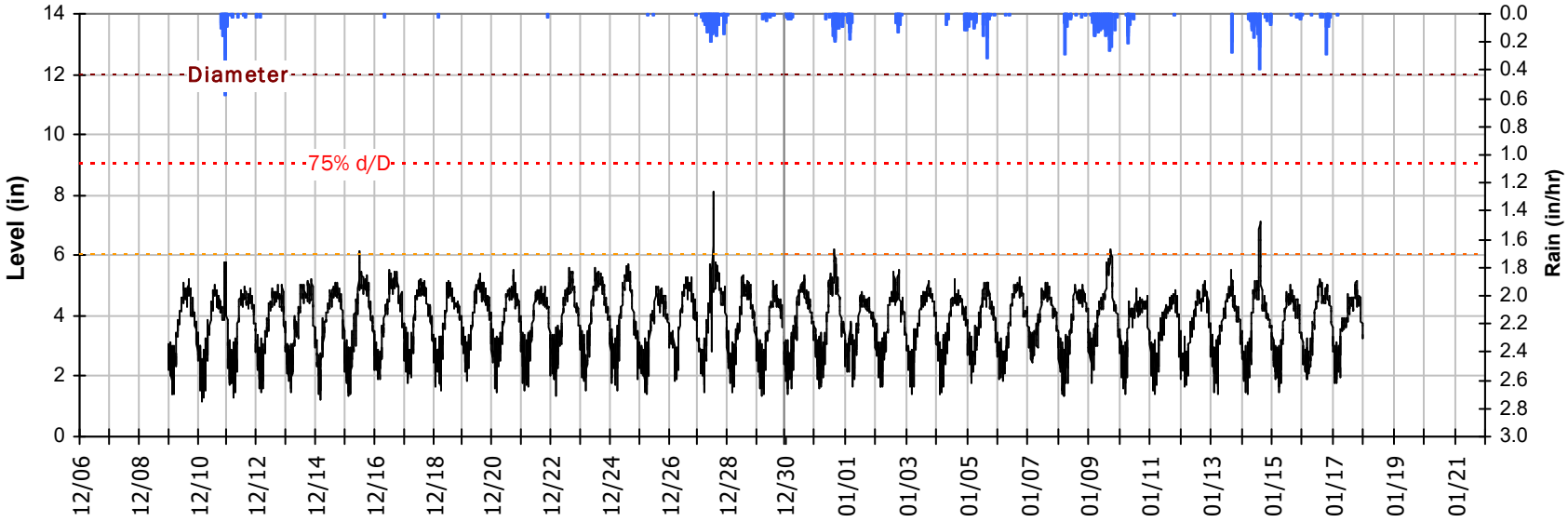
0.155 *mgd*

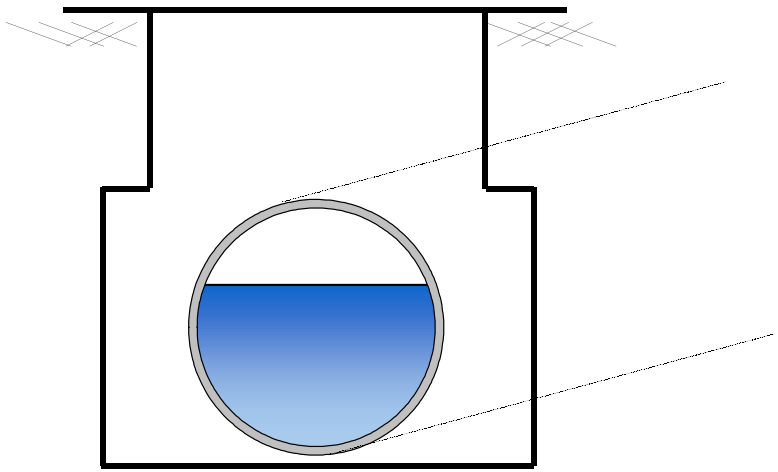


FM06C

Site Capacity and Surcharge Summary

Realtime Flow Levels with Rainfall Data over Peak Level Period



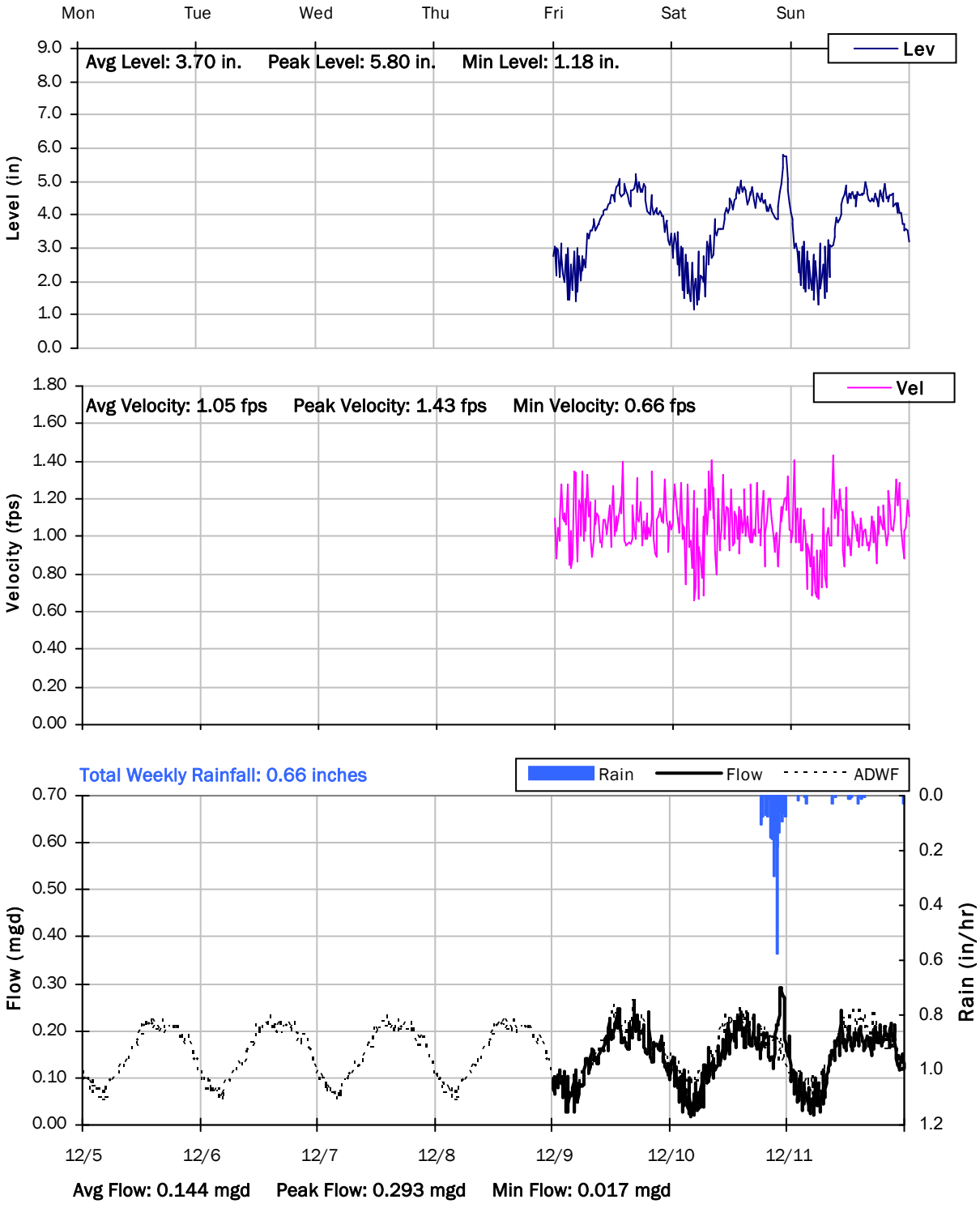


Pipe Diameter:	12	*inches*
Peak Measured Level:	8.04	*inches*
Peak d/D Ratio:	0.67	

FM06C

Weekly Level, Velocity and Flow Hydrographs

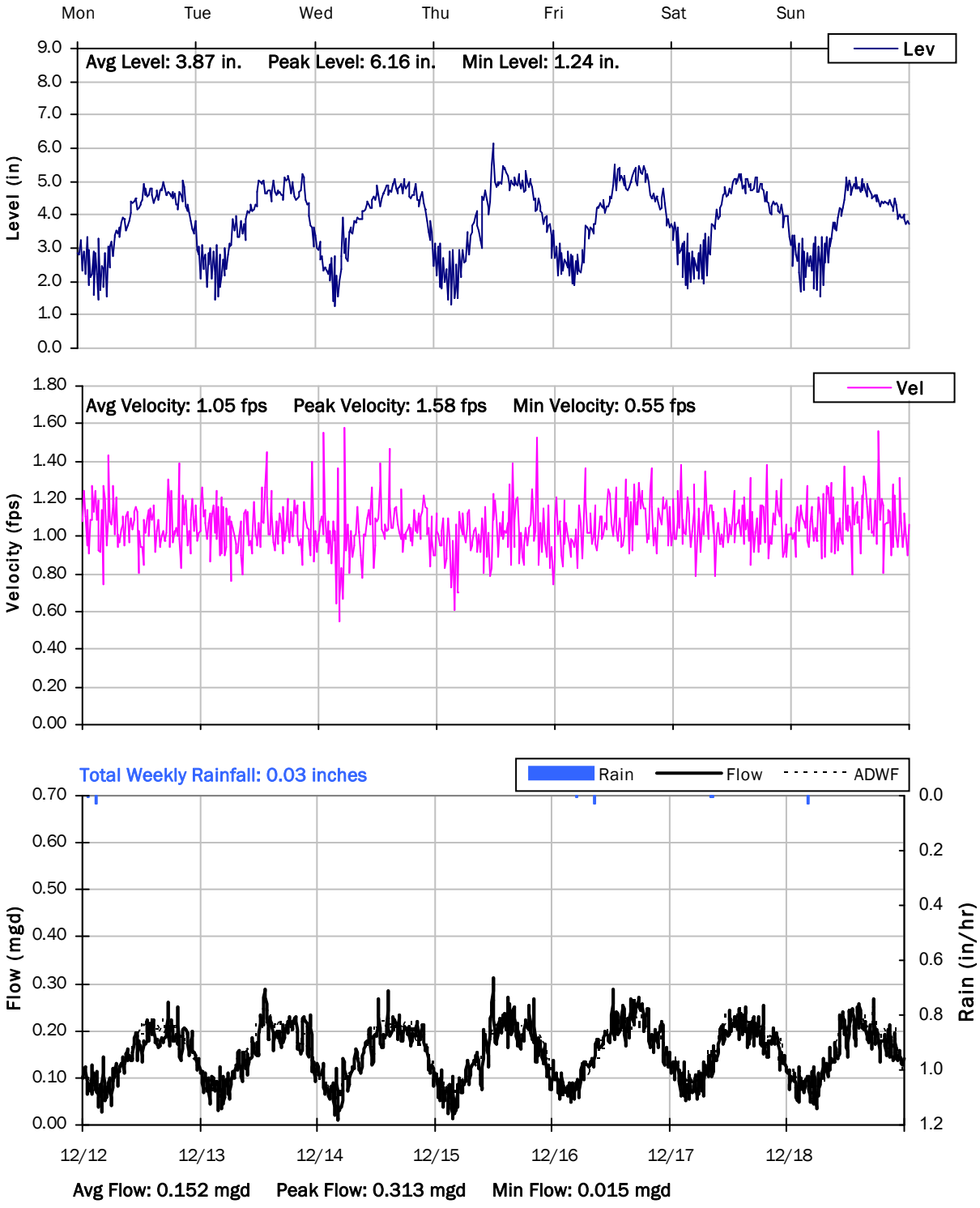
12/5/2022 to 12/12/2022



FM06C

Weekly Level, Velocity and Flow Hydrographs

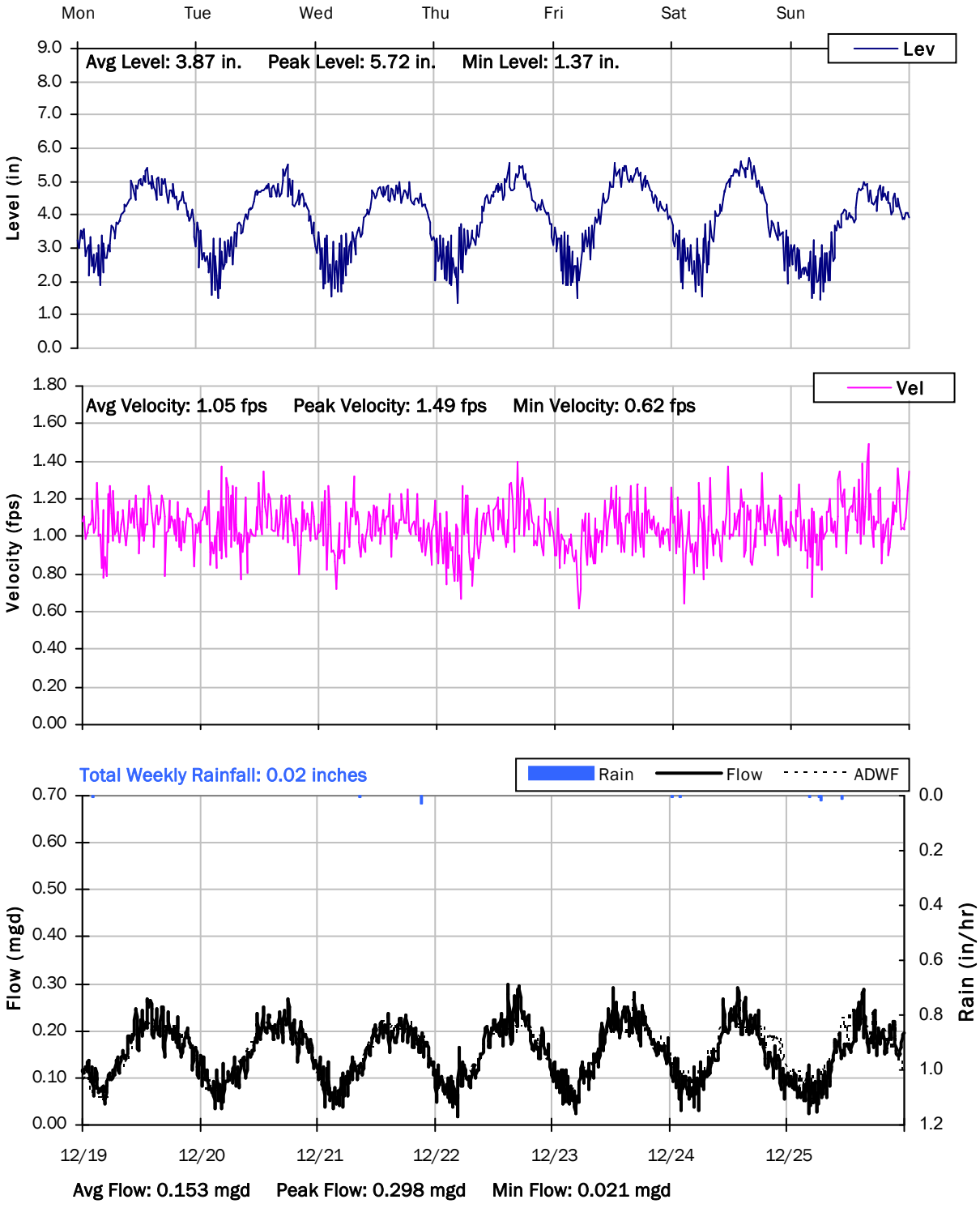
12/12/2022 to 12/19/2022



FM06C

Weekly Level, Velocity and Flow Hydrographs

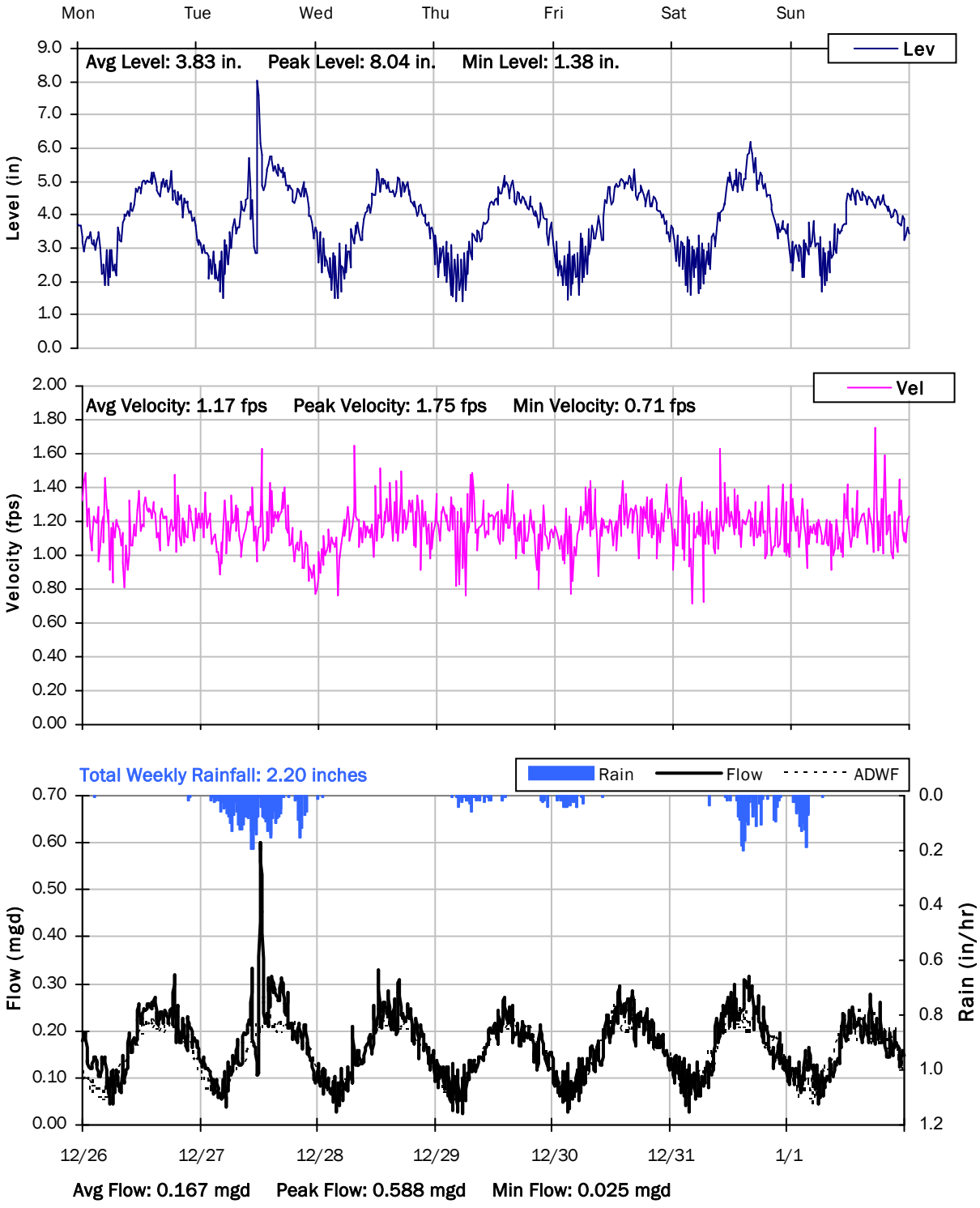
12/19/2022 to 12/26/2022



FM06C

Weekly Level, Velocity and Flow Hydrographs

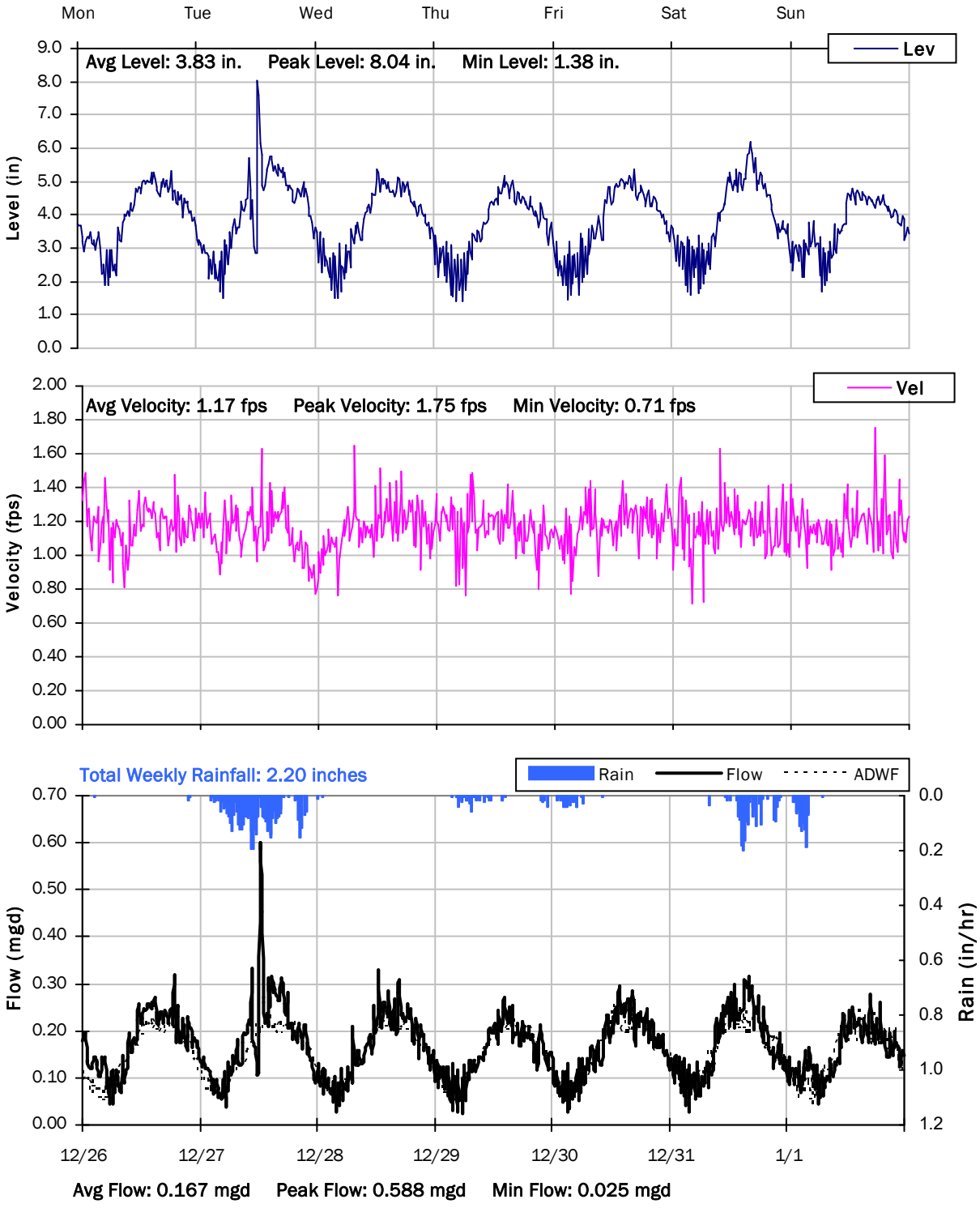
12/26/2022 to 1/2/2023



FM06C

Weekly Level, Velocity and Flow Hydrographs

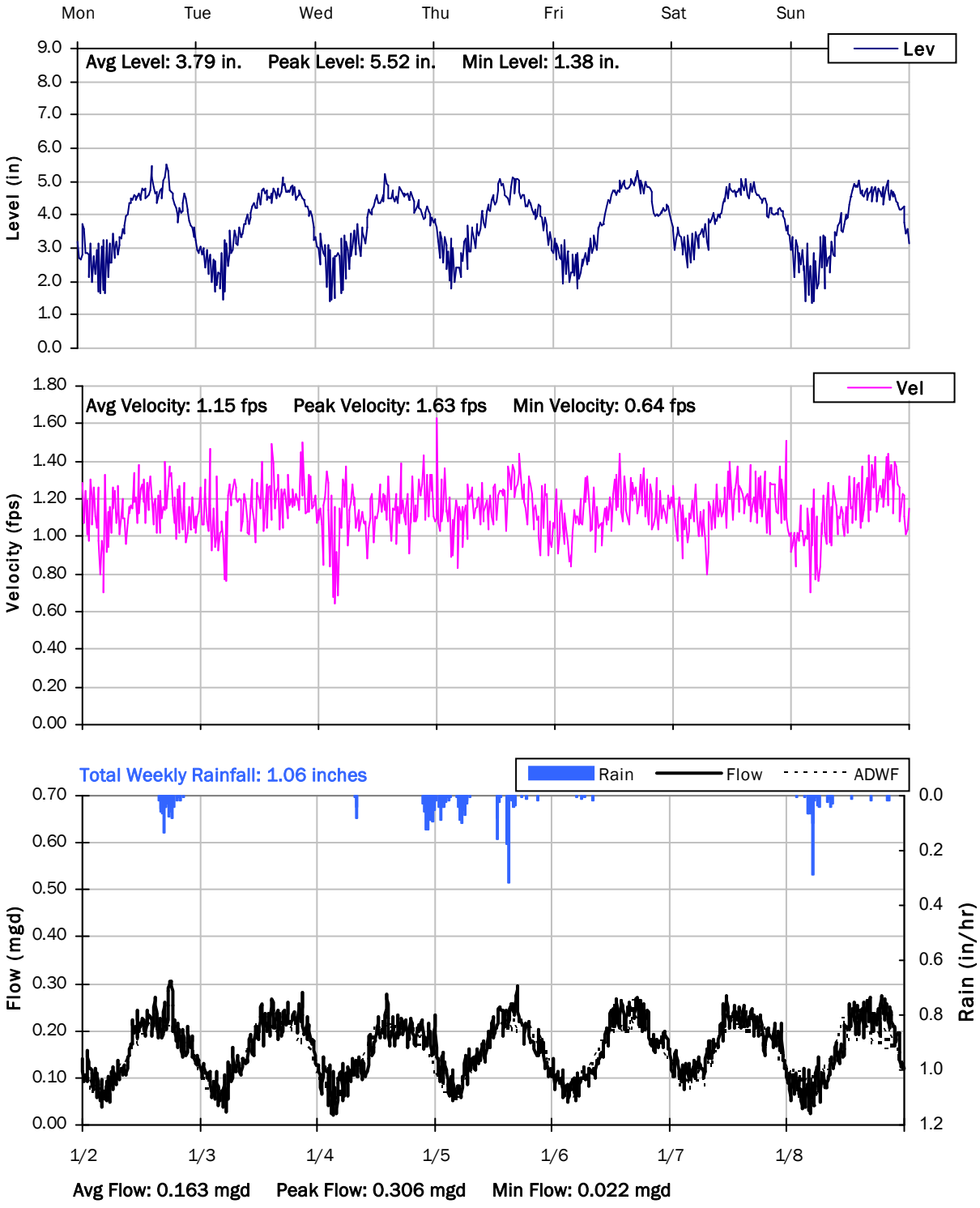
12/26/2022 to 1/2/2023



FM06C

Weekly Level, Velocity and Flow Hydrographs

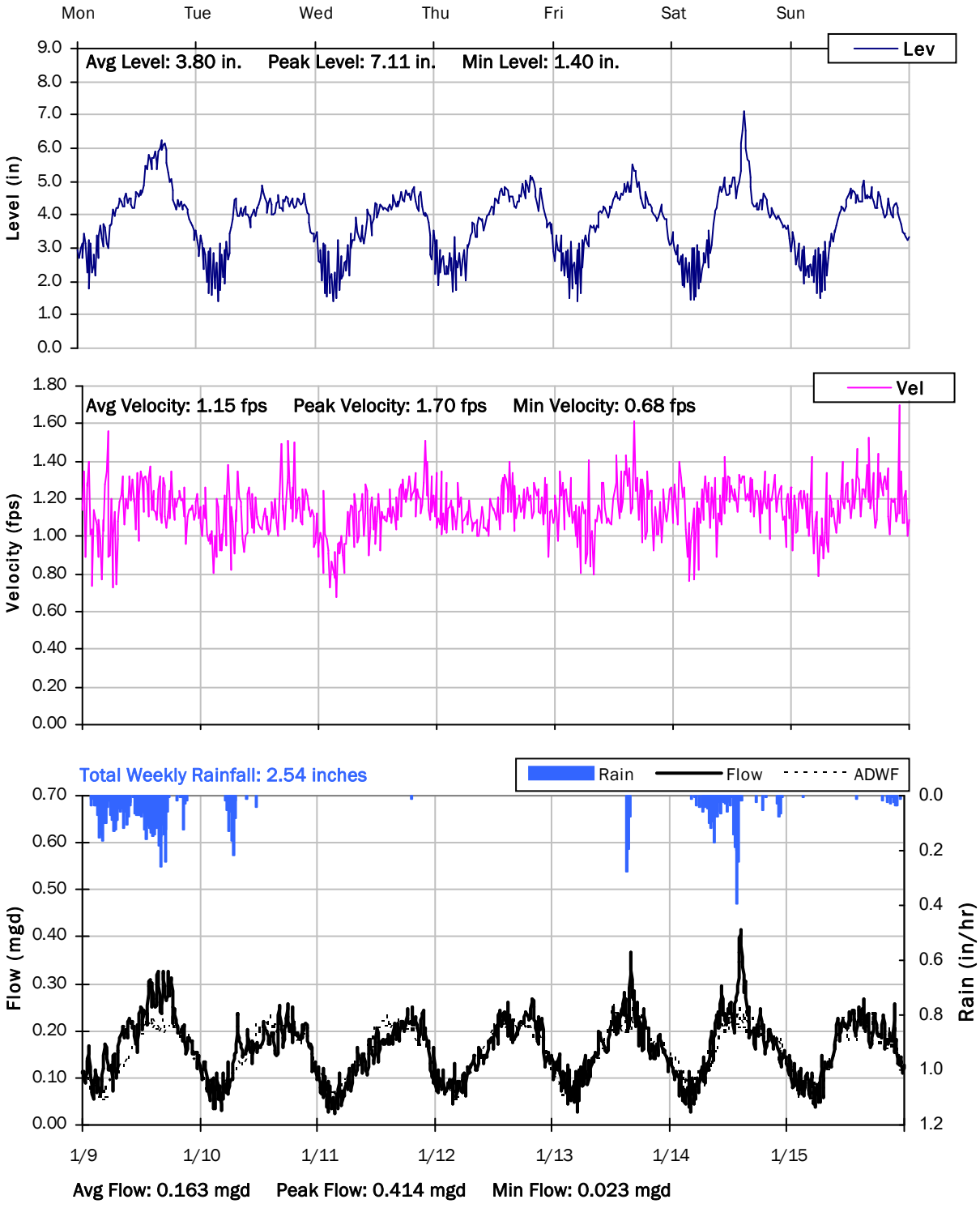
1/2/2023 to 1/9/2023



FM06C

Weekly Level, Velocity and Flow Hydrographs

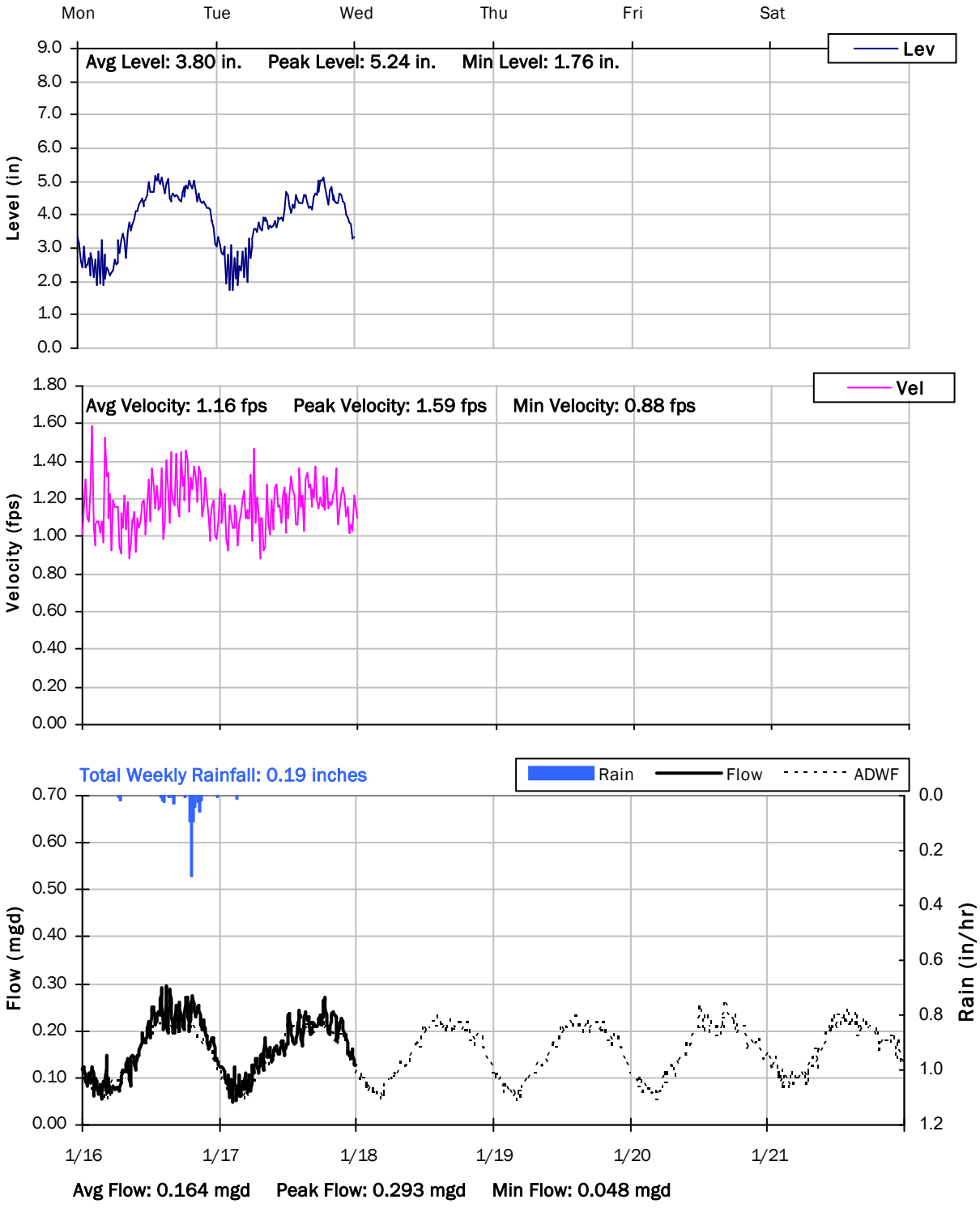
1/9/2023 to 1/16/2023



FM06C

Weekly Level, Velocity and Flow Hydrographs

1/16/2023 to 1/22/2023



Monitoring Site: FM07

Selma-Kingsburg-Fowler Sanitation District

Sanitary Sewer Flow Monitoring

December 09, 2022 - January 17, 2023

Location: 13175 S Amber Ave

Data Summary Report

Vicinity Map: FM07

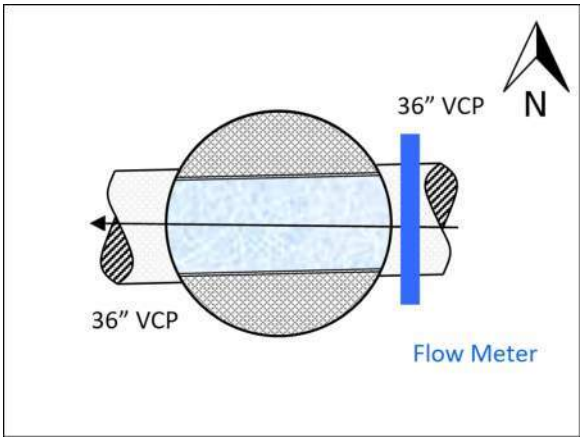
FM08

Site Information MH ID: 7000-0300

Location:	Intersection of E Conejo Ave/W Sierra Ave & S Bethel Ave
Coordinates:	119.5753° W, 36.5179° N
Rim Elevation:	299.76 feet
Expected Pipe Diameter:	36 inches
Measured Pipe Diameter:	36 inches
ADWF:	0.946 mgd
Peak Measured Flow:	1.850 mgd
Sediment:	1.75 inches

Satellite Map

Sanitary Map



Flow Sketch

Street View

Plan View

FM07

Additional Site Photos

Effluent Pipe

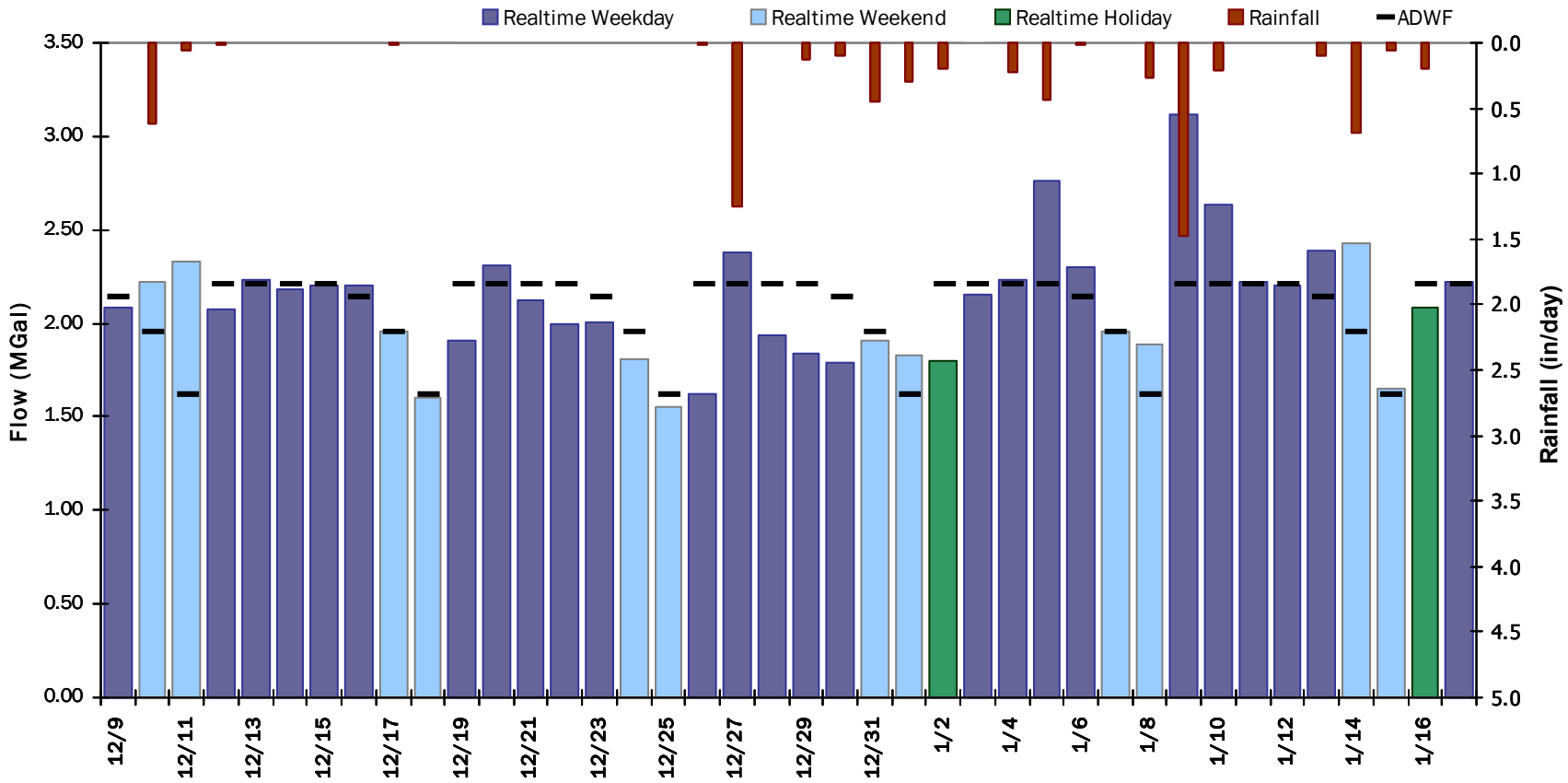
Influent Pipe

FM07

Period Flow Summary: Daily Flow Totals

Avg Daily Flow: 2.103 MGal Peak Daily Flow: 3.114 MGal Min Daily Flow: 1.555 MGal

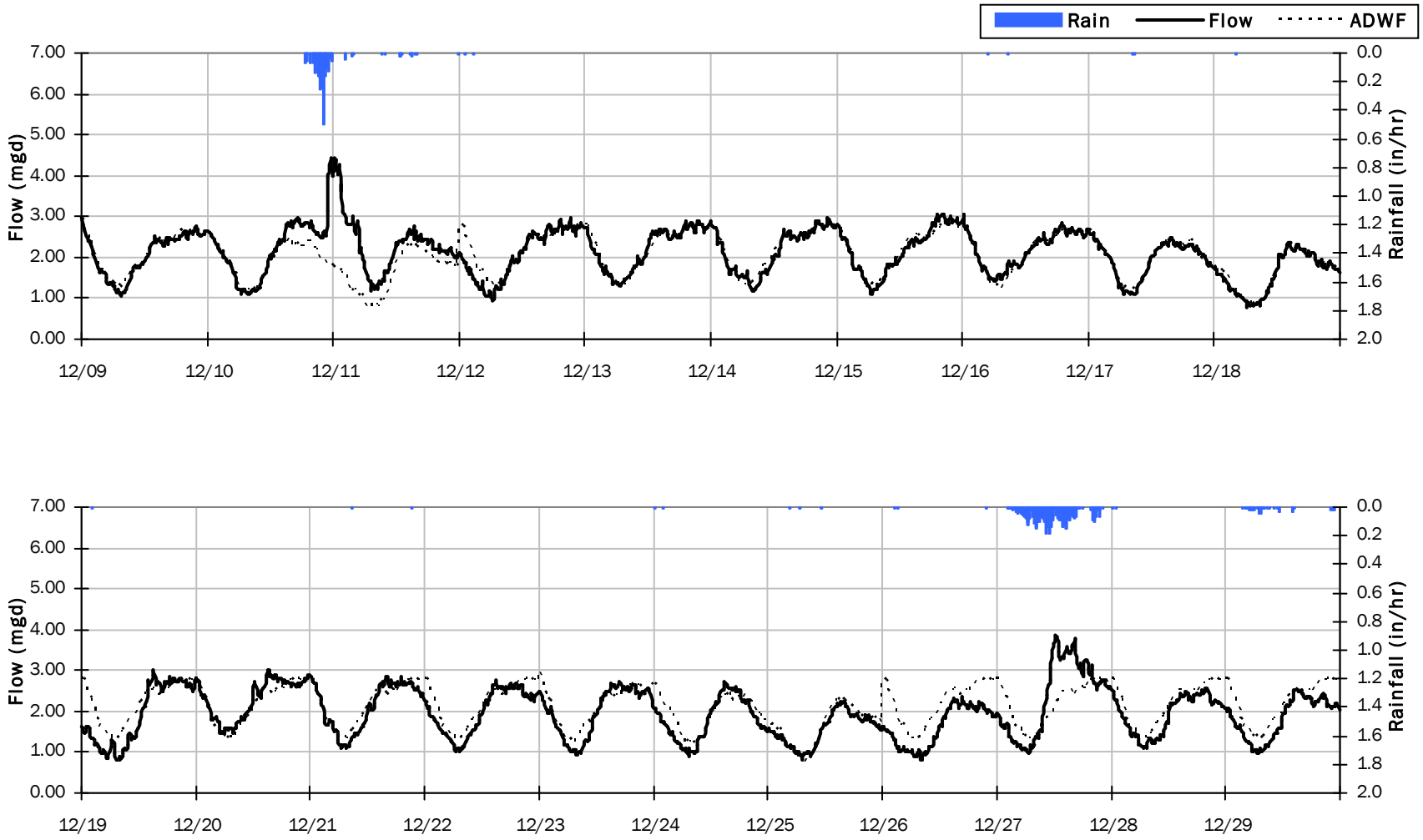
Total Rainfall: 6.81 inches



FM07

Flow Summary: 12/9/2022 to 12/29/2022

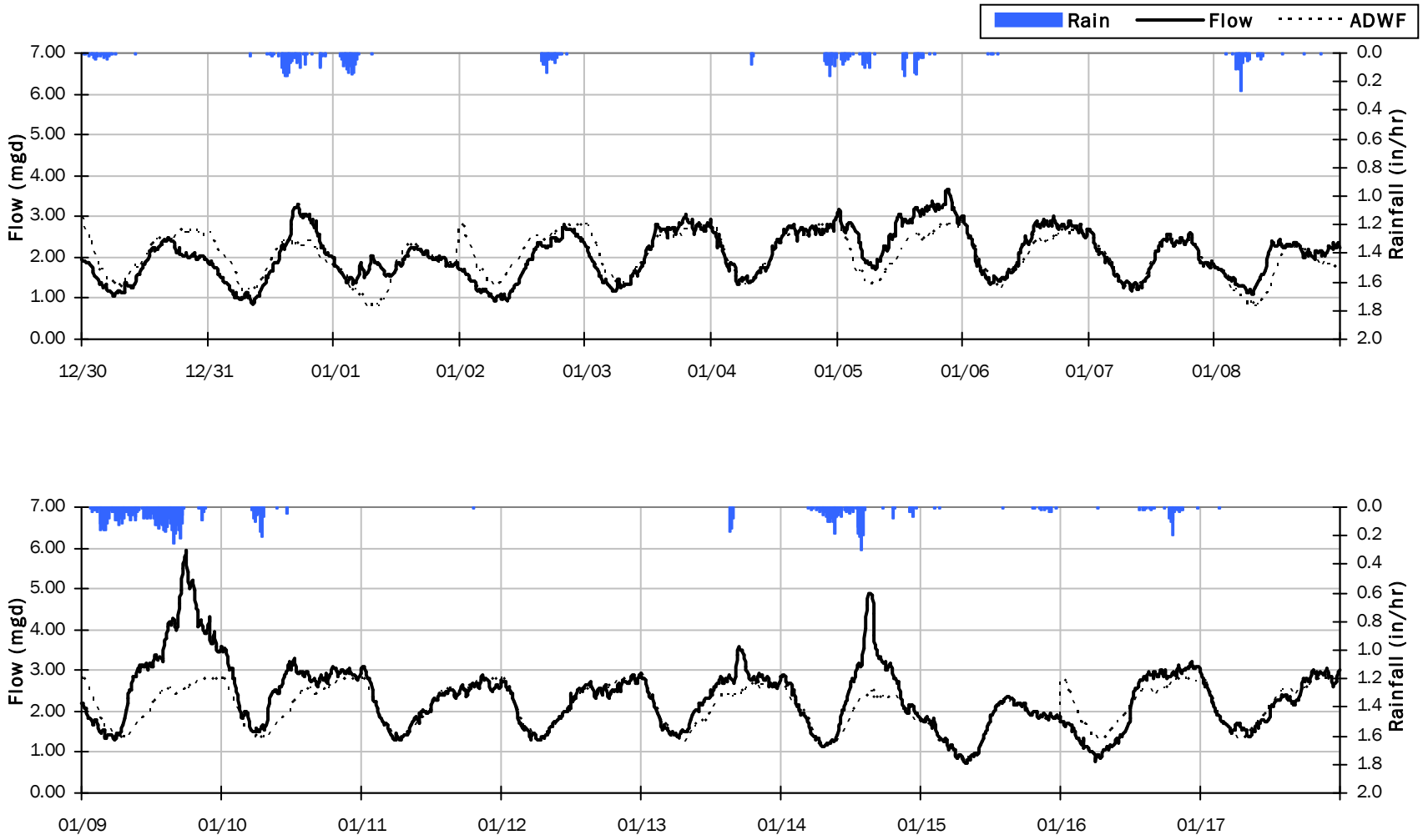
Period Rainfall: 2.11 inches Period Avg Flow: 2.026 mgd Period Peak Flow: 4.444 mgd Period Min Flow: 0.790 mgd



FM07

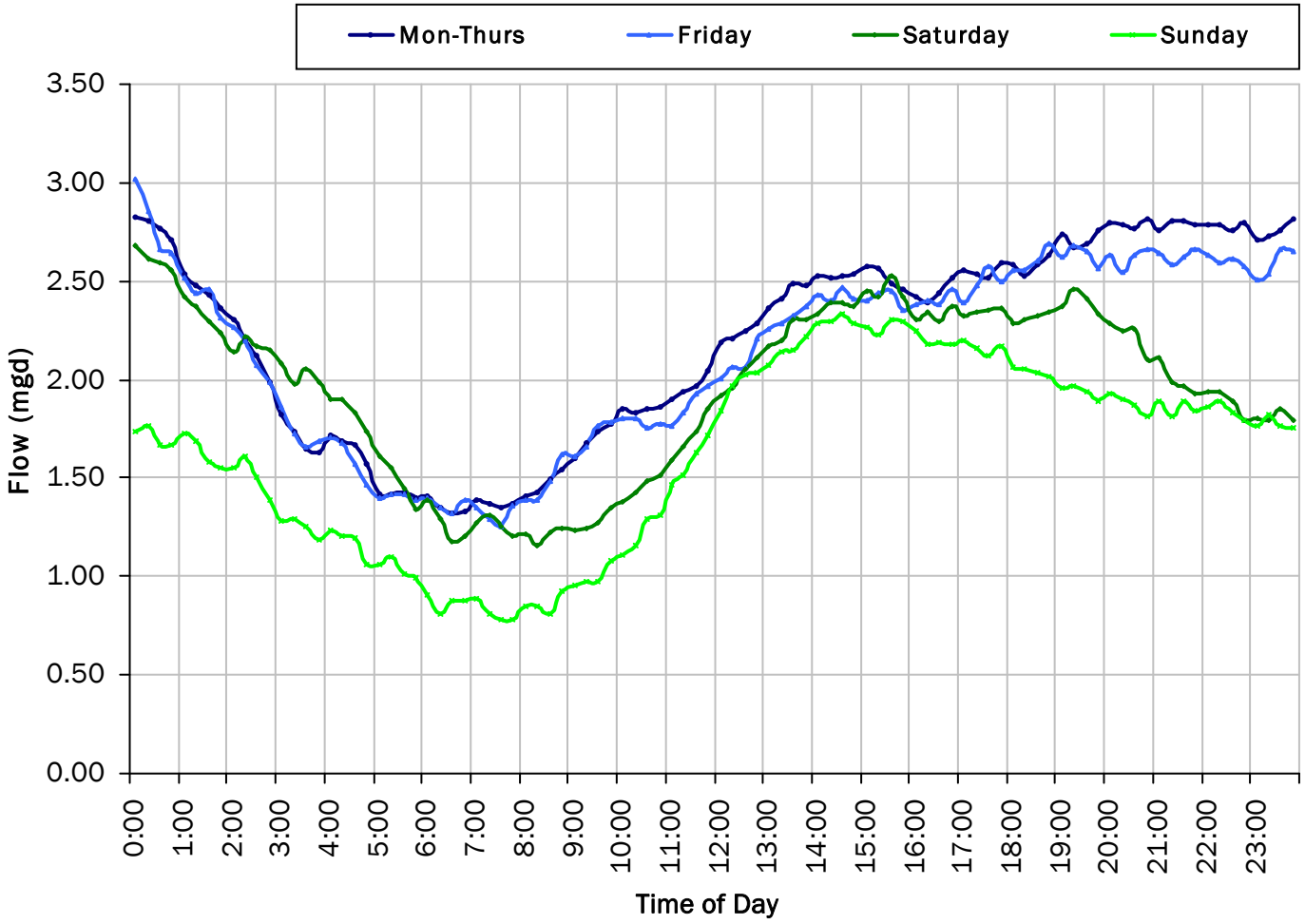
Flow Summary: 12/30/2022 to 1/17/2023

Period Rainfall: 4.70 inches Period Avg Flow: 2.188 mgd Period Peak Flow: 5.924 mgd Period Min Flow: 0.720 mgd



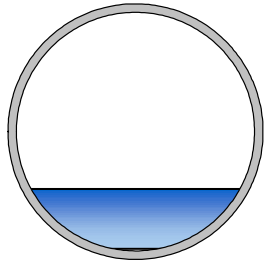
FM07

Average Dry Weather Flow Hydrographs



ADWF:

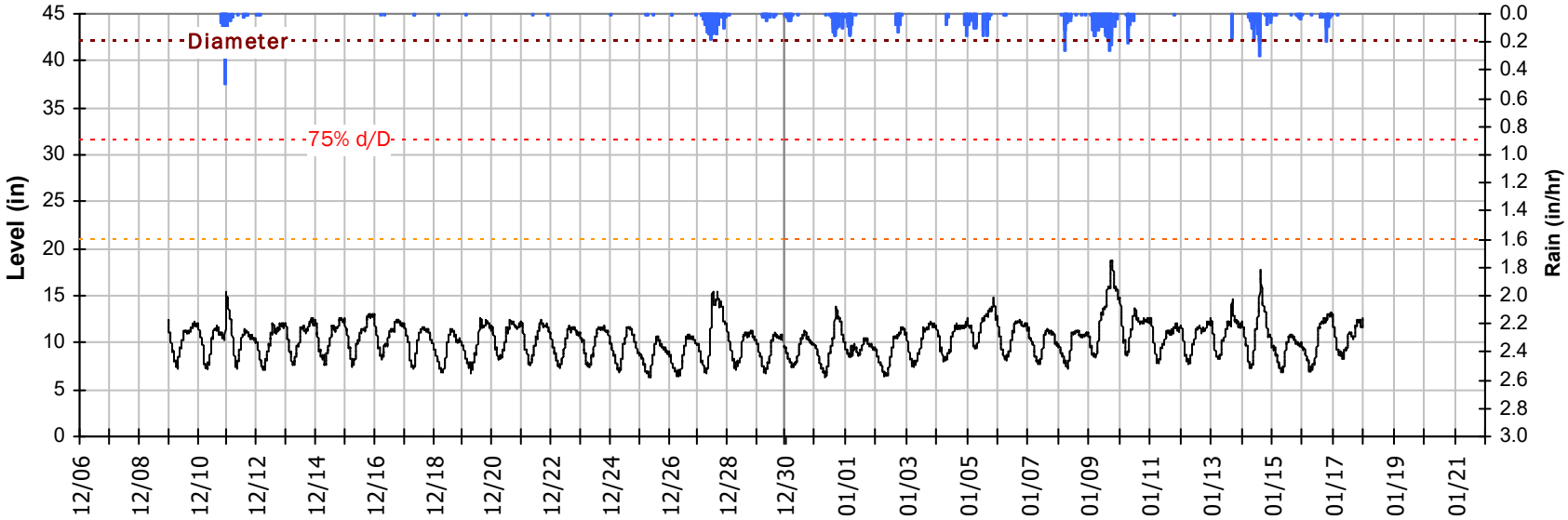
2.089 *mgd*

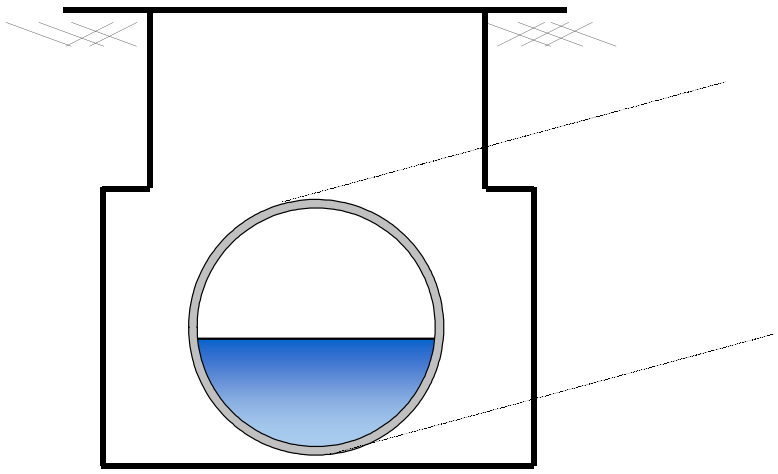


FM07

Site Capacity and Surcharge Summary

Realtime Flow Levels with Rainfall Data over Peak Level Period



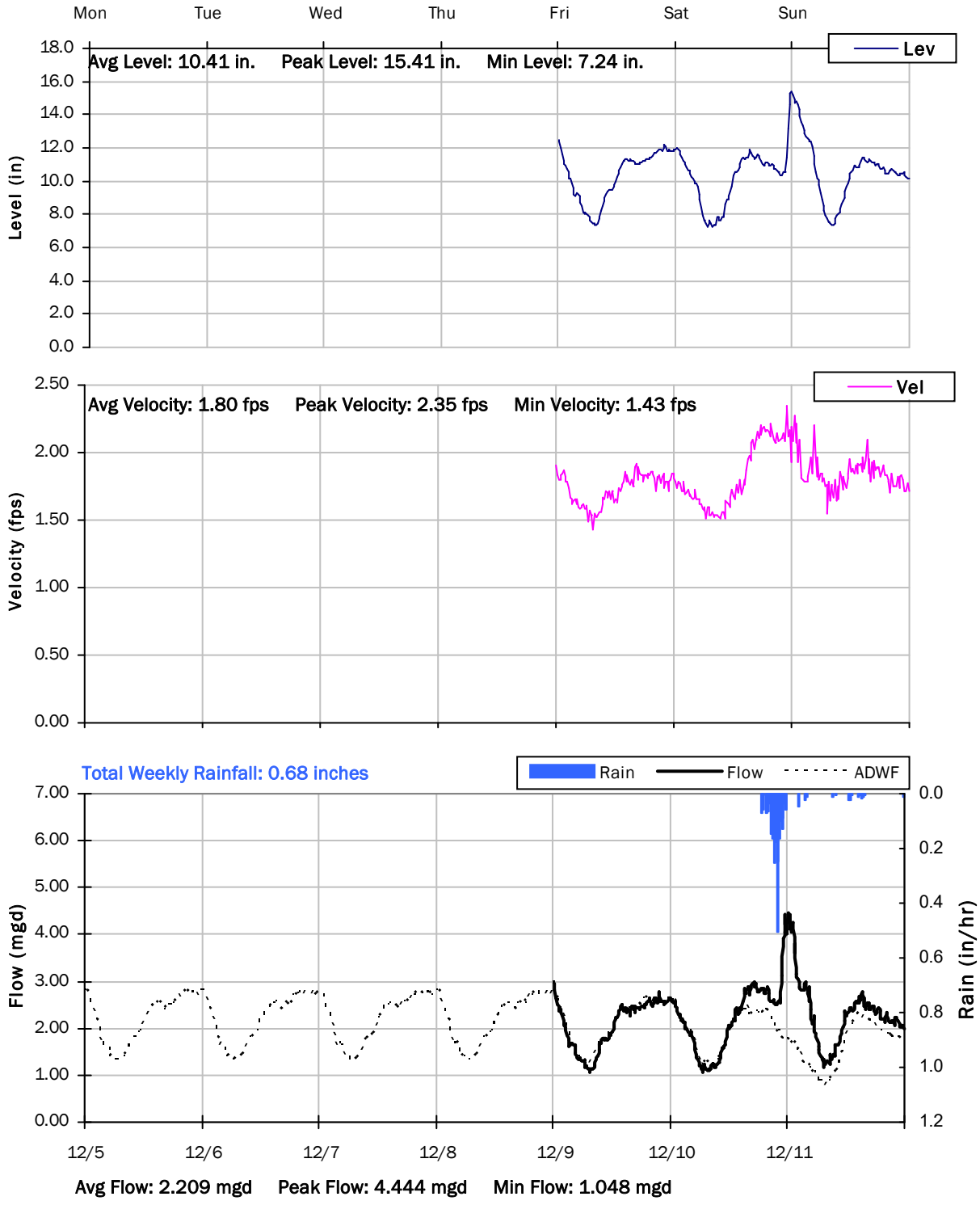


Pipe Diameter:	42	*inches*
Peak Measured Level:	18.8	*inches*
Peak d/D Ratio:	0.45	

FM07

Weekly Level, Velocity and Flow Hydrographs

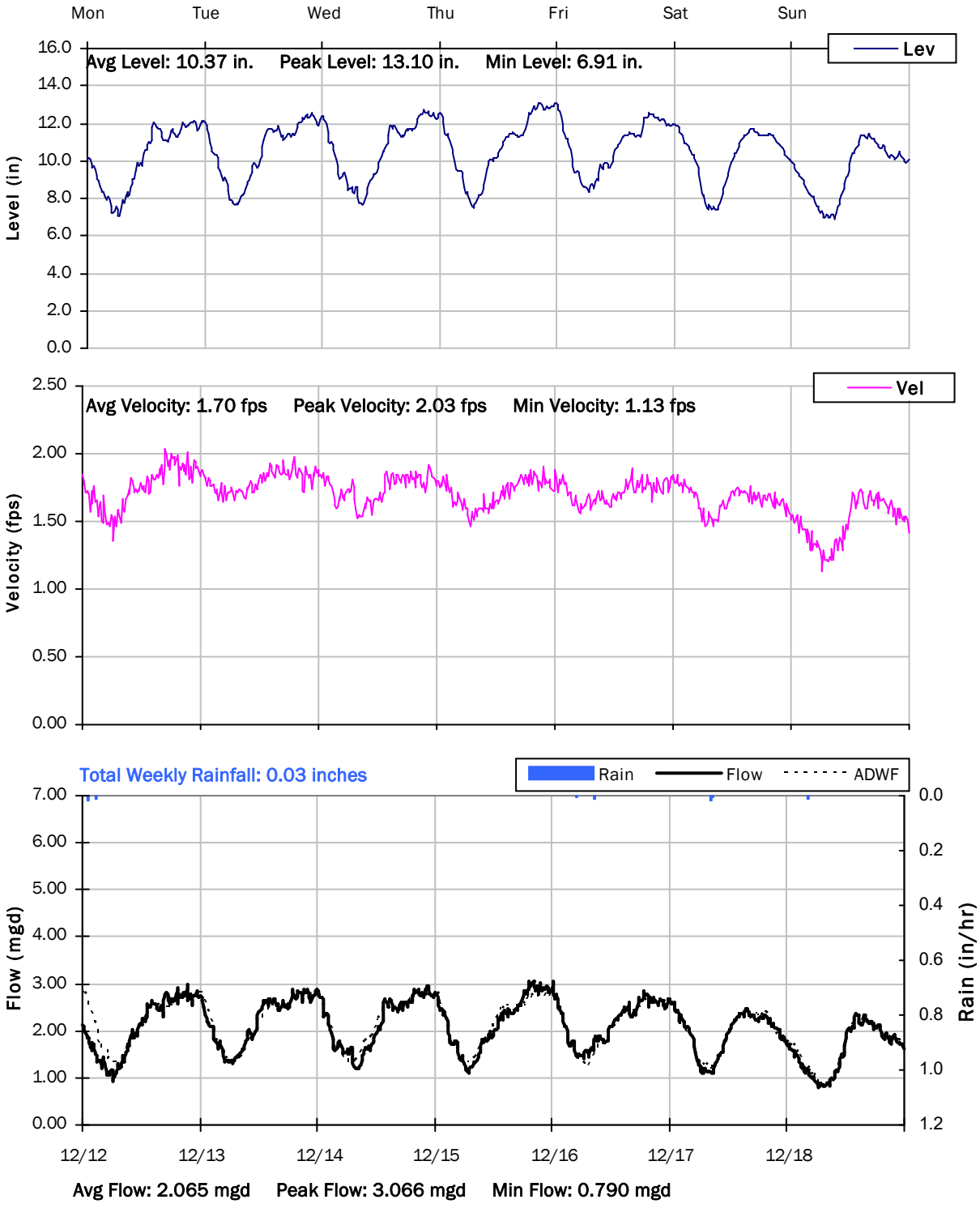
12/5/2022 to 12/12/2022



FM07

Weekly Level, Velocity and Flow Hydrographs

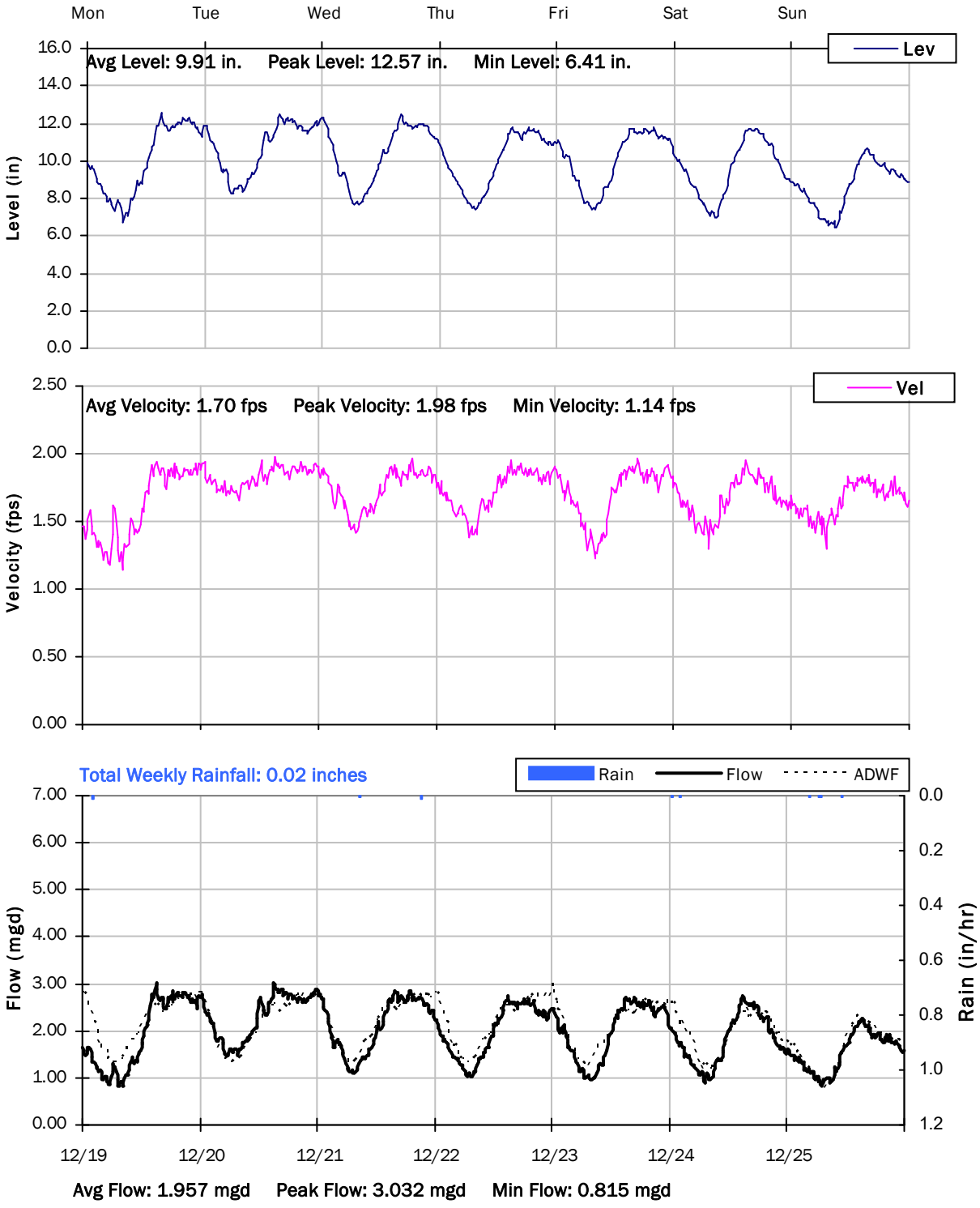
12/12/2022 to 12/19/2022



FM07

Weekly Level, Velocity and Flow Hydrographs

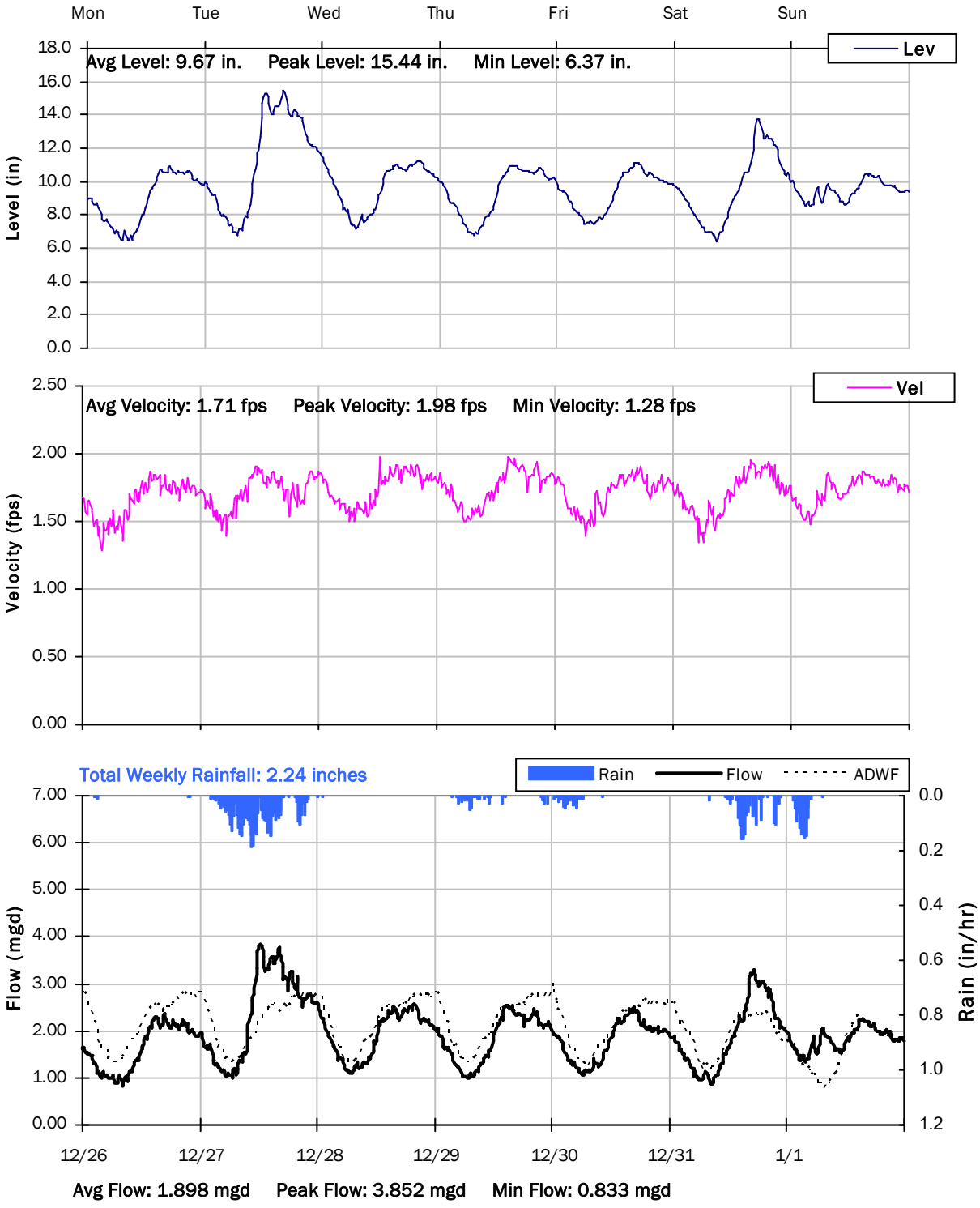
12/19/2022 to 12/26/2022



FM07

Weekly Level, Velocity and Flow Hydrographs

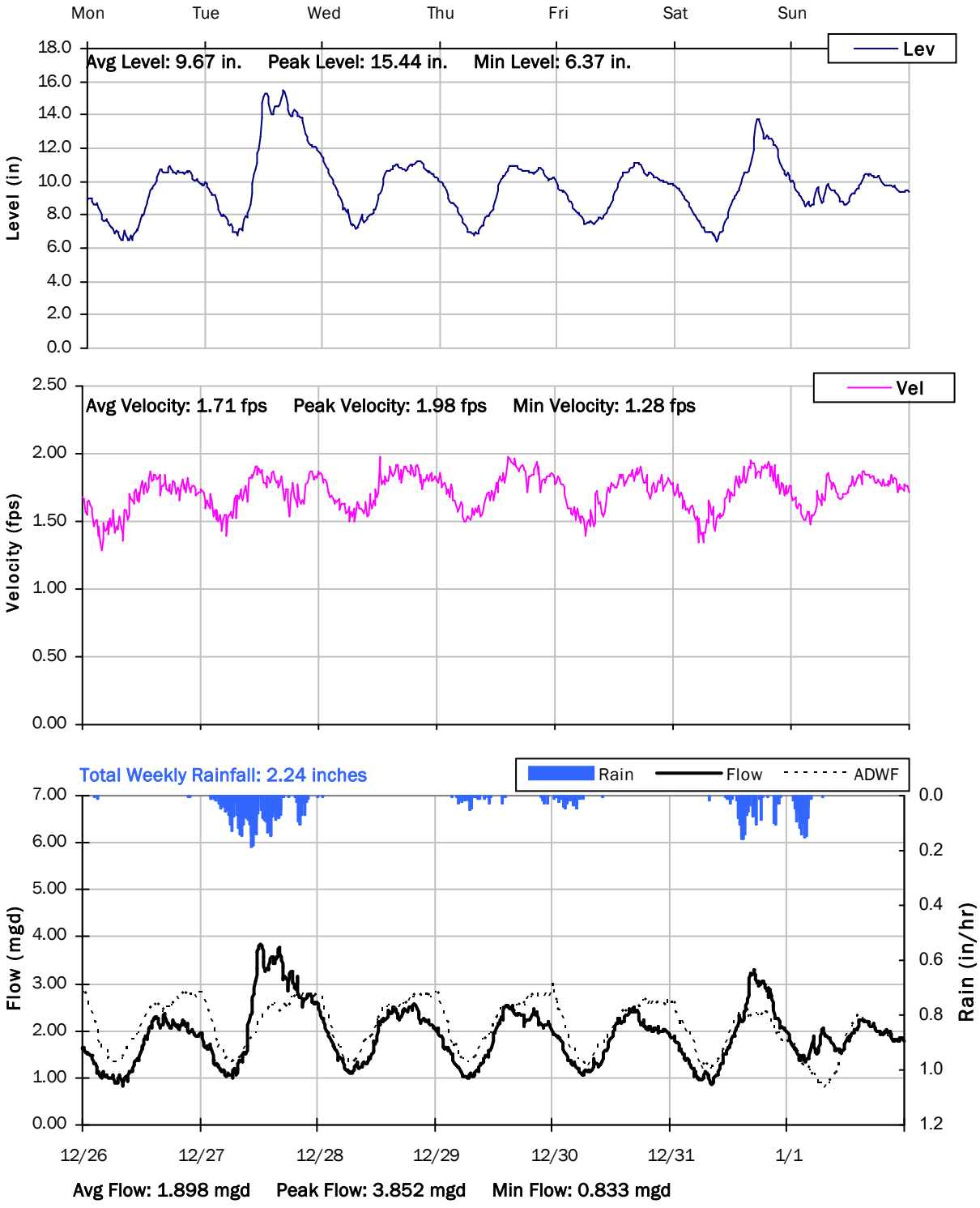
12/26/2022 to 1/2/2023



FM07

Weekly Level, Velocity and Flow Hydrographs

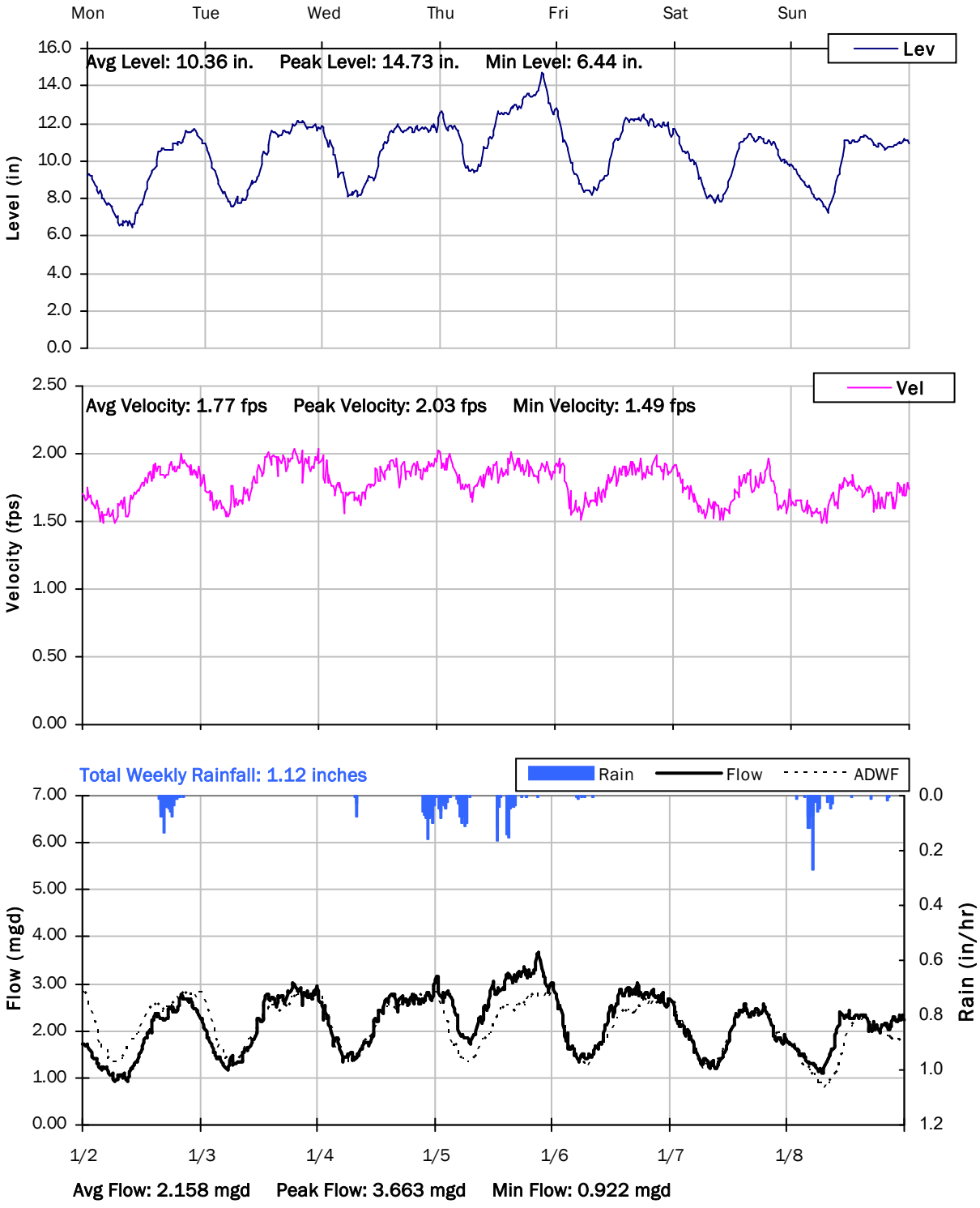
12/26/2022 to 1/2/2023



FM07

Weekly Level, Velocity and Flow Hydrographs

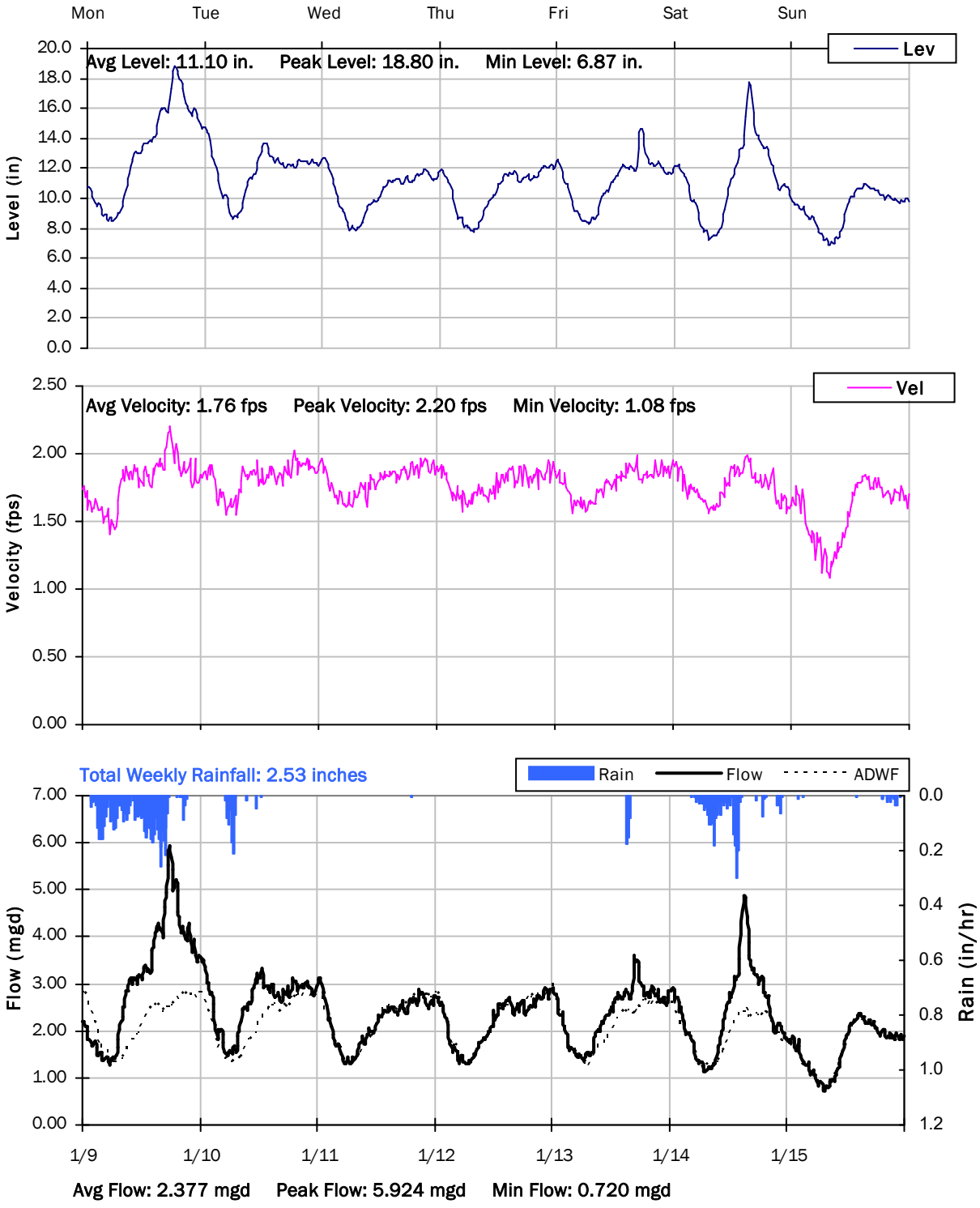
1/2/2023 to 1/9/2023



FM07

Weekly Level, Velocity and Flow Hydrographs

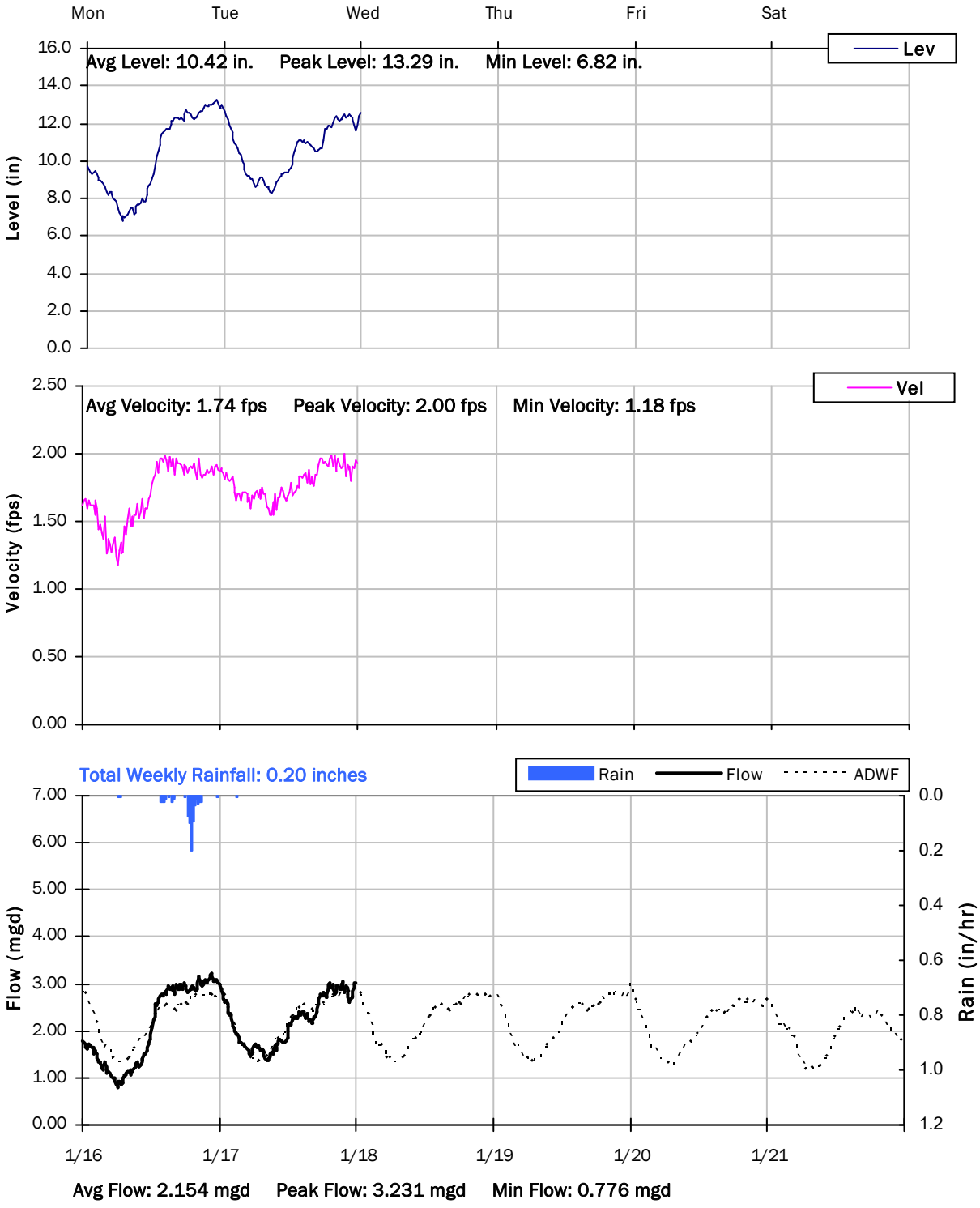
1/9/2023 to 1/16/2023



FM07

Weekly Level, Velocity and Flow Hydrographs

1/16/2023 to 1/22/2023



Monitoring Site: FM08

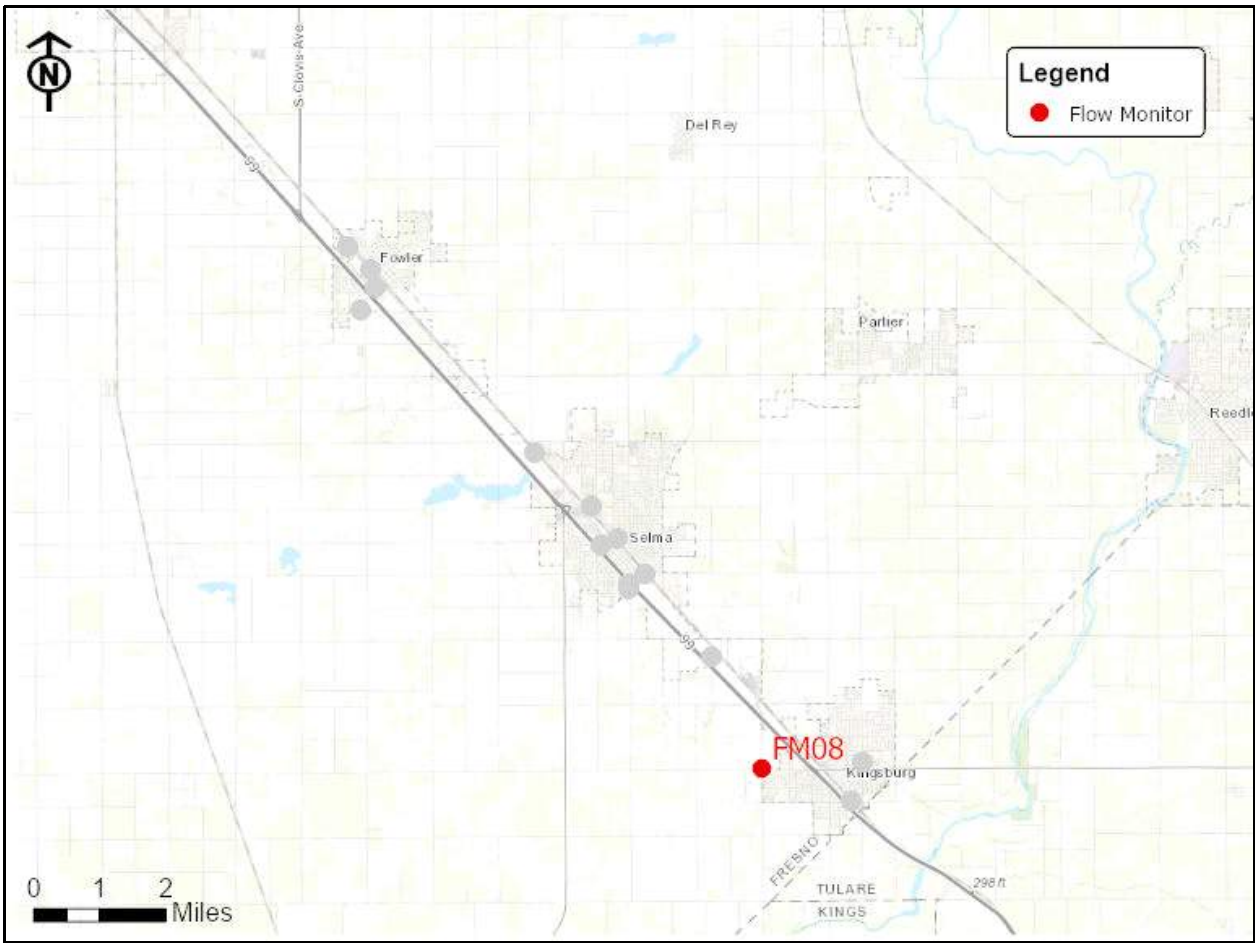
Selma-Kingsburg-Fowler Sanitation District

Sanitary Sewer Flow Monitoring

December 09, 2022 - January 17, 2023

Location: Intersection of E Conejo Ave/W Sierra Ave & S Bethel Ave

Data Summary Report

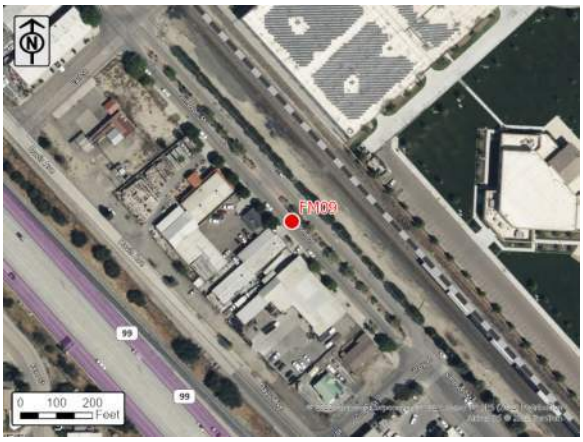


Vicinity Map: FM08

FM09

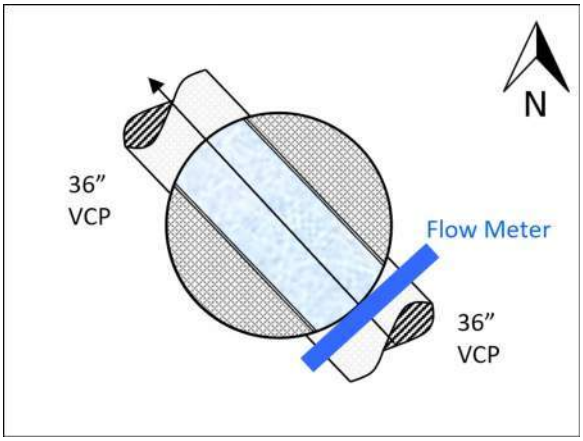
Site Information MH ID: 7000-1400

Location:	0
Coordinates:	119.5510° W, 36.5106° N
Rim Elevation:	299 feet
Expected Pipe Diameter:	36 inches
Measured Pipe Diameter:	36 inches
ADWF:	0.736 mgd
Peak Measured Flow:	1.660 mgd
Sediment:	0.5 inches



Satellite Map

Sanitary Map



Flow Sketch

Street View

Plan View

FM08

Additional Site Photos

Effluent Pipe

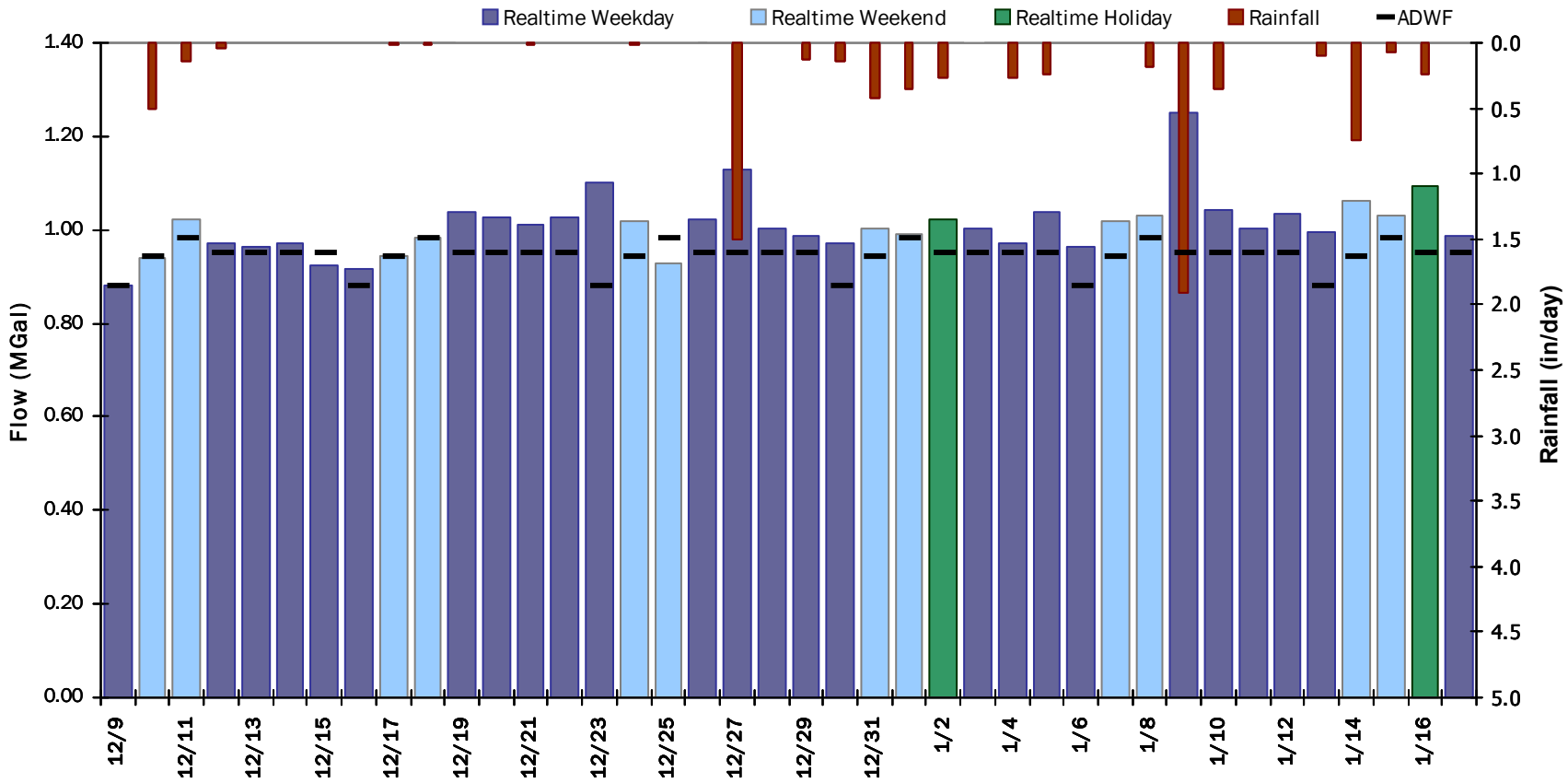
Influent Pipe

FM08

Period Flow Summary: Daily Flow Totals

Avg Daily Flow: 1.008 MGal Peak Daily Flow: 1.250 MGal Min Daily Flow: 0.882 MGal

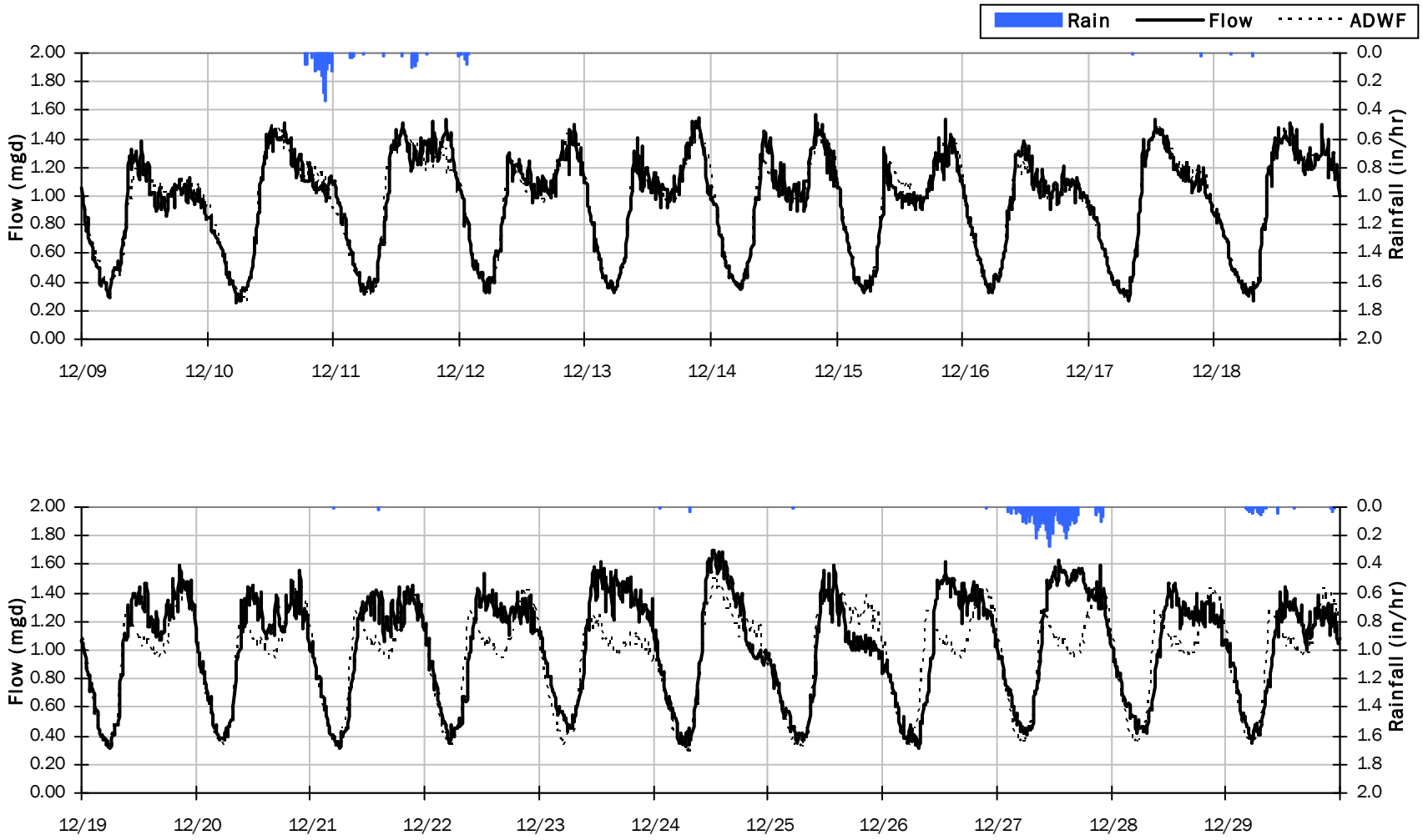
Total Rainfall: 7.63 inches



FM08

Flow Summary: 12/9/2022 to 12/29/2022

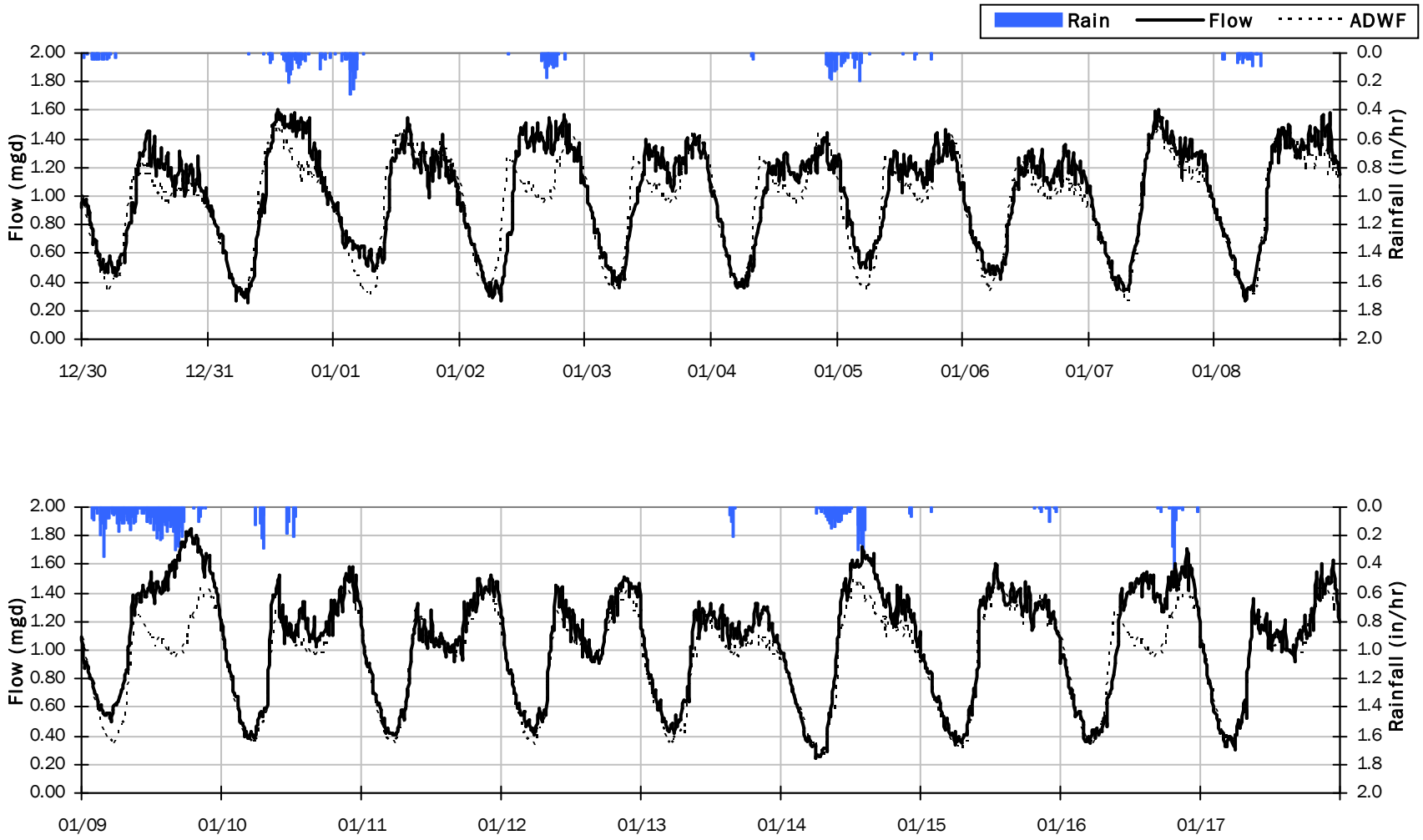
Period Rainfall: 2.36 inches Period Avg Flow: 0.991 mgd Period Peak Flow: 1.701 mgd Period Min Flow: 0.261 mgd



FM08

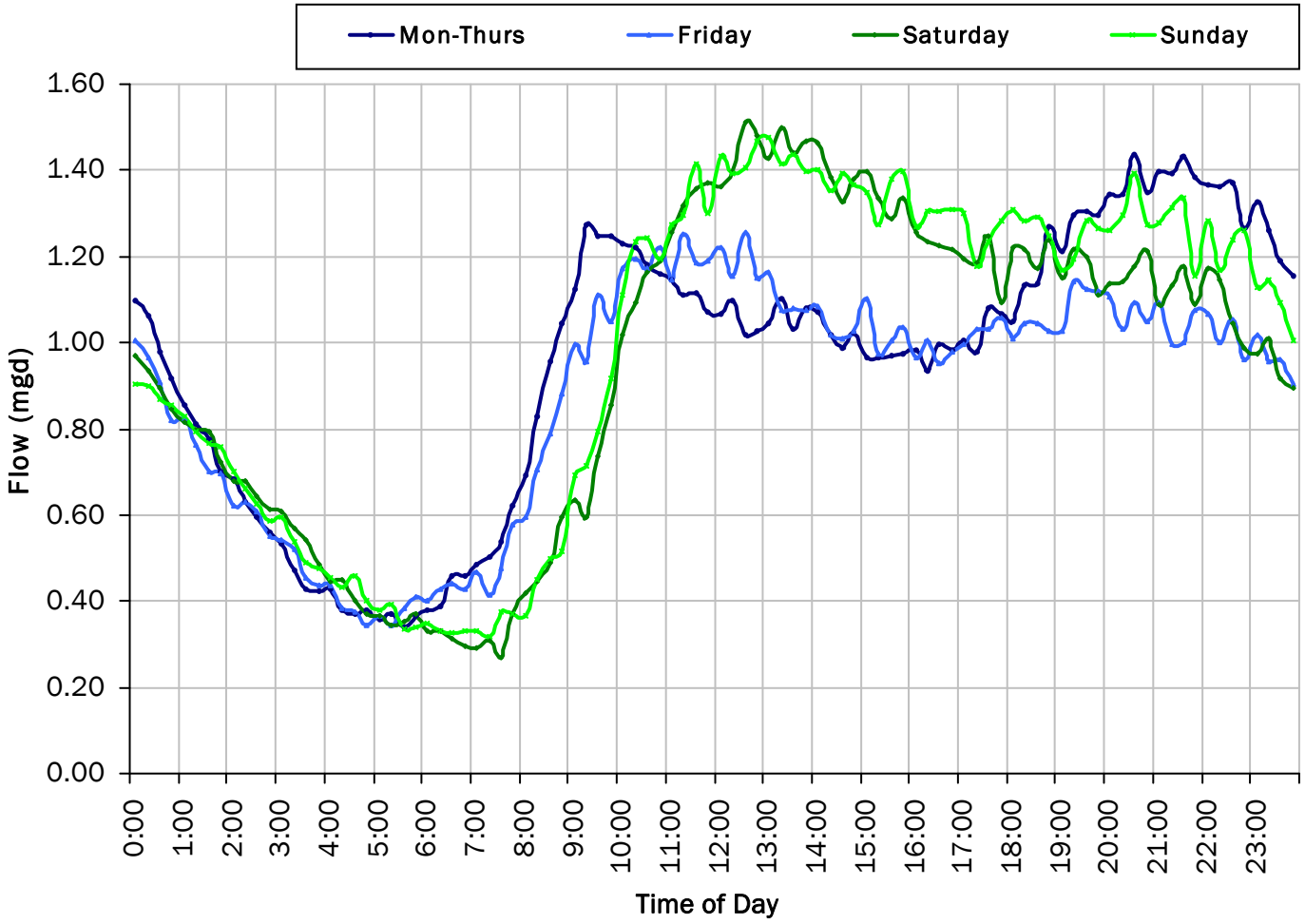
Flow Summary: 12/30/2022 to 1/17/2023

Period Rainfall: 5.27 inches Period Avg Flow: 1.027 mgd Period Peak Flow: 1.850 mgd Period Min Flow: 0.239 mgd



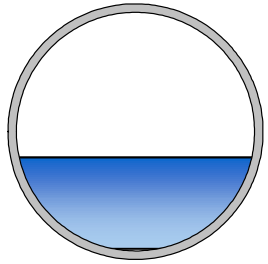
FM08

Average Dry Weather Flow Hydrographs



ADWF:

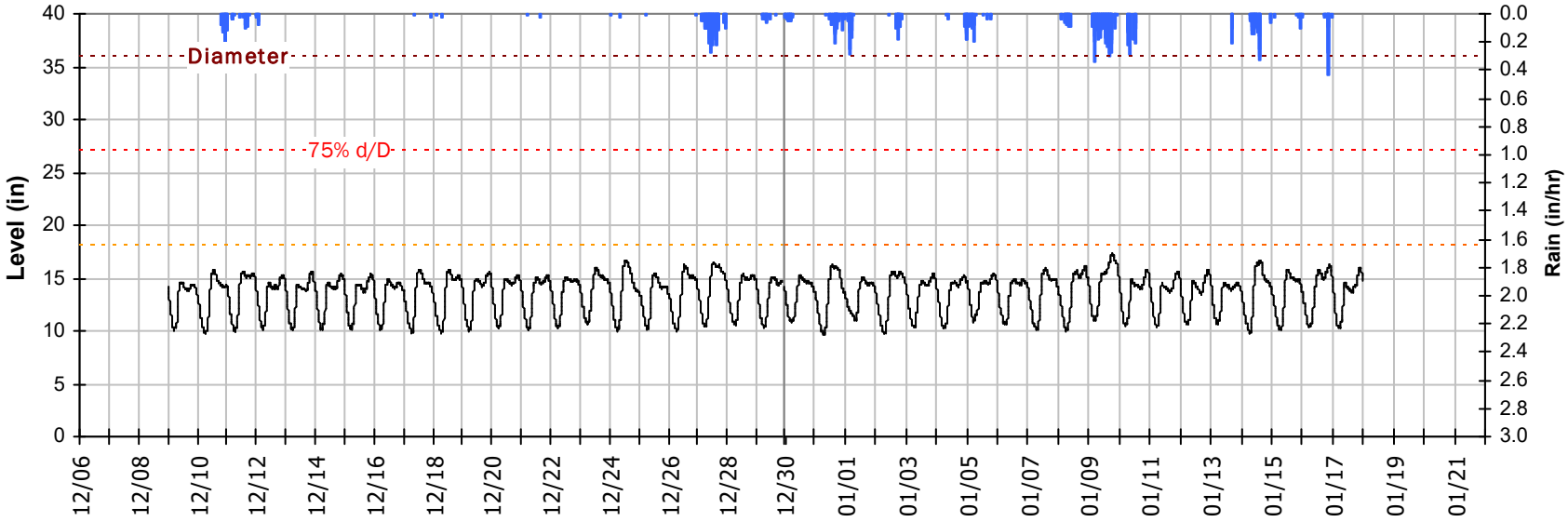
0.946 *mgd*

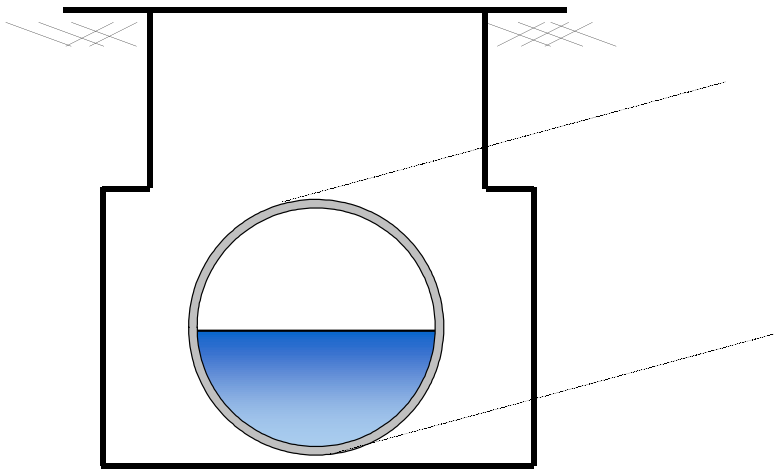


FM08

Site Capacity and Surcharge Summary

Realtime Flow Levels with Rainfall Data over Peak Level Period



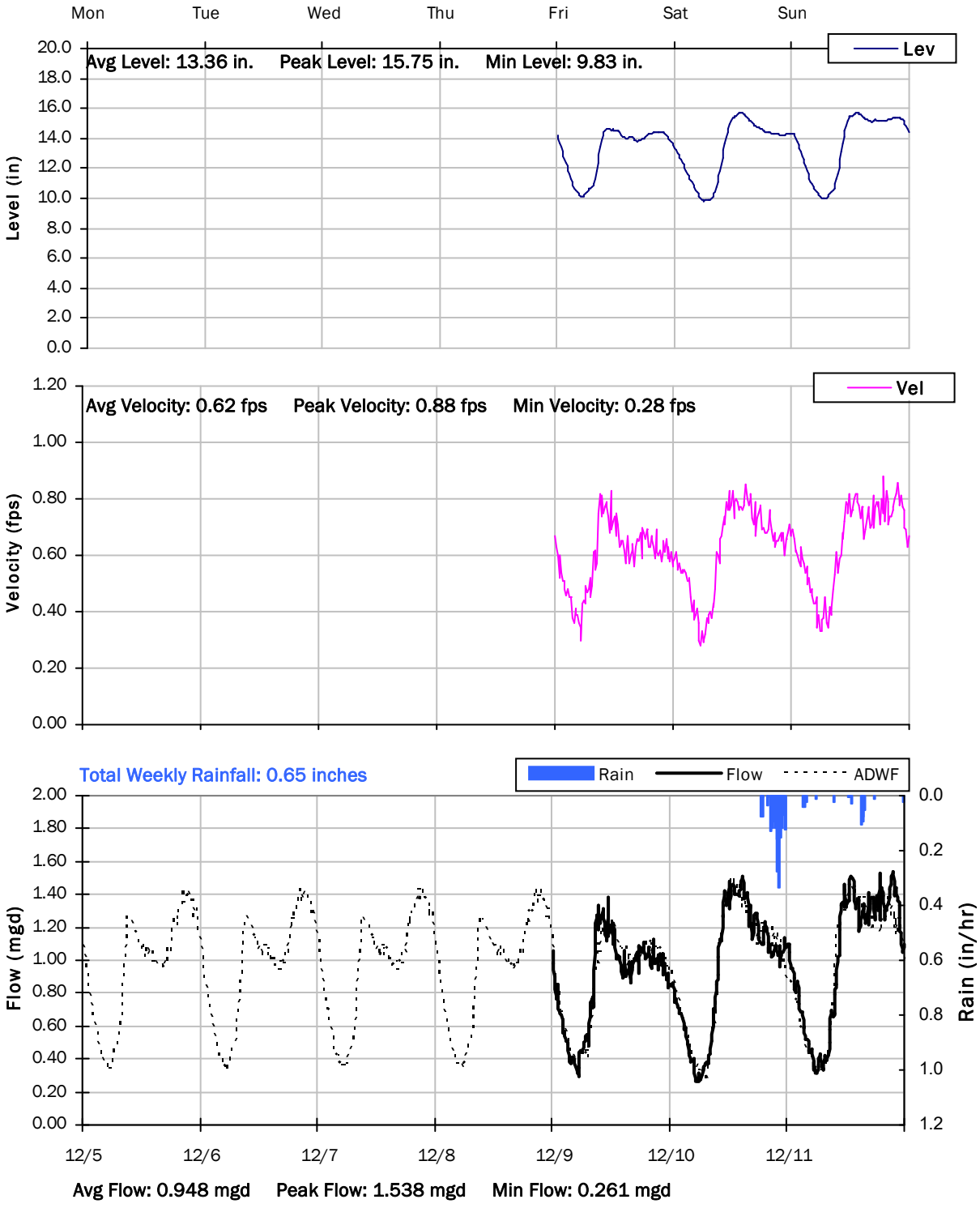


Pipe Diameter:	36	*inches*
Peak Measured Level:	17.3	*inches*
Peak d/D Ratio:	0.48	

FM08

Weekly Level, Velocity and Flow Hydrographs

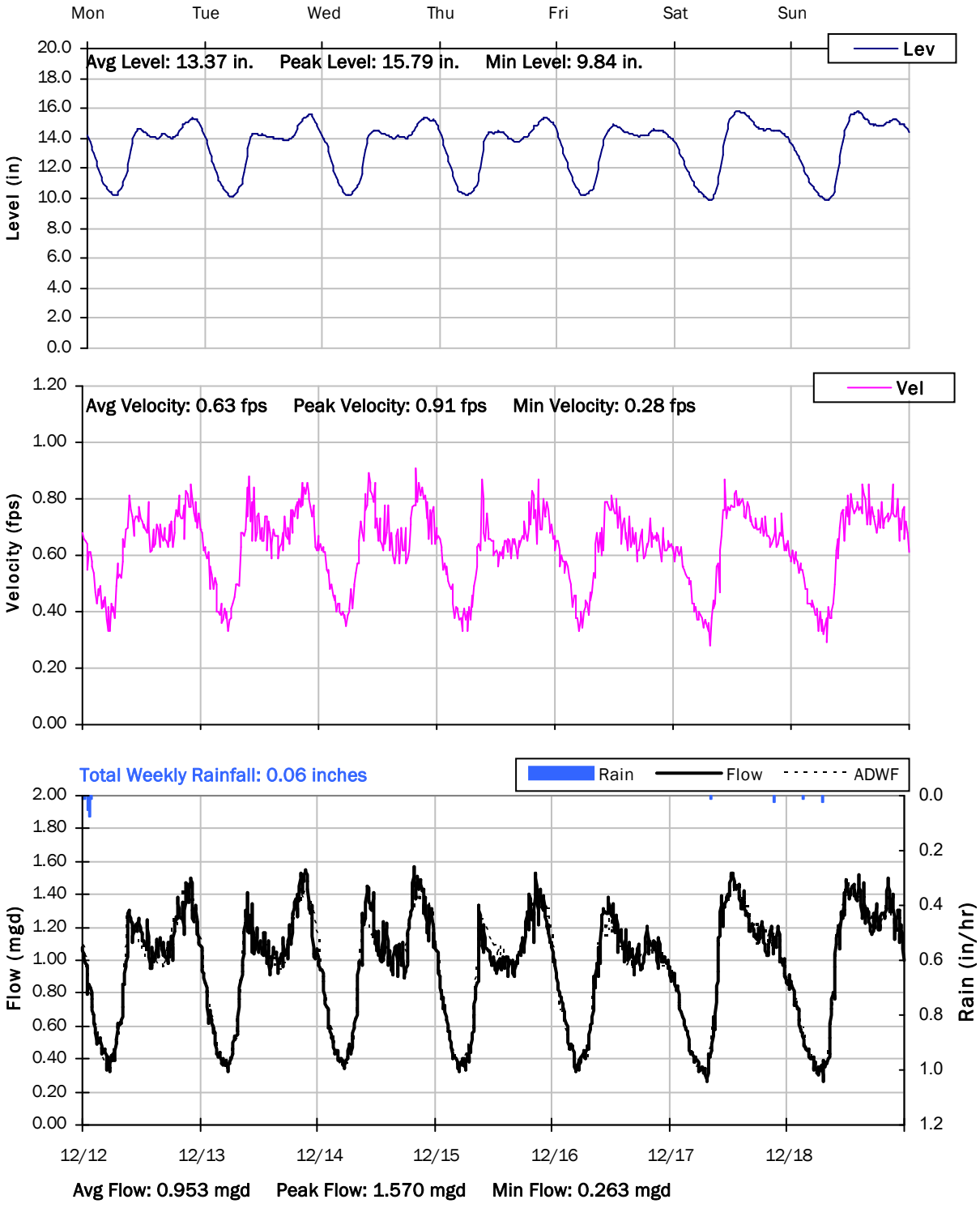
12/5/2022 to 12/12/2022



FM08

Weekly Level, Velocity and Flow Hydrographs

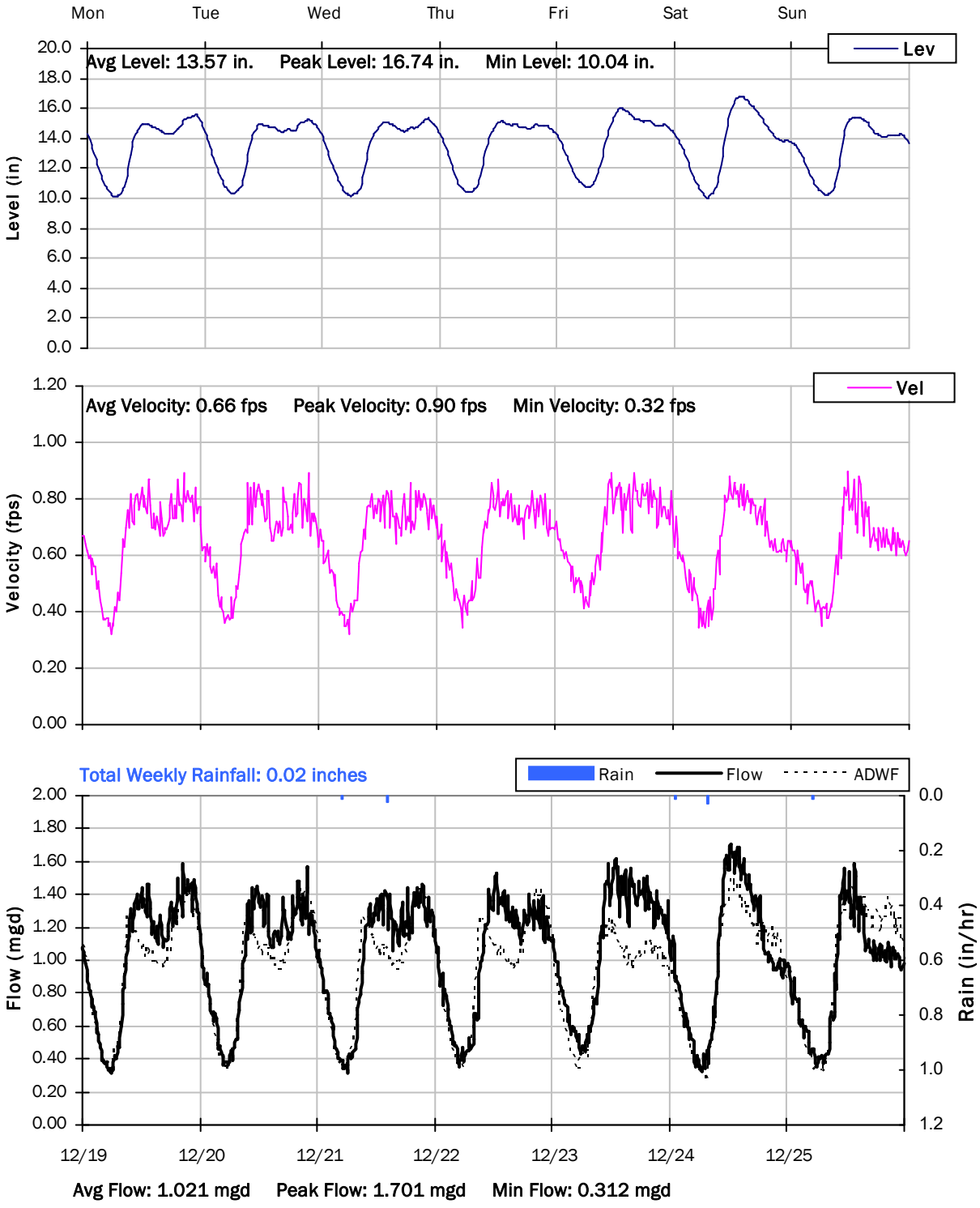
12/12/2022 to 12/19/2022



FM08

Weekly Level, Velocity and Flow Hydrographs

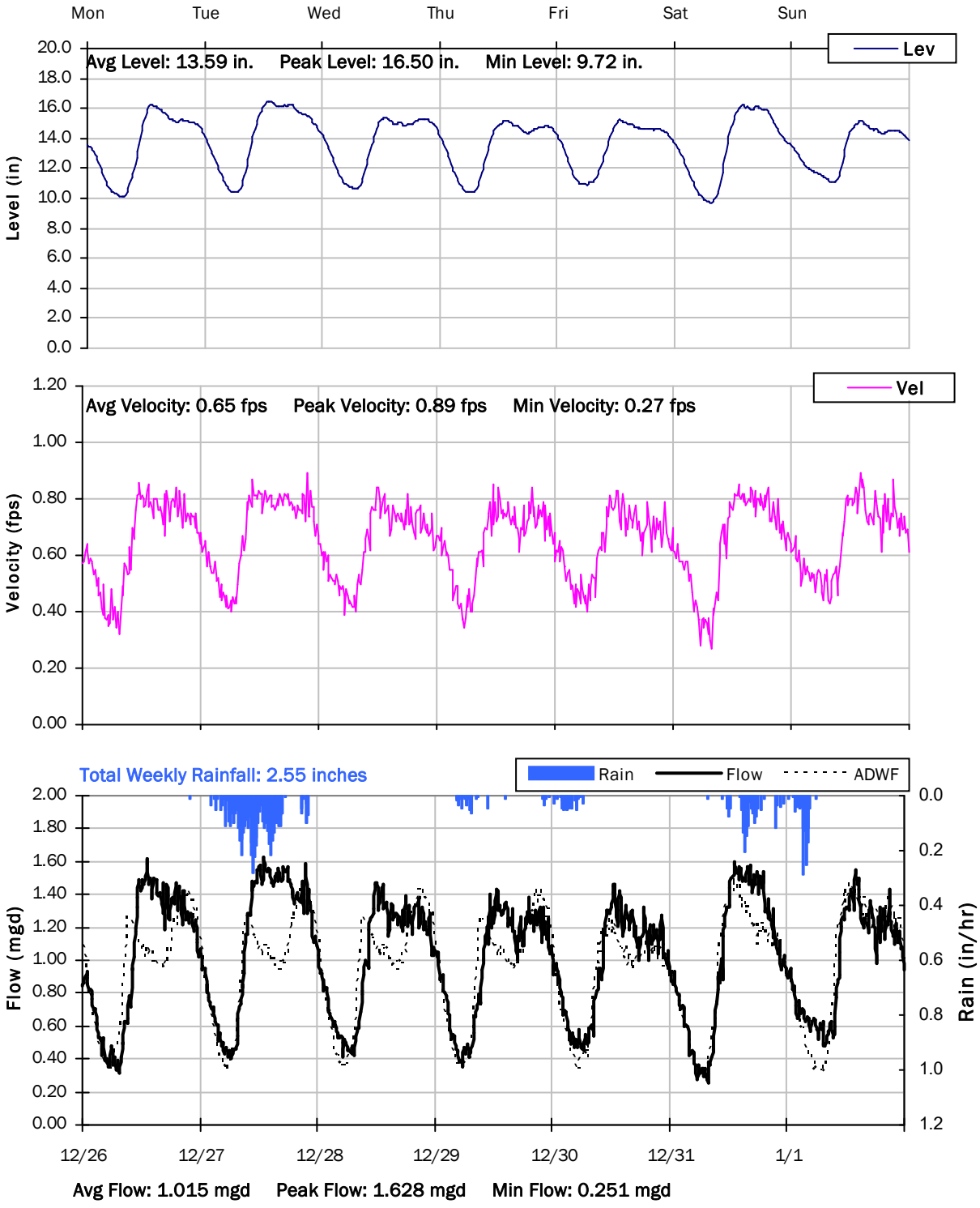
12/19/2022 to 12/26/2022



FM08

Weekly Level, Velocity and Flow Hydrographs

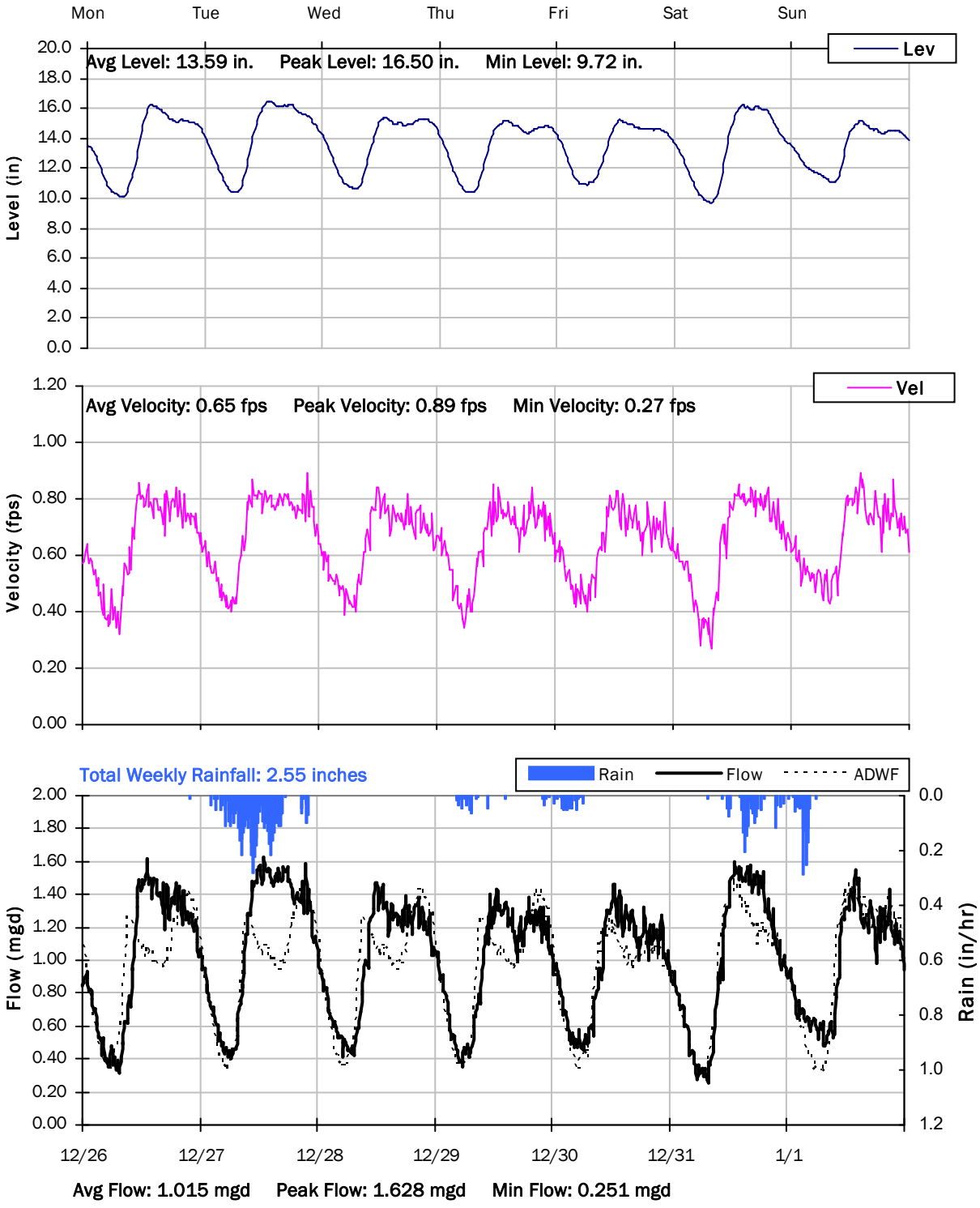
12/26/2022 to 1/2/2023



FM08

Weekly Level, Velocity and Flow Hydrographs

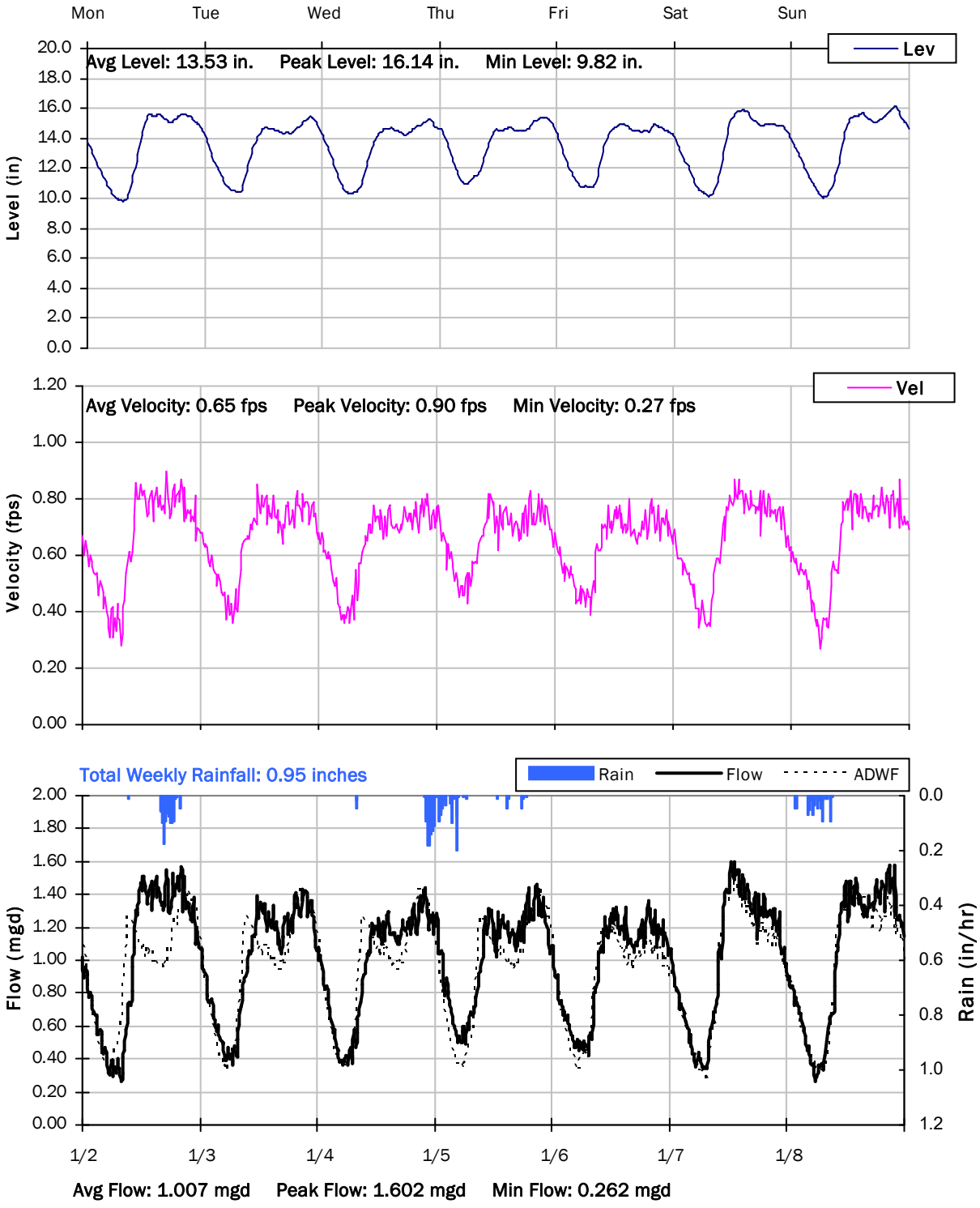
12/26/2022 to 1/2/2023



FM08

Weekly Level, Velocity and Flow Hydrographs

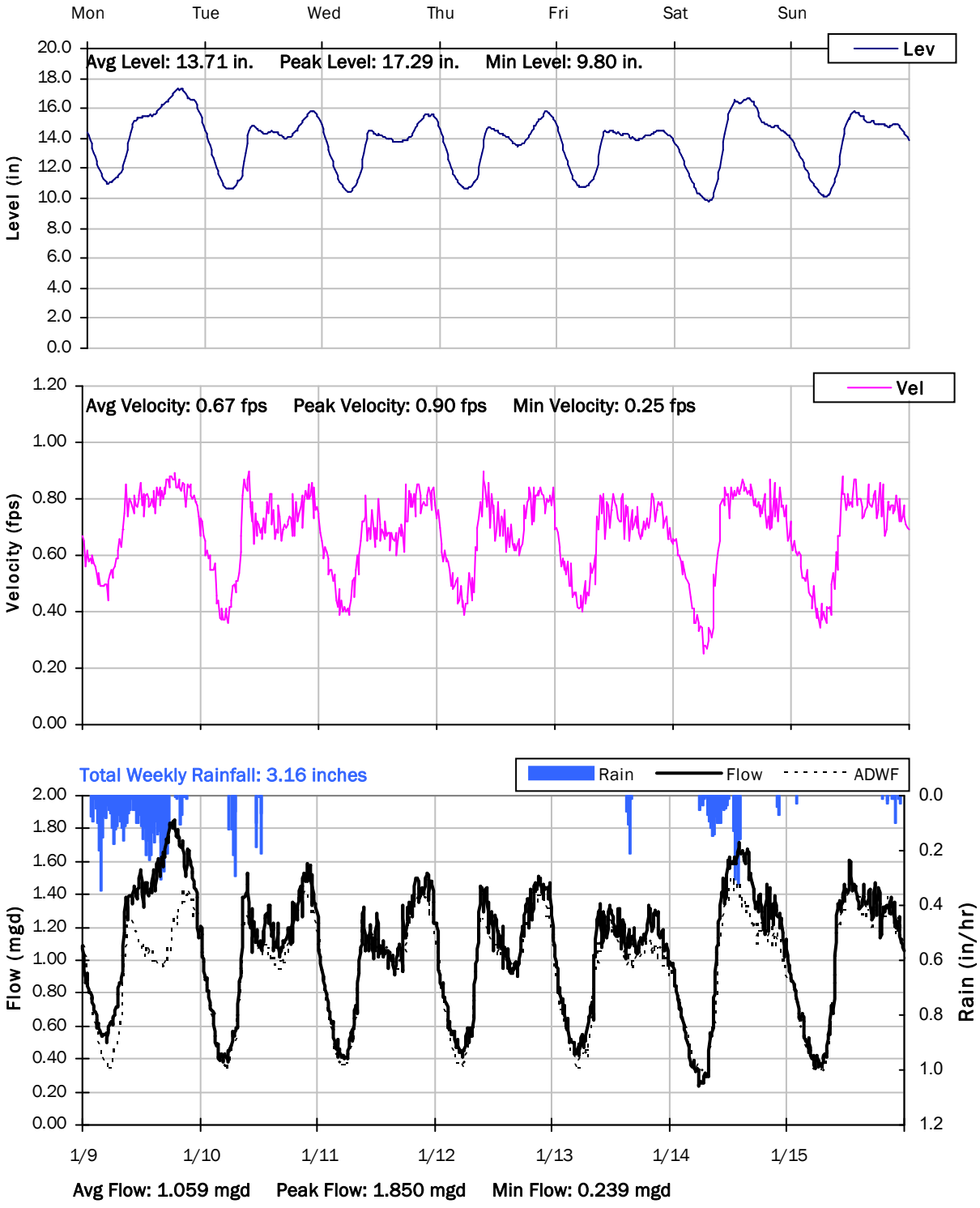
1/2/2023 to 1/9/2023



FM08

Weekly Level, Velocity and Flow Hydrographs

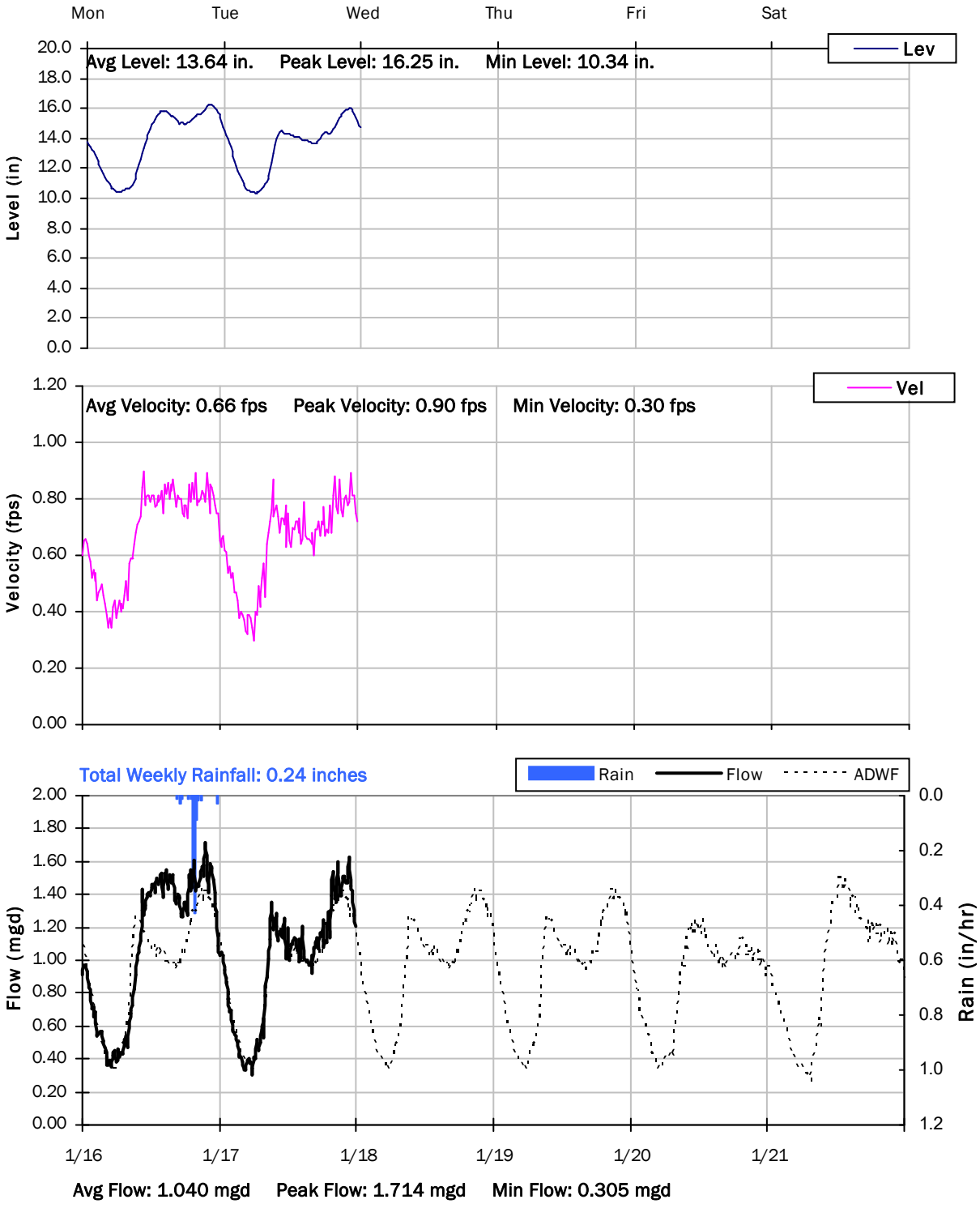
1/9/2023 to 1/16/2023



FM08

Weekly Level, Velocity and Flow Hydrographs

1/16/2023 to 1/22/2023



Monitoring Site: FM09

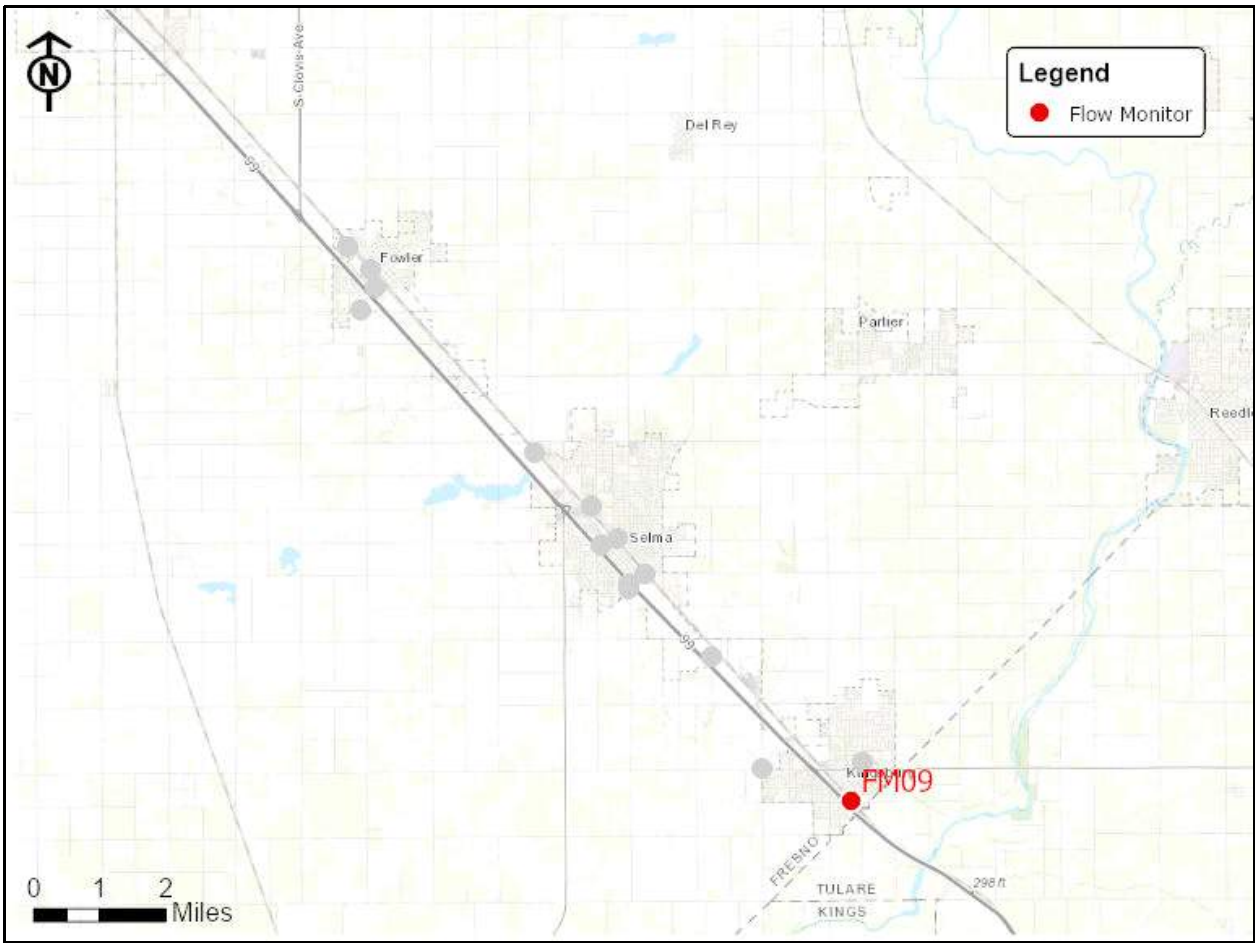
Selma-Kingsburg-Fowler Sanitation District

Sanitary Sewer Flow Monitoring

December 09, 2022 - January 17, 2023

Location: 0

Data Summary Report



Vicinity Map: FM09

FM09A

Site Information MH ID: 7E00-0800

Location: 2075 S Mendocino Ave

Coordinates: 119.5479° W, 36.5194° N

Rim Elevation: 301.61 feet

Expected Pipe Diameter: 21 inches

Measured Pipe Diameter: 20 inches

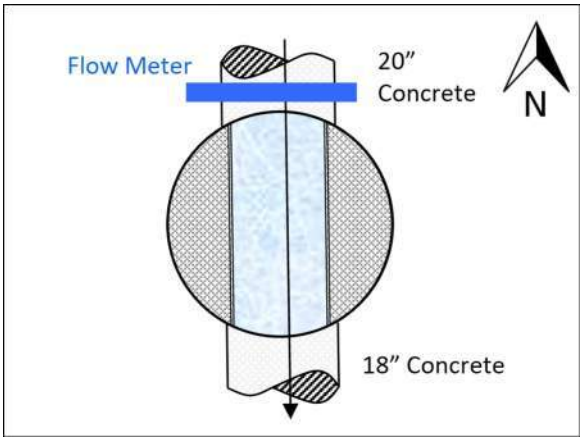
ADWF: 0.333 mgd

Peak Measured Flow: 0.721 mgd

Sediment: 0.5 inches

Satellite Map

Sanitary Map



Flow Sketch

Street View

Plan View

FM09

Additional Site Photos

Effluent Pipe

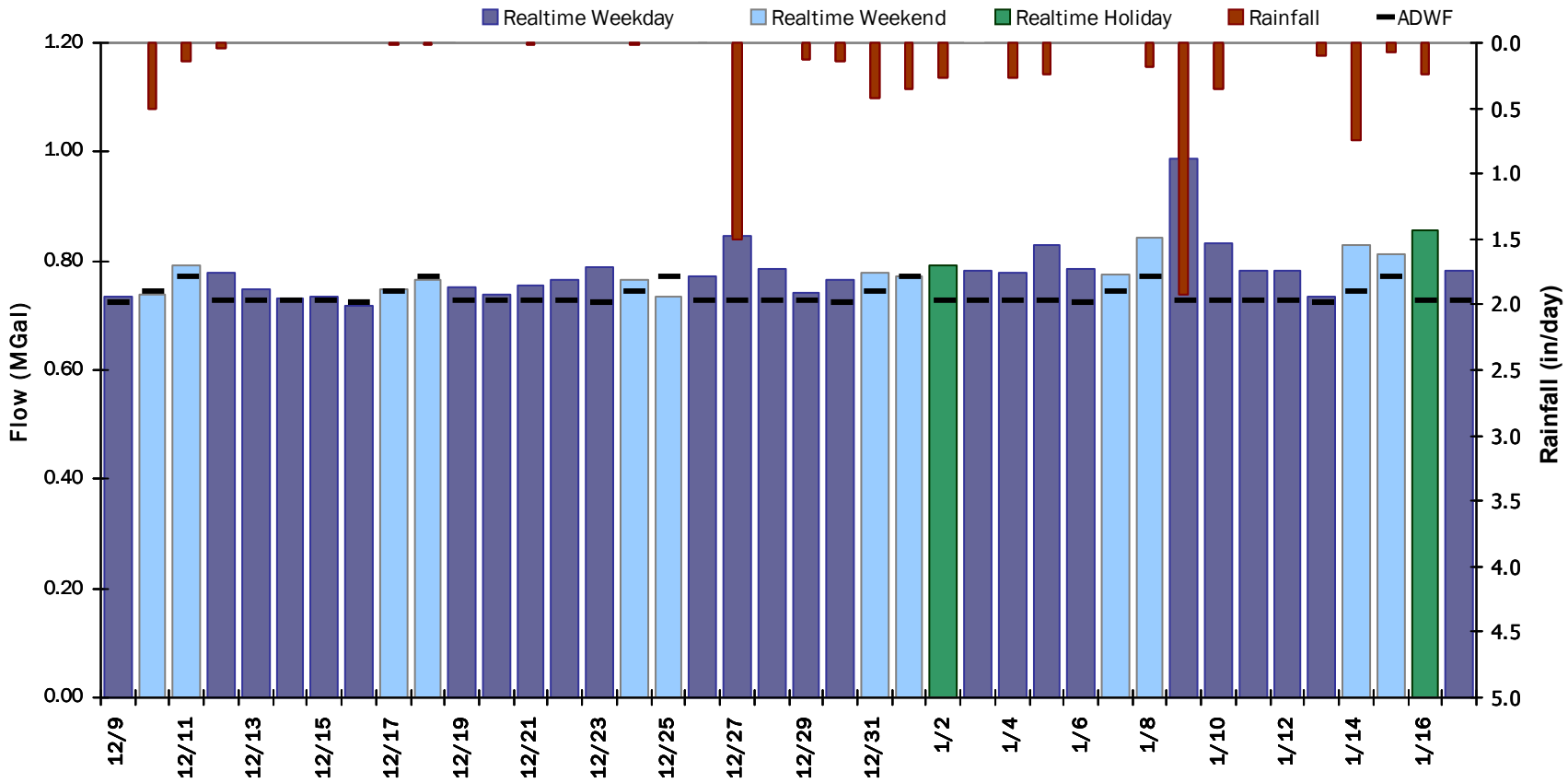
Influent Pipe

FM09

Period Flow Summary: Daily Flow Totals

Avg Daily Flow: 0.781 MGal Peak Daily Flow: 0.988 MGal Min Daily Flow: 0.717 MGal

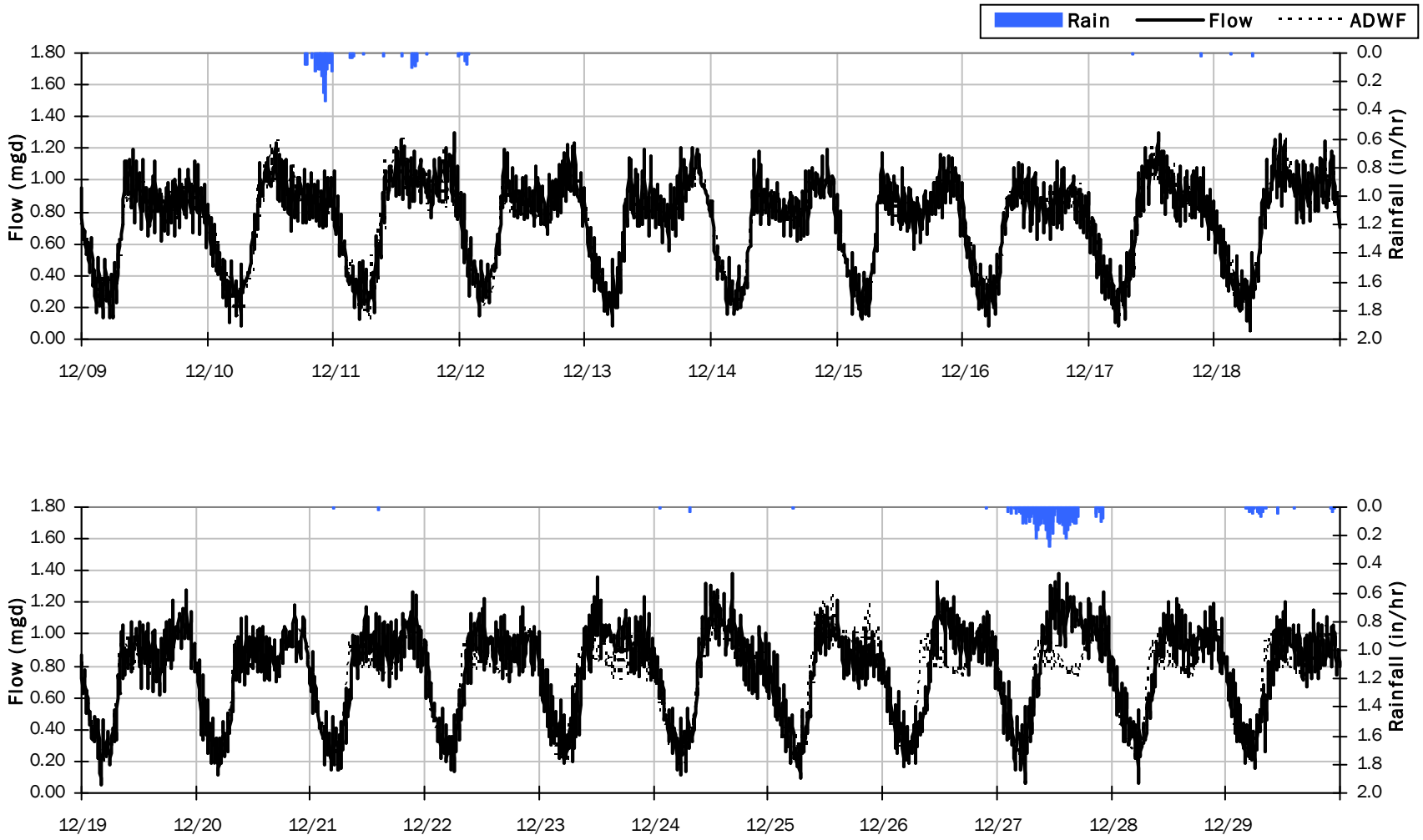
Total Rainfall: 7.67 inches



FM09

Flow Summary: 12/9/2022 to 12/29/2022

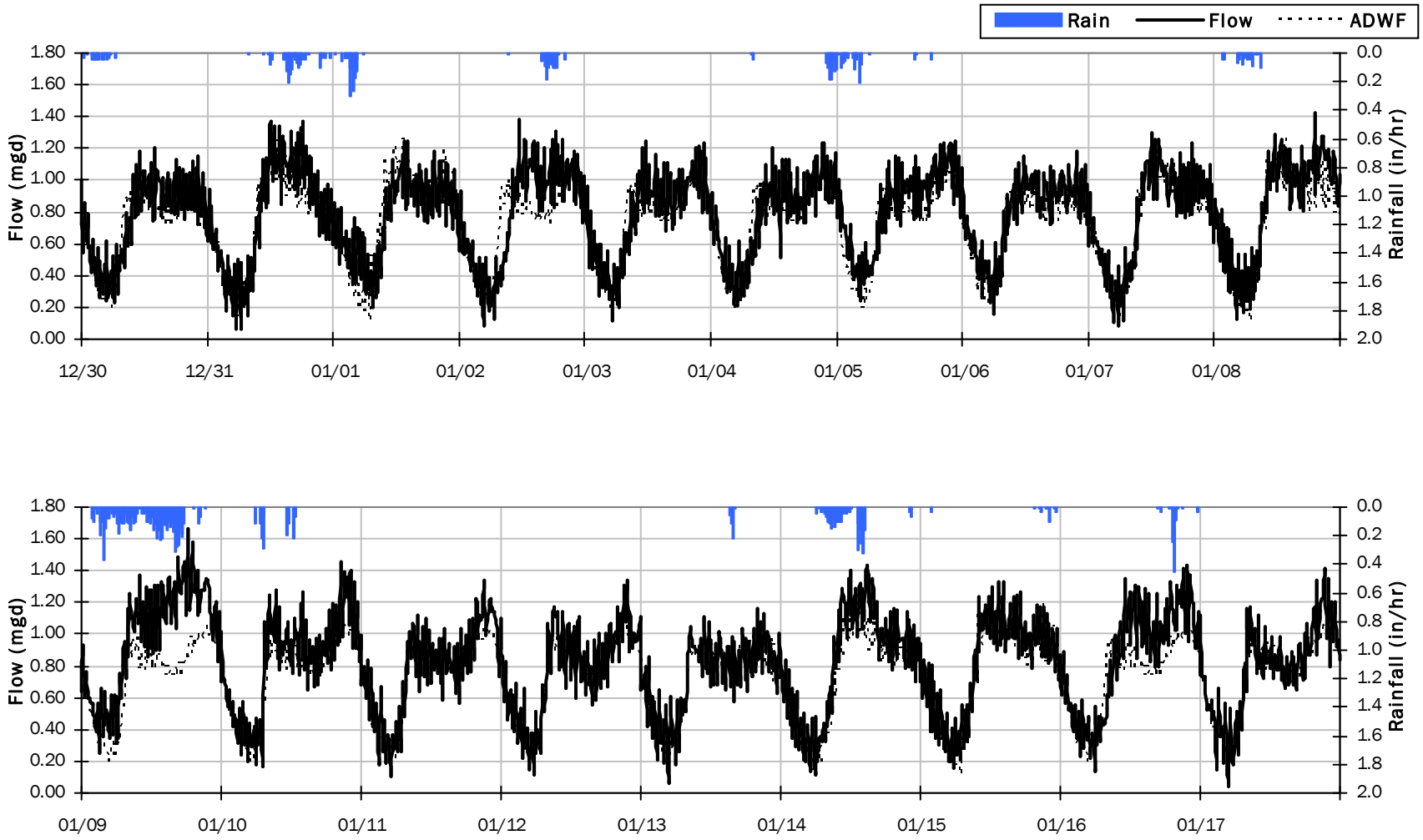
Period Rainfall: 2.37 inches Period Avg Flow: 0.759 mgd Period Peak Flow: 1.383 mgd Period Min Flow: 0.055 mgd



FM09

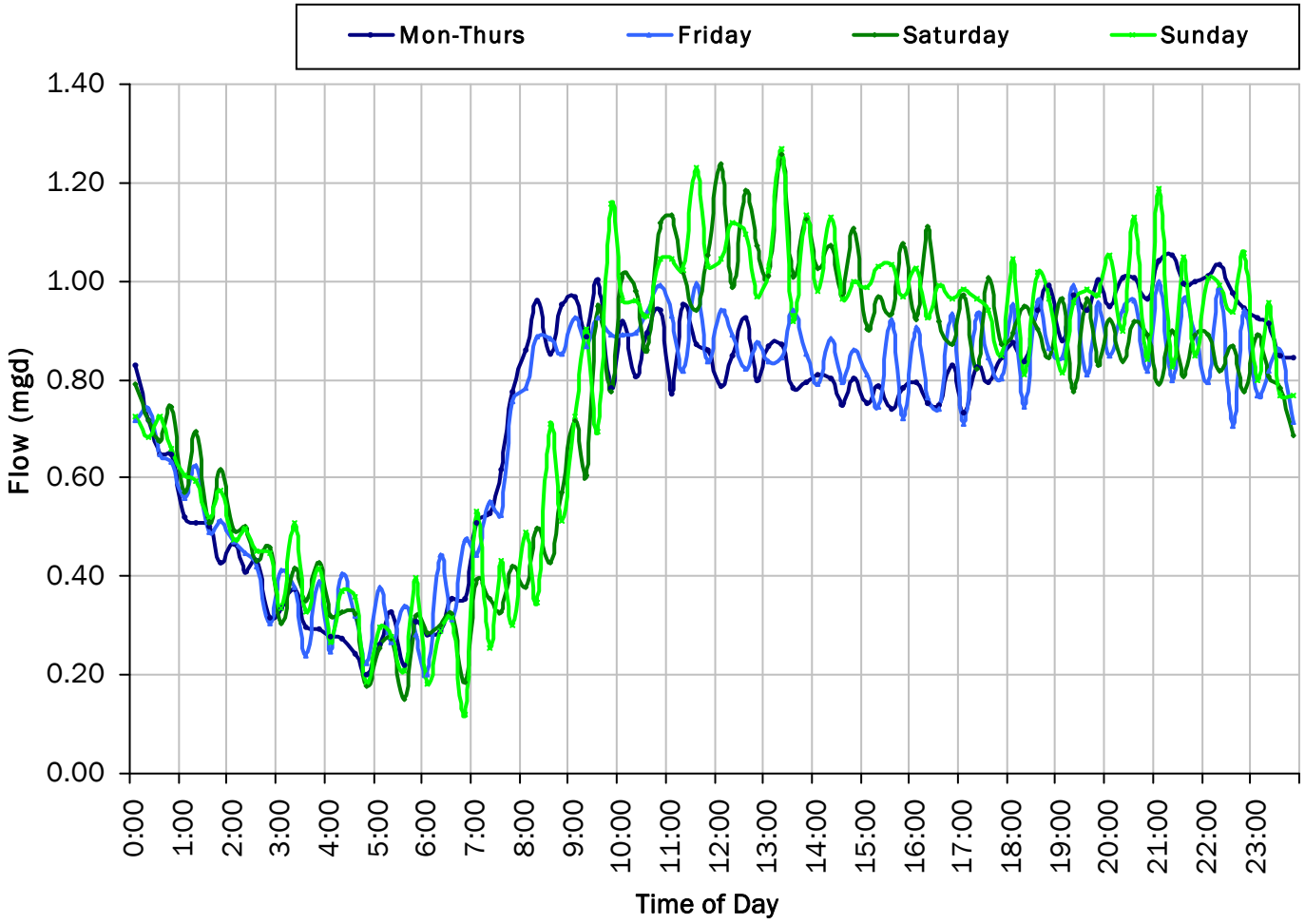
Flow Summary: 12/30/2022 to 1/17/2023

Period Rainfall: 5.29 inches Period Avg Flow: 0.805 mgd Period Peak Flow: 1.660 mgd Period Min Flow: 0.050 mgd



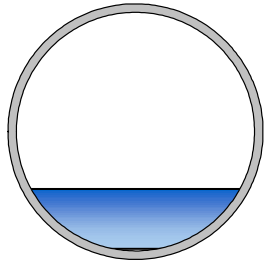
FM09

Average Dry Weather Flow Hydrographs



ADWF:

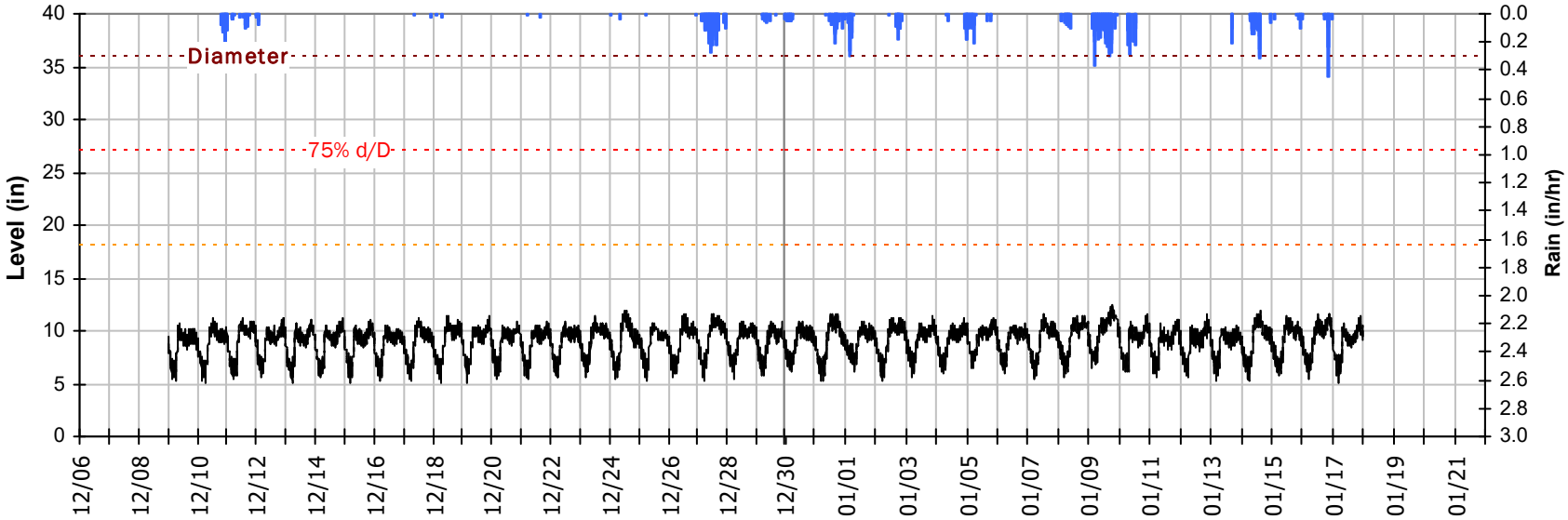
0.736 *mgd*

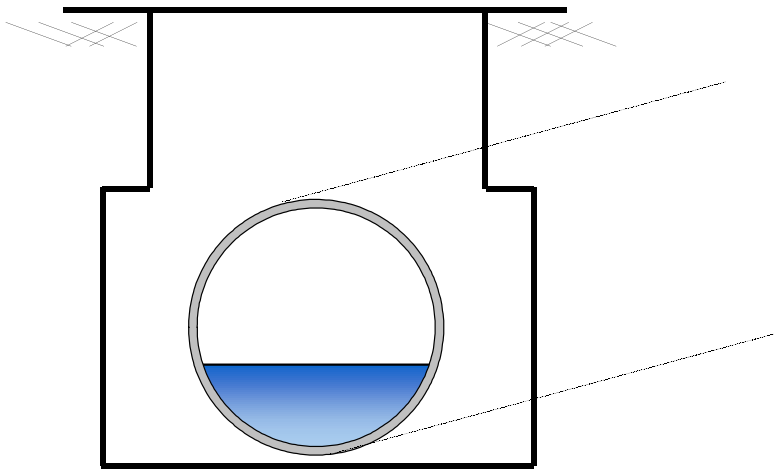


FM09

Site Capacity and Surcharge Summary

Realtime Flow Levels with Rainfall Data over Peak Level Period



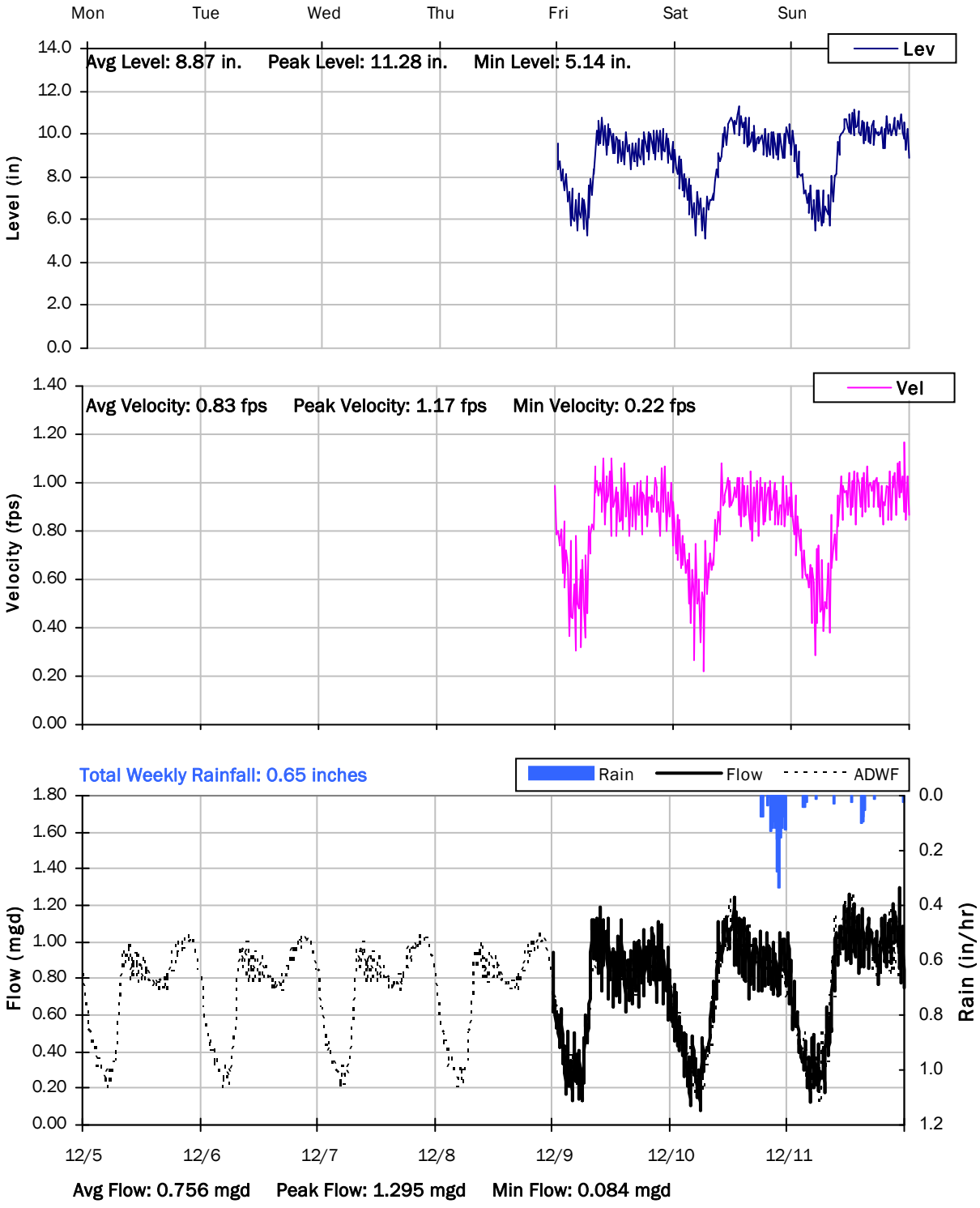


Pipe Diameter:	36	*inches*
Peak Measured Level:	12.5	*inches*
Peak d/D Ratio:	0.35	

FM09

Weekly Level, Velocity and Flow Hydrographs

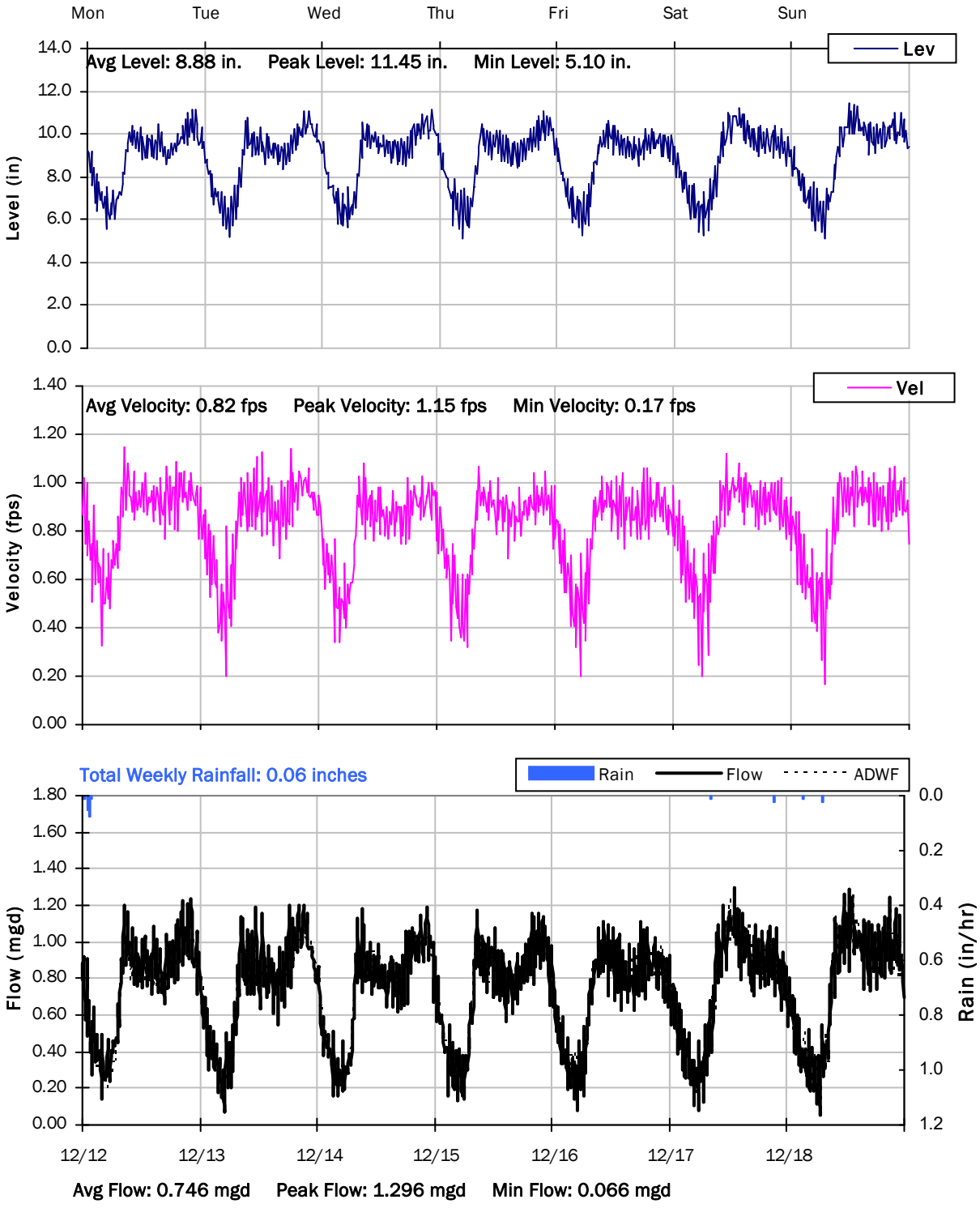
12/5/2022 to 12/12/2022



FM09

Weekly Level, Velocity and Flow Hydrographs

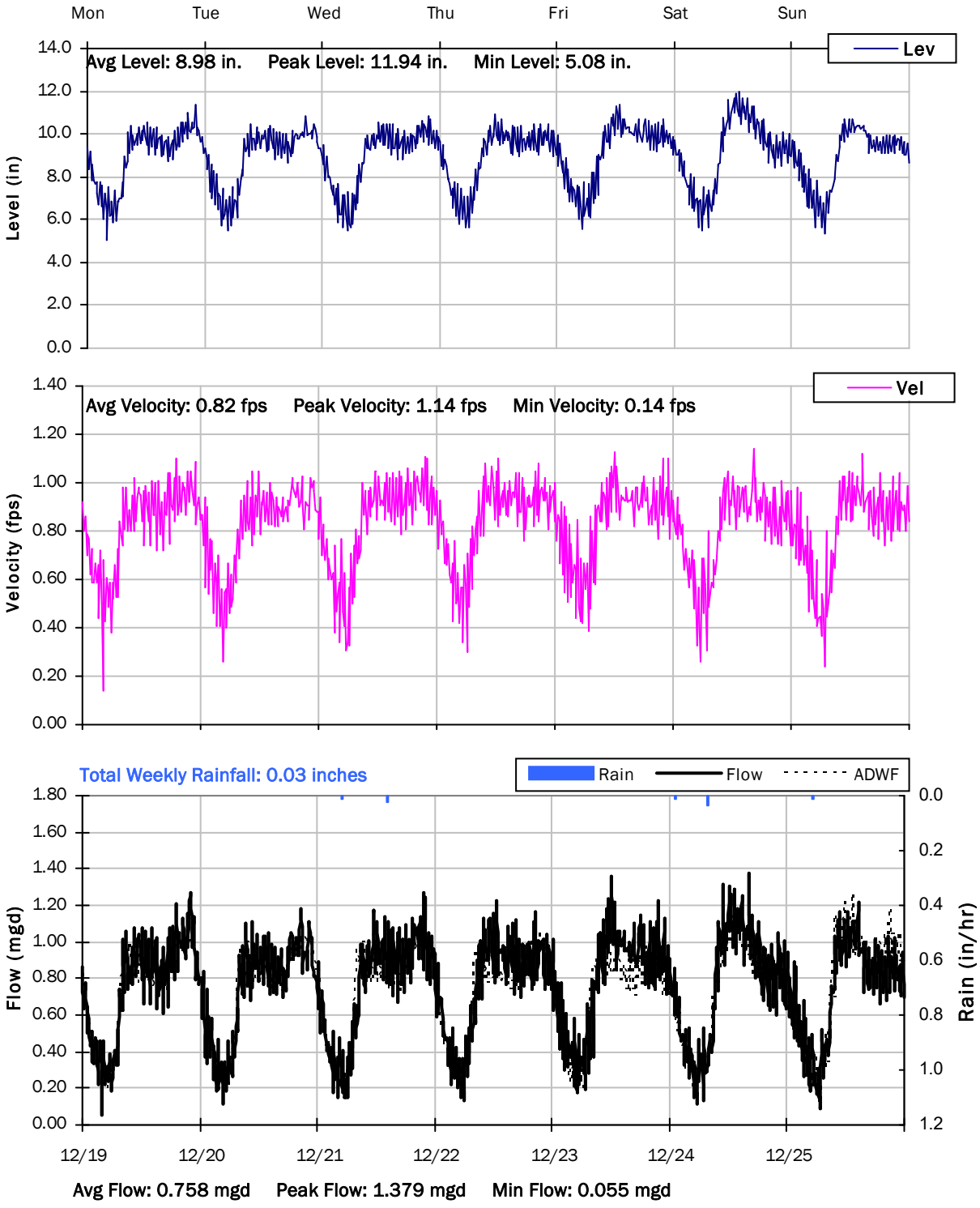
12/12/2022 to 12/19/2022



FM09

Weekly Level, Velocity and Flow Hydrographs

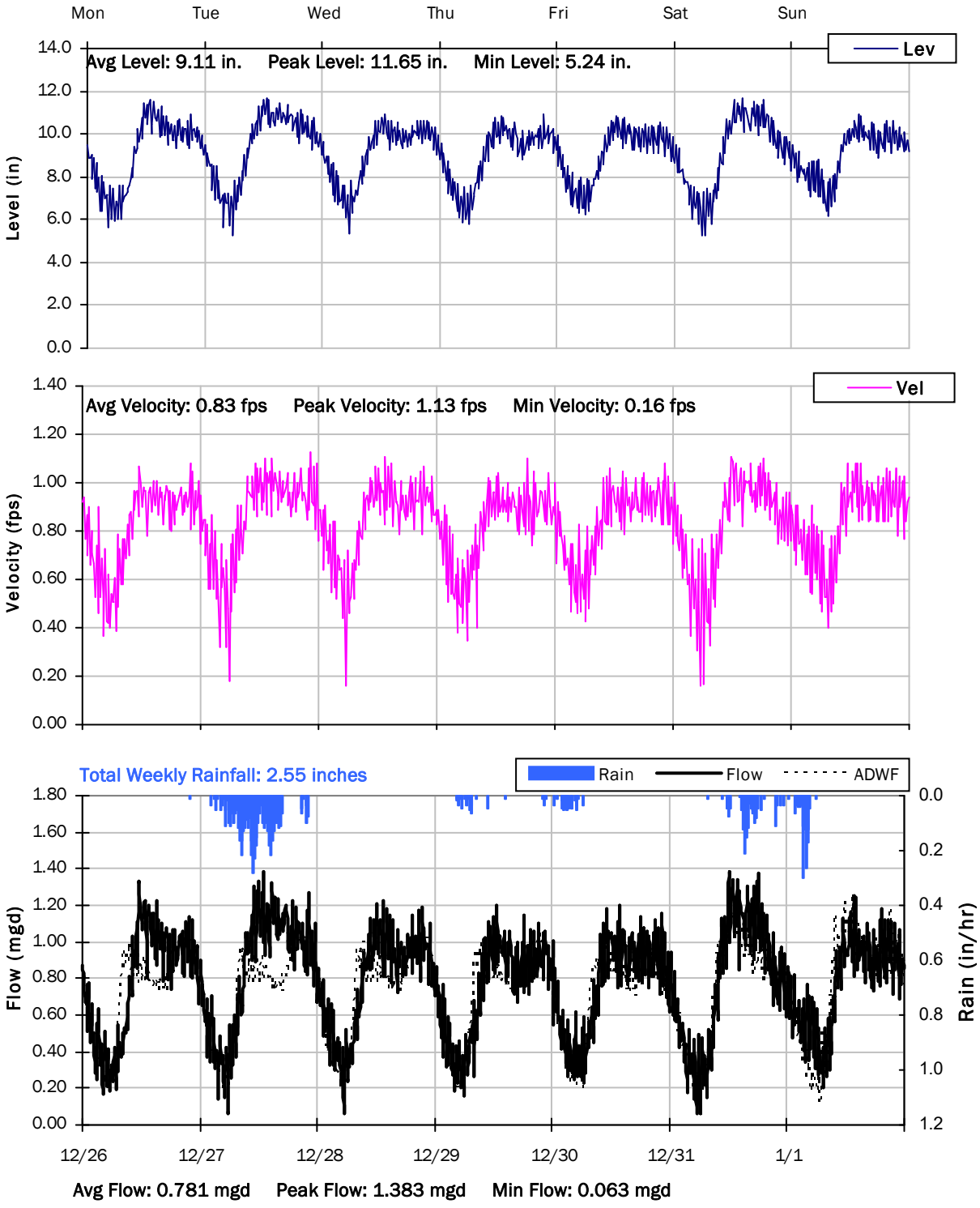
12/19/2022 to 12/26/2022



FM09

Weekly Level, Velocity and Flow Hydrographs

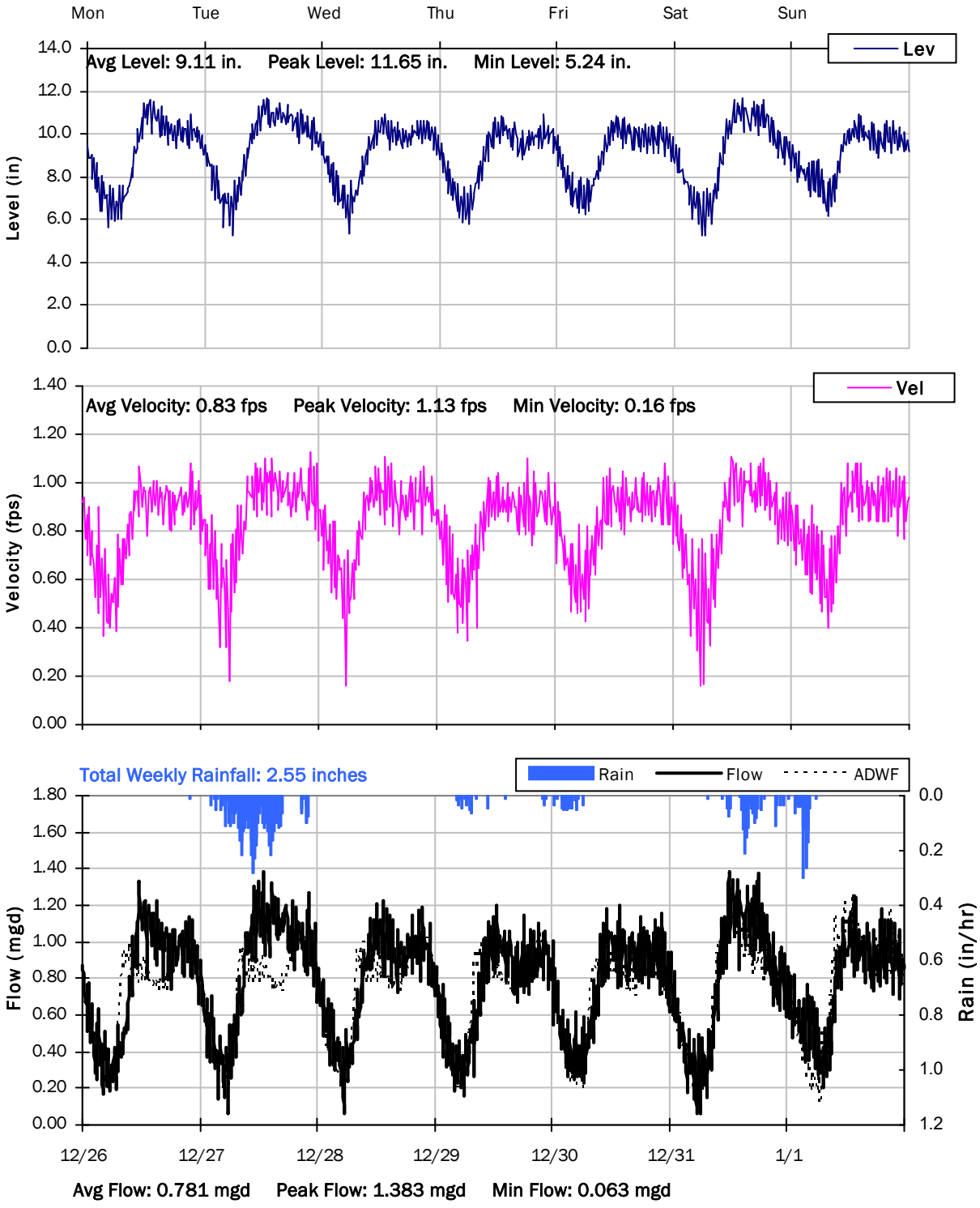
12/26/2022 to 1/2/2023



FM09

Weekly Level, Velocity and Flow Hydrographs

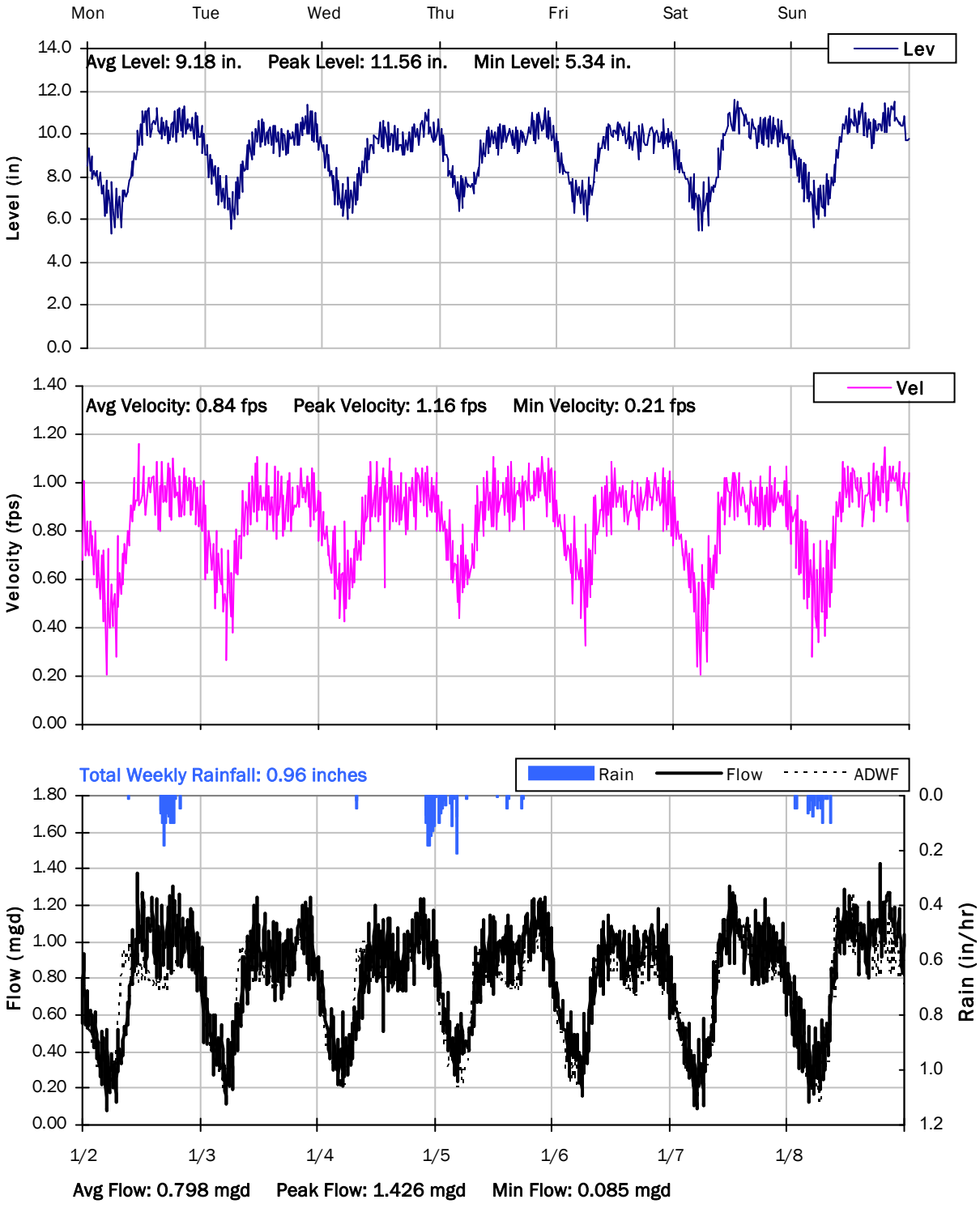
12/26/2022 to 1/2/2023



FM09

Weekly Level, Velocity and Flow Hydrographs

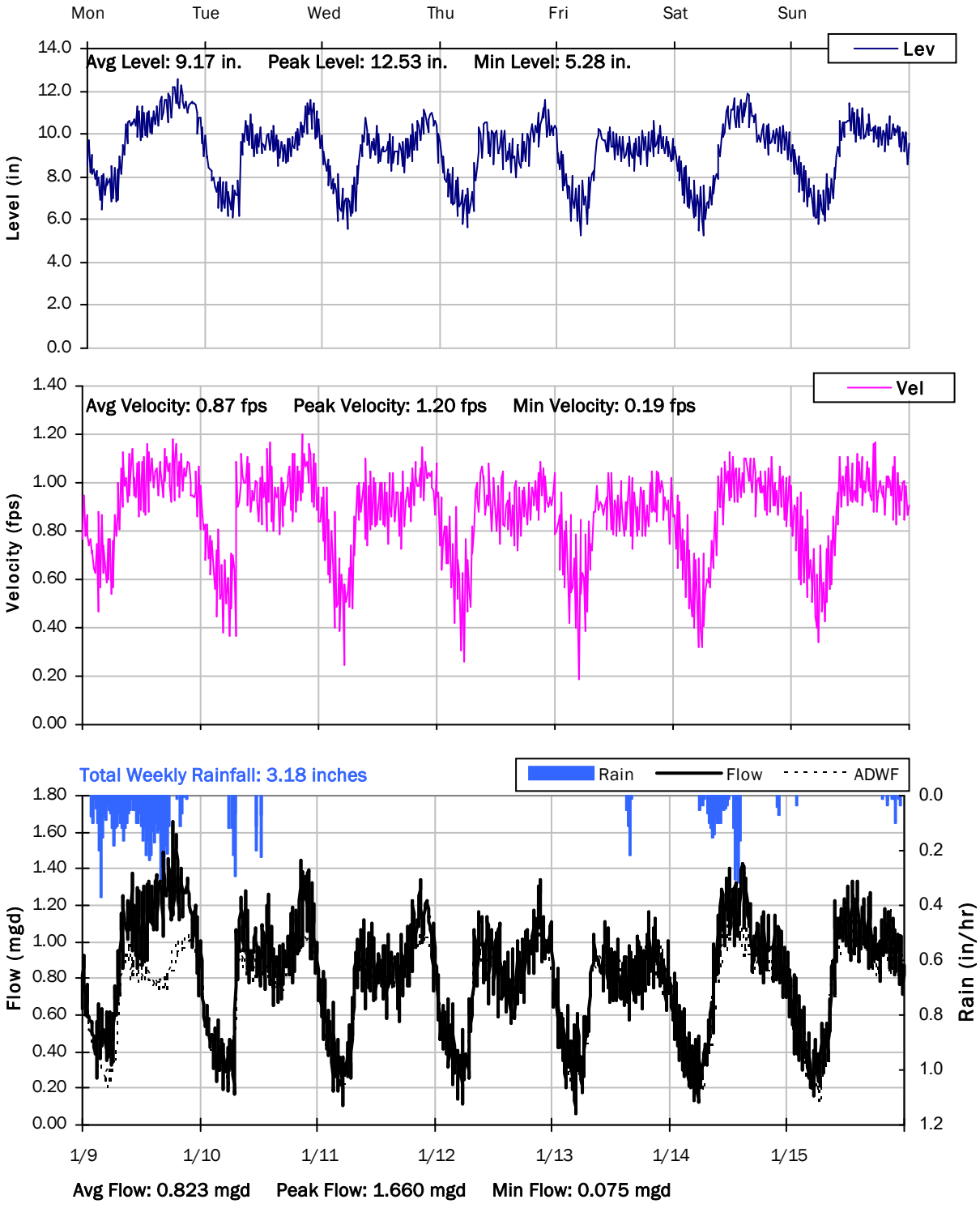
1/2/2023 to 1/9/2023



FM09

Weekly Level, Velocity and Flow Hydrographs

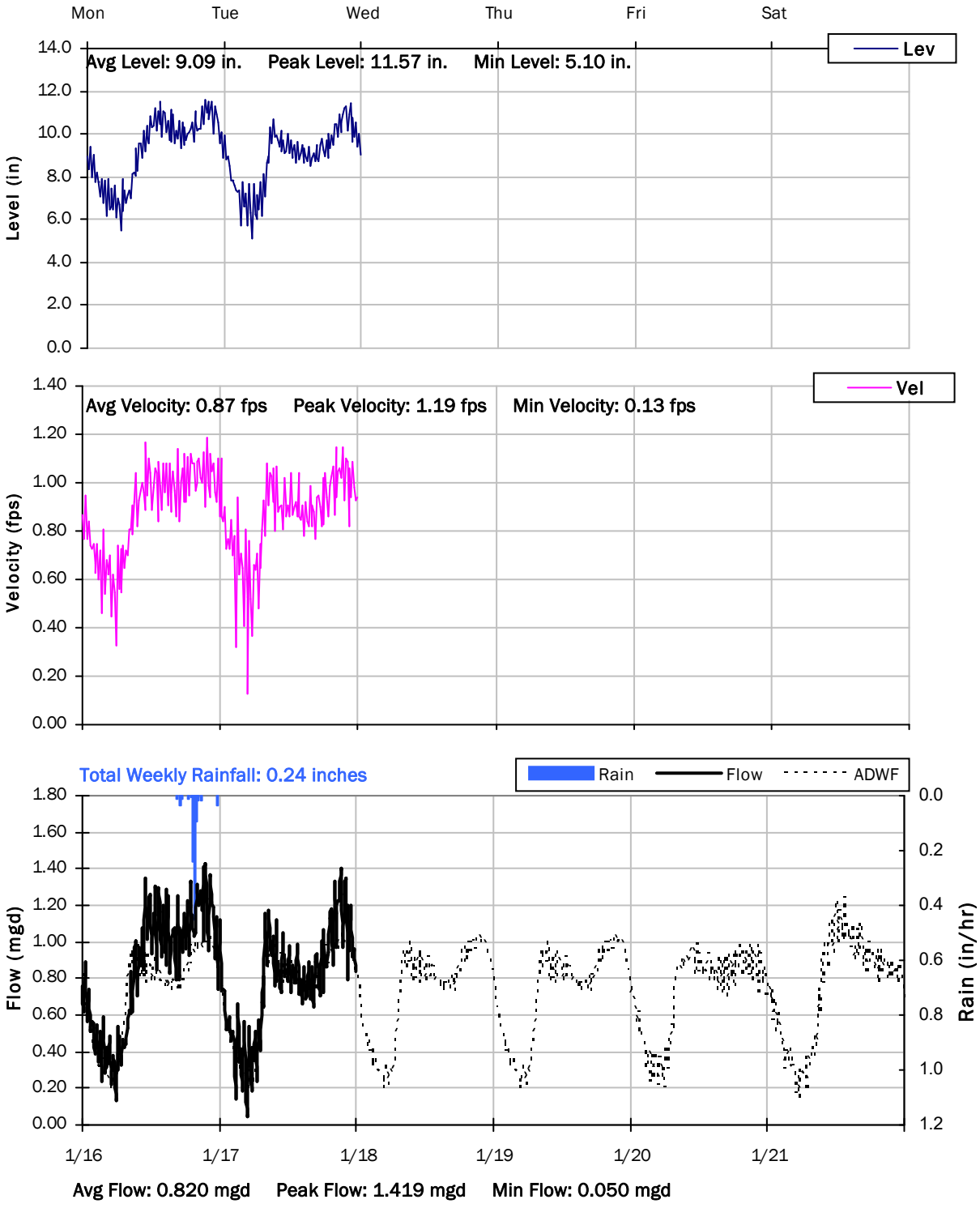
1/9/2023 to 1/16/2023



FM09

Weekly Level, Velocity and Flow Hydrographs

1/16/2023 to 1/22/2023



Monitoring Site: FM09A

Selma-Kingsburg-Fowler Sanitation District

Sanitary Sewer Flow Monitoring

December 09, 2022 - January 17, 2023

Location: 2075 S Mendocino Ave

Data Summary Report

Vicinity Map: FM09A

FM09A

Additional Site Photos

Effluent Pipe

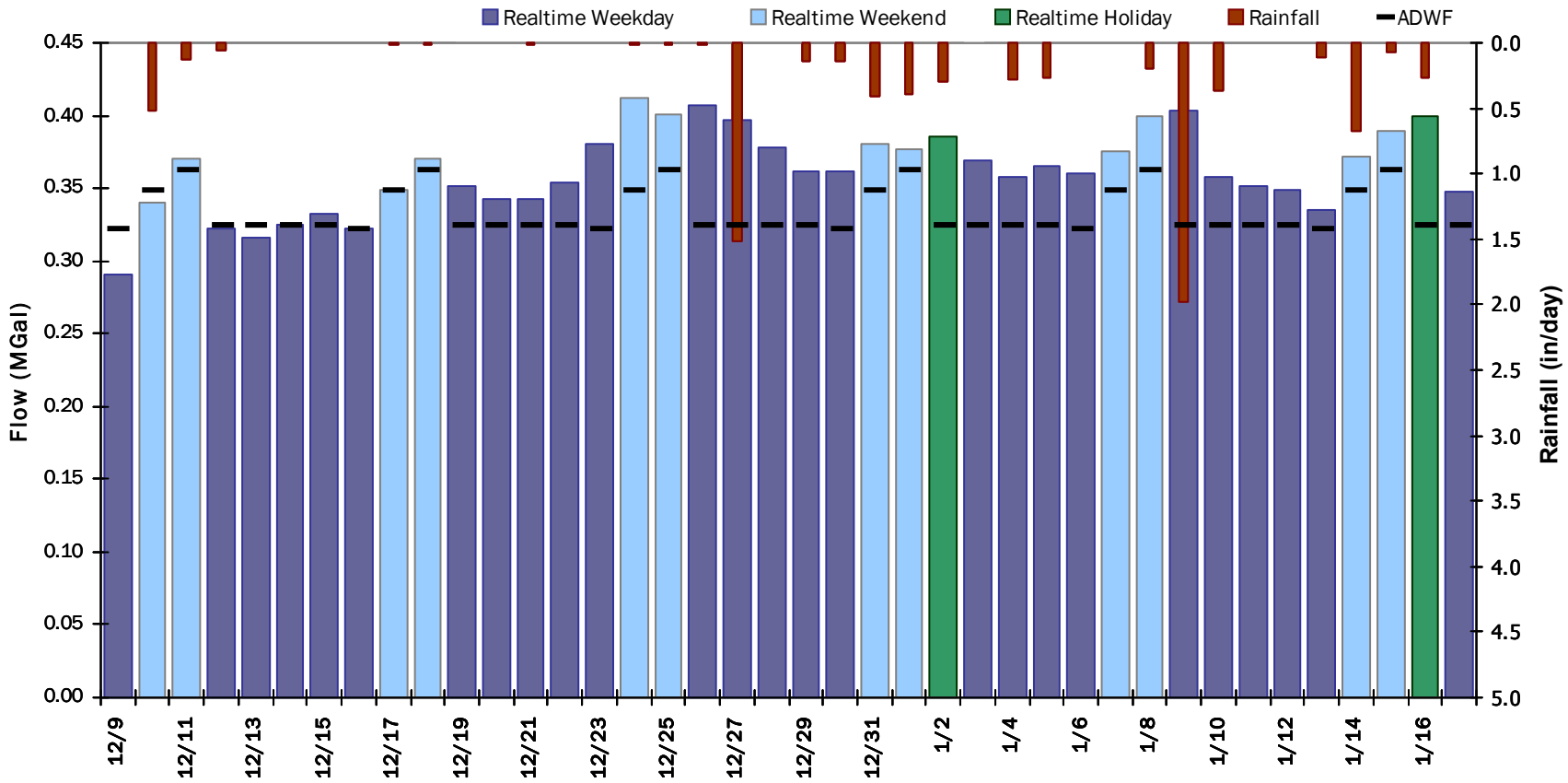
Influent Pipe

FM09A

Period Flow Summary: Daily Flow Totals

Avg Daily Flow: 0.363 MGal Peak Daily Flow: 0.412 MGal Min Daily Flow: 0.291 MGal

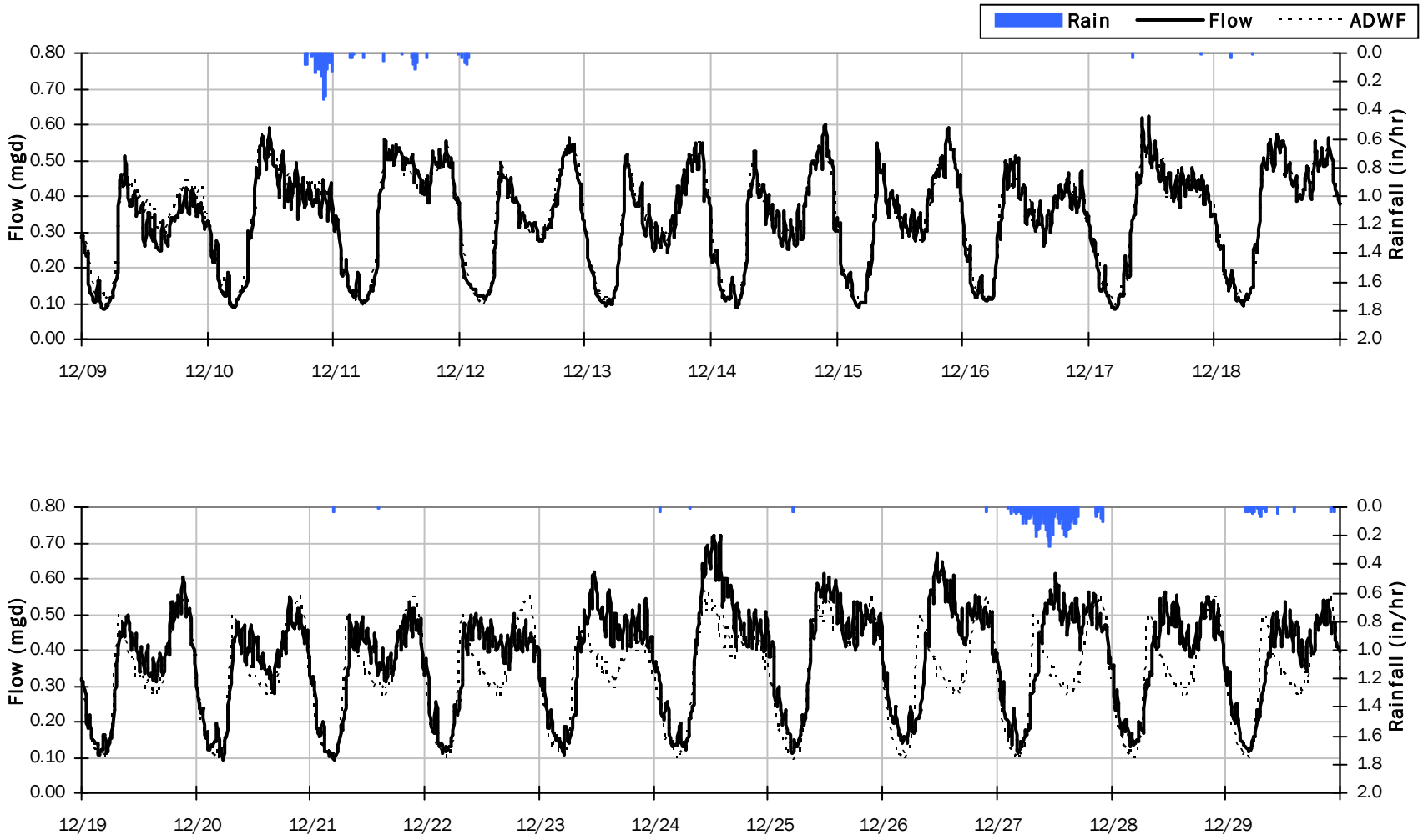
Total Rainfall: 7.83 inches



FM09A

Flow Summary: 12/9/2022 to 12/29/2022

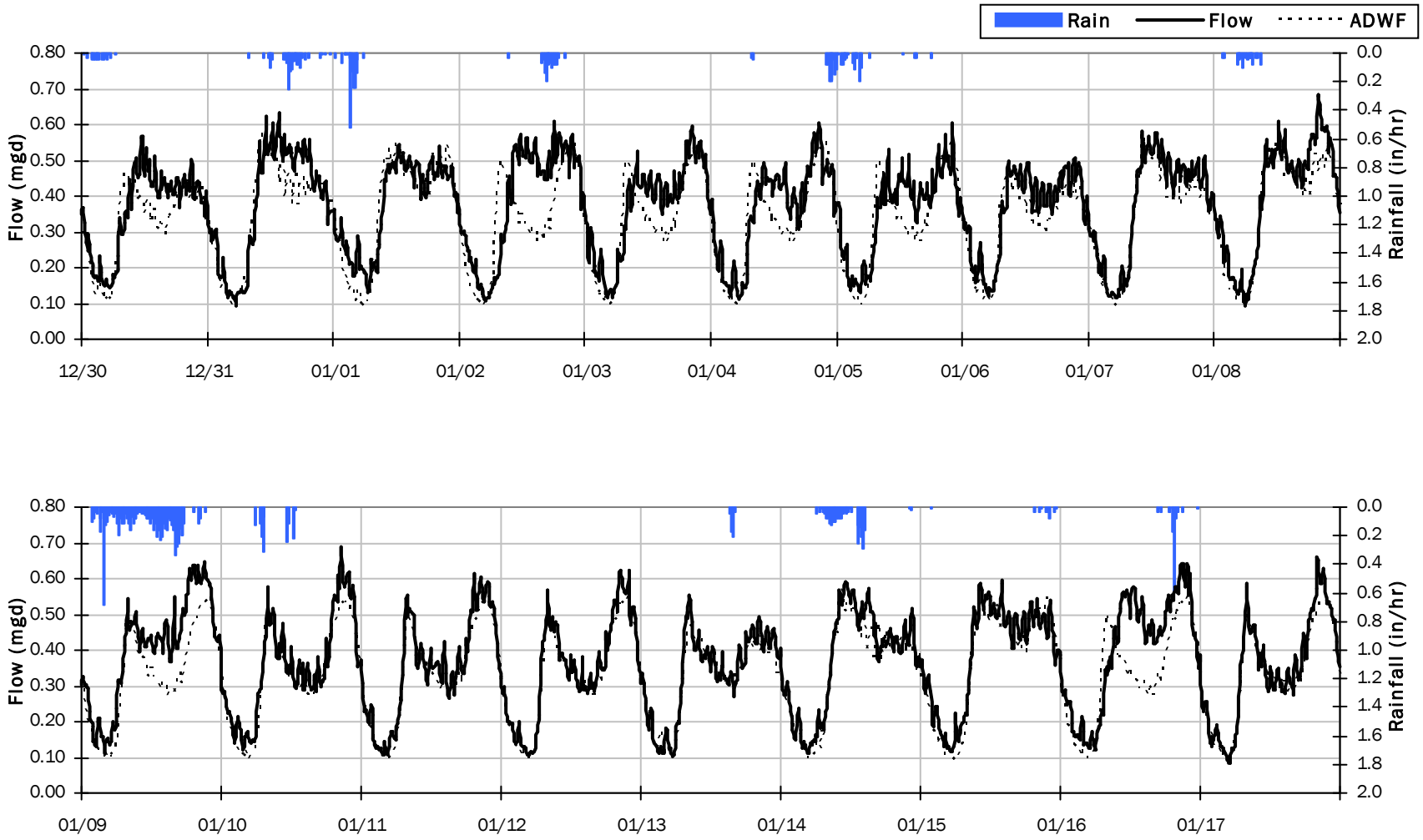
Period Rainfall: 2.41 inches Period Avg Flow: 0.356 mgd Period Peak Flow: 0.721 mgd Period Min Flow: 0.085 mgd



FM09A

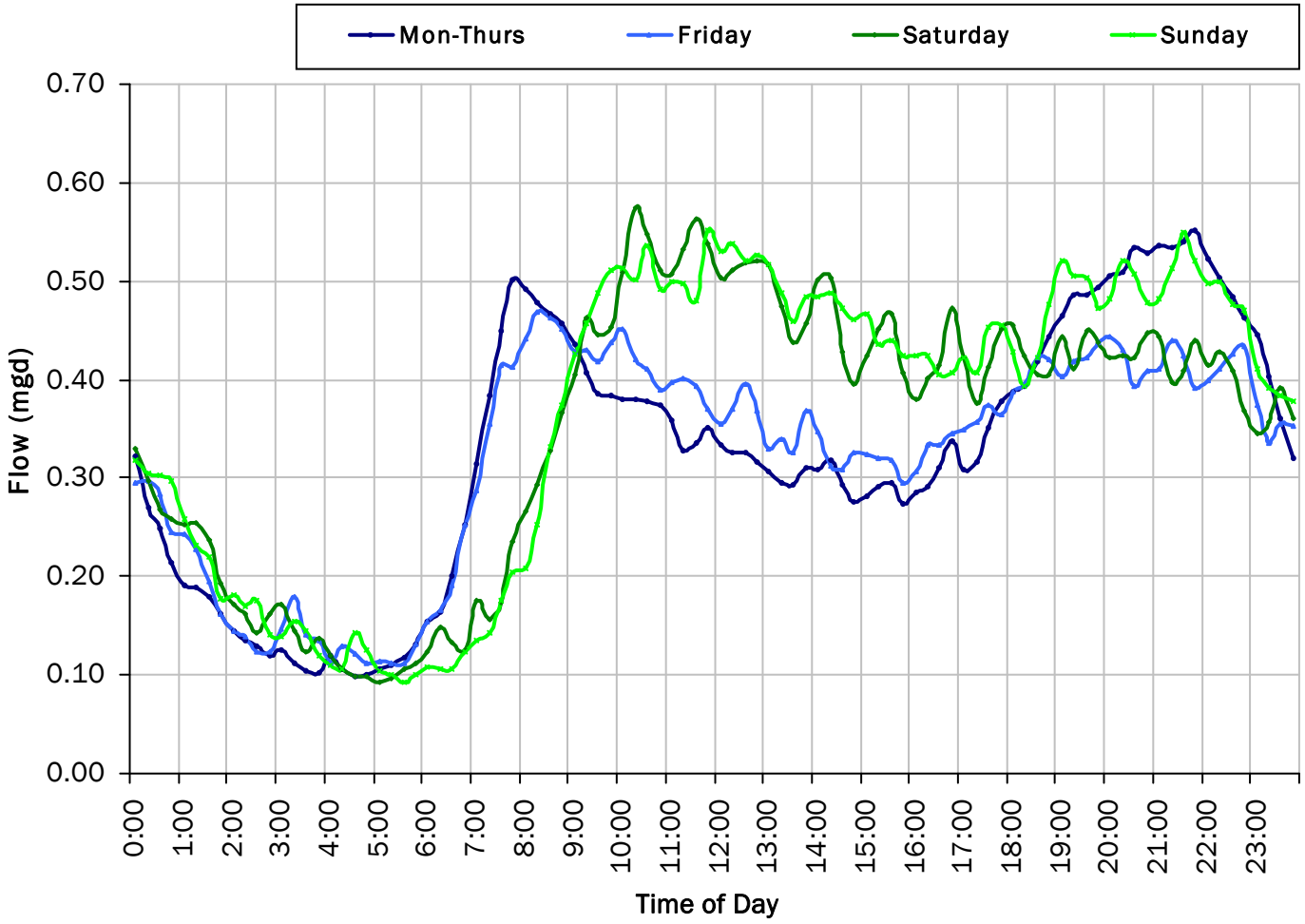
Flow Summary: 12/30/2022 to 1/17/2023

Period Rainfall: 5.42 inches Period Avg Flow: 0.370 mgd Period Peak Flow: 0.686 mgd Period Min Flow: 0.085 mgd



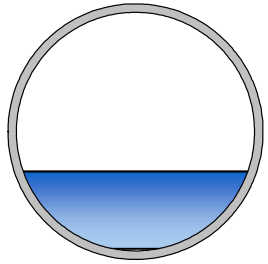
FM09A

Average Dry Weather Flow Hydrographs



ADWF:

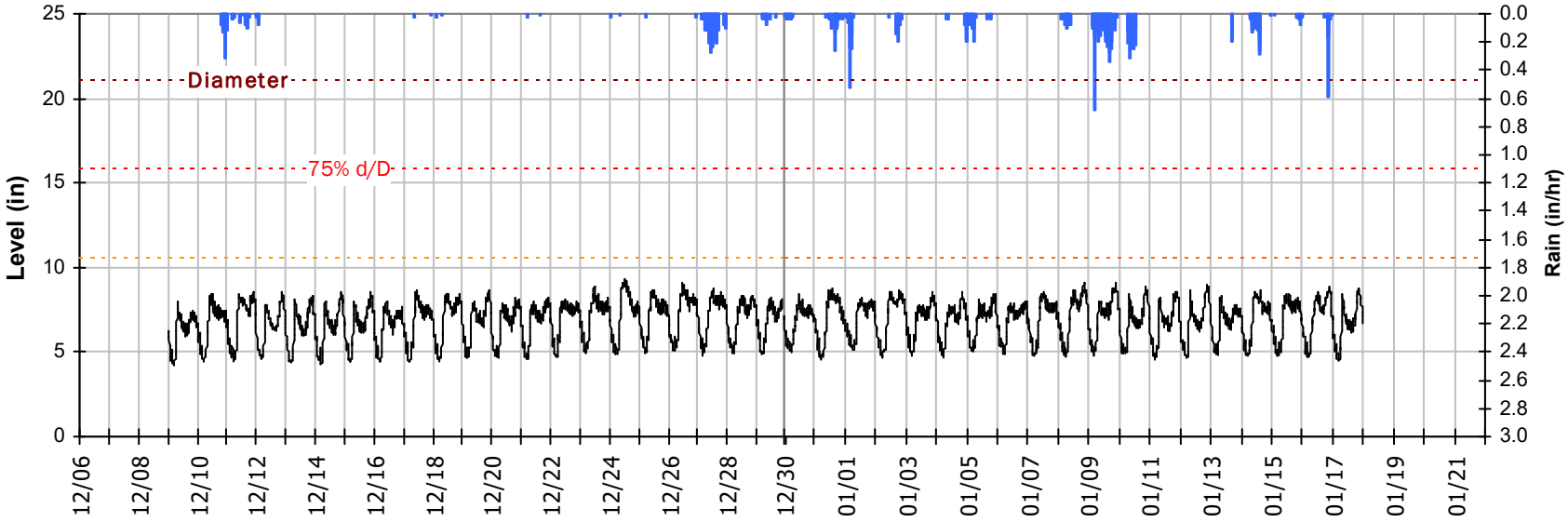
0.333 *mgd*

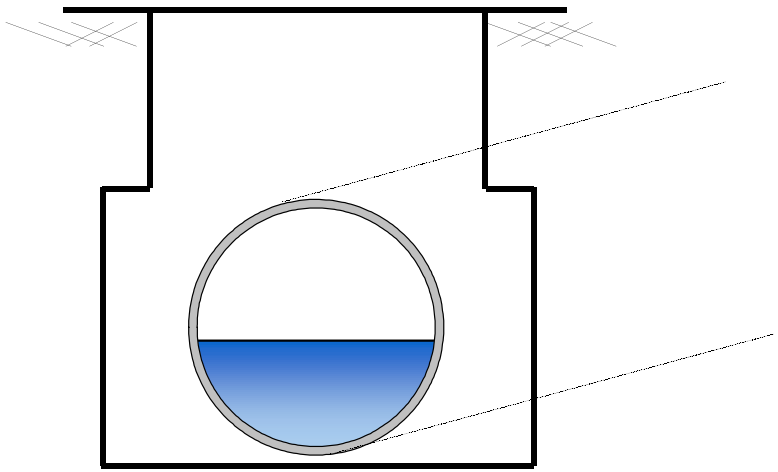


FM09A

Site Capacity and Surcharge Summary

Realtime Flow Levels with Rainfall Data over Peak Level Period



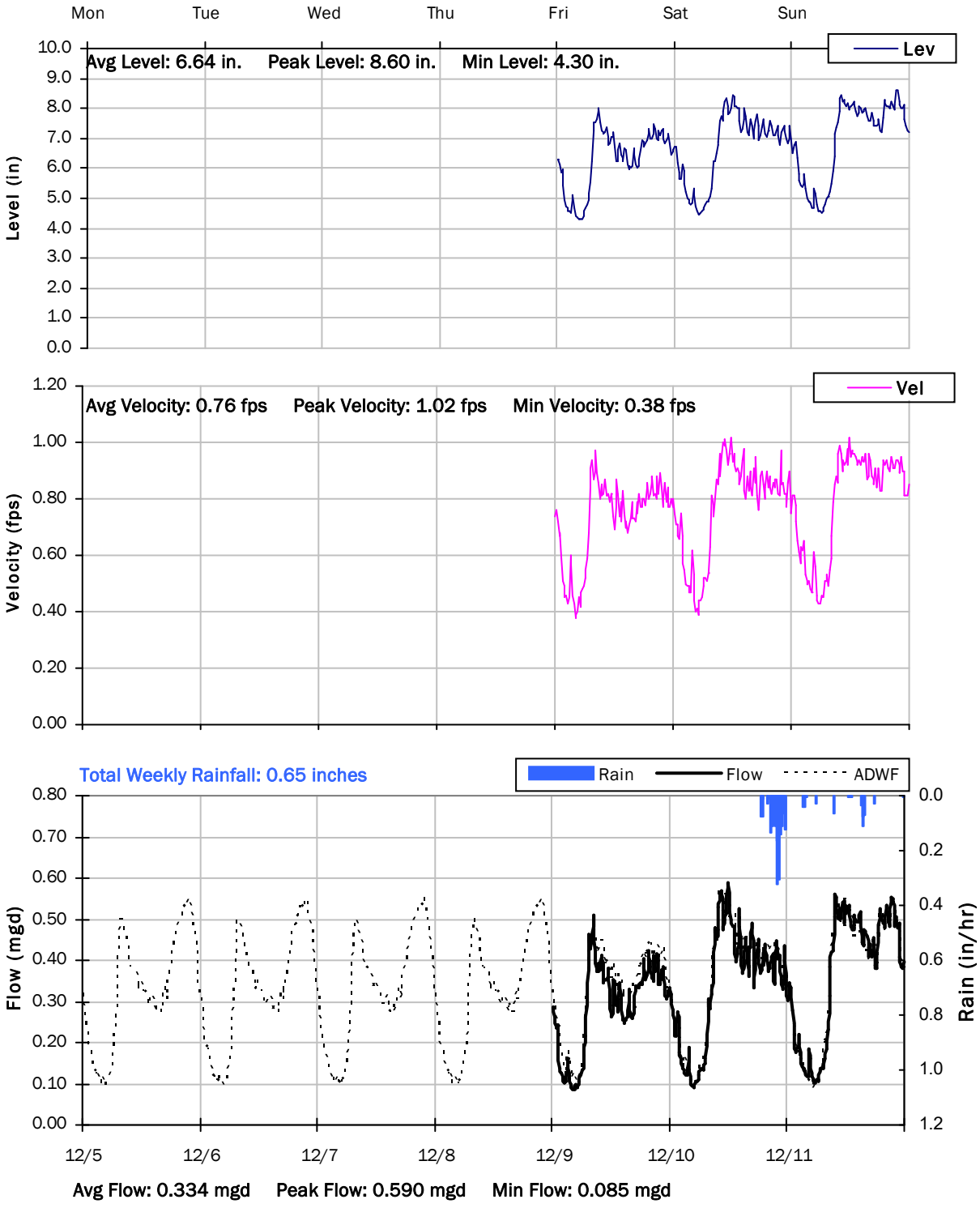


Pipe Diameter:	21	*inches*
Peak Measured Level:	9.34	*inches*
Peak d/D Ratio:	0.44	

FM09A

Weekly Level, Velocity and Flow Hydrographs

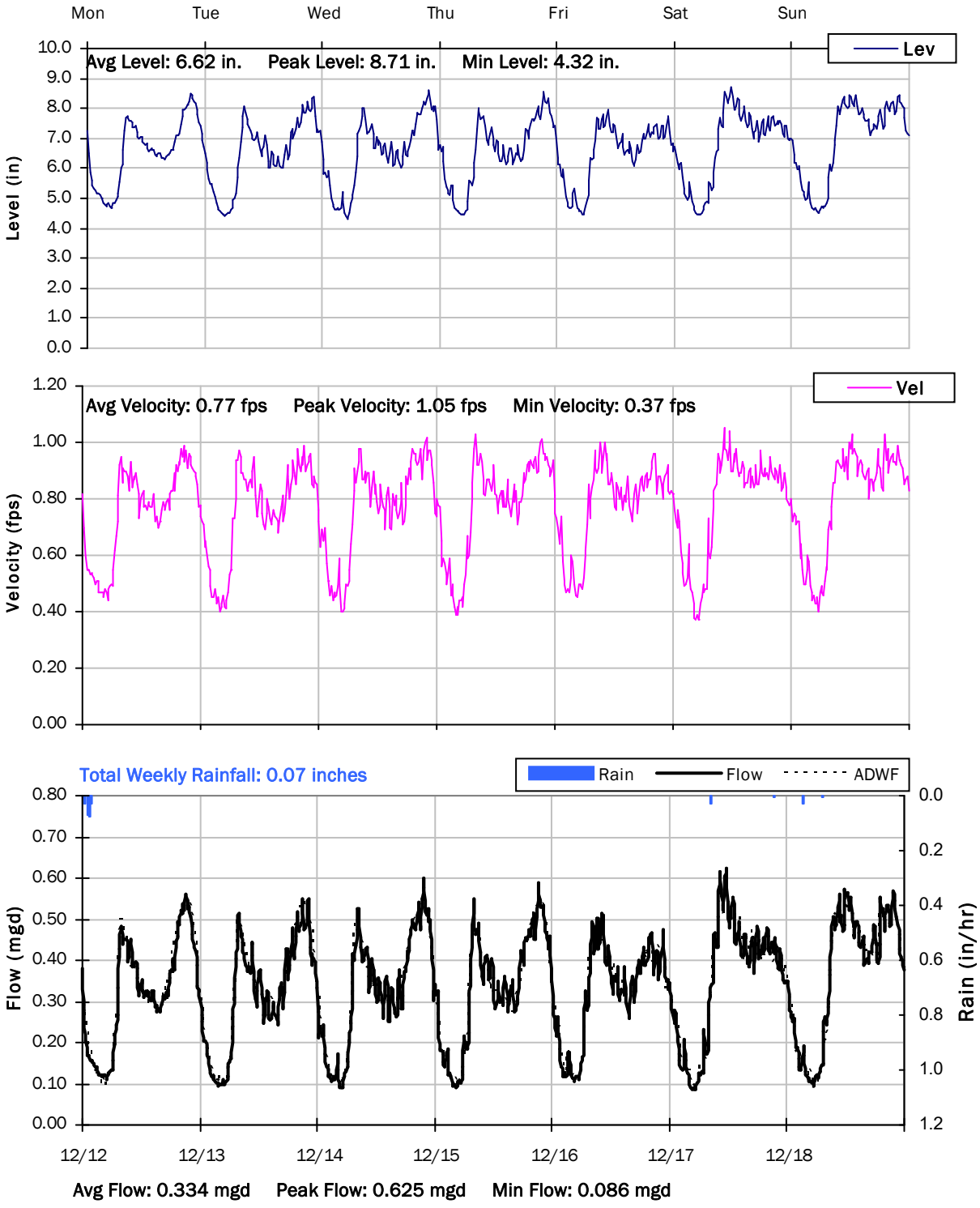
12/5/2022 to 12/12/2022



FM09A

Weekly Level, Velocity and Flow Hydrographs

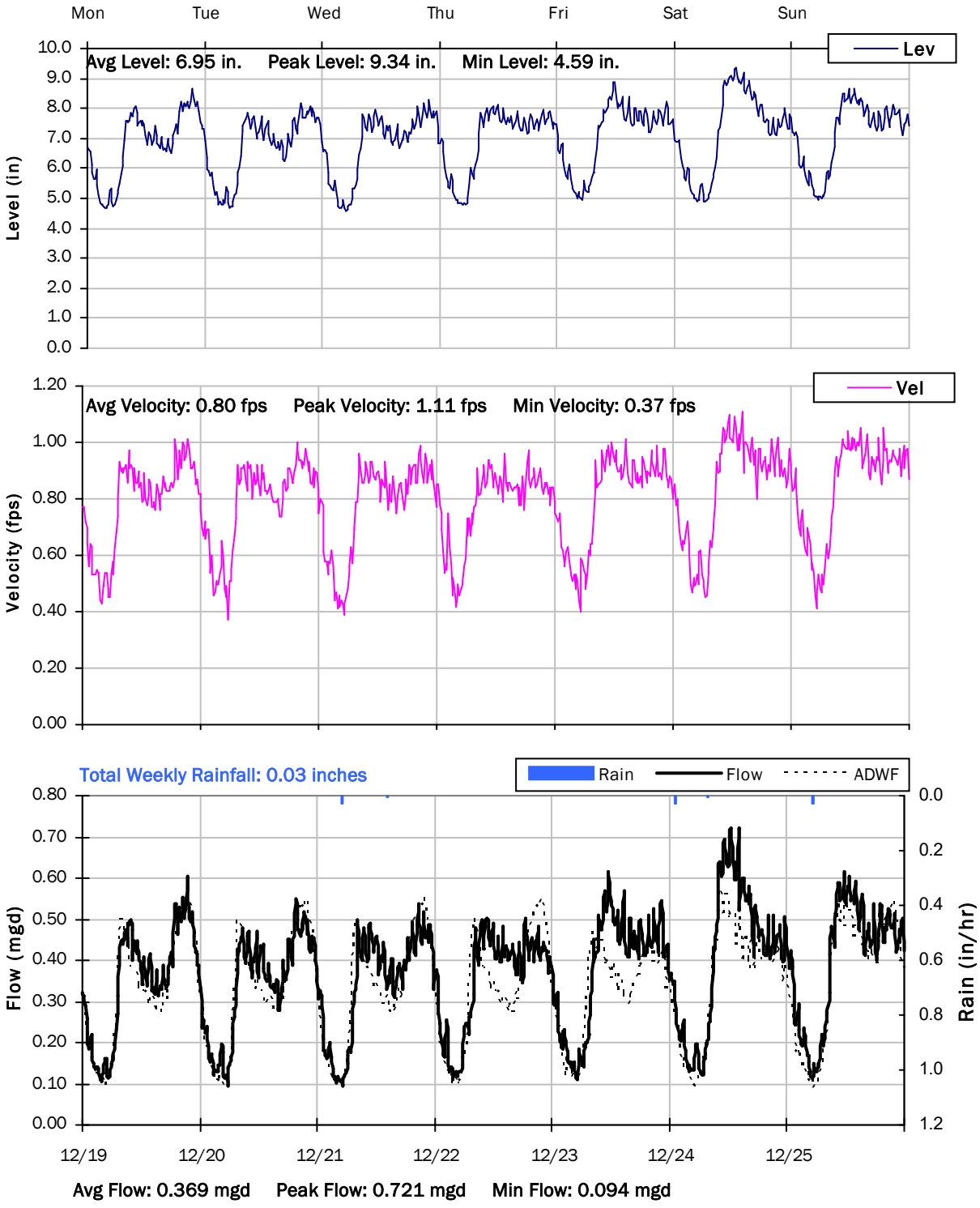
12/12/2022 to 12/19/2022



FM09A

Weekly Level, Velocity and Flow Hydrographs

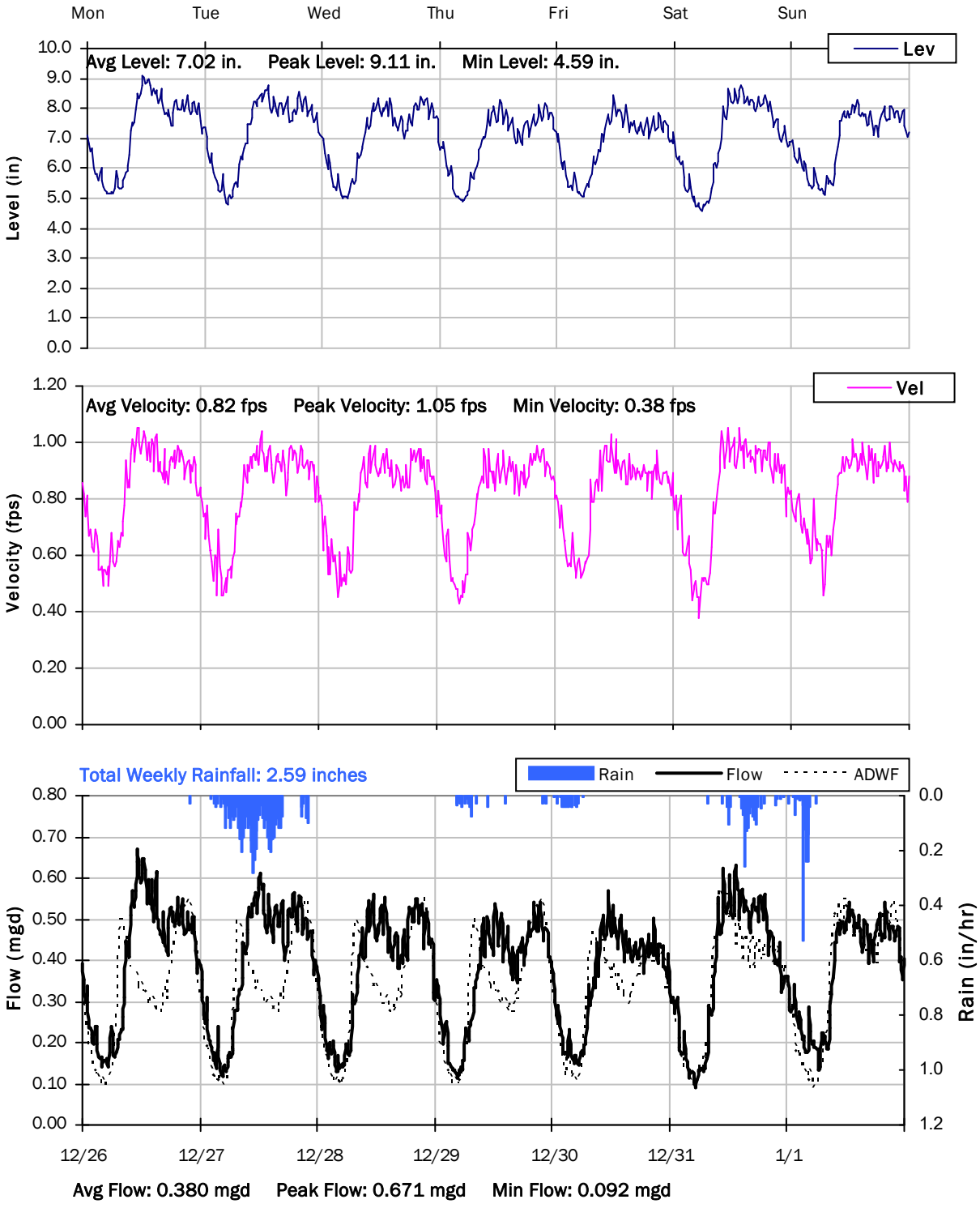
12/19/2022 to 12/26/2022



FM09A

Weekly Level, Velocity and Flow Hydrographs

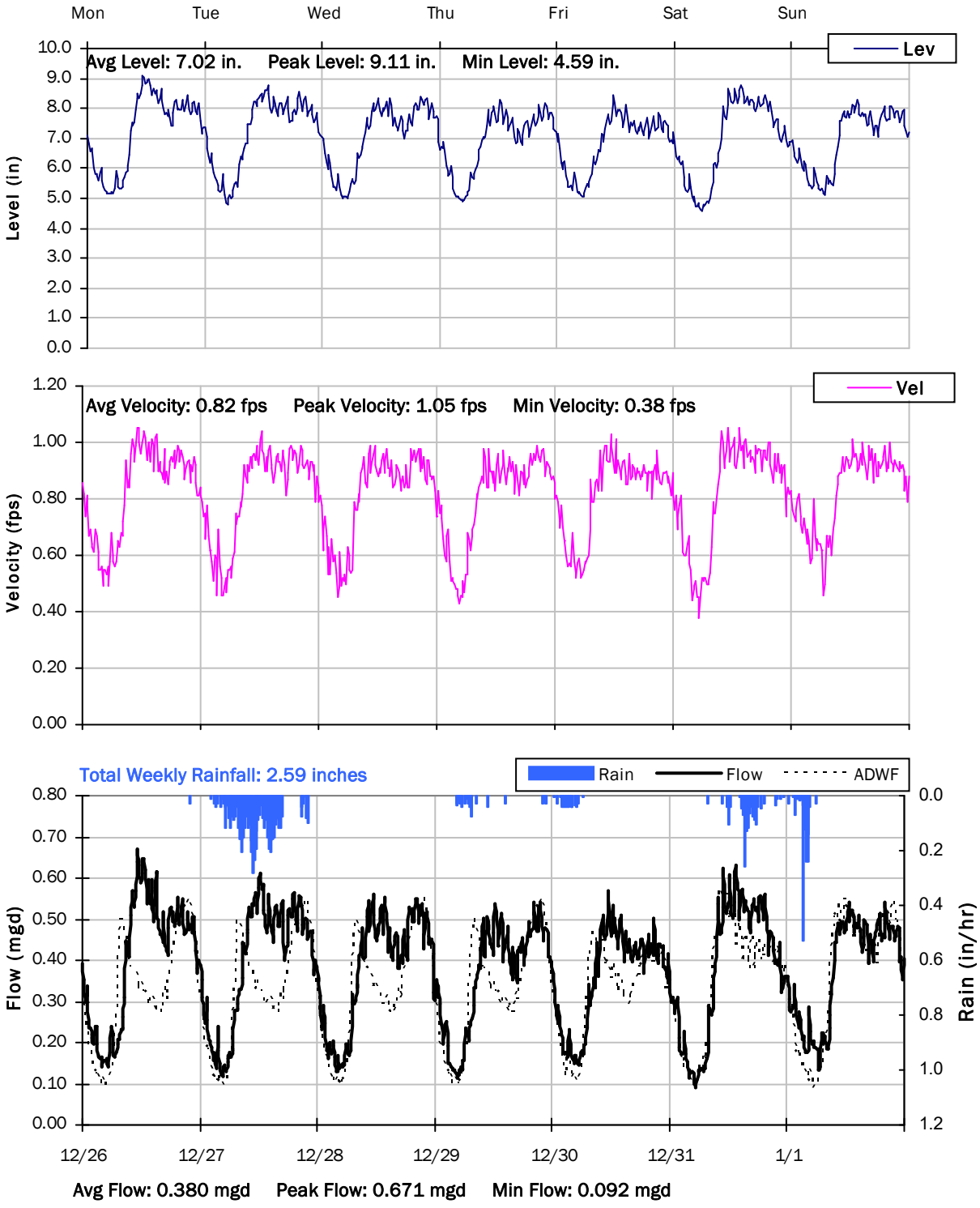
12/26/2022 to 1/2/2023



FM09A

Weekly Level, Velocity and Flow Hydrographs

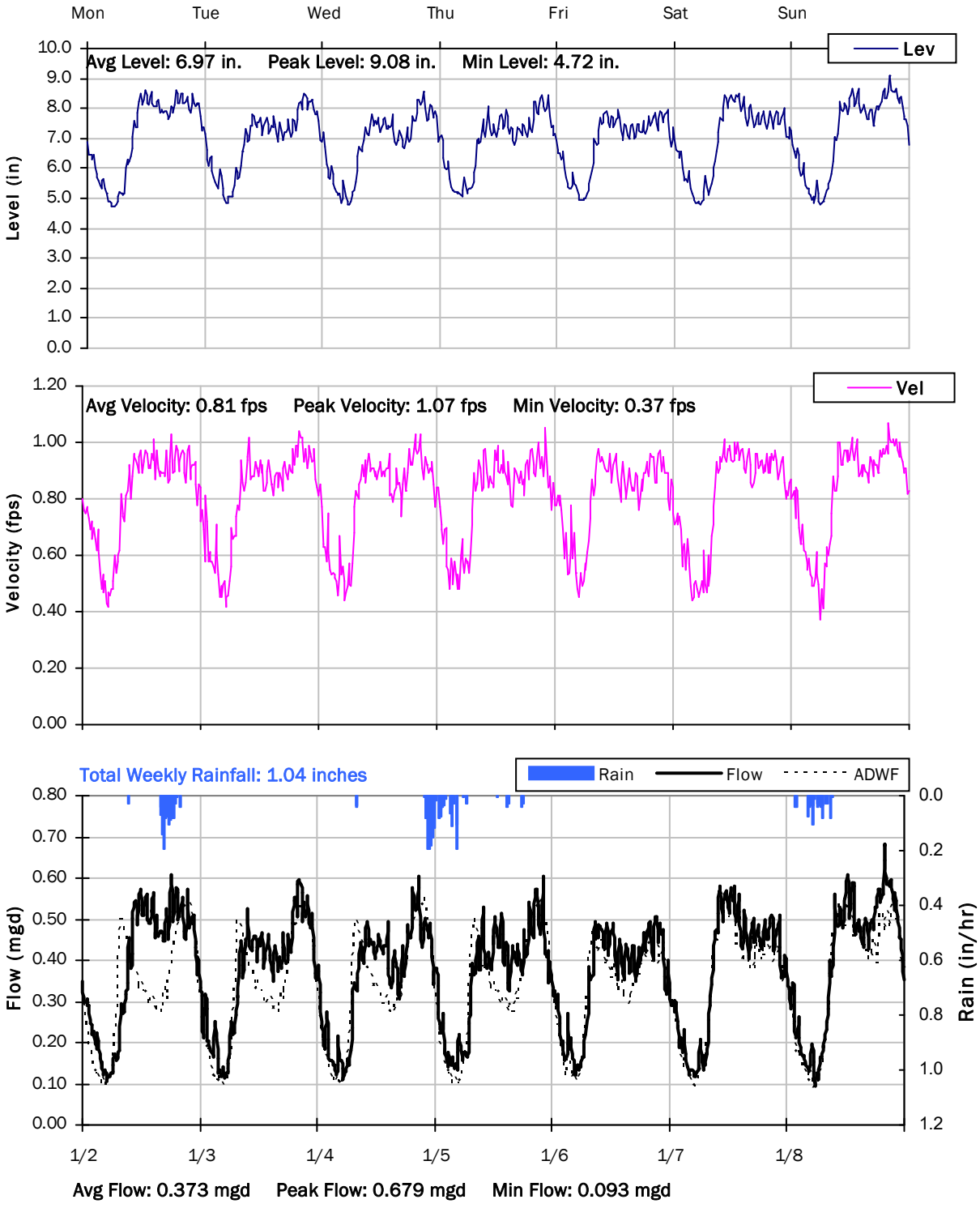
12/26/2022 to 1/2/2023



FM09A

Weekly Level, Velocity and Flow Hydrographs

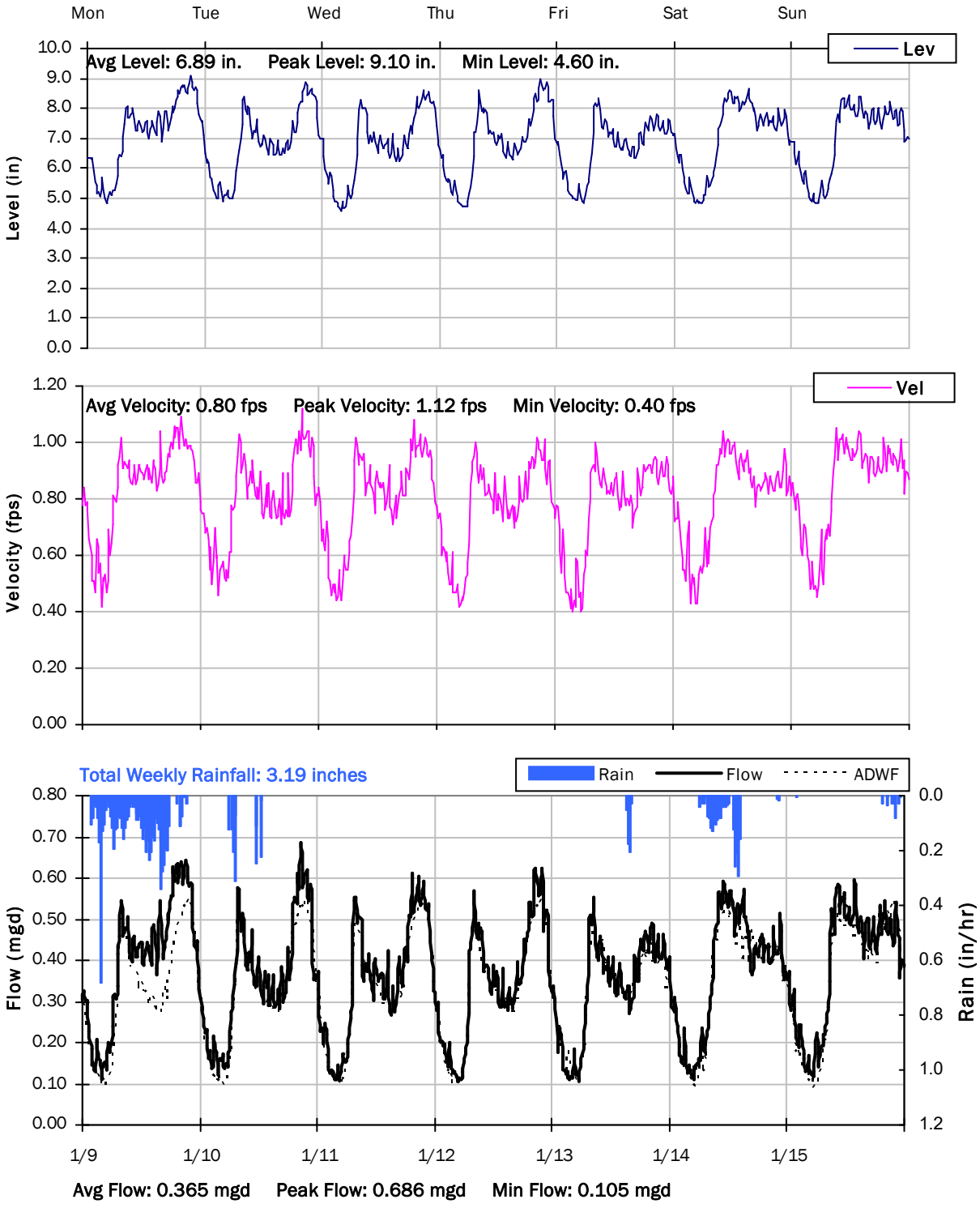
1/2/2023 to 1/9/2023



FM09A

Weekly Level, Velocity and Flow Hydrographs

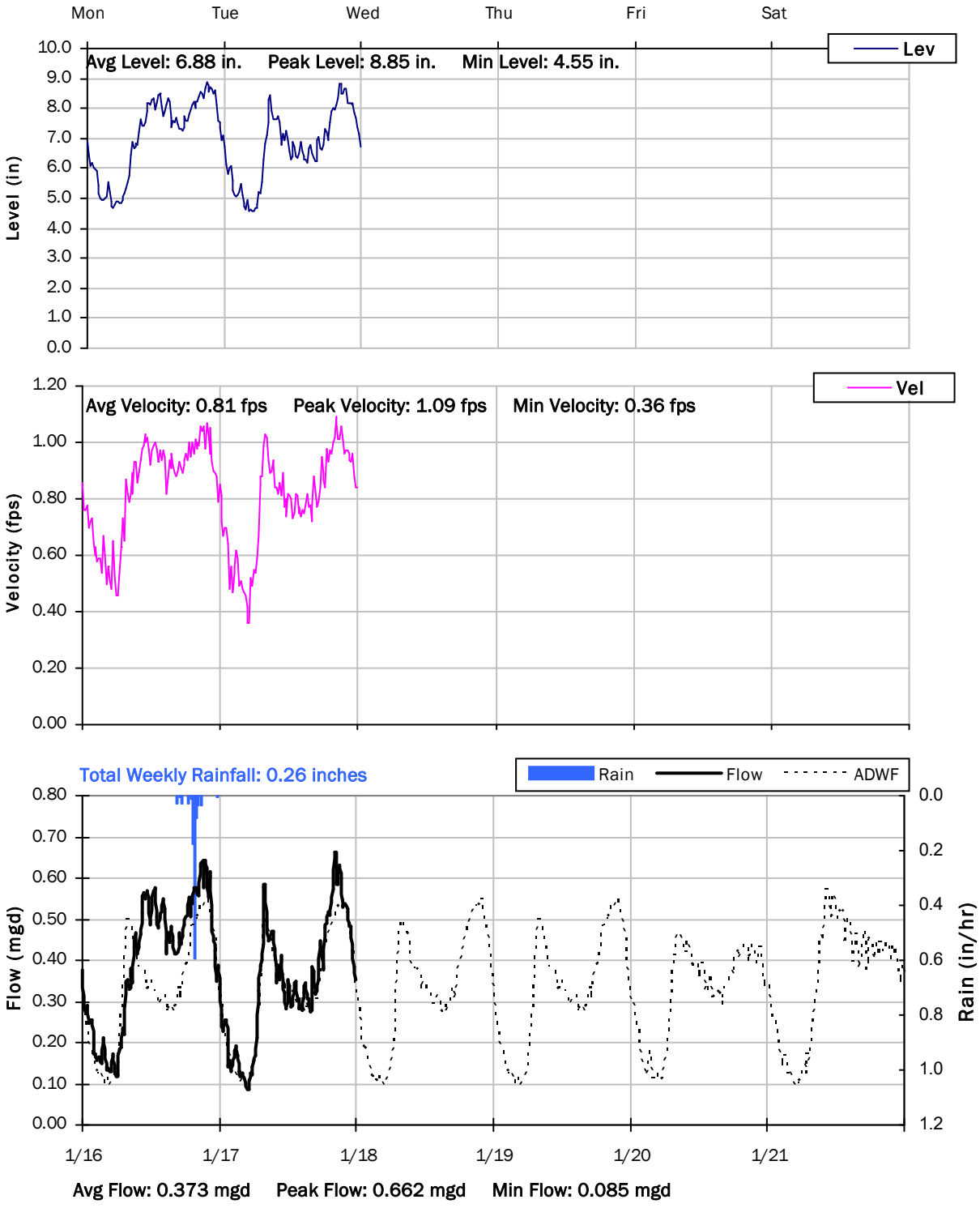
1/9/2023 to 1/16/2023



FM09A

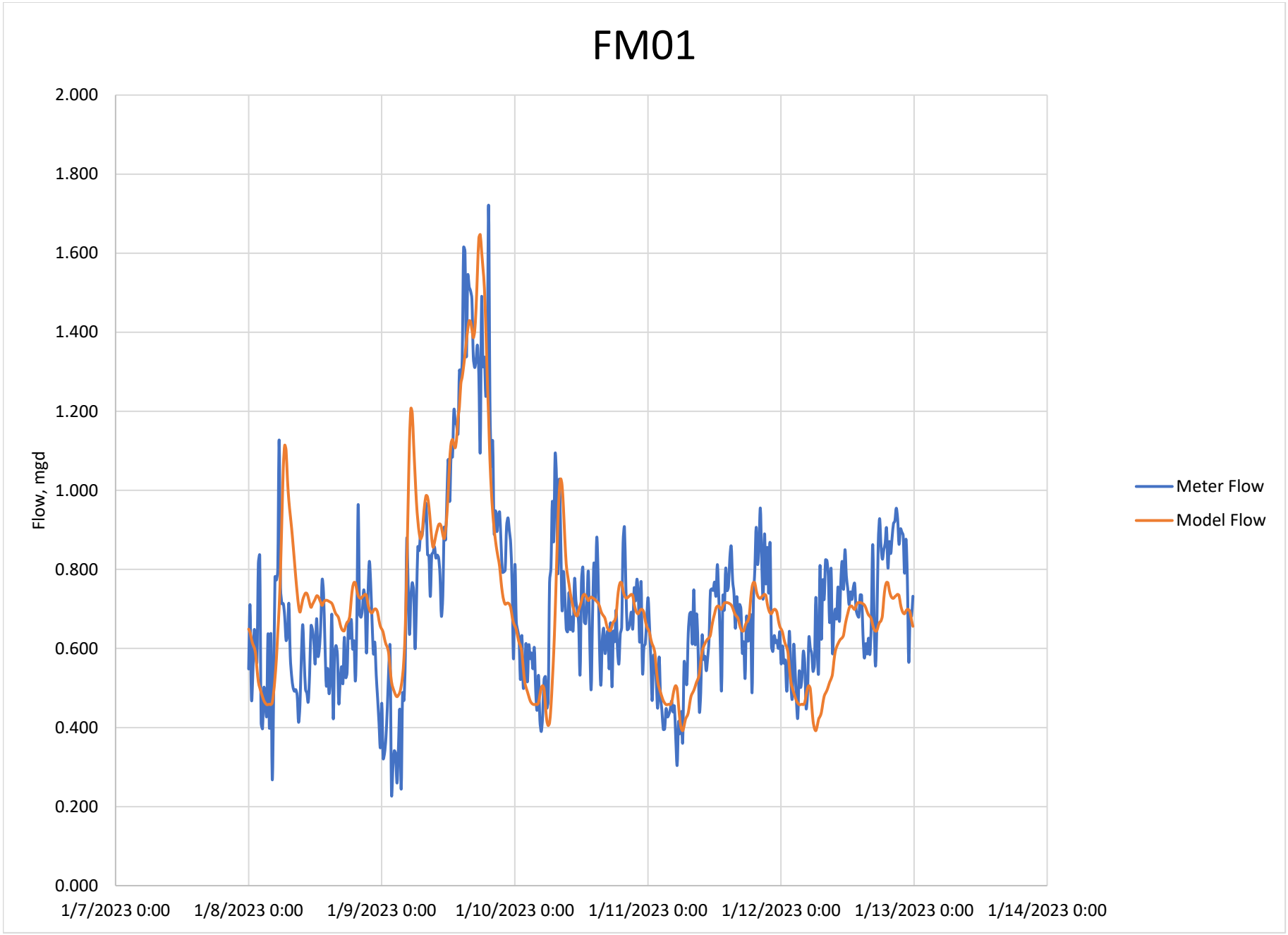
Weekly Level, Velocity and Flow Hydrographs

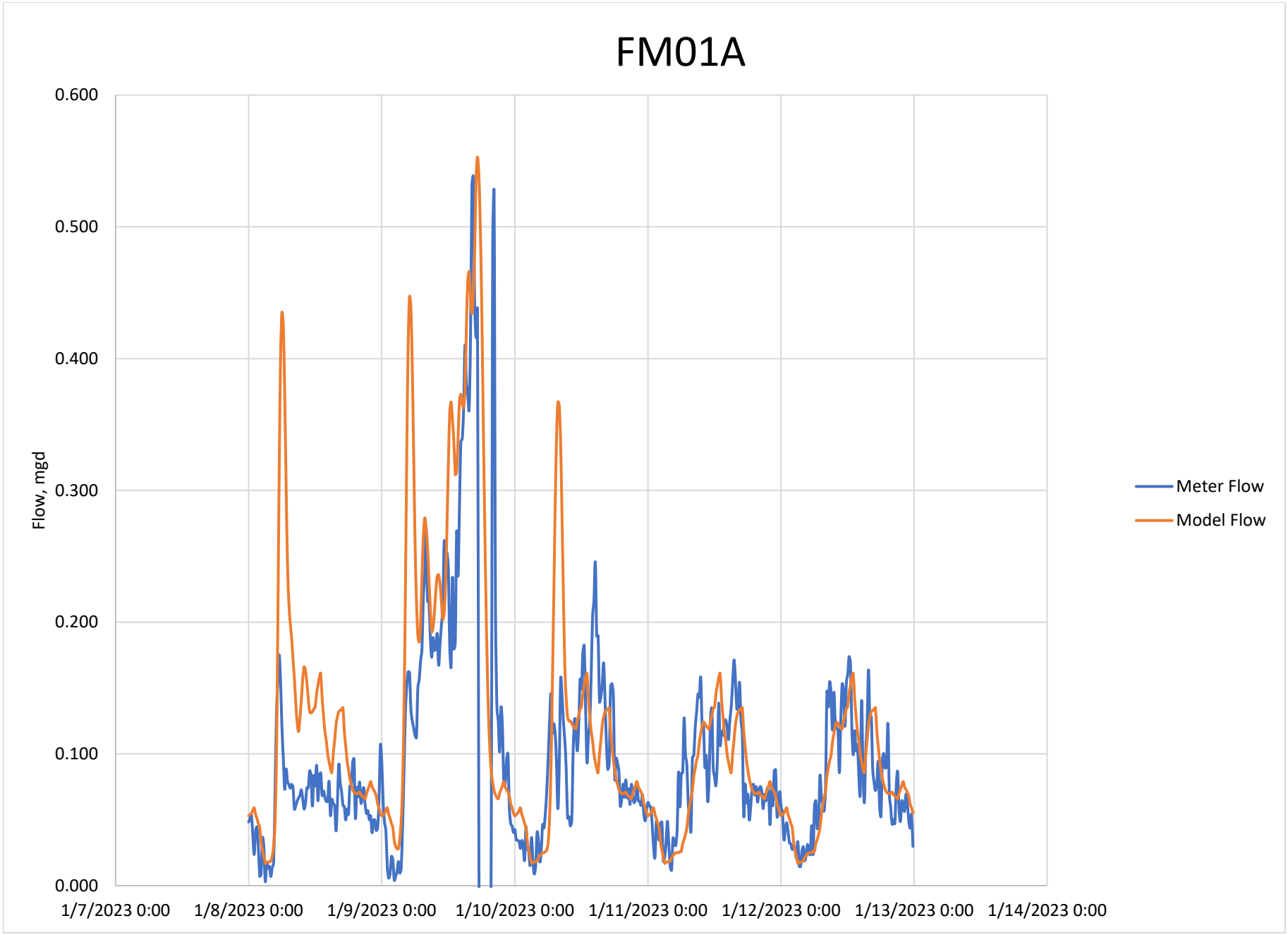
1/16/2023 to 1/22/2023

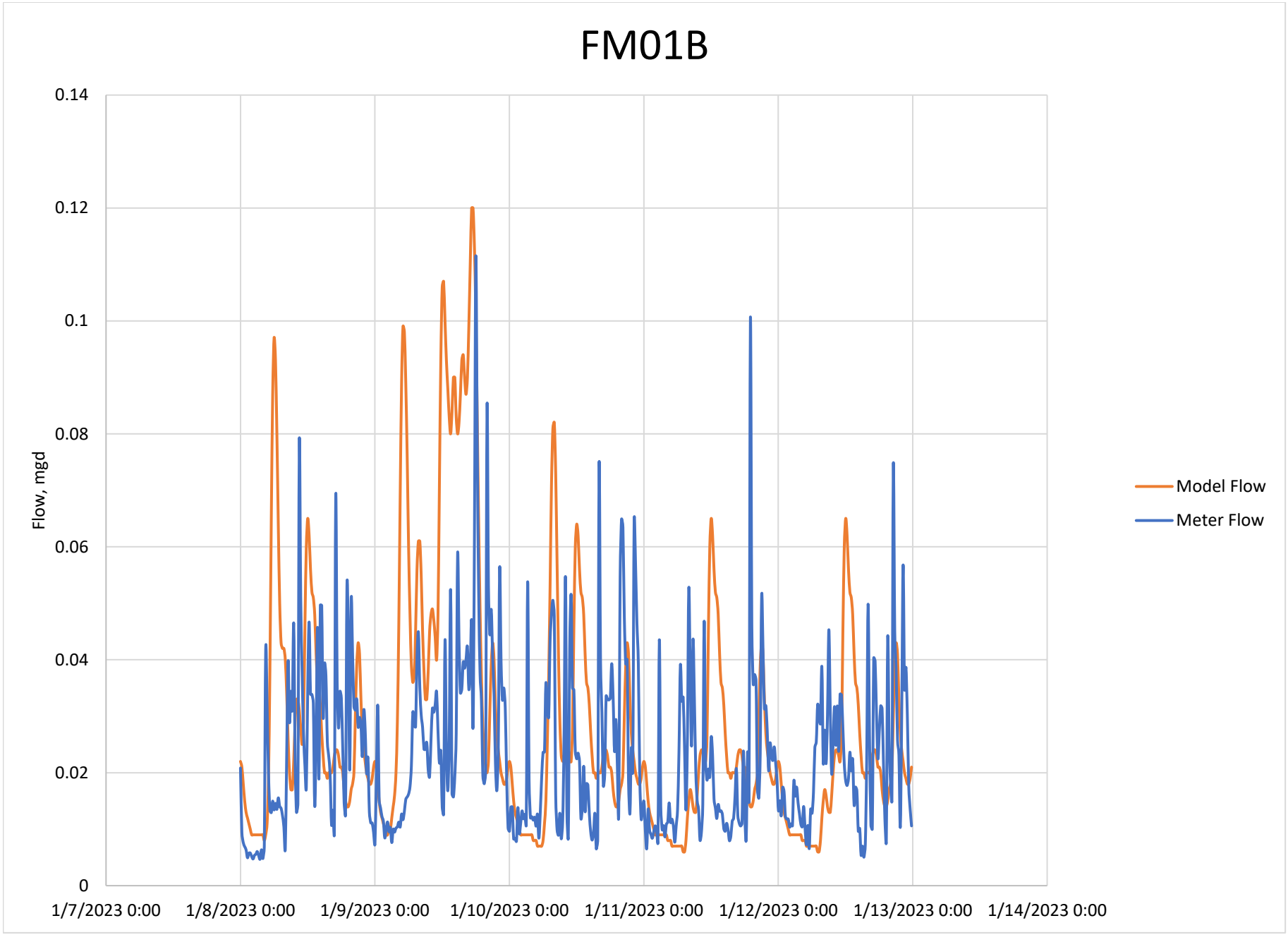


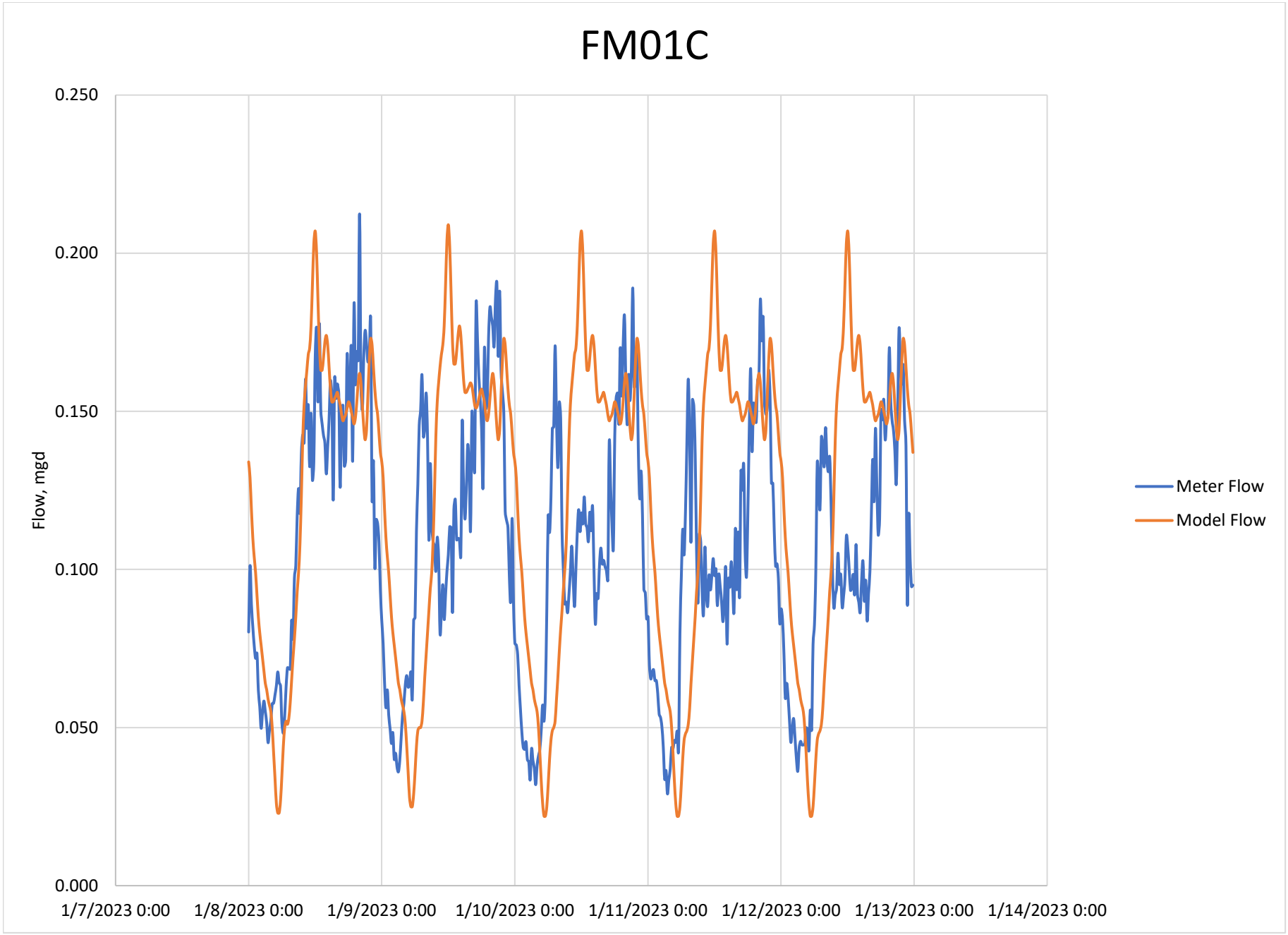
Appendix B – Dry Weather Calibration Plots

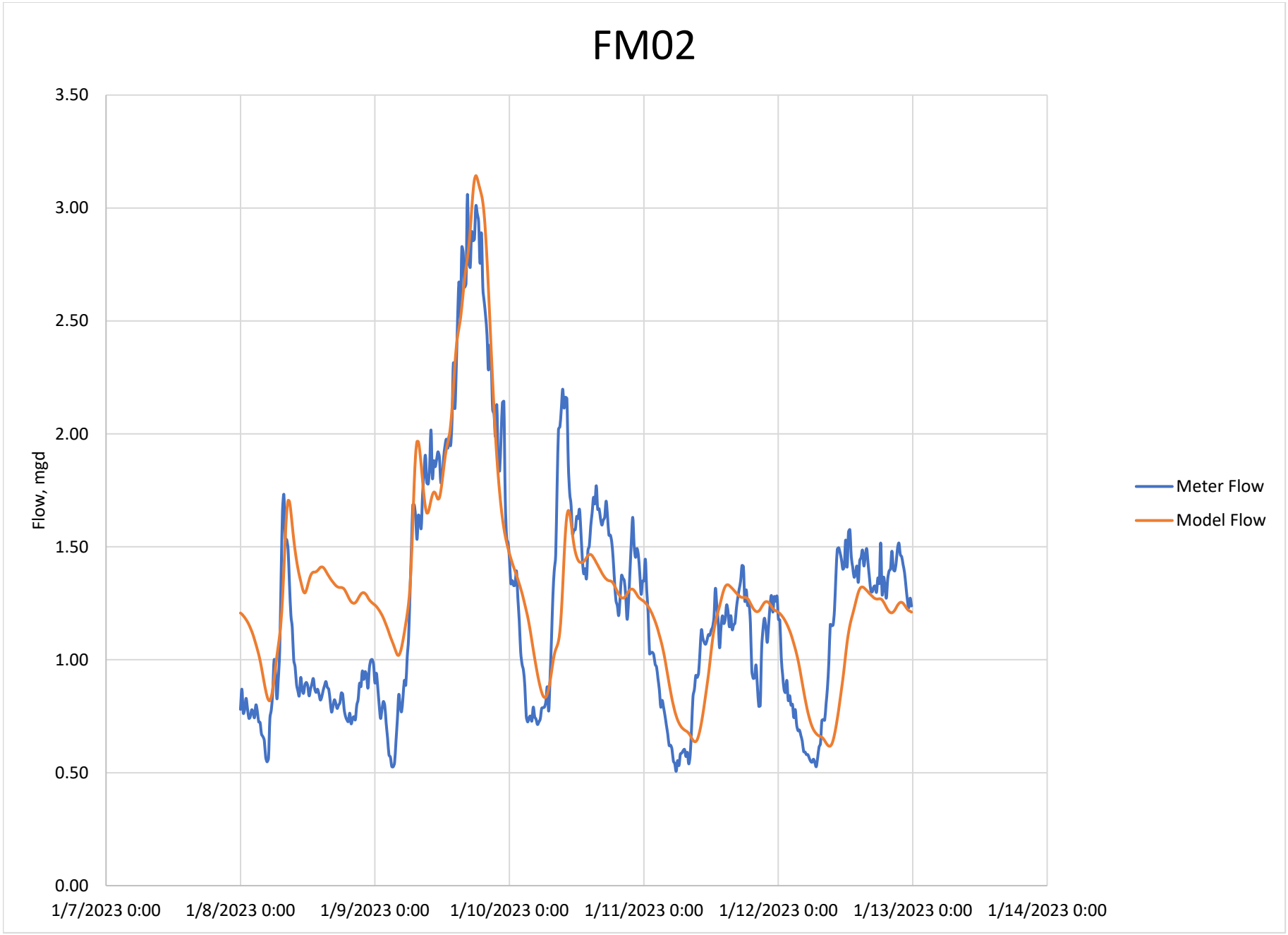
Appendix C – Wet Weather Calibration Plots

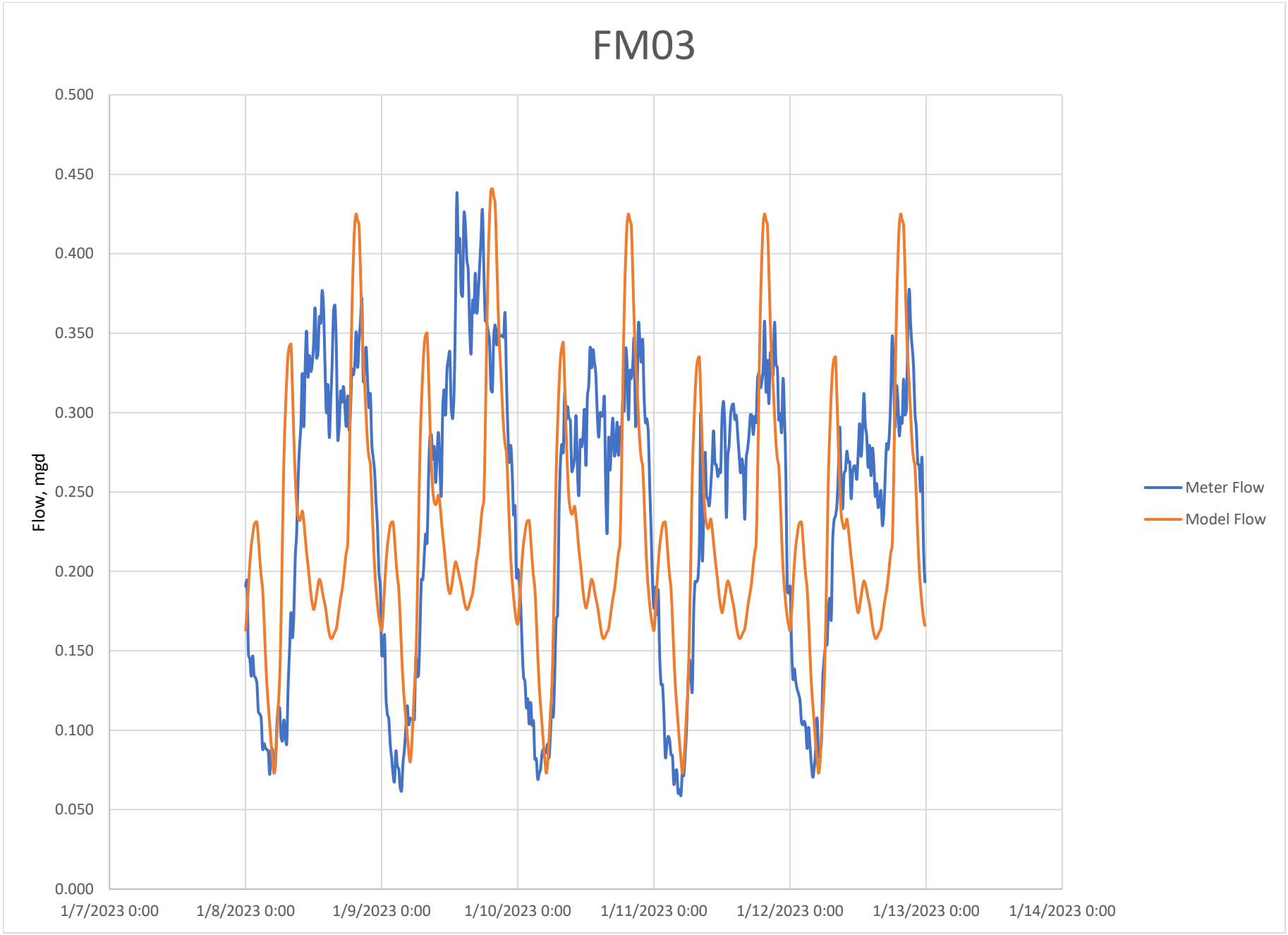

FM01
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
Flow, mgd
1/7/2023 0:00
1/8/2023 0:00
1/9/2023 0:00
1/10/2023 0:00
1/11/2023 0:00
1/12/2023 0:00
1/13/2023 0:00
1/14/2023 0:00
Meter Flow
Model Flow

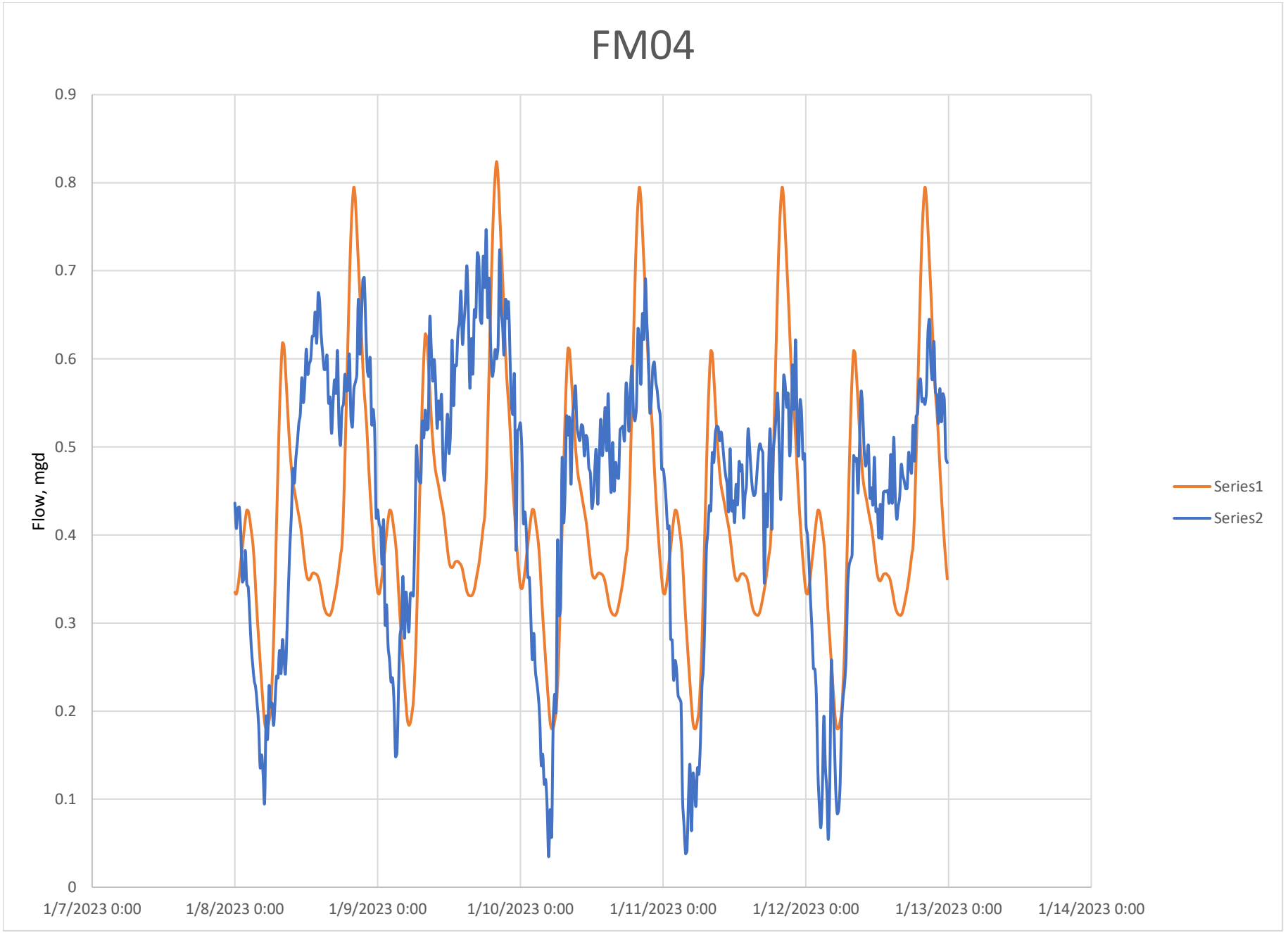

FM01A
0.600
0.500
0.400
0.300
0.200
0.100
0.000
Flow, mgd
1/7/2023 0:00
1/8/2023 0:00
1/9/2023 0:00
1/10/2023 0:00
1/11/2023 0:00
1/12/2023 0:00
1/13/2023 0:00
1/14/2023 0:00
Meter Flow
Model Flow

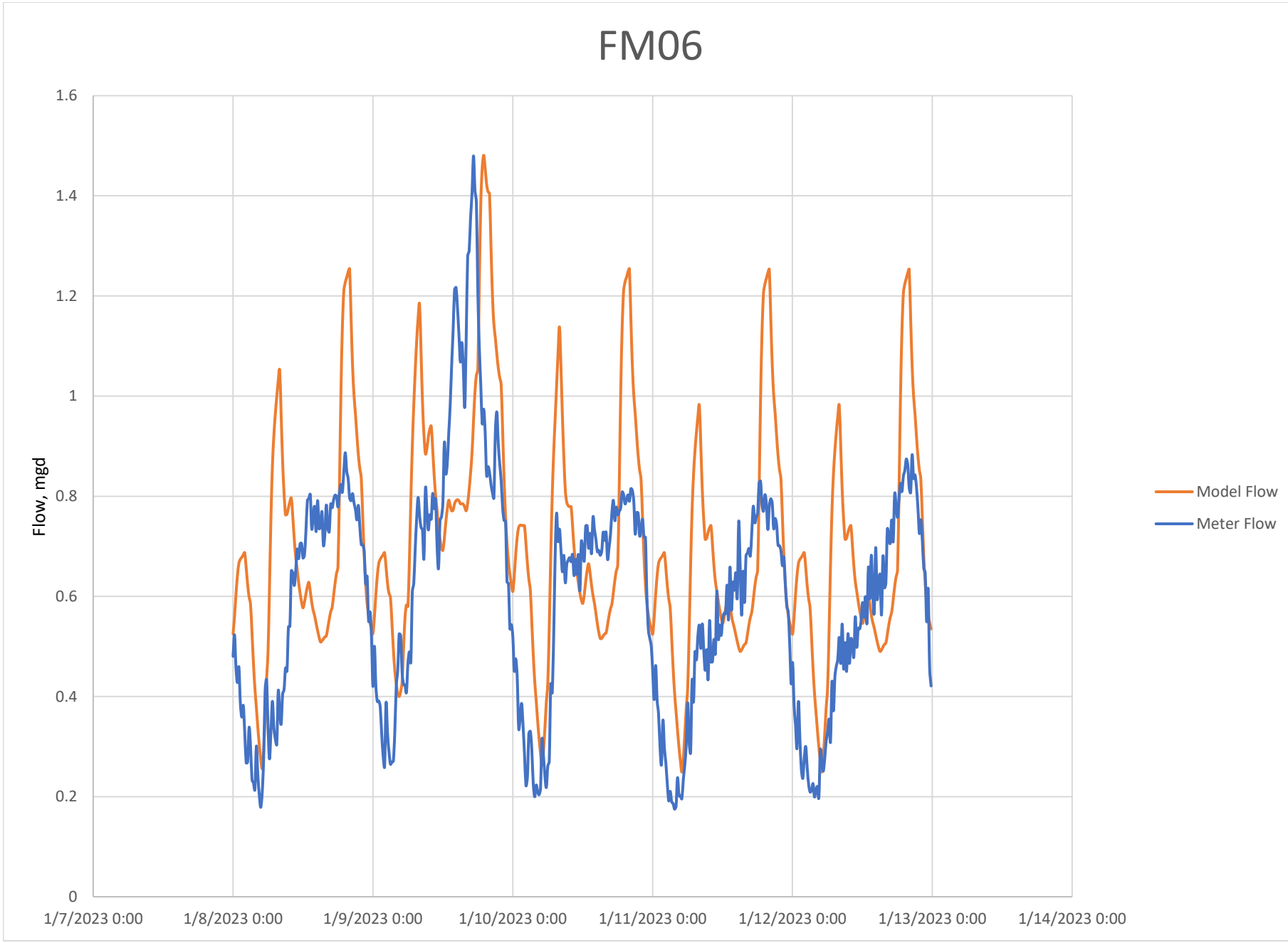

FM01B
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
Flow, mgd
1/7/2023 0:00
1/8/2023 0:00
1/9/2023 0:00
1/10/2023 0:00
1/11/2023 0:00
1/12/2023 0:00
1/13/2023 0:00
1/14/2023 0:00
Model Flow
Meter Flow

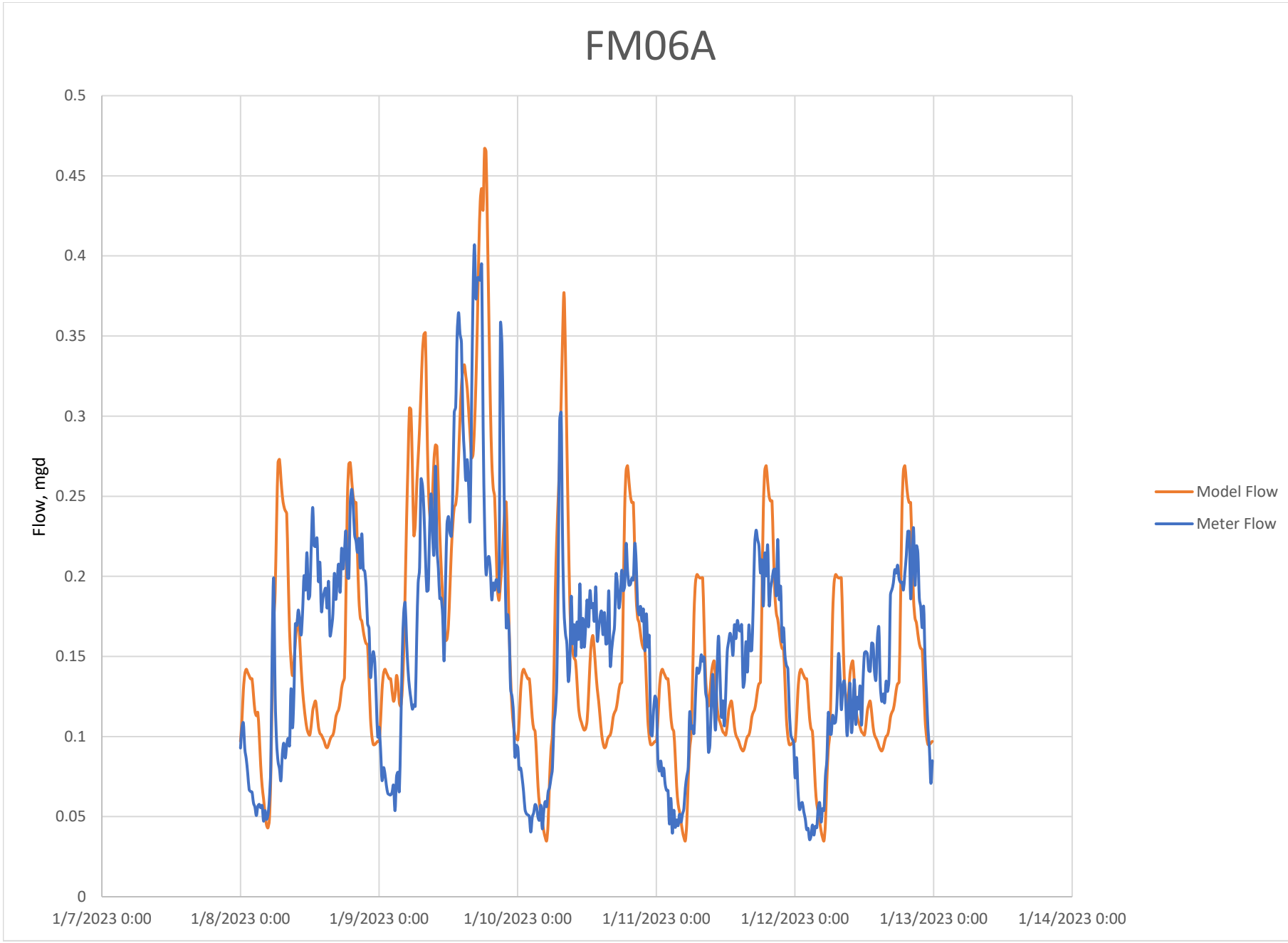

FM01C
0.250
0.200
0.150
0.100
0.050
0.000
Flow, mgd
1/7/2023 0:00
1/8/2023 0:00
1/9/2023 0:00
1/10/2023 0:00
1/11/2023 0:00
1/12/2023 0:00
1/13/2023 0:00
1/14/2023 0:00
Meter Flow
Model Flow

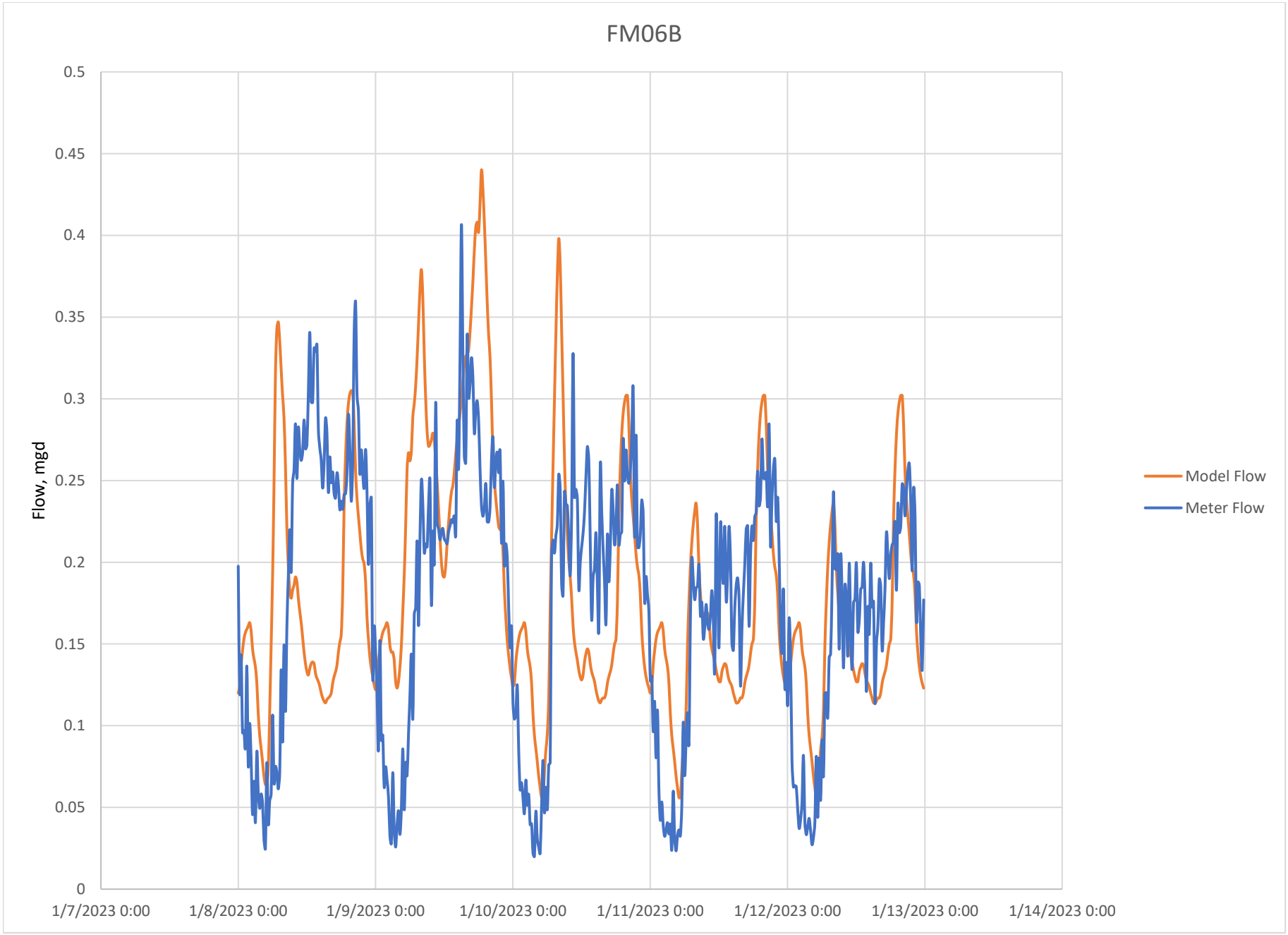

FM02
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
Flow, mgd
1/7/2023 0:00
1/8/2023 0:00
1/9/2023 0:00
1/10/2023 0:00
1/11/2023 0:00
1/12/2023 0:00
1/13/2023 0:00
1/14/2023 0:00
Meter Flow
Model Flow

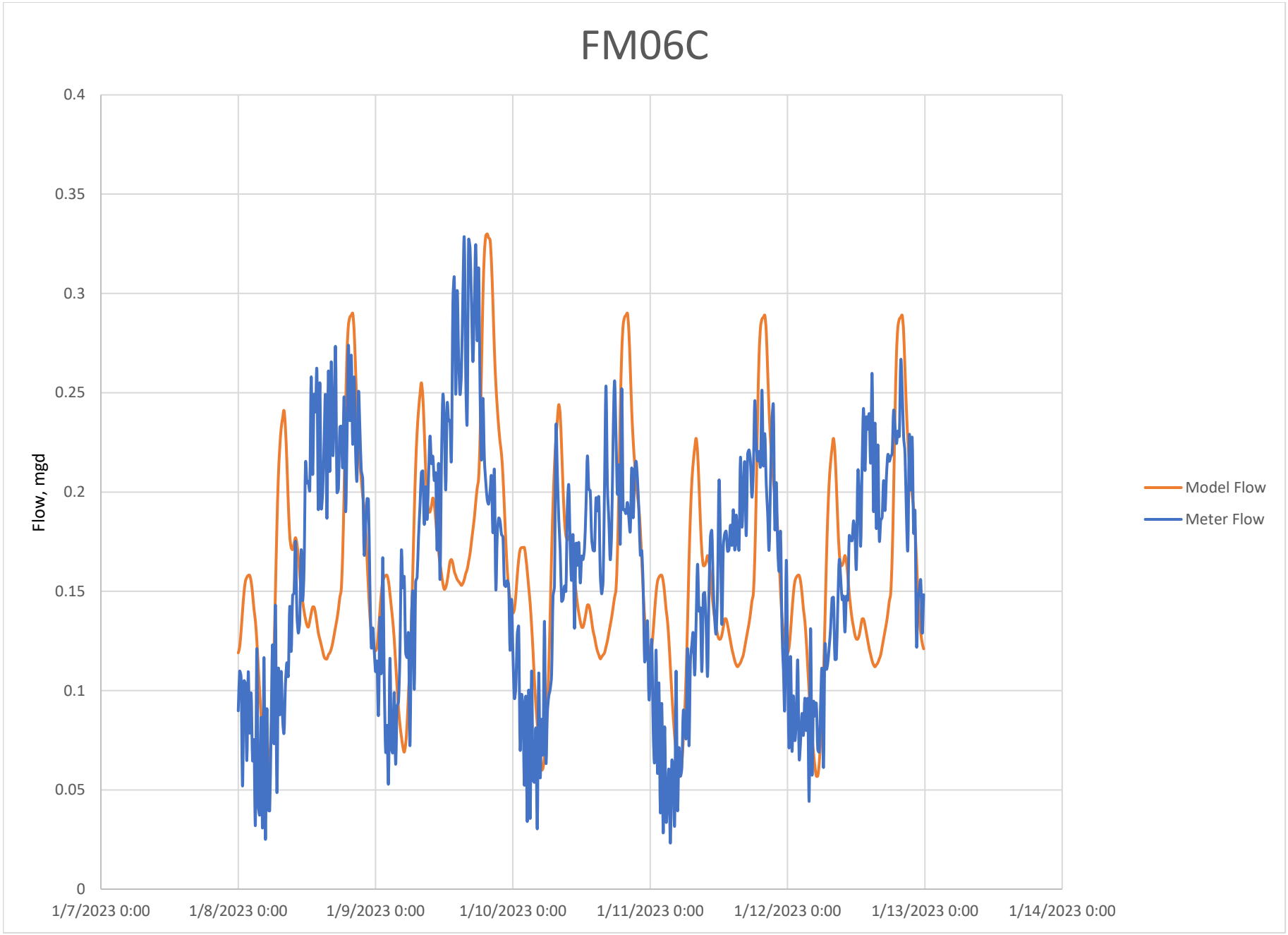

FM03
0.500
0.450
0.400
0.350
0.300
0.250
0.200
0.150
0.100
0.050
0.000
Flow, mgd
1/7/2023 0:00
1/8/2023 0:00
1/9/2023 0:00
1/10/2023 0:00
1/11/2023 0:00
1/12/2023 0:00
1/13/2023 0:00
1/14/2023 0:00
Meter Flow
Model Flow

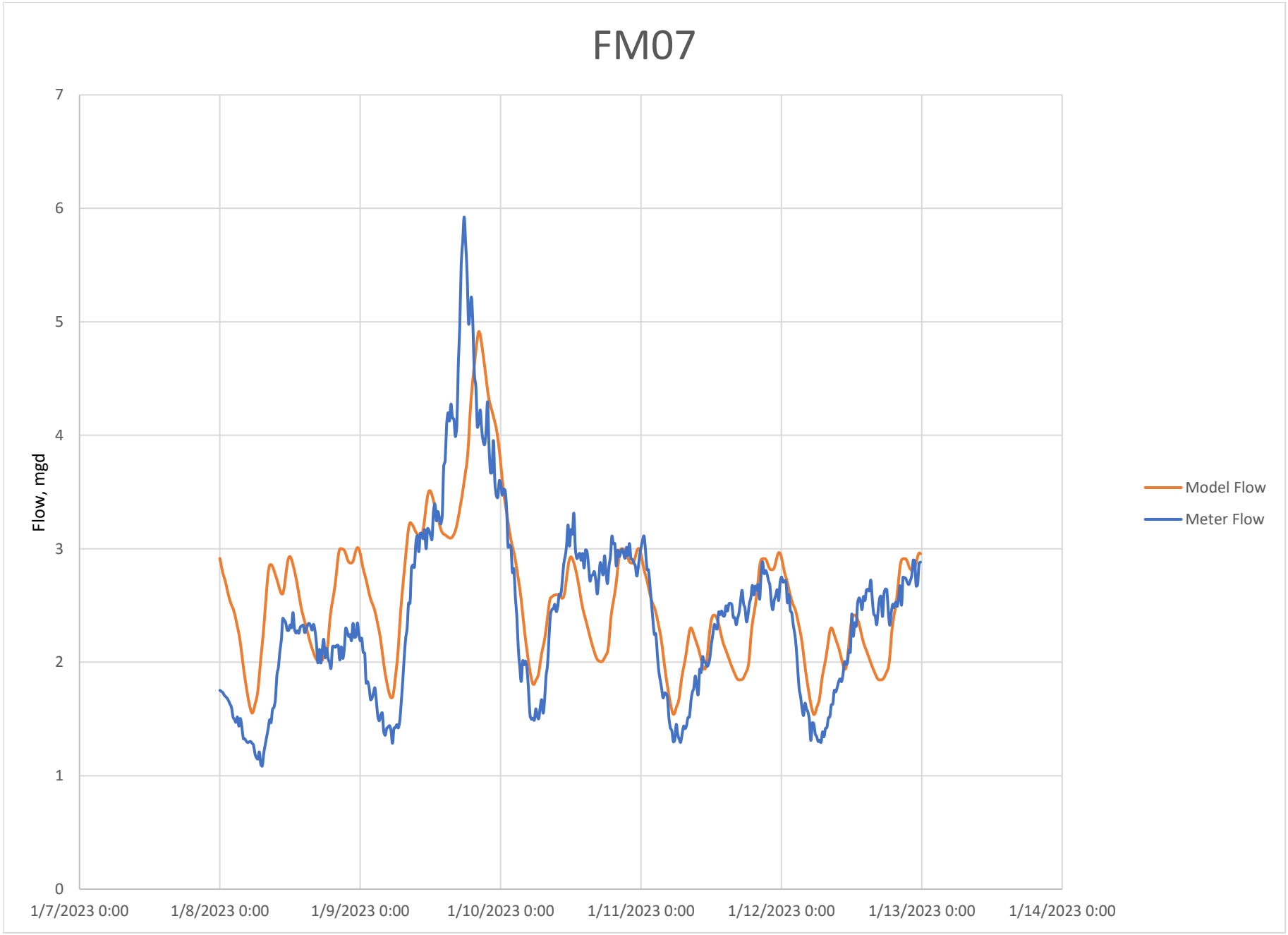

FM04
Flow, mgd
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
1/7/2023 0:00
1/8/2023 0:00
1/9/2023 0:00
1/10/2023 0:00
1/11/2023 0:00
1/12/2023 0:00
1/13/2023 0:00
1/14/2023 0:00
Series1
Series2

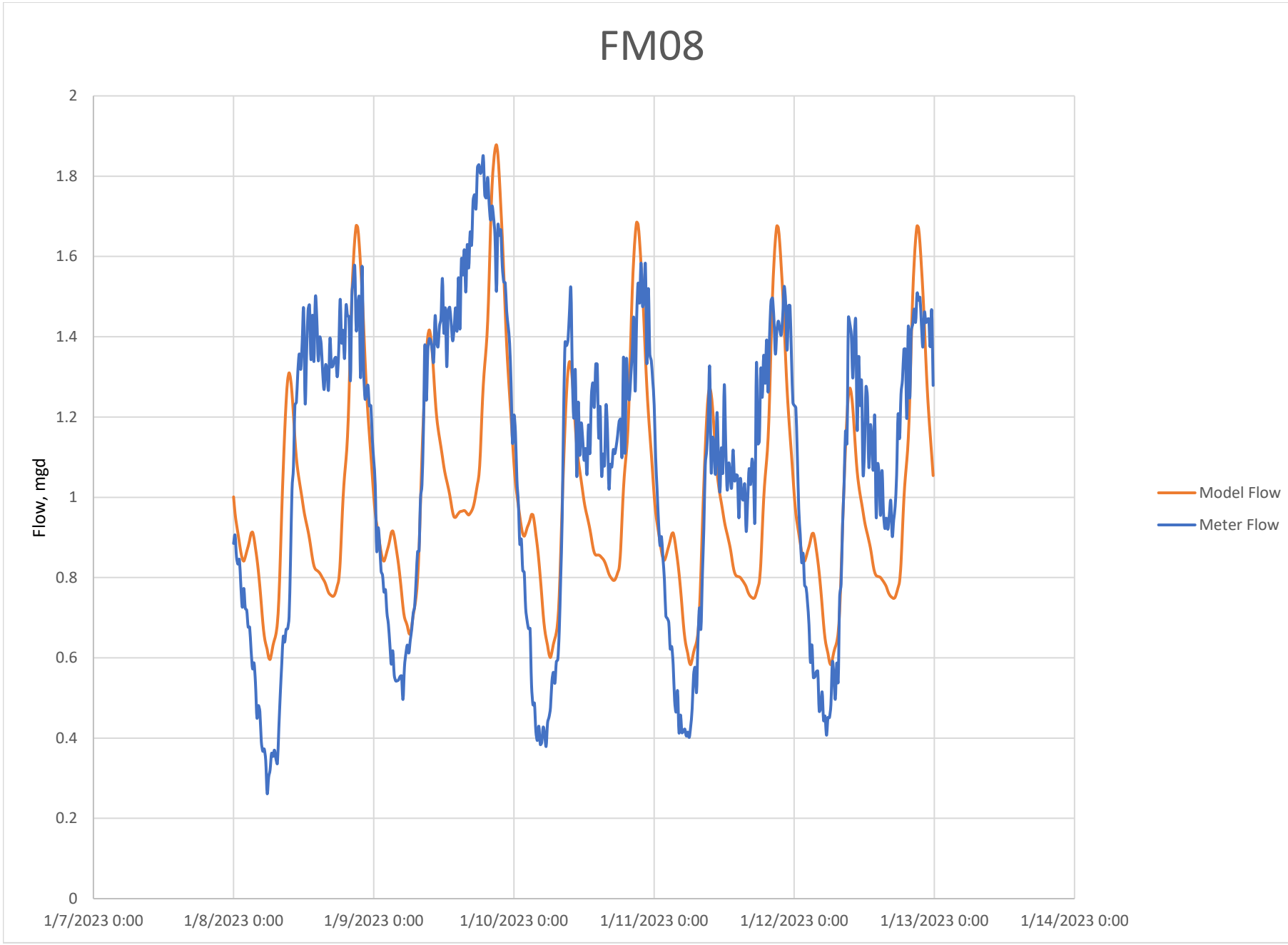

FM06
Flow, mgd
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
1/7/2023 0:00
1/8/2023 0:00
1/9/2023 0:00
1/10/2023 0:00
1/11/2023 0:00
1/12/2023 0:00
1/13/2023 0:00
1/14/2023 0:00
Model Flow
Meter Flow

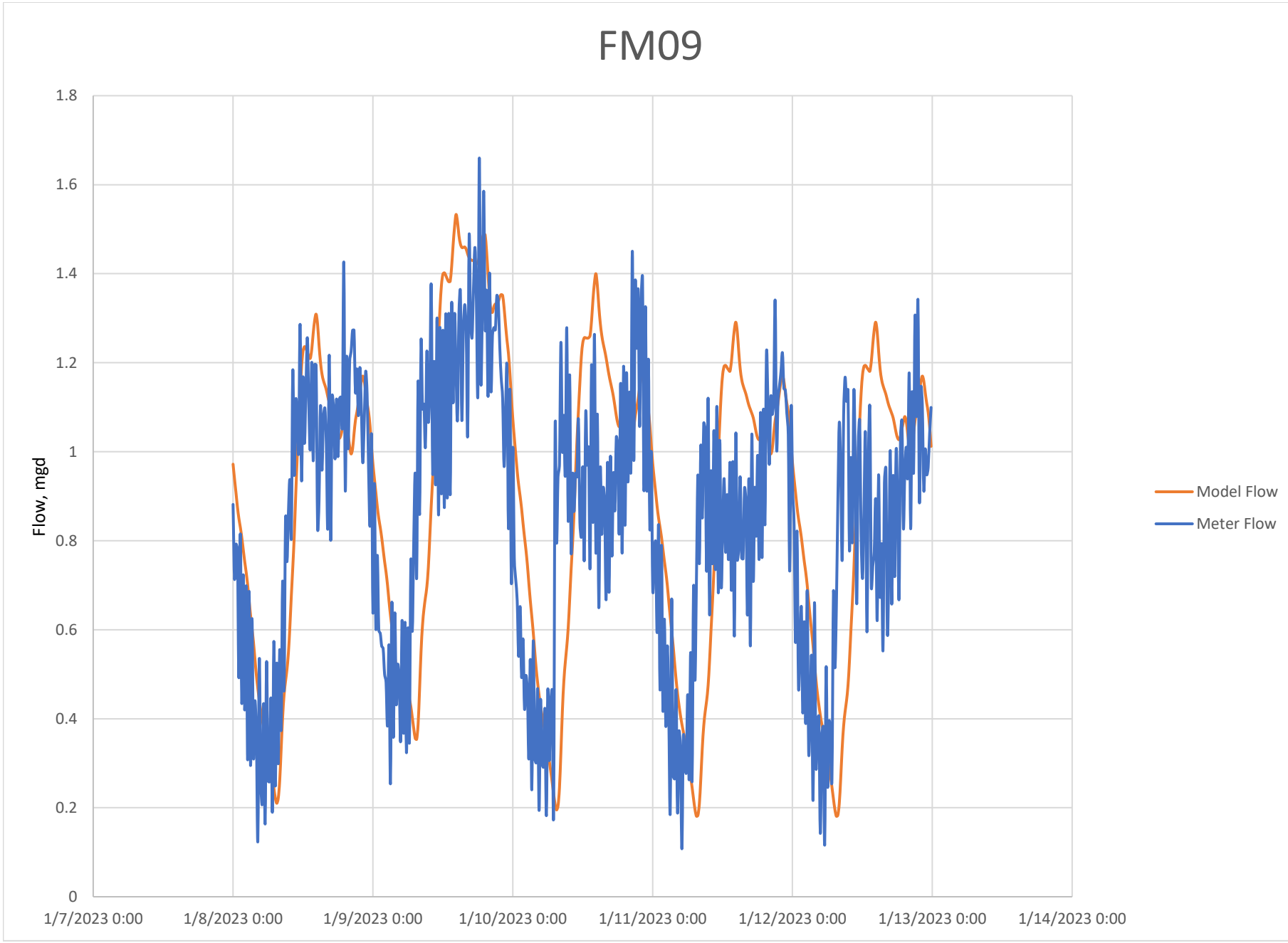

FM06A
Flow, mgd
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
1/7/2023 0:00
1/8/2023 0:00
1/9/2023 0:00
1/10/2023 0:00
1/11/2023 0:00
1/12/2023 0:00
1/13/2023 0:00
1/14/2023 0:00
Model Flow
Meter Flow

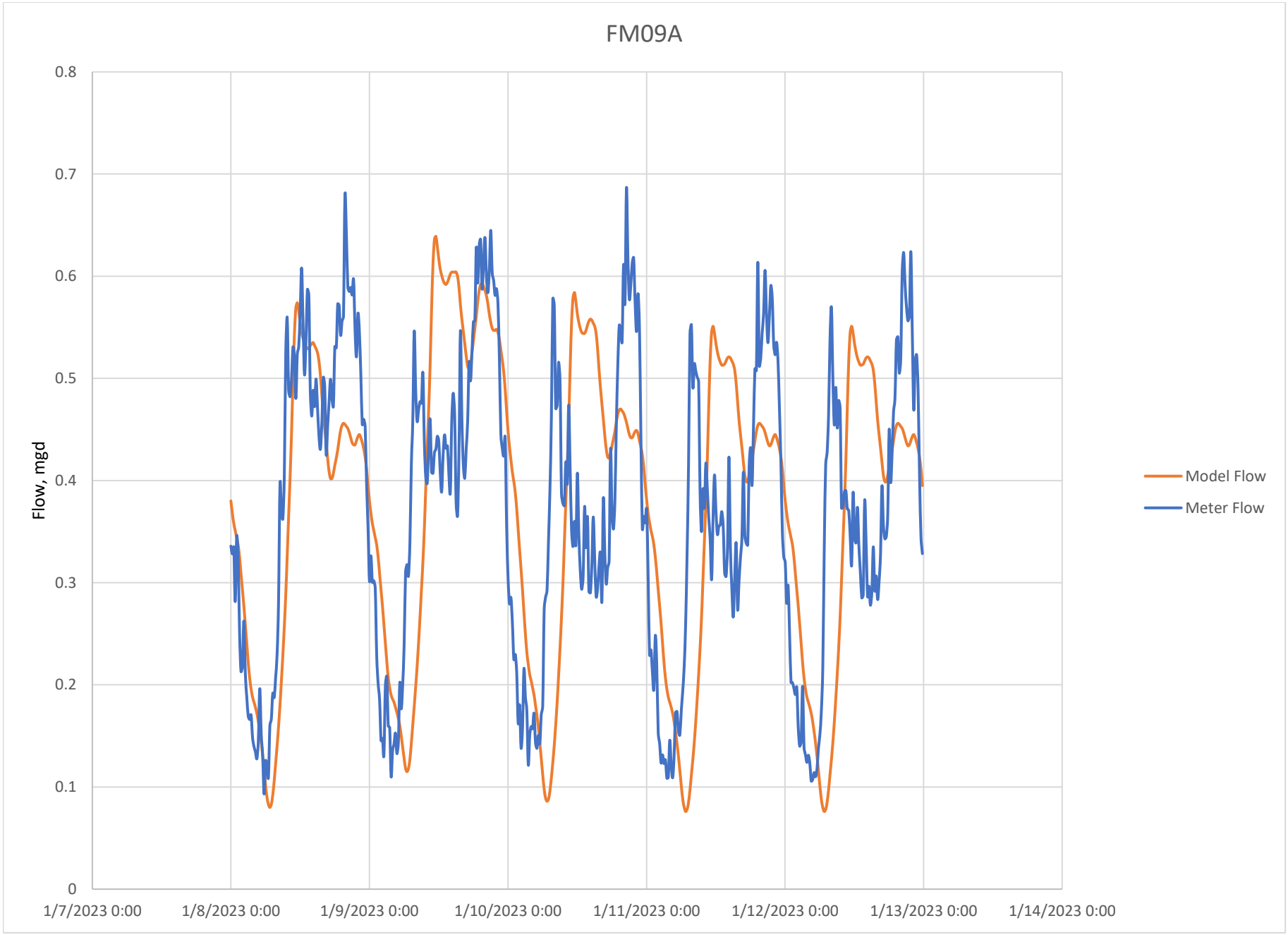

FM06B
Flow, mgd
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
1/7/2023 0:00
1/8/2023 0:00
1/9/2023 0:00
1/10/2023 0:00
1/11/2023 0:00
1/12/2023 0:00
1/13/2023 0:00
1/14/2023 0:00
Model Flow
Meter Flow


FM06C
Flow, mgd
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
1/7/2023 0:00
1/8/2023 0:00
1/9/2023 0:00
1/10/2023 0:00
1/11/2023 0:00
1/12/2023 0:00
1/13/2023 0:00
1/14/2023 0:00
Model Flow
Meter Flow


FM07
Flow, mgd
0
1
2
3
4
5
6
7
1/7/2023 0:00
1/8/2023 0:00
1/9/2023 0:00
1/10/2023 0:00
1/11/2023 0:00
1/12/2023 0:00
1/13/2023 0:00
1/14/2023 0:00
Model Flow
Meter Flow


FM08
Flow, mgd
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
1/7/2023 0:00
1/8/2023 0:00
1/9/2023 0:00
1/10/2023 0:00
1/11/2023 0:00
1/12/2023 0:00
1/13/2023 0:00
1/14/2023 0:00
Model Flow
Meter Flow


FM09
Flow, mgd
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
1/7/2023 0:00
1/8/2023 0:00
1/9/2023 0:00
1/10/2023 0:00
1/11/2023 0:00
1/12/2023 0:00
1/13/2023 0:00
1/14/2023 0:00
Model Flow
Meter Flow

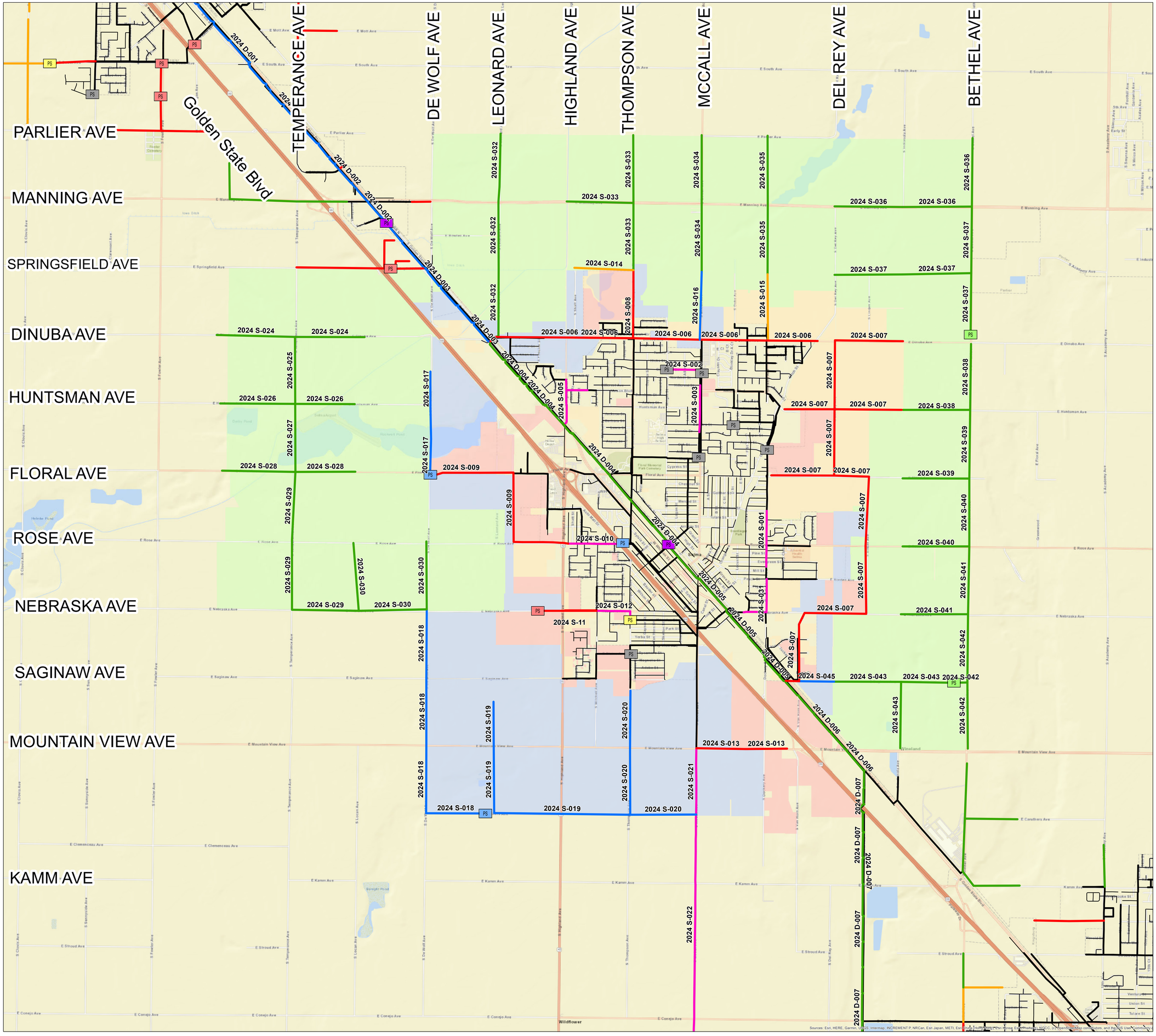

FM09A
Flow, mgd
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
1/7/2023 0:00
1/8/2023 0:00
1/9/2023 0:00
1/10/2023 0:00
1/11/2023 0:00
1/12/2023 0:00
1/13/2023 0:00
1/14/2023 0:00
Model Flow
Meter Flow

Appendix D – Condition Score Matrix

Condition Grade	Useful Life Consumed	Level of Maintenance Currently Required	Improvements Implementation Timeframe	Structural / Architectural		Mechanical System		Electrical and Power		Instrumentation / Control		Site / Civil	
				Concrete, Steel, Masonry		Piping, Valves, Pumps		VFDs, Motors, Switchgear, MCCs, Transformers, Generators, Transfer Switches		Indicators, Transmitters, Control Panels, Valve Controls		Asphalt and Concrete Surfaces, Fencing, Gates	
				Physical	Performance	Physical	Performance	Physical	Performance	Physical	Performance	Physical	Performance
1 – Like New Condition	<5%	Normal Preventative / Predictive Maintenance	20-30 years	New condition, minimal signs of wear.	Adequate design to support current and future loads, ability to address seismic loads. Meets strength and service load design, Up to code. No Leaks or Coating Issues	New condition, minimal signs of wear.	Adequate capacity for average and peak demand conditions, margin for increased capacity. Normal operator involvement during average and peak demand conditions. Very reliable. No reported failures. Equipment is generally available >99% of the time. Parts are quickly and readily available; parts typically in stock.	New condition, minimal signs of wear.	Runs perfectly as new. Adequate capacity for average and peak demand conditions, margin for increased capacity. Normal operator involvement during average and peak demand conditions. Very reliable. No reported failures. Equipment is generally available >99% of the time. Parts are quickly and readily available; parts typically in stock.	New condition.	Adequate performance for normal conditions, ability to update for future conditions. Normal operator involvement to maintain and calibrate systems. Very reliable. No reported failures. Equipment is generally available >99% of the time. Parts are quickly and readily available; parts typically in stock.	New condition, minimal signs of wear.	Adequate performance to support vehicle and pedestrian traffic and maintain site security. Gates opening and closing as intended.
2 – Minor Defects Only (some wear)	5% - 20%	Normal Preventative / Predictive Maintenance / Minor Corrective Maintenance	15-20 years	CONCRETE/MASONRY ASSETS: Mechanical abrasion or impact dents up to 1 in. General cracks up to 1/16 in. and hairline corrosion cracks. Occasional corrosion stains or small pop-out corrosion spalls. Minor Cosmetic Surface Erosion; No Rebar Exposure STEEL/METALS ASSETS: Few visible defects. Localized surface erosion with slight loss of thickness. No physical deformation	Adequate design to support loads, ability to address seismic loads. Meets strength and service load design.	Some wear or surface corrosion, or not designed to current standards. Minor oil or gland leakage evident. Piping: Minor surface corrosion (loss of wall thickness <25%)	Adequate capacity for average and peak demand conditions. No margin for increased capacity for peak demand conditions. Normal operator involvement during average demand conditions. Greater than normal operator involvement during peak demand conditions. Good reliability. Infrequent breakdown. Equipment generally available 95%- 99% of the time. Parts are generally available with short lead time; parts typically in stock.	Superficial surface wear, no interior corrosion. Major components with >10 years of remaining service. Minor components with >3 years of service.	Adequate capacity for average and peak demand conditions. No margin for increased capacity for peak demand conditions. Normal operator involvement during average demand conditions. Greater than normal operator involvement during peak demand conditions. Good reliability. Infrequent breakdown. Equipment generally available 95%- 99% of the time. Parts are generally available with short lead time; parts typically in stock.	Minimal cosmetic surface defects. Normal calibration schedule, minimal adjustment required.	Adequate performance for normal conditions. No ability to update/upgrade current equipment. Normal operator involvement to maintain and calibrate systems. Good reliability. Infrequent breakdown. Equipment generally available 95%- 99% of the time. Parts are generally available with short lead time; parts typically in stock.	ASPHALT AND CONCRETE SURFACES: Minor cracks up to up to 1/4 in. No trip hazards or potholes. FENCES/GATES: Few visible defects. Localized surface corrosion with slight loss of thickness. No physical deformation	Minor cosmetic issues but adequate performance to support vehicle and pedestrian traffic and maintain site security. Gates opening and closing as intended.

3 – Moderate Deterioration	21 - 50%	Normal Preventative / Predictive Maintenance / Major Corrective Maintenance	10-15 years	CONCRETE/MASONRY ASSETS: Structural cracks up to 1/16 in. Corrosion cracks from 1/32 in. up to 1/4 in. wide. Chemical deterioration: Random cracks up to 1/16 in.; "Soft" concrete and rounding or erosion of corners up to 3 in. deep. Some Exposed Rebar, No Structural Damage STEEL/METALS ASSETS: Moderate defects. Moderate surface erosion or corrosion. Some physical deformation or impact damage. Minor movement.	Designed to support existing loads. Meets strength design, does not meet service load design. Excessive deflection, permanent fatigue.	Functionally sound plant and components, moderate wear or surface corrosion. Moderate oil or gland leakage evident, evidence of historic leakage. Evidence of internal wear (sound, smell, temperature, etc.) Roughness when starting / stopping. Piping: Moderate corrosion (loss of wall thickness 25%-50%)	Maximum capacity for average and peak demand conditions, no margin for increase. Greater than normal operator involvement during average demand conditions. Greater than normal operator involvement during peak demand conditions. Average reliability. Occasional breakdowns. Equipment available generally available >85% of the time. Parts are generally available with a long lead time; parts not typically in stock.	Deteriorating surface wear, some interior corrosion. Major components with 5- 10 years of remaining service. Minor components with <3 years of remaining service, with intermittent failures. Low risk safety hazard.	Maximum capacity for average and peak demand conditions, no margin for increase. Greater than normal operator involvement during average and peak demand conditions. Average reliability. Occasional breakdowns. Equipment available generally available >85% of the time. Parts are generally available with a long lead time; parts not typically in stock.	Average physical wear and tear based on asset age. Normal calibration schedule, normal frequency of adjustment required.	No ability to update/upgrade current equipment. Greater than normal operator involvement to maintain and calibrate equipment. Greater than normal operator involvement during peak demand conditions. Average reliability. Occasional breakdowns. Equipment available generally available >85% of the time. Parts are generally available with a long lead time; parts not typically in stock.	ASPHALT AND CONCRETE SURFACES: Cracks up to up to 1/2 in. Minor trip hazards or potholes up to 36 in^2. FENCES/GATES: Moderate defects and surface corrosion. No physical deformation or impact damage.	Potholes and cracks are felt during vehicle and pedestrian traffic. Fence or gates may contain surface defects but are still providing security.
4 – Significant Deterioration	50% - 75%	Rehabilitate, if Possible	5-10 years	CONCRETE/MASONRY ASSETS: Structural cracks 1/4 in. to 1/2 in. or complete breakage. Loss of bearing and displacement at connections. Complete loss of concrete cover due to corrosion of reinforcing steel with over 30 percent of diameter loss for any main reinforcing bar. Exposed Rebar, Members Bent, Buckling, Leaning STEEL/METALS ASSETS: Derelict, or structural failure beyond repair. Safety hazard.	Overloaded for current loads, may impact other processes. Begun to fail.	Failing service, beyond repair. Safety hazard. Piping: Significant corrosion (loss of wall thickness 50%-75%)	Overloaded for average and peak demand conditions, may impact other processes. Excessive operator involvement during normal conditions. Excessive operator involvement during peak conditions. Very poor reliability. Continuous recurrent breakdown (weekly). Equipment out of service for more than 70% of time. Parts are generally no longer available. Technology is obsolete.	Moving parts show excess wear. Failing service, beyond repair. Evidence of arcing.	Overloaded for average and peak demand conditions, may impact other processes. Excessive operator involvement during normal conditions. Excessive operator involvement during peak conditions. Very poor reliability. Continuous recurrent breakdown (weekly). Equipment out of service for more than 70% of time. Parts are generally no longer available. Technology is obsolete.	Significant cosmetic wear or evidence of impact. Unreliable performance after maintenance or calibration.	Overloaded for current conditions, may impact other processes Excessive operator involvement to maintain operation. Highly unreliable. Continuous recurrent breakdown (weekly). Equipment out of service for more than 70% of time. Parts are generally no longer available. Technology is obsolete.	ASPHALT AND CONCRETE SURFACES: Cracks up to up to 1/2 in. 1in. Multiple trip hazards or potholes above to 36 in^2. Safety or driving hazard. FENCES/GATES: Significant defects and surface corrosion. Fence or gate components found bent, buckling, or leaning. Derelict, or structural failure beyond repair. Safety hazard.	Potholes and cracks make vehicle and pedestrian traffic difficult. Fence or gates are physically deformed and site security is compromised.
5 – Virtually Unserviceable / Failure Concern	>75%	Consider Replacement	0-2 Years	Failed. Safety risk. Immediate action needed.	Unsafe operation, fails to meet code; unable to return to service after breakdown	Failed. Safety risk. Immediate action needed. Piping: Severe Corrosion; Immediate repair/replacement needed (loss of wall thickness >75%)	Dysfunctional for demand conditions and impacting other processes. Excessive operator involvement. Unable to return to service after breakdown.	Failed. Safety risk. Immediate action needed. Condition is beyond acceptable level.	Dysfunctional for demand conditions and impacting other processes. Excessive operator involvement. Unable to return to service after breakdown.	Failed. Safety risk. Immediate action needed.	Dysfunctional for demand conditions and impacting other processes. Highly unreliable. Excessive operator involvement. Unable to return to service after breakdown.	Failed. Safety or security risk. Immediate action needed.	Unsafe to use, fails to meet code; unable to secure site.

Appendix E – CIP Project Details



DRAFT Figure E-1
Gravity Main CIP Projects
City ofSelma
11/19/2024

Table E-1. Selma CIP Details

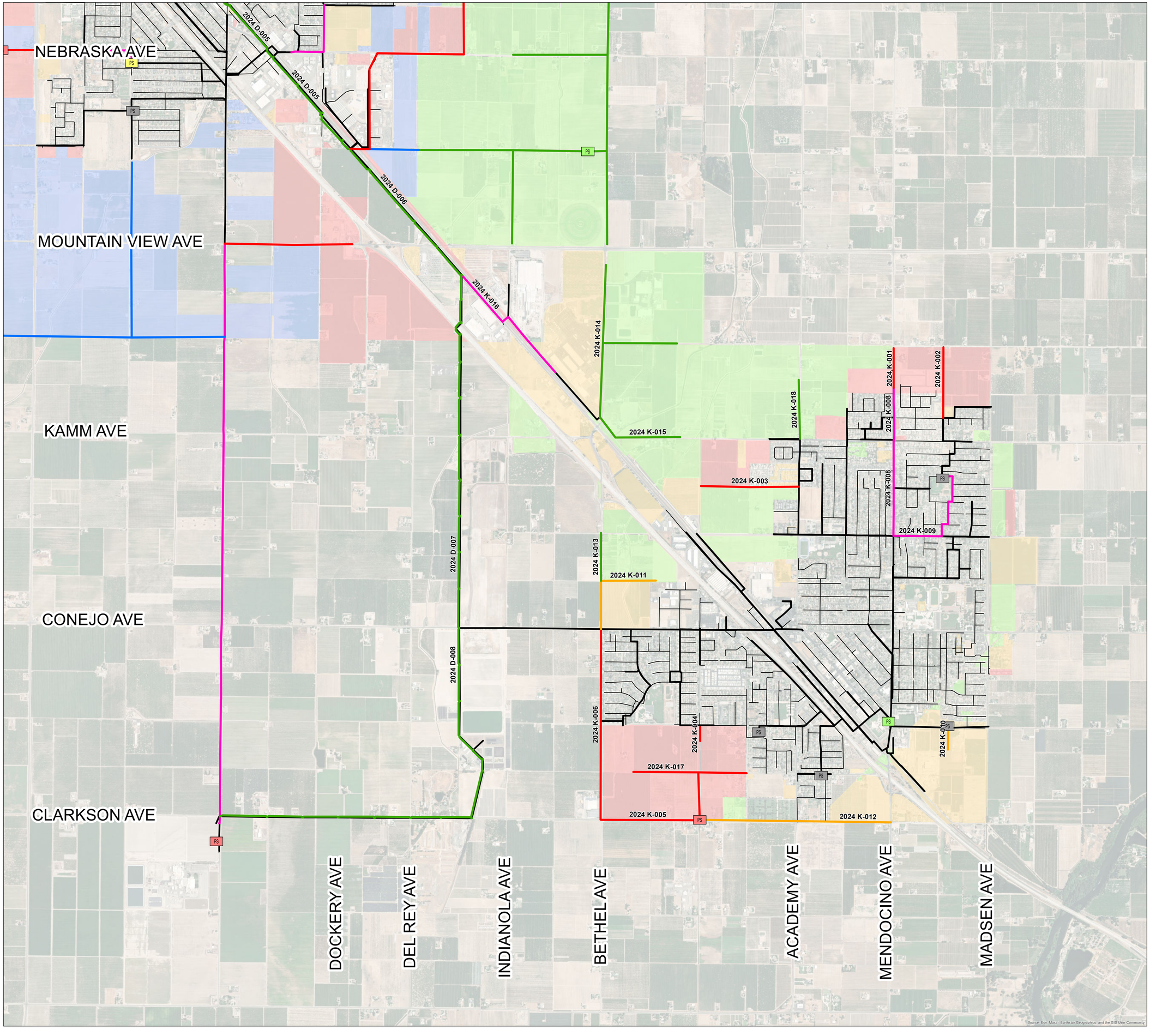
Project ID	Model Pipeline ID	Upstream Manhole	Downstream Manhole	Length, feet	CIP Type	Existing Dia., inch	Proposed Dia., inch	Remaining ESFR	Pipeline Capital Cost, $	Pipeline Total Cost, $	*Total Project Cost, $*
2024 S-001	S-793	2RO0-2000	2RO0-1900	354	Improve Existing Gravity Main	12	15	226	$ 164,500	$ 278,000	***$ 1,709,400***
2024 S-001	S-792	2RO0-1900	2RO0-1800	643	Improve Existing Gravity Main	12	15	0	$ 299,000	$ 505,300	
2024 S-001	S-791	2RO0-1800	2RO0-1700	159	Improve Existing Gravity Main	12	15	795	$ 74,000	$ 125,100	
2024 S-001	S-786	2RO0-1700	2RO0-1600	195	Improve Existing Gravity Main	12	15	513	$ 90,400	$ 152,800	
2024 S-001	S-784	2RO0-1600	2RO0-1500	199	Improve Existing Gravity Main	12	15	0	$ 92,700	$ 156,700	
2024 S-001	S-782	2RO0-1500	2RO0-1400	282	Improve Existing Gravity Main	12	15	133	$ 131,100	$ 221,600	
2024 S-001	S-783	2RO0-1400	2RO0-1300	344	Improve Existing Gravity Main	12	15	35	$ 159,700	$ 269,900	
2024 S-002	S-985	S04	2N01-0200	77	Improve Existing Gravity Main	6	8	164	$ 14,300	$ 24,200	***$ 539,600***
2024 S-002	S-986	2N01-0200	2N01-0100	609	Improve Existing Gravity Main	6	8	24	$ 150,900	$ 255,000	
2024 S-002	S-987	2N01-0100	2NO0-2400	621	Improve Existing Gravity Main	6	8	0	$ 154,100	$ 260,400	
2024 S-003	S-988	2NO0-2200	2NO0-2101	436	Improve Existing Gravity Main	8	12	13	$ 162,200	$ 274,100	***$ 1,060,000***
2024 S-003	S-989	2NO0-2150	2NO0-2000	463	Improve Existing Gravity Main	8	12	0	$ 172,300	$ 291,200	
2024 S-003	S-991	2NO0-2101	2NO0-2100	440	Improve Existing Gravity Main	8	8	10	$ 109,200	$ 184,500	
2024 S-003	S-990	2NO0-2100	2NO0-2150	206	Improve Existing Gravity Main	8	12	4	$ 76,600	$ 129,500	
2024 S-003	55	2NO0-2000	2NO0-1900	287	Improve Existing Gravity Main	8	12	0	$ 106,900	$ 180,700	
2024 S-004	S-766	2IO0-0740	2IO0-0730	213	Improve Existing Gravity Main	10	12	339	$ 79,300	$ 134,000	***$ 518,300***
2024 S-004	S-765	2IO0-0730	2IO0-0720	261	Improve Existing Gravity Main	10	12	0	$ 97,100	$ 164,100	
2024 S-004	S-770	2IO0-0720	2IO0-0710	171	Improve Existing Gravity Main	10	12	0	$ 63,500	$ 107,300	
2024 S-004	S-769	2IO0-0710	2IO0-0700	180	Improve Existing Gravity Main	10	12	0	$ 66,800	$ 112,900	
2024 S-005	S-838	2IO0-0900	2IO0-0800	199	Improve Existing Gravity Main	12	15	450	$ 92,800	$ 156,800	***$ 1,397,600***
2024 S-005	S-837	2IO0-0800	2IO0-0700	203	Improve Existing Gravity Main	12	15	319	$ 94,600	$ 159,900	
2024 S-005	S-827	2IO0-0700	2IO0-0600	246	Improve Existing Gravity Main	12	15	0	$ 114,600	$ 193,700	
2024 S-005	S-828	2IO0-0600	2IO0-0500	230	Improve Existing Gravity Main	12	15	289	$ 107,000	$ 180,800	
2024 S-005	S-826	2IO0-0500	2IO0-0400	150	Improve Existing Gravity Main	12	15	0	$ 69,800	$ 118,000	
2024 S-005	S-825	2IO0-0400	2IO0-0300	298	Improve Existing Gravity Main	12	15	0	$ 138,600	$ 234,200	
2024 S-005	S-824	2IO0-0300	2IO0-0200	204	Improve Existing Gravity Main	12	15	0	$ 94,900	$ 160,400	
2024 S-005	I-823	2IO0-0200	2IO0-0100	96	Improve Existing Gravity Main	12	15	147	$ 44,500	$ 75,200	
2024 S-005	I-644	2IO0-0100	2OO0-4500	151	Improve Existing Gravity Main	12	15	899	$ 70,200	$ 118,600	
2024 S-006	2945	1844	1840	1,317	New Gravity Main	-	24	-	$ 695,500	$ 1,175,400	***$ 9,718,100***
2024 S-006	2943	1842	2OO0-5200	270	New Gravity Main	-	27	-	$ 160,200	$ 270,700	
2024 S-006	2941	1840	1842	573	New Gravity Main	-	24	-	$ 302,500	$ 511,200	
2024 S-006	2939	1838	1844	1,203	New Gravity Main	-	24	-	$ 635,100	$ 1,073,300	
2024 S-006	2785	1758	1530	1,934	New Gravity Main	-	12	-	$ 510,600	$ 862,900	
2024 S-006	2707	1682	1680	2,597	New Gravity Main	-	21	-	$ 1,200,000	$ 2,028,000	
2024 S-006	2709	1680	1838	2,262	New Gravity Main	-	24	-	$ 1,194,100	$ 2,018,000	
2024 S-006	2787	1530	1682	2,657	New Gravity Main	-	18	-	$ 1,052,400	$ 1,778,600	
2024 S-007	3035	1898	2000-2150	226	New Gravity Main	-	36	-	$ 178,900	$ 302,300	***$ 19,472,800***
2024 S-007	3033	1896	1898	298	New Gravity Main	-	36	-	$ 235,900	$ 398,700	
2024 S-007	2537	1894	1896	2,704	New Gravity Main	-	24	-	$ 1,427,900	$ 2,413,200	
2024 S-007	2533	1878	1536	2,709	New Gravity Main	-	24	-	$ 1,430,200	$ 2,417,000	
2024 S-007	2517	1586	1534	2,455	New Gravity Main	-	18	-	$ 972,400	$ 1,643,400	
2024 S-007	2511	1584	1532	1,953	New Gravity Main	-	10	-	$ 429,700	$ 726,200	
2024 S-007	2515	1582	1532	2,617	New Gravity Main	-	12	-	$ 690,900	$ 1,167,600	
2024 S-007	3031	1538	1894	2,400	New Gravity Main	-	24	-	$ 1,267,000	$ 2,141,200	
2024 S-007	2535	1536	1538	2,640	New Gravity Main	-	24	-	$ 1,393,800	$ 2,355,500	
2024 S-007	3009	1534	1878	1,355	New Gravity Main	-	24	-	$ 715,500	$ 1,209,200	
2024 S-007	2531	1532	1534	2,587	New Gravity Main	-	21	-	$ 1,195,000	$ 2,019,600	
2024 S-007	2509	1528	1532	2,680	New Gravity Main	-	15	-	$ 884,300	$ 1,494,500	
2024 S-007	2505	1526	1528	2,654	New Gravity Main	-	12	-	$ 700,800	$ 1,184,400	
2024 S-008	3007	1800	1506	875	New Gravity Main	-	21	-	$ 404,100	$ 682,900	***$ 2,071,100***
2024 S-008	2483	1506	1680	1,778	New Gravity Main	-	21	-	$ 821,400	$ 1,388,200	
2024 S-009	2781	1752	1478	1,310	New Gravity Main	-	18	-	$ 518,600	$ 876,400	***$ 5,623,100***
2024 S-009	2589	1480	1752	1,455	New Gravity Main	-	18	-	$ 576,100	$ 973,600	
2024 S-009	2591	1478	1314	2,701	New Gravity Main	-	21	-	$ 1,247,900	$ 2,109,000	
2024 S-009	2059	1314	980	350	New Gravity Main	-	21	-	$ 161,500	$ 272,900	
2024 S-009	1485	980	978	374	New Gravity Main	-	21	-	$ 172,600	$ 291,700	
2024 S-009	1483	978	976	426	New Gravity Main	-	21	-	$ 196,600	$ 332,300	
2024 S-009	1481	976	974	407	New Gravity Main	-	21	-	$ 188,200	$ 318,100	
2024 S-009	1479	974	972	414	New Gravity Main	-	21	-	$ 191,100	$ 323,000	
2024 S-009	1477	972	6WB0-0800	161	New Gravity Main	-	21	-	$ 74,600	$ 126,100	
2024 S-010	S-722	6WB0-0800	6WB0-0700	325	Improve Existing Gravity Main	15	21	395	$ 211,600	$ 357,600	***$ 2,303,100***
2024 S-010	S-874	6WB0-0700	6WB0-0675	30	Improve Existing Gravity Main	15	21	2649	$ 19,500	$ 33,000	
2024 S-010	S-873	6WB0-0675	6WB0-0650	161	Improve Existing Gravity Main	15	21	711	$ 104,900	$ 177,300	
2024 S-010	S-762	6WB0-0650	6WB0-0625	121	Improve Existing Gravity Main	15	21	1130	$ 78,500	$ 132,700	
2024 S-010	S-763	6WB0-0625	6WB0-0600	21	Improve Existing Gravity Main	15	21	2269	$ 13,400	$ 22,600	
2024 S-010	S-761	6WB0-0600	6WB0-0550	101	Improve Existing Gravity Main	15	21	536	$ 66,000	$ 111,500	
2024 S-010	S-760	6WB0-0550	6WB0-0500	389	Improve Existing Gravity Main	15	21	614	$ 253,400	$ 428,200	
2024 S-010	S-721	6WB0-0500	6WB0-0401	308	Improve Existing Gravity Main	15	21	379	$ 200,600	$ 339,000	
2024 S-010	S-720	6WB0-0401	6WB0-0400	343	Improve Existing Gravity Main	15	21	0	$ 223,200	$ 377,200	

Table E-1. Selma CIP Details

Project ID	Model Pipeline ID	Upstream Manhole	Downstream Manhole	Length, feet	CIP Type	Existing Dia., inch	Proposed Dia., inch	Remaining ESFR	Pipeline Capital Cost, $	Pipeline Total Cost, $	*Total Project Cost, $*
2024 S-010	S-695	6WB0-0400	6WB0-0300	295	Improve Existing Gravity Main	15	21	69	$ 191,700	$ 324,000	
2024 S-011	2969	1854	1464	1,500	New Gravity Main	-	12	-	$ 396,000	$ 669,200	***$ 1,256,000***
2024 S-011	2603	1464	6UCB-0600	1,315	New Gravity Main	-	12	-	$ 347,200	$ 586,800	
2024 S-012	S-682	6UCB-0550	6UCB-0500	241	Improve Existing Gravity Main	12	15	0	$ 111,900	$ 189,100	***$ 1,220,800***
2024 S-012	S-683	6UCB-0500	6UCB-0400	254	Improve Existing Gravity Main	12	10	111	$ 78,800	$ 133,200	
2024 S-012	S-684	6UCB-0400	6UCB-0300	398	Improve Existing Gravity Main	12	15	0	$ 185,000	$ 312,700	
2024 S-012	S-685	6UCB-0300	6UCB-0200	400	Improve Existing Gravity Main	12	15	0	$ 185,800	$ 314,000	
2024 S-012	S-664	6UCB-0200	6UCB-0100	346	Improve Existing Gravity Main	12	15	0	$ 160,800	$ 271,800	
2024 S-013	2995	1788	6OO0-2100	1,924	New Gravity Main	-	15	-	$ 634,900	$ 1,073,000	***$ 1,790,200***
2024 S-013	2651	1652	1788	1,607	New Gravity Main	-	12	-	$ 424,400	$ 717,200	
2024 S-014	2871	JCT_42	1800	2,303	New Gravity Main	-	15	-	$ 759,900	$ 1,284,200	***$ 1,284,200***
2024 S-015	2503	1514	1530	2,586	New Gravity Main	-	15	-	$ 853,400	$ 1,442,200	***$ 1,442,200***
2024 S-016	2973	1856	1682	2,640	New Gravity Main	-	15	-	$ 871,300	$ 1,472,500	***$ 1,472,500***
2024 S-017	2657	1658	1790	1,264	New Gravity Main	-	15	-	$ 417,300	$ 705,200	***$ 2,023,400***
2024 S-017	2583	1474	1472	1,314	New Gravity Main	-	12	-	$ 347,000	$ 586,400	
2024 S-017	2585	1472	1658	1,312	New Gravity Main	-	15	-	$ 433,000	$ 731,800	
2024 S-018	2595	1458	1452	2,650	New Gravity Main	-	30	-	$ 1,749,300	$ 2,956,300	***$ 11,437,800***
2024 S-018	2998A	1456	JCT_56	2,313	New Gravity Main	-	30	-	$ 1,526,600	$ 2,580,000	
2024 S-018	2599	1454	1456	2,628	New Gravity Main	-	30	-	$ 1,734,600	$ 2,931,500	
2024 S-018	2597	1452	1454	2,663	New Gravity Main	-	30	-	$ 1,757,400	$ 2,970,000	
2024 S-019	2998	STOR_14	1462	5,301	New Gravity Main	-	36	-	$ 4,198,400	$ 7,095,300	***$ 9,804,700***
2024 S-019	2994	JCT_58	STOR_14	2,617	New Gravity Main	-	18	-	$ 1,036,300	$ 1,751,300	
2024 S-019	2996	JCT_54	JCT_58	1,718	New Gravity Main	-	15	-	$ 566,900	$ 958,100	
2024 S-020	3003	1876	1656	2,345	New Gravity Main	-	15	-	$ 773,800	$ 1,307,700	***$ 6,141,800***
2024 S-020	3001	1656	1462	2,496	New Gravity Main	-	15	-	$ 823,600	$ 1,391,900	
2024 S-020	2999	1462	6OO0-1800	2,572	New Gravity Main	-	36	-	$ 2,036,800	$ 3,442,200	
2024 S-021	703	6OO0-2900	6OO0-2800	650	Improve Existing Gravity Main	21	24	3167	$ 483,600	$ 817,300	***$ 3,349,500***
2024 S-021	I-976	6OO0-2800	6OO0-2700	650	Improve Existing Gravity Main	21	24	3545	$ 483,600	$ 817,300	
2024 S-021	701	6OO0-2700	6OO0-1800	663	Improve Existing Gravity Main	21	27	2719	$ 554,900	$ 937,800	
2024 S-021	2643	6OO0-2100	6OO0-2900	618	Improve Existing Gravity Main	21	24	5279	$ 459,800	$ 777,100	
2024 S-022	699	6OO0-2400A	6OO0-2300A	650	Improve Existing Gravity Main	21	36	3172	$ 725,400	$ 1,225,900	***$ 24,703,000***
2024 S-022	697	6OO0-2300A	6OO0-2200	650	Improve Existing Gravity Main	21	36	3898	$ 725,400	$ 1,225,900	
2024 S-022	695	6OO0-2200	6OO0-1400	650	Improve Existing Gravity Main	21	36	2314	$ 725,400	$ 1,225,900	
2024 S-022	693	6OO0-2000	6OO0-1900	550	Improve Existing Gravity Main	21	36	4371	$ 613,800	$ 1,037,300	
2024 S-022	691	6OO0-1900	6OO0-1800A	550	Improve Existing Gravity Main	21	36	3140	$ 613,800	$ 1,037,300	
2024 S-022	689	6OO0-1800A	6OO0-1100	563	Improve Existing Gravity Main	21	36	2602	$ 628,300	$ 1,061,800	
2024 S-022	I-974	6OO0-1700	6OO0-2400A	648	Improve Existing Gravity Main	21	36	3555	$ 723,200	$ 1,222,200	
2024 S-022	687	6OO0-1500	6OO0-1400A	650	Improve Existing Gravity Main	21	36	2770	$ 725,400	$ 1,225,900	
2024 S-022	685	6OO0-1400A	6OO0-1300	600	Improve Existing Gravity Main	21	36	3371	$ 669,600	$ 1,131,600	
2024 S-022	I-973	6OO0-1400	6OO0-2000	600	Improve Existing Gravity Main	21	36	5452	$ 669,600	$ 1,131,600	
2024 S-022	683	6OO0-1300	6OO0-1200	571	Improve Existing Gravity Main	21	36	4267	$ 637,200	$ 1,076,900	
2024 S-022	681	6OO0-1200	6OO0-1100A	429	Improve Existing Gravity Main	21	36	1826	$ 478,800	$ 809,200	
2024 S-022	679	6OO0-1100A	6OO0-1000A	500	Improve Existing Gravity Main	21	36	3373	$ 558,000	$ 943,000	
2024 S-022	I-972	6OO0-1100	6OO0-1000	346	Improve Existing Gravity Main	21	36	3032	$ 386,100	$ 652,500	
2024 S-022	677	6OO0-1000A	6OO0-0900	600	Improve Existing Gravity Main	21	36	3764	$ 669,600	$ 1,131,600	
2024 S-022	I-971	6OO0-1000	6OO0-1500	741	Improve Existing Gravity Main	21	36	3868	$ 827,000	$ 1,397,600	
2024 S-022	I-968	6OO0-0900	6OO0-0800	600	Improve Existing Gravity Main	21	36	3374	$ 669,600	$ 1,131,600	
2024 S-022	673	6OO0-0800	6OO0-0700A	554	Improve Existing Gravity Main	21	36	4359	$ 618,300	$ 1,044,900	
2024 S-022	I-967	6OO0-0700A	6OO0-0600	446	Improve Existing Gravity Main	21	36	3116	$ 497,700	$ 841,100	
2024 S-022	671	6OO0-0600	6OO0-0500	500	Improve Existing Gravity Main	21	36	2861	$ 558,000	$ 943,000	
2024 S-022	669	6OO0-0500	6OO0-0400A	500	Improve Existing Gravity Main	21	36	2863	$ 558,000	$ 943,000	
2024 S-022	667	6OO0-0400A	6OO0-0300A	600	Improve Existing Gravity Main	21	36	4131	$ 669,600	$ 1,131,600	
2024 S-022	665	6OO0-0300A	6OO0-0200A	600	Improve Existing Gravity Main	21	36	6465	$ 669,600	$ 1,131,600	
2024 S-023	2565	1432	1434	2,716	New Gravity Main	-	18	-	$ 1,075,400	$ 1,817,400	***$ 3,929,700***
2024 S-023	2563	1430	1432	1,249	New Gravity Main	-	15	-	$ 412,200	$ 696,600	
2024 S-023	2561	1428	1430	2,538	New Gravity Main	-	15	-	$ 837,700	$ 1,415,700	
2024 S-024	2567A	JCT_72	1434	3,053	New Gravity Main	-	12	-	$ 805,900	$ 1,362,000	***$ 2,872,000***
2024 S-024	2567	1436	1434	2,708	New Gravity Main	-	15	-	$ 893,500	$ 1,510,000	
2024 S-025	2569	1434	1438	2,613	New Gravity Main	-	21	-	$ 1,207,000	$ 2,039,800	***$ 2,039,800***
2024 S-026	2569B	JCT_70	1438	2,318	New Gravity Main	-	12	-	$ 611,900	$ 1,034,100	***$ 2,341,100***
2024 S-026	2569A	JCT_68	1438	2,930	New Gravity Main	-	12	-	$ 773,400	$ 1,307,000	
2024 S-027	2571	1438	1440	2,644	New Gravity Main	-	24	-	$ 1,396,200	$ 2,359,600	***$ 2,359,600***
2024 S-028	2571B	JCT_66	1440	2,336	New Gravity Main	-	12	-	$ 616,700	$ 1,042,200	***$ 2,318,000***
2024 S-028	2571A	JCT_64	1440	2,860	New Gravity Main	-	12	-	$ 754,900	$ 1,275,800	
2024 S-029	2572	1444	JCT_60	2,598	New Gravity Main	-	30	-	$ 1,714,400	$ 2,897,300	***$ 8,293,100***
2024 S-029	2575	1442	1444	2,720	New Gravity Main	-	27	-	$ 1,615,400	$ 2,730,000	
2024 S-029	2573	1440	1442	2,656	New Gravity Main	-	27	-	$ 1,577,400	$ 2,665,800	
2024 S-030	2574	JCT_62	JCT_60	2,651	New Gravity Main	-	12	-	$ 700,000	$ 1,183,000	***$ 5,317,900***
2024 S-030	2570	JCT_60	1458	2,651	New Gravity Main	-	30	-	$ 1,749,600	$ 2,956,800	

Table E-1. Selma CIP Details

Project ID	Model Pipeline ID	Upstream Manhole	Downstream Manhole	Length, feet	CIP Type	Existing Dia., inch	Proposed Dia., inch	Remaining ESFR	Pipeline Capital Cost, $	Pipeline Total Cost, $	*Total Project Cost, $*
2024 S-030	2593	1460	1458	2,641	New Gravity Main	-	12	-	$ 697,100	$ 1,178,100	
2024 S-031	S-775	2RO0-1100	2RO0-0900	289	Improve Existing Gravity Main	15	18	0	$ 161,300	$ 272,600	***$ 1,977,400***
2024 S-031	S-774	2RO0-0900	2RO0-0800	284	Improve Existing Gravity Main	15	18	713	$ 158,300	$ 267,500	
2024 S-031	S-772	2RO0-0700	2RO0-0600	663	Improve Existing Gravity Main	15	18	427	$ 370,000	$ 625,300	
2024 S-031	S-742	2RO0-0550	2RO0-0500	374	Improve Existing Gravity Main	15	18	40	$ 208,800	$ 352,900	
2024 S-031	S-745	2RO0-0500	2RO0-0420	275	Improve Existing Gravity Main	15	18	163	$ 153,500	$ 259,400	
2024 S-031	S-746	2RO0-0420	2RO0-0410	34	Improve Existing Gravity Main	15	18	3434	$ 19,000	$ 32,100	
2024 S-031	S-747	2RO0-0410	2RO0-0400	76	Improve Existing Gravity Main	15	18	325	$ 42,500	$ 71,800	
2024 S-031	S-748	2RO0-0400	2RO0-0300	102	Improve Existing Gravity Main	15	18	905	$ 56,700	$ 95,800	
2024 S-032	2865	1646	1484	588	New Gravity Main	-	18	-	$ 232,700	$ 393,300	***$ 5,354,500***
2024 S-032	2631	1638	1646	2,068	New Gravity Main	-	18	-	$ 818,800	$ 1,383,800	
2024 S-032	2471	1486	1842	2,729	New Gravity Main	-	18	-	$ 1,080,600	$ 1,826,200	
2024 S-032	2475	1484	1486	2,617	New Gravity Main	-	18	-	$ 1,036,200	$ 1,751,200	
2024 S-033	2479A	JCT_40	1504	2,609	New Gravity Main	-	15	-	$ 861,000	$ 1,455,100	***$ 4,678,800***
2024 S-033	2873	1504	1800	2,617	New Gravity Main	-	18	-	$ 1,036,500	$ 1,751,700	
2024 S-033	2479	1502	1504	2,639	New Gravity Main	-	15	-	$ 871,000	$ 1,472,000	
2024 S-034	2971A	JCT_38	1858	2,697	New Gravity Main	-	12	-	$ 712,000	$ 1,203,300	***$ 2,961,100***
2024 S-034	2971	1858	1856	2,627	New Gravity Main	-	18	-	$ 1,040,100	$ 1,757,800	
2024 S-035	2489	1512	1514	2,696	New Gravity Main	-	24	-	$ 1,423,300	$ 2,405,400	***$ 4,508,800***
2024 S-035	2487	1510	1512	2,694	New Gravity Main	-	21	-	$ 1,244,600	$ 2,103,400	
2024 S-036	2495	JCT_50	1520	2,640	New Gravity Main	-	10	-	$ 580,900	$ 981,700	***$ 2,980,600***
2024 S-036	2789B	JCT_44	JCT_46	2,667	New Gravity Main	-	10	-	$ 586,700	$ 991,500	
2024 S-036	2495A	1520	JCT_46	2,709	New Gravity Main	-	10	-	$ 596,100	$ 1,007,400	
2024 S-037	2788	JCT_52	1524	2,656	New Gravity Main	-	10	-	$ 584,400	$ 987,600	***$ 4,930,400***
2024 S-037	CDT_23	JCT_48	STOR_12	2,389	New Gravity Main	-	18	-	$ 946,000	$ 1,598,700	
2024 S-037	2789A	JCT_46	JCT_48	2,591	New Gravity Main	-	12	-	$ 684,000	$ 1,156,000	
2024 S-037	2788A	1524	JCT_48	2,663	New Gravity Main	-	12	-	$ 703,000	$ 1,188,100	
2024 S-038	2513	1772	1580	2,614	New Gravity Main	-	12	-	$ 690,100	$ 1,166,300	***$ 3,166,600***
2024 S-038	2789	1760	1580	2,562	New Gravity Main	-	21	-	$ 1,183,600	$ 2,000,300	
2024 S-039	2837	1774	1574	2,601	New Gravity Main	-	12	-	$ 686,600	$ 1,160,400	***$ 3,253,500***
2024 S-039	2791	1580	1574	2,681	New Gravity Main	-	21	-	$ 1,238,500	$ 2,093,100	
2024 S-040	2839	1776	1570	2,600	New Gravity Main	-	12	-	$ 686,300	$ 1,159,800	***$ 3,514,500***
2024 S-040	2793	1574	1570	2,639	New Gravity Main	-	24	-	$ 1,393,300	$ 2,354,700	
2024 S-041	2841	1778	1578	2,616	New Gravity Main	-	12	-	$ 690,700	$ 1,167,300	***$ 3,523,800***
2024 S-041	2795	1570	1578	2,641	New Gravity Main	-	24	-	$ 1,394,400	$ 2,356,500	
2024 S-042	2797	1578	1544	2,660	New Gravity Main	-	24	-	$ 1,404,600	$ 2,373,800	***$ 4,005,800***
2024 S-042	2411	1564	1544	2,609	New Gravity Main	-	12	-	$ 688,900	$ 1,164,200	
2024 S-042	2843	1544	9045	524	New Gravity Main	-	24	-	$ 276,800	$ 467,800	
2024 S-043	2829	1784	1542	1,896	New Gravity Main	-	30	-	$ 1,251,200	$ 2,114,500	***$ 7,321,600***
2024 S-043	2331	1566	1542	2,580	New Gravity Main	-	24	-	$ 1,362,000	$ 2,301,800	
2024 S-043	2549	1542	1540	2,605	New Gravity Main	-	30	-	$ 1,719,100	$ 2,905,300	
2024 S-044	733	4OO0-1100	4OO0-0900	1,302	New Gravity Main	-	36	-	$ 1,031,200	$ 1,742,700	***$ 12,329,600***
2024 S-044	731	4OO0-0900	4OO0-0800	1,009	New Gravity Main	-	36	-	$ 799,500	$ 1,351,200	
2024 S-044	729	4OO0-0800	4OO0-0700	1,003	New Gravity Main	-	36	-	$ 794,500	$ 1,342,700	
2024 S-044	727	4OO0-0700	4OO0-0600	1,025	New Gravity Main	-	36	-	$ 811,400	$ 1,371,300	
2024 S-044	725	4OO0-0600	4OO0-0500	1,019	New Gravity Main	-	36	-	$ 806,900	$ 1,363,700	
2024 S-044	723	4OO0-0500	4OO0-0400	861	New Gravity Main	-	36	-	$ 682,100	$ 1,152,700	
2024 S-044	721	4OO0-0400	4OO0-0300	872	New Gravity Main	-	36	-	$ 690,600	$ 1,167,100	
2024 S-044	719	4OO0-0300	4OO0-0200	1,372	New Gravity Main	-	36	-	$ 1,086,400	$ 1,836,000	
2024 S-044	717	4OO0-0200	4OO0-0100	340	New Gravity Main	-	36	-	$ 269,500	$ 455,500	
2024 S-044	715	4OO0-0100	1OO0-0050	409	New Gravity Main	-	36	-	$ 323,500	$ 546,700	
2024 S-045	2559	1540	1896	1,361	New Gravity Main	-	30	-	$ 898,300	$ 1,518,100	***$ 1,518,100***



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Miles

Legend

Proposed/Improved LS

- PS — Proposed Primary
- PS — Proposed T1
- PS — Proposed T2
- PS — Proposed T3

Proposed Gravity Mains

- Proposed Primary
- Proposed T1
- Proposed T2
- Proposed T3
- Existing Gravity Main Requiring Improvement
- Modeled Gravity Main

Existing System

- Force
- Gravity

Development Tier

- Primary
- Tier 1
- Tier 2
- Tier 3

DRAFT Figure E-2
Gravity Main CIP Projects
City of Kingsburg
11/19/2024

Table E-2. Kingsburg CIP Details

Project ID	Model Pipeline ID	Upstream Manhole	Downstream Manhole	Length, feet	CIP Type	Existing Dia., inch	Proposed Dia., inch	Remaining ESFR	Pipeline Capital Cost, $	Pipeline Total Cost, $	*Total Project Cost, $*
2024 K-001	2661	1610	239	1,103	New Gravity Main	-	12	-	$ 291,300	$ 492,300	***$ 492,300***
2024 K-002	2415	1612	265	1,956	New Gravity Main	-	12	-	$ 516,400	$ 872,700	***$ 872,700***
2024 K-003	2985	1870	7EO0-2400	1,357	New Gravity Main	-	12	-	$ 358,100	$ 605,200	***$ 1,208,700***
2024 K-003	2983	1868	1870	1,353	New Gravity Main	-	12	-	$ 357,100	$ 603,500	
2024 K-004	2665	1622	1748	382	New Gravity Main	-	15	-	$ 125,900	$ 212,800	***$ 212,800***
2024 K-005	2668	JCT_88	1620	2,607	New Gravity Main	-	30	-	$ 1,720,600	$ 2,907,800	***$ 2,907,800***
2024 K-006	2669	1620	1618	2,593	New Gravity Main	-	18	-	$ 1,026,700	$ 1,735,100	***$ 3,525,100***
2024 K-006	2671	1618	7OO0-0300	2,675	New Gravity Main	-	18	-	$ 1,059,200	$ 1,790,000	
2024 K-008	K-32	7EH0-0800	7EH0-0700	309	Improve Existing Gravity Main	10	12	337	$ 114,900	$ 194,200	***$ 2,959,700***
2024 K-008	K-31	7EH0-0700	7EH0-0600	286	Improve Existing Gravity Main	10	12	554	$ 106,400	$ 179,800	
2024 K-008	K-377	7EH0-0400	7EH0-0300	659	Improve Existing Gravity Main	12	15	309	$ 306,400	$ 517,800	
2024 K-008	K-376	7EH0-0300	7EH0-0200	659	Improve Existing Gravity Main	12	15	258	$ 306,300	$ 517,600	
2024 K-008	K-418	7EH0-0200	7EH0-0100	661	Improve Existing Gravity Main	12	15	230	$ 307,200	$ 519,200	
2024 K-008	K-417	7EH0-0100	7EO0-1300	660	Improve Existing Gravity Main	12	15	329	$ 307,000	$ 518,800	
2024 K-008	567	239	237	416	Improve Existing Gravity Main	10	12	383	$ 154,600	$ 261,300	
2024 K-008	565	237	7EH0-0800	399	Improve Existing Gravity Main	10	12	357	$ 148,500	$ 251,000	
2024 K-009	K-322	7EGB-0900A	7EGB-0800A	236	Improve Existing Gravity Main	12	15	733	$ 109,600	$ 185,200	***$ 2,768,000***
2024 K-009	K-323	7EGB-0800A	7EGB-0700A	199	Improve Existing Gravity Main	12	15	709	$ 92,400	$ 156,200	
2024 K-009	K-324	7EGB-0700A	7EGB-0600A	334	Improve Existing Gravity Main	12	15	601	$ 155,500	$ 262,800	
2024 K-009	K-325	7EGB-0600A	7EGB-0500A	166	Improve Existing Gravity Main	12	15	701	$ 77,100	$ 130,300	
2024 K-009	K-326	7EGB-0500A	7EGB-0400A	112	Improve Existing Gravity Main	12	15	757	$ 52,000	$ 87,900	
2024 K-009	K-327	7EGB-0400A	7EGB-0300A	317	Improve Existing Gravity Main	12	15	549	$ 147,500	$ 249,300	
2024 K-009	K-318	7EGB-0300A	7EGB-0200A	312	Improve Existing Gravity Main	12	15	616	$ 145,000	$ 245,100	
2024 K-009	K-317	7EGB-0200A	7EGB-0100A	173	Improve Existing Gravity Main	12	15	685	$ 80,400	$ 135,900	
2024 K-009	K-388	7EGB-0100A	7EG0-0200	337	Improve Existing Gravity Main	12	15	519	$ 156,600	$ 264,700	
2024 K-009	K-389	7EG0-0200	7EG0-0150	476	Improve Existing Gravity Main	12	15	795	$ 221,400	$ 374,200	
2024 K-009	K-20	7EG0-0150	7EG0-0100	200	Improve Existing Gravity Main	12	15	651	$ 93,200	$ 157,500	
2024 K-009	K-54	7EG0-0100	7EG0-0050	305	Improve Existing Gravity Main	12	15	722	$ 142,000	$ 240,000	
2024 K-009	K-55	7EG0-0050	7EO0-1300	355	Improve Existing Gravity Main	12	15	1170	$ 165,000	$ 278,900	
2024 K-010	CDT_27	JCT_80	JCT_82	600	New Gravity Main	-	12	-	$ 158,400	$ 267,700	***$ 267,700***
2024 K-011	2854	JCT_84	1794	1,518	New Gravity Main	-	10	-	$ 333,900	$ 564,300	***$ 1,160,700***
2024 K-011	2853	1794	7OO0-0300	1,337	New Gravity Main	-	12	-	$ 352,900	$ 596,400	
2024 K-012	2664	JCT_90	STOR_16	5,283	New Gravity Main	-	12	-	$ 1,394,700	$ 2,357,000	***$ 2,357,000***
2024 K-013	2856	JCT_86	1794	1,324	New Gravity Main	-	10	-	$ 291,300	$ 492,300	***$ 492,300***
2024 K-014	CDT_31	JCT_94	JCT_74	2,531	New Gravity Main	-	10	-	$ 556,800	$ 941,000	***$ 3,267,000***
2024 K-014	2410A	JCT_76	JCT_74	2,644	New Gravity Main	-	12	-	$ 698,100	$ 1,179,800	
2024 K-014	2408	JCT_74	1TA0-1400	2,055	New Gravity Main	-	15	-	$ 678,200	$ 1,146,200	
2024 K-015	2406	JCT_92	1TA0-1400	711	New Gravity Main	-	12	-	$ 187,600	$ 317,000	***$ 1,346,500***
2024 K-015	CDT_29	JCT_78	JCT_92	2,308	New Gravity Main	-	12	-	$ 609,200	$ 1,029,500	
2024 K-016	I-882	1TA0-0800	1TA0-0700	581	Improve Existing Gravity Main	24	36	2309	$ 648,700	$ 1,096,300	***$ 7,403,100***
2024 K-016	I-880	1TA0-0700	1TA0-0600	775	Improve Existing Gravity Main	24	36	4484	$ 864,900	$ 1,461,700	
2024 K-016	I-879	1TA0-0600	1TA0-0500	660	Improve Existing Gravity Main	24	36	5308	$ 736,600	$ 1,244,900	
2024 K-016	I-877	1TA0-0500	1TA0-0400	206	Improve Existing Gravity Main	24	36	4385	$ 230,100	$ 388,900	
2024 K-016	I-878	1TA0-0400	1TA0-0300	547	Improve Existing Gravity Main	24	36	4214	$ 610,400	$ 1,031,600	
2024 K-016	I-939	1TA0-0300	1TA0-0200	600	Improve Existing Gravity Main	24	36	7935	$ 669,600	$ 1,131,600	
2024 K-016	I-938	1TA0-0200	1OO0-1TA0	556	Improve Existing Gravity Main	24	36	3950	$ 620,200	$ 1,048,100	

CHESTNUT AVE
WILLOW AVE
Golden State Blvd
PEACH AVE
MINNEWAWA AVE
CLOVIS AVE
SUNNYSIDE AVE
FLOWER AVE
ARMSTRONG AVE
TEMPERANCE AVE
LOCAN AVE
DE WOLF AVE
LEONARD AVE

AMERICAN AVE
JEFFERSON AVE
LINCOLN AVE
CLAYTON AVE
ADAMS AVE
SUMNER AVE
SOUTH AVE
PARLIER AVE
MANNING AVE
SPRINGFIELD AVE

2024 F-003
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Miles

NEWPHASE

PS Proposed Primary
PS Proposed T1
PS Proposed T2
PS Proposed T3

Proposed Gravity Mains

Proposed Primary
Proposed T1
Proposed T2
Proposed T3
Existing Gravity Main Requiring Improvement
Modeled Gravity Main

Existing System

Force
Gravity

Development Tier

Primary
Tier 1
Tier 2
Tier 3

DRAFT Figure E-3
Gravity Main CIP Projects
City of Fowler
11/19/2024

Table E-3. Fowler CIP Details

Project ID	Model Pipeline ID	Upstream Manhole	Downstream Manhole	Length, feet	CIP Type	Existing Dia., inch	Proposed Dia., inch	Remaining ESFR	Pipeline Capital Cost, $	Pipeline Total Cost, $	*Total Project Cost, $*
2024 F-001	F-232	3DO0-0700	3DO0-0600	479	Improve Existing Gravity Main	8	18	388	$ 267,600	$ 452,200	***$ 5,013,400***
2024 F-001	F-233	3DO0-0600	3DO0-0500	479	Improve Existing Gravity Main	12	18	51	$ 267,400	$ 451,900	
2024 F-001	F-230	3DO0-0500	3DO0-0400	360	Improve Existing Gravity Main	12	21	0	$ 234,400	$ 396,100	
2024 F-001	F-231	3DO0-0400	3DO0-0300	315	Improve Existing Gravity Main	12	21	205	$ 205,100	$ 346,600	
2024 F-001	F-210	3DO0-0300	3DO0-0200	470	Improve Existing Gravity Main	12	21	0	$ 306,000	$ 517,100	
2024 F-001	F-1000	3DO0-0200	3DO0-0100	379	Improve Existing Gravity Main	12	21	0	$ 246,800	$ 417,100	
2024 F-001	F-155	3DC0-0500	F2-WW	82	Improve Existing Gravity Main	8	12	1014	$ 30,500	$ 51,500	
2024 F-001	F-153	3DC0-0400	3DC0-0300	481	Improve Existing Gravity Main	8	18	0	$ 268,500	$ 453,800	
2024 F-001	F-294	3DC0-0300	3DC0-0200	493	Improve Existing Gravity Main	8	18	0	$ 275,300	$ 465,300	
2024 F-001	F-295	3DC0-0200	3DC0-0100	475	Improve Existing Gravity Main	8	18	0	$ 264,800	$ 447,500	
2024 F-001	F-234	3DC0-0100	3DO0-0700	200	Improve Existing Gravity Main	8	18	0	$ 111,800	$ 188,900	
2024 F-001	F-218	3DBB-0400	3DBB-0300	129	Improve Existing Gravity Main	8	18	0	$ 32,000	$ 54,100	
2024 F-001	F-228	3DB0-0200	3DB0-0100	295	Improve Existing Gravity Main	8	18	104	$ 164,700	$ 278,300	
2024 F-001	F-229	3DB0-0100	3DO0-0500	523	Improve Existing Gravity Main	8	18	92	$ 291,700	$ 493,000	
2024 F-002	F-168	3CO0-0800	3CO0-0700	297	Improve Existing Gravity Main	12	18	0	$ 165,800	$ 280,200	***$ 3,967,500***
2024 F-002	F-167	3CO0-0700	3CO0-0600	293	Improve Existing Gravity Main	12	18	0	$ 163,700	$ 276,700	
2024 F-002	F-116	3CO0-0600	3CO0-0500	400	Improve Existing Gravity Main	12	18	546	$ 222,900	$ 376,700	
2024 F-002	F-115	3CO0-0500	3CO0-0400	400	Improve Existing Gravity Main	12	18	0	$ 223,300	$ 377,400	
2024 F-002	F-120	3CC0-0100	3CO0-0300	467	Improve Existing Gravity Main	10	12	168	$ 173,700	$ 293,600	
2024 F-002	F-166	3CA0-0400	3CA0-0300	400	Improve Existing Gravity Main	6	12	88	$ 148,800	$ 251,500	
2024 F-002	F-165	3CA0-0300	3CA0-0200	400	Improve Existing Gravity Main	8	15	0	$ 185,900	$ 314,200	
2024 F-002	F-117	3CA0-0200	3CA0-0100	400	Improve Existing Gravity Main	8	15	0	$ 186,100	$ 314,500	
2024 F-002	F-118	3CA0-0100	3CA0-0099	399	Improve Existing Gravity Main	8	15	0	$ 185,700	$ 313,800	
2024 F-002	139	28	10	403	Improve Existing Gravity Main	12	15	57	$ 187,200	$ 316,400	
2024 F-002	137	24	28	262	Improve Existing Gravity Main	12	15	60	$ 121,700	$ 205,700	
2024 F-002	135	14	24	262	Improve Existing Gravity Main	12	15	0	$ 121,700	$ 205,700	
2024 F-002	127	10	8	328	Improve Existing Gravity Main	12	15	106	$ 152,700	$ 258,100	
2024 F-002	123	8	3CO0-0800	194	Improve Existing Gravity Main	12	18	63	$ 108,300	$ 183,000	
2024 F-003	2325	1368	F6-WW	129	New Gravity Main	-	12	-	$ 34,000	$ 57,500	***$ 1,473,600***
2024 F-003	2151	1344	1368	3,174	New Gravity Main	-	12	-	$ 837,900	$ 1,416,100	
2024 F-004	I-275	3OO0-9965	3OO0-9960	256	Improve Existing Gravity Main	12	18	1212	$ 143,000	$ 241,700	***$ 4,540,500***
2024 F-004	I-273	3OO0-9960	3OO0-9950	377	Improve Existing Gravity Main	12	18	731	$ 210,200	$ 355,200	
2024 F-004	I-272	3OO0-9950	3OO0-9945	321	Improve Existing Gravity Main	12	18	672	$ 179,400	$ 303,200	
2024 F-004	I-271	3OO0-9945	3OO0-9940	434	Improve Existing Gravity Main	12	18	674	$ 242,000	$ 409,000	
2024 F-004	I-270	3OO0-9940	3OO0-9935	433	Improve Existing Gravity Main	12	18	674	$ 241,800	$ 408,600	
2024 F-004	I-269	3OO0-9935	3OO0-9930	425	Improve Existing Gravity Main	12	18	682	$ 237,200	$ 400,900	
2024 F-004	I-268	3OO0-9930	3OO0-9925	430	Improve Existing Gravity Main	12	18	677	$ 239,700	$ 405,100	
2024 F-004	I-267	3OO0-9925	3OO0-9920	443	Improve Existing Gravity Main	12	18	666	$ 247,400	$ 418,100	
2024 F-004	I-266	3OO0-9920	3OO0-9915	440	Improve Existing Gravity Main	12	18	656	$ 245,400	$ 414,700	
2024 F-004	I-265	3OO0-9915	3OO0-9910	414	Improve Existing Gravity Main	12	18	709	$ 231,000	$ 390,400	
2024 F-004	I-264	3OO0-9910	3OO0-9905	420	Improve Existing Gravity Main	12	18	639	$ 234,200	$ 395,800	
2024 F-004	I-263	3OO0-9905	3OO0-9901	422	Improve Existing Gravity Main	12	18	631	$ 235,400	$ 397,800	
2024 F-005	2861	1366	1364	2,645	New Gravity Main	-	12	-	$ 698,300	$ 1,180,100	***$ 2,818,800***
2024 F-005	2443	1364	3OO0-9901	895	New Gravity Main	-	15	-	$ 295,300	$ 499,100	
2024 F-005	2147	1358	1364	2,554	New Gravity Main	-	12	-	$ 674,300	$ 1,139,600	
2024 F-006	I-261	3OO0-9900	3OO0-9800	410	Improve Existing Gravity Main	18	21	1551	$ 266,600	$ 450,600	***$ 2,265,400***
2024 F-006	I-260	3OO0-9800	3OO0-9700	414	Improve Existing Gravity Main	18	21	1517	$ 269,800	$ 456,000	
2024 F-006	I-259	3OO0-9700	3OO0-9600	419	Improve Existing Gravity Main	18	21	1508	$ 272,700	$ 460,900	
2024 F-006	I-258	3OO0-9600	3OO0-9500	409	Improve Existing Gravity Main	18	21	1528	$ 266,400	$ 450,200	
2024 F-006	I-257	3OO0-9500	3OO0-9400	407	Improve Existing Gravity Main	18	21	1199	$ 264,900	$ 447,700	
2024 F-007	3015	1882	3OO0-9400	1,477	New Gravity Main	-	18	-	$ 584,800	$ 988,300	***$ 988,300***
2024 F-008	I-256	3OO0-9400	3OO0-9300	385	Improve Existing Gravity Main	18	27	1607	$ 322,400	$ 544,900	***$ 5,203,300***
2024 F-008	I-107	3OO0-9300	3OO0-9200	379	Improve Existing Gravity Main	18	27	2568	$ 317,000	$ 535,700	
2024 F-008	I-106	3OO0-9200	3OO0-9100	379	Improve Existing Gravity Main	18	27	825	$ 317,300	$ 536,200	
2024 F-008	I-104	3OO0-9100	3OO0-9000	381	Improve Existing Gravity Main	18	27	868	$ 319,200	$ 539,400	
2024 F-008	I-105	3OO0-9000	3OO0-8900	386	Improve Existing Gravity Main	18	27	1605	$ 323,200	$ 546,200	
2024 F-008	I-251	3OO0-8900	3OO0-8800	348	Improve Existing Gravity Main	18	27	1588	$ 291,300	$ 492,300	
2024 F-008	I-250	3OO0-8800	3OO0-8700	61	Improve Existing Gravity Main	18	27	1159	$ 51,400	$ 86,900	
2024 F-008	I-249	3OO0-8700	3OO0-8600	368	Improve Existing Gravity Main	18	27	1507	$ 307,600	$ 519,800	
2024 F-008	I-248	3OO0-8600	3OO0-8500	334	Improve Existing Gravity Main	18	27	1496	$ 279,500	$ 472,400	
2024 F-008	I-176	3OO0-8500	3OO0-8400	325	Improve Existing Gravity Main	18	27	1546	$ 272,300	$ 460,200	
2024 F-008	I-175	3OO0-8400	3OO0-8300	332	Improve Existing Gravity Main	18	27	1492	$ 277,700	$ 469,300	
2024 F-009	F-183	3AO0-0400	3AO0-0300	649	Improve Existing Gravity Main	12	15	1005	$ 301,900	$ 510,200	***$ 1,356,600***
2024 F-009	F-182	3AO0-0300	3AO0-0200	253	Improve Existing Gravity Main	12	15	575	$ 117,600	$ 198,700	
2024 F-009	F-184	3AO0-0200	3AO0-0100	289	Improve Existing Gravity Main	12	15	685	$ 134,200	$ 226,800	
2024 F-009	I-185	3AO0-0100	3OO0-8300	211	Improve Existing Gravity Main	12	15	520	$ 97,900	$ 165,500	
2024 F-009	F-177	3AB0-0100	3AO0-0400	325	Improve Existing Gravity Main	12	15	383	$ 151,100	$ 255,400	
2024 F-010	2929	1370	3AB0-0100	2,236	New Gravity Main	-	15	-	$ 737,900	$ 1,247,100	***$ 1,247,100***
2024 F-011	I-239	3OO0-8300	3OO0-8200	469	Improve Existing Gravity Main	18	30	2342	$ 436,400	$ 737,500	***$ 3,936,400***
2024 F-011	I-238	3OO0-8200	3OO0-8100	551	Improve Existing Gravity Main	18	30	1543	$ 512,300	$ 865,800	
2024 F-011	I-149	3OO0-8100	3OO0-8000	551	Improve Existing Gravity Main	18	30	1842	$ 512,500	$ 866,100	
2024 F-011	I-150	3OO0-8000	3OO0-7900	473	Improve Existing Gravity Main	18	30	1159	$ 439,500	$ 742,800	
2024 F-011	I-147	3OO0-7800	3OO0-7700	461	Improve Existing Gravity Main	24	30	6977	$ 428,500	$ 724,200	
2024 F-012	2931	1372	8	2,573	New Gravity Main	-	15	-	$ 849,200	$ 1,435,100	***$ 1,435,100***
2024 F-013	141A	JCT 18	34	1,446	New Gravity Main	-	12	-	$ 381,600	$ 644,900	***$ 644,900***
2024 F-014	2705	1678	3BAO-0900	778	New Gravity Main	-	12	-	$ 205,300	$ 347,000	***$ 4,895,200***
2024 F-015	F-200	3BO0-0900	3BO0-0800	187	Improve Existing Gravity Main	15	21	867	$ 121,800	$ 205,800	
2024 F-015	F-201	3BO0-0800	3BO0-0700	136	Improve Existing Gravity Main	15	21	573	$ 88,800	$ 150,100	
2024 F-015	F-202	3BO0-0700	3BO0-0600	260	Improve Existing Gravity Main	15	21	531	$ 169,100	$ 285,800	
2024 F-015	F-203	3BO0-0600	3BO0-0500	201	Improve Existing Gravity Main	15	21	283	$ 130,700	$ 220,900	
2024 F-015	F-204	3BO0-0500	3BO0-0400	472	Improve Existing Gravity Main	15	21	724	$ 307,400	$ 519,500	

Table E-3. Fowler CIP Details

Project ID	Model Pipeline ID	Upstream Manhole	Downstream Manhole	Length, feet	CIP Type	Existing Dia., inch	Proposed Dia., inch	Remaining ESFR	Pipeline Capital Cost, $	Pipeline Total Cost, $	*Total Project Cost, $*
2024 F-015	F-205	3BO0-0400	3BO0-0300	480	Improve Existing Gravity Main	15	21	869	$ 312,700	$ 528,500	
2024 F-015	F-114	3BO0-0300	3BO0-0200	480	Improve Existing Gravity Main	15	21	57	$ 312,300	$ 527,800	
2024 F-015	F-113	3BO0-0200	3BO0-0100	483	Improve Existing Gravity Main	15	21	406	$ 314,200	$ 531,000	
2024 F-015	F-124	3BO0-0100	3CO0-0100	496	Improve Existing Gravity Main	15	21	612	$ 322,800	$ 545,500	
2024 F-015	F-192	3BAO-0800	3BAO-0700	88	Improve Existing Gravity Main	-	15	1041	$ 40,800	$ 69,000	
2024 F-015	F-191	3BAO-0700	3BAO-0600	75	Improve Existing Gravity Main	10	15	1215	$ 34,900	$ 59,000	
2024 F-015	F-139	3BAO-0600	3BAO-0500	197	Improve Existing Gravity Main	10	15	86	$ 91,700	$ 155,000	
2024 F-015	F-138	3BAO-0500	3BAO-0401	273	Improve Existing Gravity Main	10	15	121	$ 126,700	$ 214,100	
2024 F-015	F-140	3BAO-0401	3BAO-0300	258	Improve Existing Gravity Main	10	15	127	$ 119,900	$ 202,600	
2024 F-015	F-193	3BAO-0400	3BAO-0100	193	Improve Existing Gravity Main	10	15	153	$ 89,600	$ 151,400	
2024 F-015	F-194	3BAO-0100	3BO0-0900	232	Improve Existing Gravity Main	10	15	445	$ 107,800	$ 182,200	
2024 F-016	2855	1796	1410	1,263	New Gravity Main	-	12	-	$ 333,300	$ 563,300	***$ 1,300,100***
2024 F-016	2927	1426	1410	632	New Gravity Main	-	15	-	$ 208,600	$ 352,500	
2024 F-016	2221	1410	3DGO-SOUT	689	New Gravity Main	-	15	-	$ 227,400	$ 384,300	
2024 F-017	2469	1634	1406	1,206	New Gravity Main	-	18	-	$ 477,700	$ 807,300	***$ 1,006,000***
2024 F-017	2437	1406	3DG0-0800	297	New Gravity Main	-	18	-	$ 117,600	$ 198,700	
2024 F-018	2921A	JCT_34	STOR_10	47	New Gravity Main	-	15	-	$ 15,500	$ 26,200	***$ 1,494,100***
2024 F-018	2911	JCT_32	JCT_34	1,294	New Gravity Main	-	15	-	$ 427,100	$ 721,800	
2024 F-018	2921	1836	3DG0-0100	1,338	New Gravity Main	-	15	-	$ 441,500	$ 746,100	
2024 F-019	2911B	JCT_36	JCT_32	2,240	New Gravity Main	-	10	-	$ 492,700	$ 832,700	***$ 1,794,500***
2024 F-019	2911A	F2	JCT_32	2,587	New Gravity Main	-	10	-	$ 569,100	$ 961,800	
2024 F-020	2979A	JCT_24	JCT_26	1,528	New Gravity Main	-	12	-	$ 403,400	$ 681,700	***$ 681,700***
2024 F-021	2975	1866	1864	880	New Gravity Main	-	12	-	$ 232,400	$ 392,800	***$ 2,489,400***
2024 F-021	2977	1864	1862	1,320	New Gravity Main	-	12	-	$ 348,400	$ 588,800	
2024 F-021	2979	1862	JCT_26	2,704	New Gravity Main	-	15	-	$ 892,200	$ 1,507,800	
2024 F-022	CDT_21	JCT_26	1860	1,376	New Gravity Main	-	18	-	$ 544,800	$ 920,700	***$ 2,142,600***
2024 F-022	2981	1860	1380	787	New Gravity Main	-	18	-	$ 311,700	$ 526,800	
2024 F-022	2167	1380	3JO0-0100	1,039	New Gravity Main	-	18	-	$ 411,300	$ 695,100	
2024 F-023	3017	1884	1882	2,631	New Gravity Main	-	12	-	$ 694,600	$ 1,173,900	***$ 3,494,800***
2024 F-023	3013	1880	1882	2,555	New Gravity Main	-	12	-	$ 674,500	$ 1,139,900	
2024 F-023	2219	1398	1424	2,647	New Gravity Main	-	12	-	$ 698,800	$ 1,181,000	
2024 F-024	2457	1424	1426	1,310	New Gravity Main	-	15	-	$ 432,200	$ 730,400	***$ 1,299,400***
2024 F-024	2925	1420	1424	1,275	New Gravity Main	-	12	-	$ 336,700	$ 569,000	
2024 F-025	2461	1630	1424	643	New Gravity Main	-	15	-	$ 212,300	$ 358,800	***$ 1,248,400***
2024 F-025	2463	1628	1400	1,994	New Gravity Main	-	12	-	$ 526,400	$ 889,600	
2024 F-026	2459	1626	1400	1,291	New Gravity Main	-	12	-	$ 340,900	$ 576,100	***$ 2,309,000***
2024 F-026	2455	1404	1400	2,588	New Gravity Main	-	12	-	$ 683,400	$ 1,154,900	
2024 F-026	2467	1400	9028	864	New Gravity Main	-	18	-	$ 342,000	$ 578,000	
2024 F-027	F-289	3DG0-0800	3DG0-0700	442	Improve Existing Gravity Main	12	18	464	$ 246,600	$ 416,800	***$ 2,361,400***
2024 F-027	F-288	3DG0-0700	3DG0-0600	384	Improve Existing Gravity Main	12	18	544	$ 214,300	$ 362,200	
2024 F-027	F-227	3DG0-0600	3DG0-0500	448	Improve Existing Gravity Main	12	18	399	$ 250,000	$ 422,500	
2024 F-027	F-226	3DG0-0500	3DG0-0400	343	Improve Existing Gravity Main	12	18	235	$ 191,100	$ 323,000	
2024 F-027	F-224	3DG0-0400	3DG0-0300	301	Improve Existing Gravity Main	12	18	596	$ 167,700	$ 283,400	
2024 F-027	F-223	3DG0-0300	3DG0-0200	291	Improve Existing Gravity Main	12	18	555	$ 162,600	$ 274,800	
2024 F-027	F-220	3DG0-0200	3DG0-0100	296	Improve Existing Gravity Main	12	18	1076	$ 164,900	$ 278,700	
2024 F-028	2930	JCT_12	1370	2,703	New Gravity Main	-	12	-	$ 713,600	$ 1,206,000	***$ 1,206,000***
2024 F-029	2932	JCT_14	1372	2,686	New Gravity Main	-	12	-	$ 709,100	$ 1,198,400	***$ 1,198,400***
2024 F-030	141	JCT_16	34	2,656	New Gravity Main	-	12	-	$ 701,300	$ 1,185,200	***$ 1,185,200***
2024 F-031	141B	JCT_20	JCT_18	1,198	New Gravity Main	-	10	-	$ 263,700	$ 445,700	***$ 445,700***
2024 F-032	F-147	JCT_22	3EO0-0500-F	1,382	New Gravity Main	12	15	-	$ 456,000	$ 770,600	***$ 770,600***
2024 F-033	F-146	3EO0-0500-F	3EO0-0400-F	316	Improve Existing Gravity Main	12	15	762	$ 146,900	$ 248,300	***$ 3,430,000***
2024 F-033	F-145	3EO0-0400-F	3EO0-0300-F	313	Improve Existing Gravity Main	12	15	692	$ 145,300	$ 245,600	
2024 F-033	F-143	3EO0-0300-F	3EO0-0200-F	312	Improve Existing Gravity Main	12	15	615	$ 145,100	$ 245,200	
2024 F-033	F-144	3EO0-0200-F	3EO0-0100-F	315	Improve Existing Gravity Main	12	15	649	$ 146,300	$ 247,200	
2024 F-033	195	50	3EO0-0100-F	261	Improve Existing Gravity Main	12	18	1261	$ 145,800	$ 246,400	
2024 F-033	155	48	50	400	Improve Existing Gravity Main	12	18	376	$ 223,200	$ 377,200	
2024 F-033	153	46	48	330	Improve Existing Gravity Main	12	18	384	$ 184,200	$ 311,300	
2024 F-033	151	44	46	400	Improve Existing Gravity Main	12	18	383	$ 223,200	$ 377,200	
2024 F-033	149	40	44	400	Improve Existing Gravity Main	12	18	387	$ 223,200	$ 377,200	
2024 F-033	145	38	40	400	Improve Existing Gravity Main	12	18	680	$ 223,200	$ 377,200	
2024 F-033	143	34	38	400	Improve Existing Gravity Main	12	18	682	$ 223,200	$ 377,200	
2024 F-034	F-119	3CO0-0300	3C00-0200	400	Improve Existing Gravity Main	15	18	134	$ 222,900	$ 376,700	***$ 1,588,900***
2024 F-034	F-125	3CO0-0100	3OO0-7700	373	Improve Existing Gravity Main	18	24	488	$ 277,400	$ 468,800	
2024 F-034	119	3CA0-0099	3CA0-0098	401	Improve Existing Gravity Main	8	15	774	$ 186,400	$ 315,000	
2024 F-034	F-109	3CA0-0098	3CA0-0097	304	Improve Existing Gravity Main	8	15	0	$ 141,200	$ 238,600	
2024 F-034	F-123	3C00-0200	3CO0-0100	201	Improve Existing Gravity Main	15	18	3211	$ 112,300	$ 189,800	
2024 F-035	F-163	3CAE-0300	3CAE-0200	351	Improve Existing Gravity Main	8	15	446	$ 163,000	$ 275,500	***$ 813,800***
2024 F-035	F-156	3CAE-0200	3CAE-0101	187	Improve Existing Gravity Main	8	15	83	$ 86,800	$ 146,700	
2024 F-035	F-157	3CAE-0101	3CO0-0800	498	Improve Existing Gravity Main	8	15	291	$ 231,700	$ 391,600	
2024 F-036	2171	JCT_30	JCT_28	1,400	New Gravity Main	-	10	-	$ 308,000	$ 520,500	***$ 2,559,500***
2024 F-036	2173	JCT_28	1384	2,601	New Gravity Main	-	12	-	$ 686,700	$ 1,160,500	
2024 F-036	2175	1384	3KO0-0300	1,969	New Gravity Main	-	12	-	$ 519,800	$ 878,500	
2024 F-037	2449	1382	1792	724	New Gravity Main	-	10	-	$ 159,200	$ 269,000	***$ 269,000***

Table E-4. District CIP Details

Project ID	Model Pipeline ID	Upstream Manhole	Downstream Manhole	Length, feet	CIP Type	Existing Dia., inch	Parallel Dia., inch	Remaining ESFR	Pipeline Capital Cost, $	Pipeline Total Cost, $	*Project Total Cost*
2024 D-001	1959	3OO0-7400	3OO0-7300	1,327	New Gravity Main - Parallel	24	36	1,919	$ 1,051,100	$ 1,776,400	***$ 9,335,200***
2024 D-001	1957	3OO0-7300	3OO0-7200	900	New Gravity Main - Parallel	24	36	1,040	$ 713,000	$ 1,205,000	
2024 D-001	1955	3OO0-7200	3OO0-7100	992	New Gravity Main - Parallel	24	36	855	$ 785,600	$ 1,327,700	
2024 D-001	1953	3OO0-7100	3OO0-7000	1,120	New Gravity Main - Parallel	24	36	724	$ 886,900	$ 1,498,900	
2024 D-001	1949	3OO0-6900	3OO0-6800	978	New Gravity Main - Parallel	24	36	697	$ 774,700	$ 1,309,200	
2024 D-001	1947	3OO0-6800	3OO0-6750	279	New Gravity Main - Parallel	24	36	579	$ 221,000	$ 373,500	
2024 D-001	1945	3OO0-6750	3OO0-6700	778	New Gravity Main - Parallel	24	36	680	$ 616,200	$ 1,041,400	
2024 D-001	1943	3OO0-6700	3OO0-6650	600	New Gravity Main - Parallel	24	36	713	$ 475,200	$ 803,100	
2024 D-002	1941	3OO0-6650	3OO0-6600	300	New Gravity Main - Parallel	24	30	746	$ 198,000	$ 334,600	***$ 5,831,400***
2024 D-002	1939	3OO0-6600	3OO0-6500	1,144	New Gravity Main - Parallel	24	30	797	$ 754,900	$ 1,275,800	
2024 D-002	1937	3OO0-6500	3OO0-6400	675	New Gravity Main - Parallel	24	30	834	$ 445,500	$ 752,900	
2024 D-002	1935	3OO0-6400	3OO0-6300	328	New Gravity Main - Parallel	24	30	897	$ 216,600	$ 366,100	
2024 D-002	2923	3OO0-6300	3OO0-6200	1,031	New Gravity Main - Parallel	24	30	884	$ 680,600	$ 1,150,200	
2024 D-002	1931	3OO0-6200	3OO0-610H	281	New Gravity Main - Parallel	24	30	379	$ 185,600	$ 313,700	
2024 D-002	1929	3OO0-610H	3OO0-6100	687	New Gravity Main - Parallel	24	30	755	$ 453,100	$ 765,700	
2024 D-002	1927	3OO0-6100	3OO0-6050	782	New Gravity Main - Parallel	24	30	1,627	$ 516,200	$ 872,400	
2024 D-003	1917	2OO0-5800	2OO0-5700	1,406	New Gravity Main - Parallel	33	42	5,407	$ 1,299,400	$ 2,196,000	***$ 9,389,500***
2024 D-003	1913	2OO0-5600	2OO0-5500	803	New Gravity Main - Parallel	33	42	5,199	$ 742,400	$ 1,254,700	
2024 D-003	1911	2OO0-5500	2OO0-5400	1,003	New Gravity Main - Parallel	33	42	5,024	$ 926,900	$ 1,566,500	
2024 D-003	1909	2OO0-5400	2OO0-5300	925	New Gravity Main - Parallel	33	42	4,899	$ 855,100	$ 1,445,100	
2024 D-003	1907	2OO0-5300	2OO0-5200	946	New Gravity Main - Parallel	33	42	6,751	$ 874,500	$ 1,477,900	
2024 D-003	1921	2CO0-5906	2OO0-5800	928	New Gravity Main - Parallel	30	42	4,777	$ 857,600	$ 1,449,300	
2024 D-004	1905	2OO0-5200	2OO0-5100	948	New Gravity Main - Parallel	33	36	4,637	$ 750,800	$ 1,268,900	***$ 14,158,800***
2024 D-004	1903	2OO0-5100	2OO0-5000	854	New Gravity Main - Parallel	33	36	4,761	$ 676,400	$ 1,143,100	
2024 D-004	1899	2OO0-5001	2OO0-4900	330	New Gravity Main - Parallel	33	36	8,483	$ 261,400	$ 441,800	
2024 D-004	1901	2OO0-5000	2OO0-5001	393	New Gravity Main - Parallel	33	36	8,318	$ 311,300	$ 526,100	
2024 D-004	1897	2OO0-4900	2OO0-4800	719	New Gravity Main - Parallel	33	36	4,589	$ 569,400	$ 962,300	
2024 D-004	1895	2OO0-4800	2OO0-4700	90	New Gravity Main - Parallel	33	36	4,582	$ 71,300	$ 120,500	
2024 D-004	1893	2OO0-4700	2OO0-4600	956	New Gravity Main - Parallel	33	36	4,251	$ 757,100	$ 1,279,500	
2024 D-004	1891	2OO0-4600	2OO0-4500	98	New Gravity Main - Parallel	33	36	4,825	$ 77,700	$ 131,300	
2024 D-004	1889	2OO0-4500	2OO0-4400	405	New Gravity Main - Parallel	33	36	4,587	$ 320,800	$ 542,200	
2024 D-004	1887	2OO0-4400	2OO0-4300	80	New Gravity Main - Parallel	33	36	2,560	$ 63,400	$ 107,100	
2024 D-004	1885	2OO0-4300	2OO0-4200	1,086	New Gravity Main - Parallel	33	36	3,673	$ 860,400	$ 1,454,100	
2024 D-004	1883	2OO0-4200	2OO0-4101	755	New Gravity Main - Parallel	33	36	3,077	$ 598,300	$ 1,011,100	
2024 D-004	1881	2OO0-4101	2OO0-4100	302	New Gravity Main - Parallel	33	36	2,671	$ 239,400	$ 404,600	
2024 D-004	1879	2OO0-4100	2OO0-4000	1,274	New Gravity Main - Parallel	33	36	2,486	$ 1,008,700	$ 1,704,700	
2024 D-004	1877	2OO0-4000	2OO0-3900	1,358	New Gravity Main - Parallel	33	36	2,511	$ 1,075,900	$ 1,818,300	
2024 D-004	1875	2OO0-3900	2OO0-3800	929	New Gravity Main - Parallel	33	36	2,804	$ 735,600	$ 1,243,200	
2024 D-005	1869	2OO0-3700	2OO0-3600	17	New Gravity Main - Parallel	39	42	3,301	$ 26,800	$ 45,300	***$ 10,922,700***
2024 D-005	1867	2OO0-3600	2OO0-3500	565	New Gravity Main - Parallel	39	42	885	$ 522,200	$ 882,500	
2024 D-005	1865	2OO0-3500	2OO0-3400	560	New Gravity Main - Parallel	39	42	912	$ 517,700	$ 874,900	
2024 D-005	1863	2OO0-3400	2OO0-3300	549	New Gravity Main - Parallel	39	42	3,017	$ 507,500	$ 857,700	
2024 D-005	1861	2OO0-3300	2OO0-3200	40	New Gravity Main - Parallel	39	42	7,141	$ 37,100	$ 62,700	
2024 D-005	1859	2OO0-3200	2OO0-3100	77	New Gravity Main - Parallel	39	42	4,907	$ 71,100	$ 120,200	
2024 D-005	1857	2OO0-3100	2OO0-3000	1,053	New Gravity Main - Parallel	39	42	1,341	$ 973,400	$ 1,645,000	
2024 D-005	1855	2OO0-3000	2OO0-2900	499	New Gravity Main - Parallel	39	42	1,138	$ 461,500	$ 779,900	
2024 D-005	1851	2OO0-2800	2OO0-2700	20	New Gravity Main - Parallel	39	42	1,337	$ 18,700	$ 31,600	
2024 D-005	1849	2OO0-2700	2OO0-2600	260	New Gravity Main - Parallel	42	42	18,485	$ 240,000	$ 405,600	
2024 D-005	1847	2OO0-2600	2OO0-2500	1,022	New Gravity Main - Parallel	42	42	6,735	$ 944,000	$ 1,595,400	
2024 D-005	2085	2OO0-2500	2OO0-2400	1,043	New Gravity Main - Parallel	42	42	6,485	$ 963,700	$ 1,628,700	
2024 D-005	2087	2OO0-2400	2OO0-2300	89	New Gravity Main - Parallel	42	42	95,161	$ 82,500	$ 139,400	
2024 D-005	2089	2OO0-2300	2OO0-2200	874	New Gravity Main - Parallel	42	42	27,208	$ 807,500	$ 1,364,700	
2024 D-005	2091	2OO0-2200	2000-2150	313	New Gravity Main - Parallel	42	42	13,854	$ 289,400	$ 489,100	
2024 D-006	1843	2OO0-2100	2OO0-2000	900	New Gravity Main - Parallel	42	48	6,576	$ 950,400	$ 1,606,200	
2024 D-006	1841	2OO0-2000	2OO0-1900	1,004	New Gravity Main - Parallel	42	48	6,585	$ 1,060,200	$ 1,791,700	***$ 6,709,000***
2024 D-006	1839	2OO0-1900	1OO0-1800	922	New Gravity Main - Parallel	42	48	6,519	$ 973,600	$ 1,645,400	
2024 D-006	1845	2000-2150	2OO0-2100	787	New Gravity Main - Parallel	42	48	2,834	$ 831,100	$ 1,404,600	
2024 D-006	1837	1OO0-1800	1OO0-1700	1,046	New Gravity Main - Parallel	42	48	6,976	$ 1,104,900	$ 1,867,300	
2024 D-007	1833	1TA0-1600	1OO0-1500	656	New Gravity Main - Parallel	42	48	7,094	$ 693,000	$ 1,171,200	***$ 17,650,100***
2024 D-007	1835	1OO0-1700	1TA0-1600	675	New Gravity Main - Parallel	42	48	10,033	$ 712,800	$ 1,204,600	
2024 D-007	1831	1OO0-1500	1OO0-1400	225	New Gravity Main - Parallel	42	48	3,957	$ 237,600	$ 401,500	
2024 D-007	1829	1OO0-1400	1OO0-1300	206	New Gravity Main - Parallel	42	48	7,535	$ 217,800	$ 368,100	
2024 D-007	1827	1OO0-1300	1OO0-1200	759	New Gravity Main - Parallel	42	48	9,945	$ 801,900	$ 1,355,200	
2024 D-007	1825	1OO0-1200	1OO0-1100	1,003	New Gravity Main - Parallel	42	48	7,341	$ 1,059,300	$ 1,790,200	
2024 D-007	1823	1OO0-1100	1OO0-0900	1,022	New Gravity Main - Parallel	42	48	9,218	$ 1,079,100	$ 1,823,700	
2024 D-007	1821	1OO0-0900	1OO0-0800	1,247	New Gravity Main - Parallel	42	48	8,797	$ 1,316,700	$ 2,225,200	
2024 D-007	1819	1OO0-0800	1OO0-0700	1,000	New Gravity Main - Parallel	42	48	8,857	$ 1,056,000	$ 1,784,600	
2024 D-007	1817	1OO0-0700	1OO0-0600	994	New Gravity Main - Parallel	42	48	8,937	$ 1,049,400	$ 1,773,500	
2024 D-007	1815	1OO0-0600	1OO0-0500	1,013	New Gravity Main - Parallel	42	48	8,740	$ 1,069,200	$ 1,806,900	
2024 D-007	1813	1OO0-0500	1OO0-0400	1,090	New Gravity Main - Parallel	42	48	8,317	$ 1,151,100	$ 1,945,400	
2024 D-008	1811	1OO0-0400	1OO0-0300	1,022	New Gravity Main - Parallel	42	48	8,581	$ 1,079,100	$ 1,823,700	***$ 6,287,500***
2024 D-008	1809	1OO0-0300	1OO0-0200	993	New Gravity Main - Parallel	42	48	8,720	$ 1,048,600	$ 1,772,100	
2024 D-008	1807	1OO0-0200	1OO0-0100	973	New Gravity Main - Parallel	42	48	8,976	$ 1,027,700	$ 1,736,800	
2024 D-008	1805	1OO0-0100	1OO0-0050	535	New Gravity Main - Parallel	42	48	96,214	$ 565,000	$ 954,900	

Table E-5 Existing Lift Station Capacity ESFRs Remaining

Name	Owned by	Firm Capacity, gpm	Existing Design Flow, gpm	Status	ESFRs Remaining
Merced	District	750	1,250	Deficient	-
Manning	District	750	2,200	Deficient	-
North	District	1,900	6,900	Deficient	-
18th Ave	District	2,326	1,300	Sufficient	1,610
10th St	Fowler	316	30	Sufficient	450
Peach	Fowler	800	150	Sufficient	1,020
Gleason	Fowler	224	30	Sufficient	300
South Ave	Fowler	417	150	Sufficient	420
Jefferson	Fowler	120	20	Sufficient	160
Adams	Fowler	478	200	Sufficient	440
Randy	Fowler	250	30	Sufficient	340
Mehlert	Kingsburg	230	40	Sufficient	300
Kern	Kingsburg	787	20	Sufficient	1,200
Skansen	Kingsburg	500	80	Sufficient	660
Tulare	Kingsburg	250	70	Sufficient	280
Rose	Selma	865	170	Sufficient	1,090
Goldridge	Selma	100	30	Sufficient	110
North Hill	Selma	352	10	Sufficient	540
Dockery	Selma	865	280	Sufficient	920
Sunset	Selma	669	410	Sufficient	410
Barbara	Selma	170	20	Sufficient	230
Valley View	Selma	1,100	150	Sufficient	1,490
Maple & McCall	Selma	550	150	Sufficient	630
Clarkson & McCall	Selma	1,500	1,100	Sufficient	630