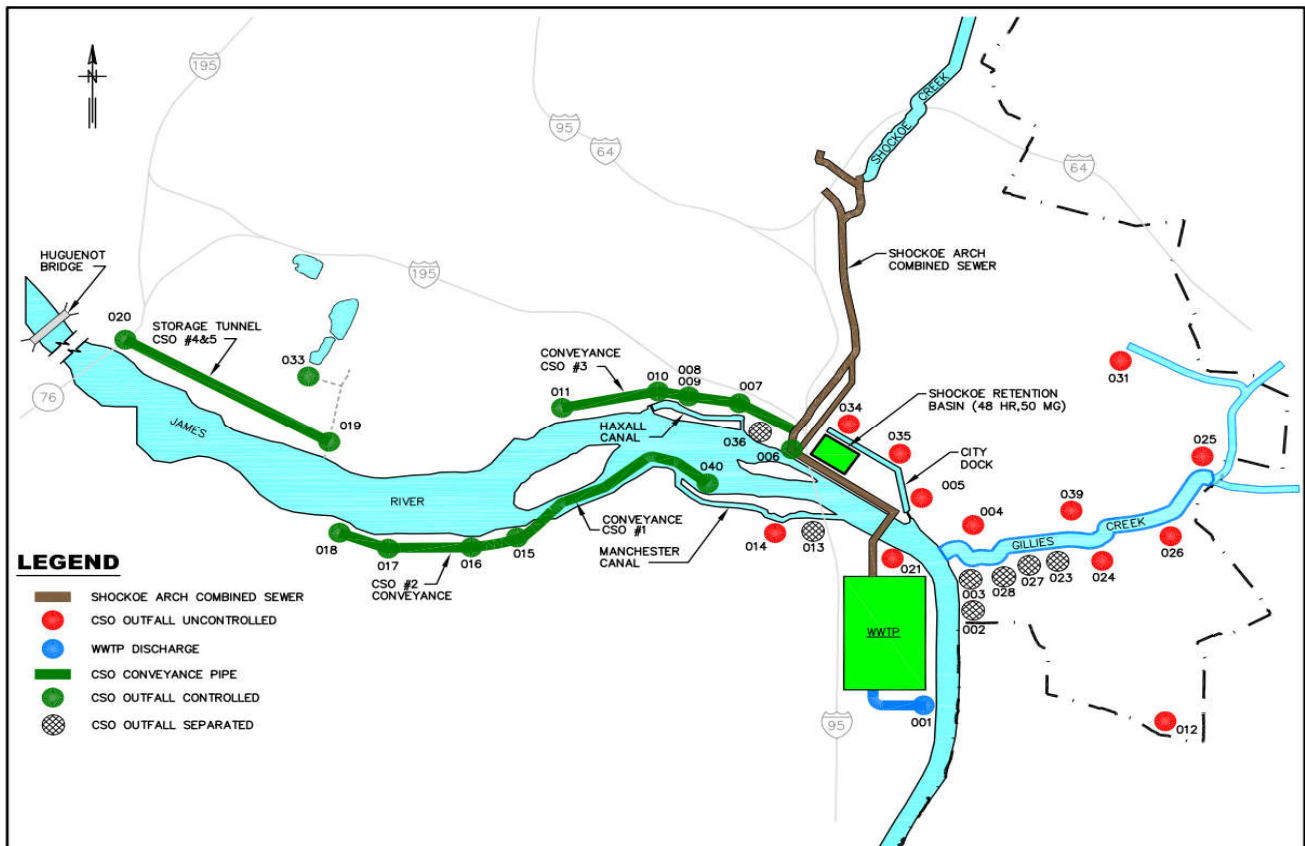


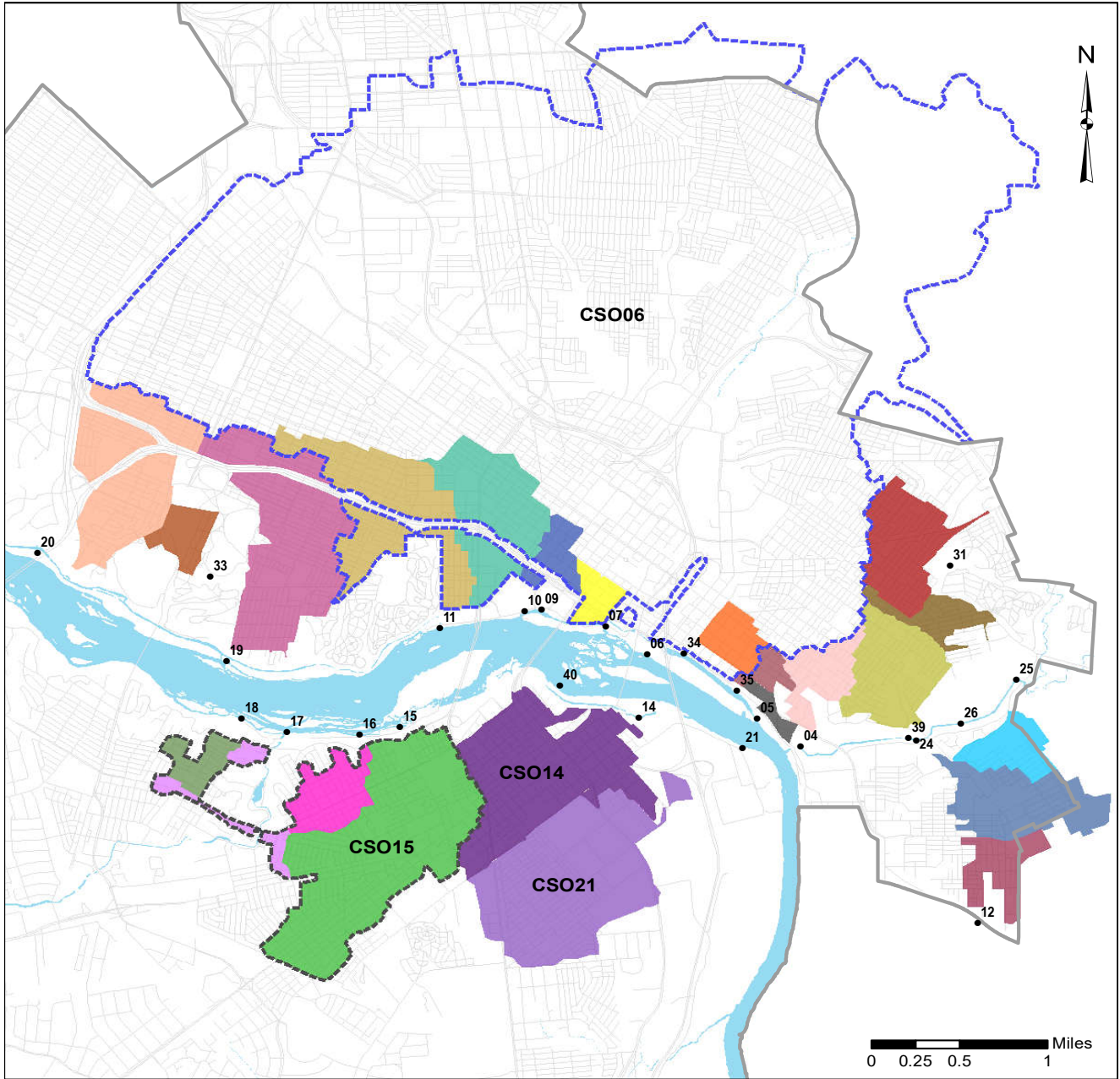
CITY OF RICHMOND, VIRGINIA  
DEPARTMENT OF PUBLIC UTILITIES

Combined Sewer Overflow Monthly Report

September, 2020



# Combined Sewer System Drainage Area Map



## Legend

City Limit	CSO04	CSO09	CSO14	CSO18	CSO24	CSO33	CSO40
CSO05	CSO10	CSO15	CSO19	CSO25	CSO34		
CSO06	CSO11	CSO16	CSO20	CSO26	CSO35		
CSO07	CSO12	CSO17	CSO21	CSO31	CSO39		

**CSO04 - Bloody Run  
Overflow Model Summary  
Current Month: September 2020**

Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
9/1/20	1	0.98	2.50	1.56	0.33	6.50
9/2/20		0.01	0.08	0.12		
9/3/20						
9/4/20		0.01	0.08	0.12		
9/5/20						
9/6/20						
9/7/20						
9/8/20						
9/9/20		0.25	1.58	0.48		
9/10/20		0.08	0.42	0.48		
9/11/20		0.13	0.42	1.08		
9/12/20		0.01	0.08	0.12		
9/13/20						
9/14/20						
9/15/20						
9/16/20						
9/17/20	1	2.77	8.50	1.68	1.8	6.00
9/18/20		0.24	1.42	0.36		
9/19/20						
9/20/20						
9/21/20						
9/22/20						
9/23/20						
9/24/20						
9/25/20	1	0.67	2.67	2.28	0.11	0.75
9/26/20		0.10	0.75	0.24		
9/27/20						
9/28/20						
9/29/20	1 <sup>(3)</sup>	1.61	2.83	2.40	0.77	2.67
9/30/20		0.07	0.58	0.12	0.06	0.58

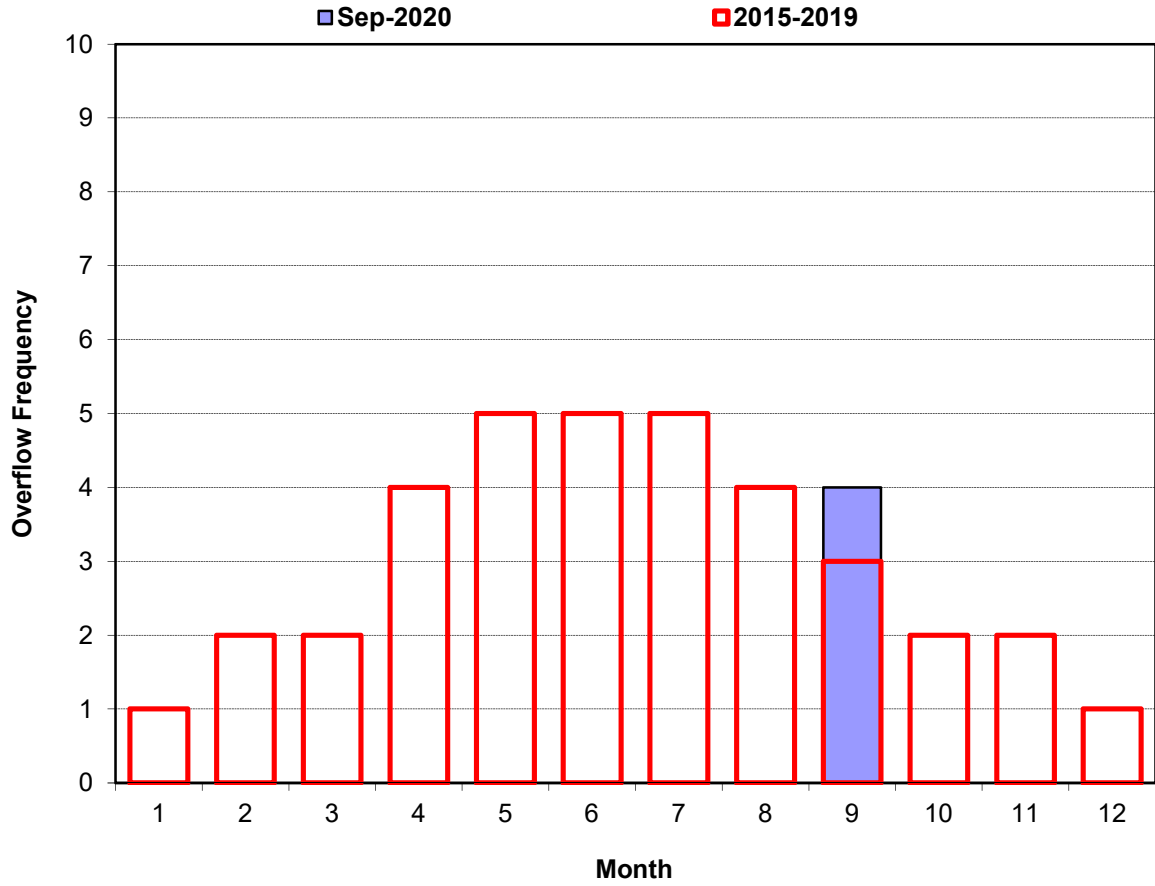
**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
4	6.93	21.92	2.40	3.00	16.50

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

<sup>(3)</sup> Overflow event continued on the following day.

### City of Richmond, Virginia Overflow Frequency by Month



**CSO05 - Peach Street  
Overflow Model Summary  
Current Month: September 2020**

Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
9/1/20		0.98	2.50	1.56		
9/2/20		0.01	0.08	0.12		
9/3/20						
9/4/20		0.01	0.08	0.12		
9/5/20						
9/6/20						
9/7/20						
9/8/20						
9/9/20		0.25	1.58	0.48		
9/10/20		0.08	0.42	0.48		
9/11/20		0.13	0.42	1.08		
9/12/20		0.01	0.08	0.12		
9/13/20						
9/14/20						
9/15/20						
9/16/20						
9/17/20	1 <sup>(3)</sup>	2.77	8.50	1.68	1.9	8.25
9/18/20		0.24	1.42	0.36	0.17	4.50
9/19/20						
9/20/20						
9/21/20						
9/22/20						
9/23/20						
9/24/20						
9/25/20		0.67	2.67	2.28		
9/26/20		0.10	0.75	0.24		
9/27/20						
9/28/20						
9/29/20	1 <sup>(3)</sup>	1.61	2.83	2.40	0.19	0.75
9/30/20		0.07	0.58	0.12	0.38	4.33

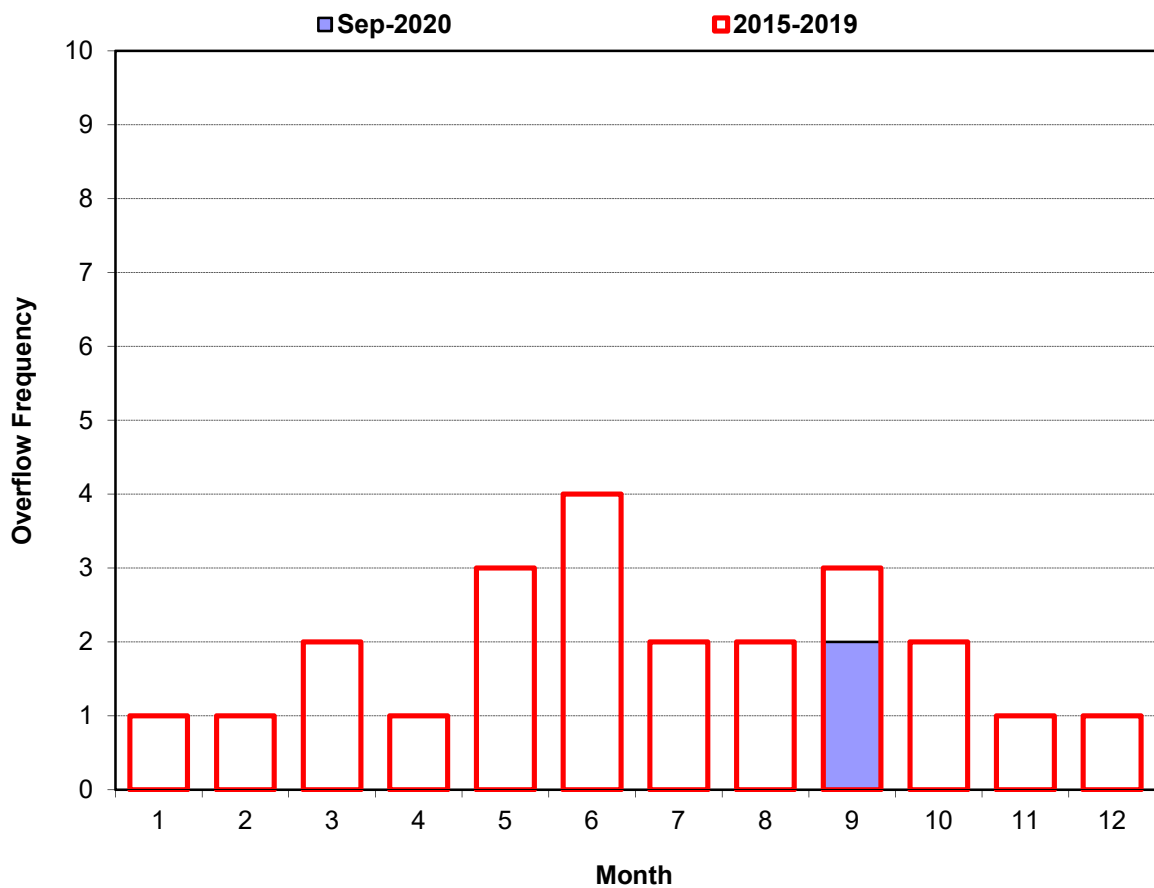
**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
2	6.93	21.92	2.40	2.60	17.83

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

<sup>(3)</sup> Overflow event continued on the following day.

### City of Richmond, Virginia Overflow Frequency by Month



**CSO06 - Shockoe**  
**Overflow Model Summary<sup>†</sup>**  
**Current Month: September 2020**

Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
9/1/20	1 <sup>(3)</sup>	0.98	2.50	1.56	27.7	5.50
9/2/20		0.01	0.08	0.12	0.04	0.42
9/3/20						
9/4/20		0.01	0.08	0.12		
9/5/20						
9/6/20						
9/7/20						
9/8/20						
9/9/20		0.25	1.58	0.48		
9/10/20		0.08	0.42	0.48		
9/11/20		0.13	0.42	1.08		
9/12/20		0.01	0.08	0.12		
9/13/20						
9/14/20						
9/15/20						
9/16/20						
9/17/20	1 <sup>(3)</sup>	2.77	8.50	1.68	209	8.25
9/18/20		0.24	1.42	0.36	43.7	13.25
9/19/20						
9/20/20						
9/21/20						
9/22/20						
9/23/20						
9/24/20						
9/25/20		0.67	2.67	2.28		
9/26/20		0.10	0.75	0.24		
9/27/20						
9/28/20						
9/29/20	1 <sup>(3)</sup>	1.61	2.83	2.40	45.1	1.00
9/30/20		0.07	0.58	0.12	57.3	13.08

**MONTH SUMMARY**

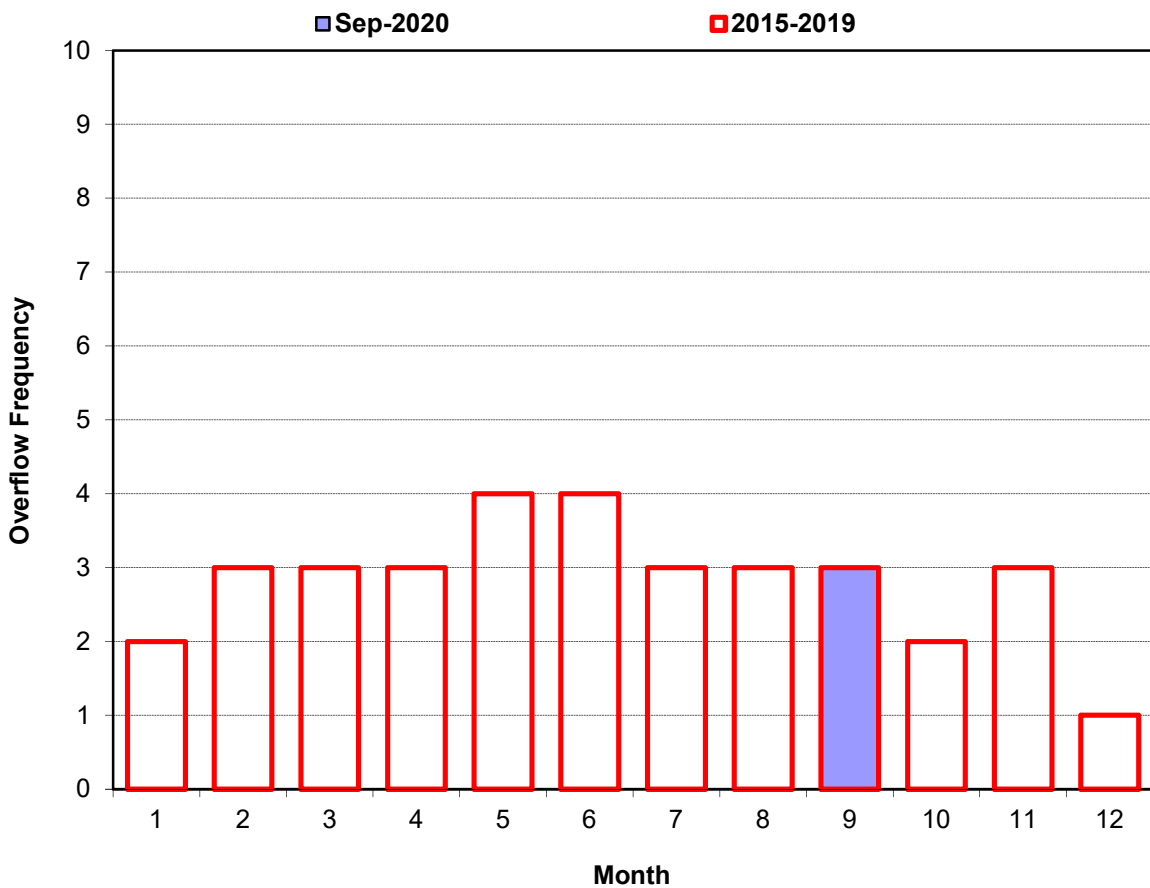
Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
3	6.93	21.92	2.40	383.00	41.50

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

<sup>†</sup> Overflow occurred after the Shockoe Retention Basin was full.

<sup>(3)</sup> Overflow event continued on the following day.

### City of Richmond, Virginia Overflow Frequency by Month†



† Overflow occurred after the Shockoe Retention Basin was full.



**CSO07 - Byrd  
Overflow Model Summary  
Current Month: September 2020**

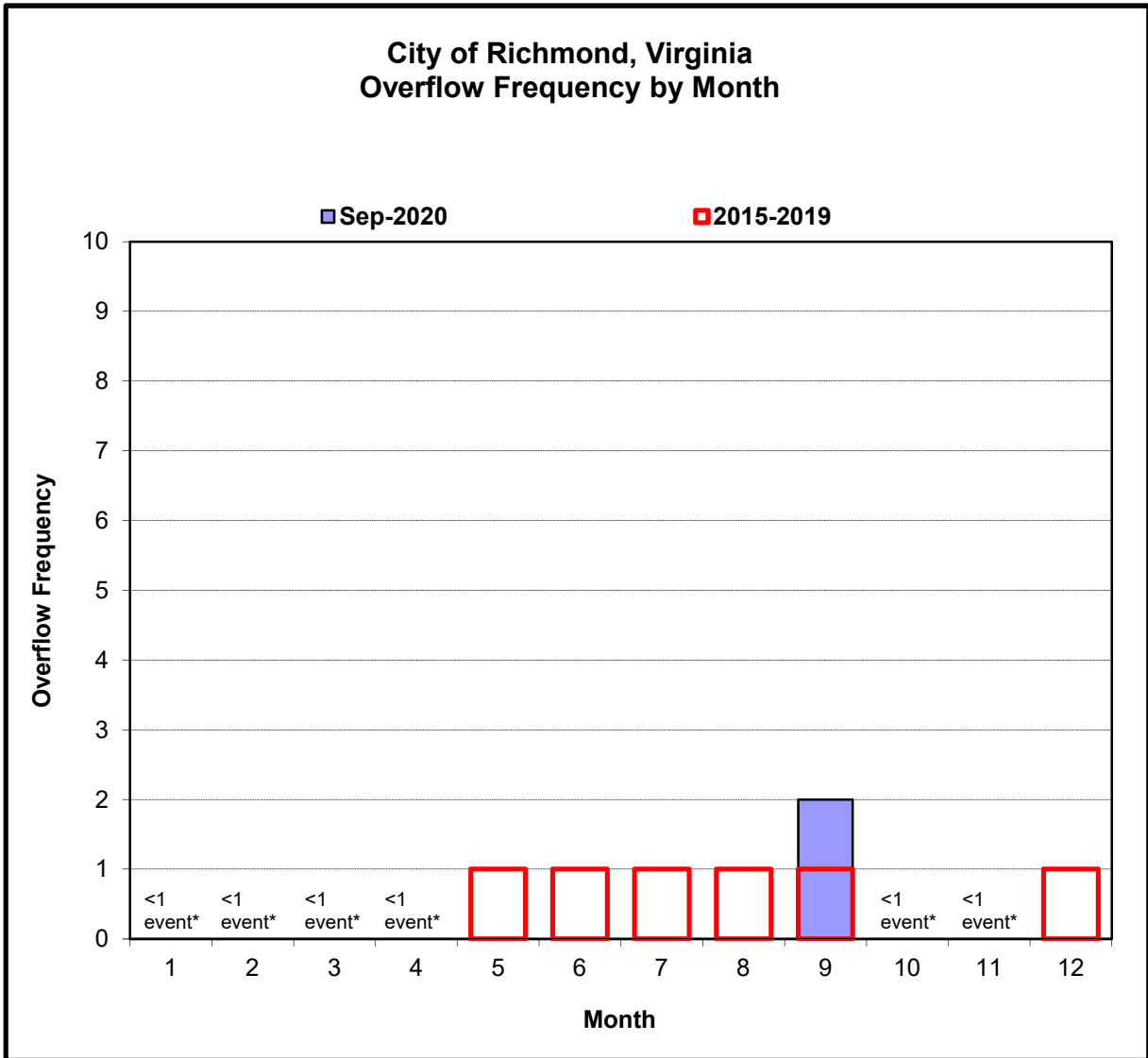
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
9/1/20		0.98	2.50	1.56		
9/2/20		0.01	0.08	0.12		
9/3/20						
9/4/20		0.01	0.08	0.12		
9/5/20						
9/6/20						
9/7/20						
9/8/20						
9/9/20		0.25	1.58	0.48		
9/10/20		0.08	0.42	0.48		
9/11/20		0.13	0.42	1.08		
9/12/20		0.01	0.08	0.12		
9/13/20						
9/14/20						
9/15/20						
9/16/20						
9/17/20	1	2.77	8.50	1.68	0.03	0.92
9/18/20		0.24	1.42	0.36		
9/19/20						
9/20/20						
9/21/20						
9/22/20						
9/23/20						
9/24/20						
9/25/20		0.67	2.67	2.28		
9/26/20		0.10	0.75	0.24		
9/27/20						
9/28/20						
9/29/20	1	1.61	2.83	2.40	0.02	0.42
9/30/20		0.07	0.58	0.12		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
2	6.93	21.92	2.40	0.06	1.33

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month



\* Average Overflow Frequency is less than once in the month.

**CSO09 - 7th Street  
Overflow Model Summary  
Current Month: September 2020**

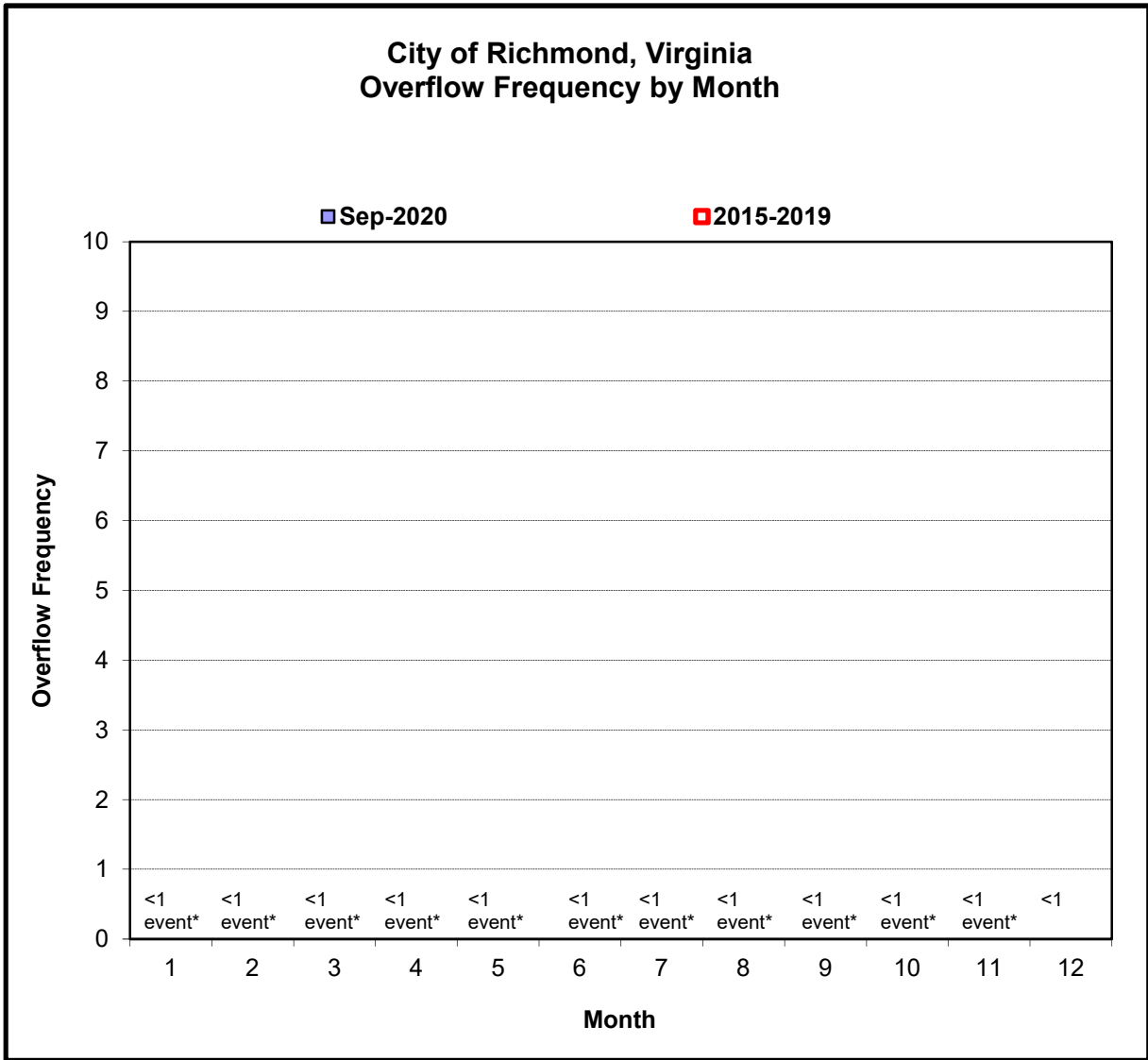
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
9/1/20		0.98	2.50	1.56		
9/2/20		0.01	0.08	0.12		
9/3/20						
9/4/20		0.01	0.08	0.12		
9/5/20						
9/6/20						
9/7/20						
9/8/20						
9/9/20		0.25	1.58	0.48		
9/10/20		0.08	0.42	0.48		
9/11/20		0.13	0.42	1.08		
9/12/20		0.01	0.08	0.12		
9/13/20						
9/14/20						
9/15/20						
9/16/20						
9/17/20		2.77	8.50	1.68		
9/18/20		0.24	1.42	0.36		
9/19/20						
9/20/20						
9/21/20						
9/22/20						
9/23/20						
9/24/20						
9/25/20		0.67	2.67	2.28		
9/26/20		0.10	0.75	0.24		
9/27/20						
9/28/20						
9/29/20		1.61	2.83	2.40		
9/30/20		0.07	0.58	0.12		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
0	6.93	21.92	2.40	0.00	0.00

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month



\* Average Overflow Frequency is less than once in the month.

**CSO10 - Gambles Hill  
 Overflow Model Summary  
 Current Month: September 2020**

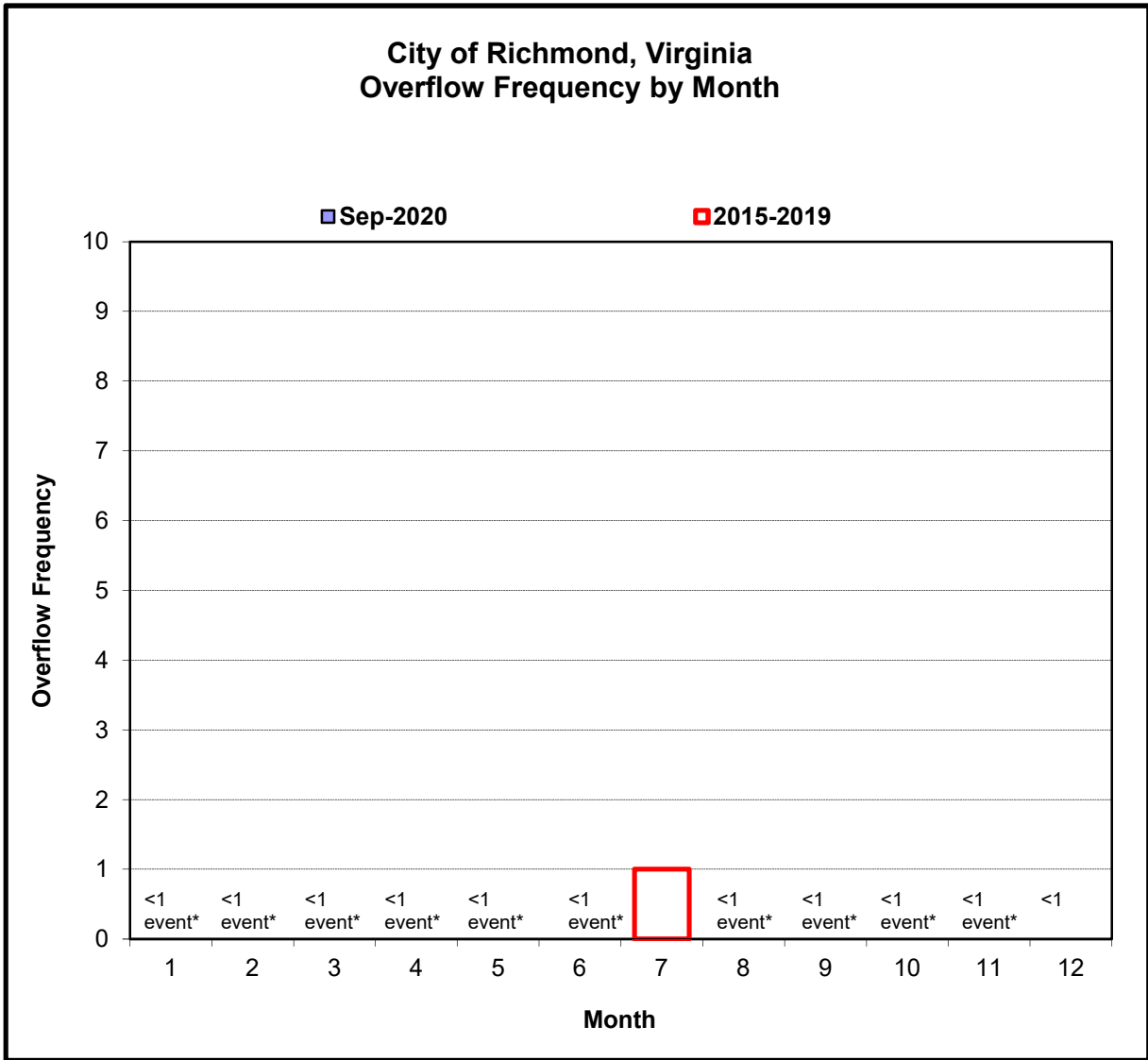
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
9/1/20		0.98	2.50	1.56		
9/2/20		0.01	0.08	0.12		
9/3/20						
9/4/20		0.01	0.08	0.12		
9/5/20						
9/6/20						
9/7/20						
9/8/20						
9/9/20		0.25	1.58	0.48		
9/10/20		0.08	0.42	0.48		
9/11/20		0.13	0.42	1.08		
9/12/20		0.01	0.08	0.12		
9/13/20						
9/14/20						
9/15/20						
9/16/20						
9/17/20		2.77	8.50	1.68		
9/18/20		0.24	1.42	0.36		
9/19/20						
9/20/20						
9/21/20						
9/22/20						
9/23/20						
9/24/20						
9/25/20		0.67	2.67	2.28		
9/26/20		0.10	0.75	0.24		
9/27/20						
9/28/20						
9/29/20		1.61	2.83	2.40		
9/30/20		0.07	0.58	0.12		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
0	6.93	21.92	2.40	0.00	0.00

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month



\* Average Overflow Frequency is less than once in the month.

**CSO11 - Park Hydro  
Overflow Model Summary  
Current Month: September 2020**

Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
9/1/20	1	0.98	2.50	1.56	4.6	2.33
9/2/20		0.01	0.08	0.12		
9/3/20						
9/4/20		0.01	0.08	0.12		
9/5/20						
9/6/20						
9/7/20						
9/8/20						
9/9/20		0.25	1.58	0.48		
9/10/20		0.08	0.42	0.48		
9/11/20		0.13	0.42	1.08		
9/12/20		0.01	0.08	0.12		
9/13/20						
9/14/20						
9/15/20						
9/16/20						
9/17/20	1	2.77	8.50	1.68	13.9	6.25
9/18/20		0.24	1.42	0.36		
9/19/20						
9/20/20						
9/21/20						
9/22/20						
9/23/20						
9/24/20						
9/25/20	1	0.67	2.67	2.28	2.9	1.17
9/26/20		0.10	0.75	0.24		
9/27/20						
9/28/20						
9/29/20	1 <sup>(3)</sup>	1.61	2.83	2.40	7.7	2.67
9/30/20		0.07	0.58	0.12	0.03	0.17

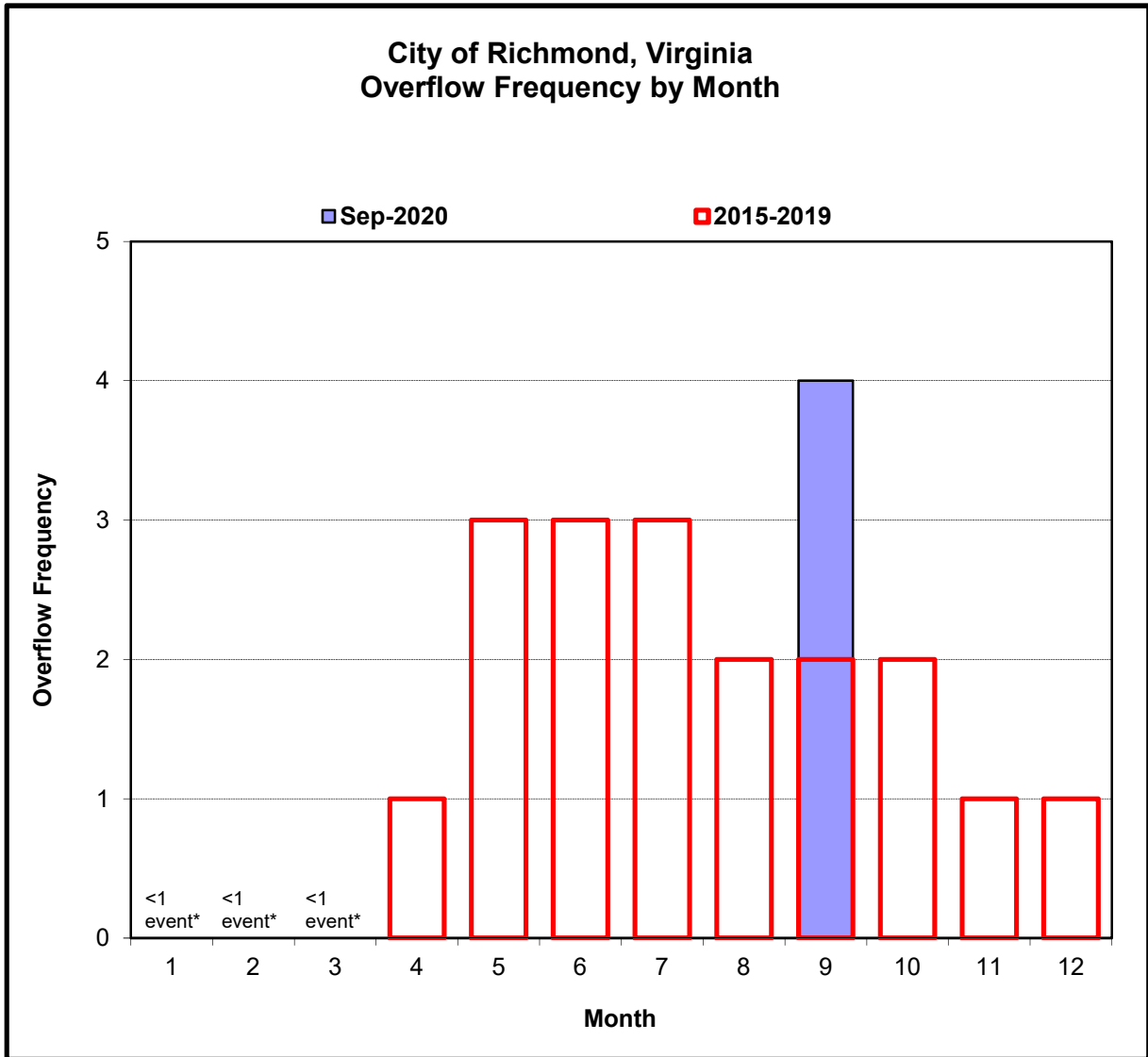
**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
4	6.93	21.92	2.40	29.10	12.58

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

<sup>(3)</sup> Overflow event continued on the following day.

### City of Richmond, Virginia Overflow Frequency by Month



\* Average Overflow Frequency is less than once in the month.



**CSO12 - Hilton Street  
Overflow Model Summary  
Current Month: September 2020**

Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
9/1/20	1	0.98	2.50	1.56	0.19	1.83
9/2/20		0.01	0.08	0.12		
9/3/20						
9/4/20		0.01	0.08	0.12		
9/5/20						
9/6/20						
9/7/20						
9/8/20						
9/9/20		0.25	1.58	0.48		
9/10/20		0.08	0.42	0.48		
9/11/20		0.13	0.42	1.08		
9/12/20		0.01	0.08	0.12		
9/13/20						
9/14/20						
9/15/20						
9/16/20						
9/17/20	1	2.77	8.50	1.68	1.2	7.67
9/18/20		0.24	1.42	0.36		
9/19/20						
9/20/20						
9/21/20						
9/22/20						
9/23/20						
9/24/20						
9/25/20	1	0.67	2.67	2.28	0.08	0.92
9/26/20		0.10	0.75	0.24		
9/27/20						
9/28/20						
9/29/20	1 <sup>(3)</sup>	1.61	2.83	2.40	0.58	2.58
9/30/20		0.07	0.58	0.12	0.03	0.75

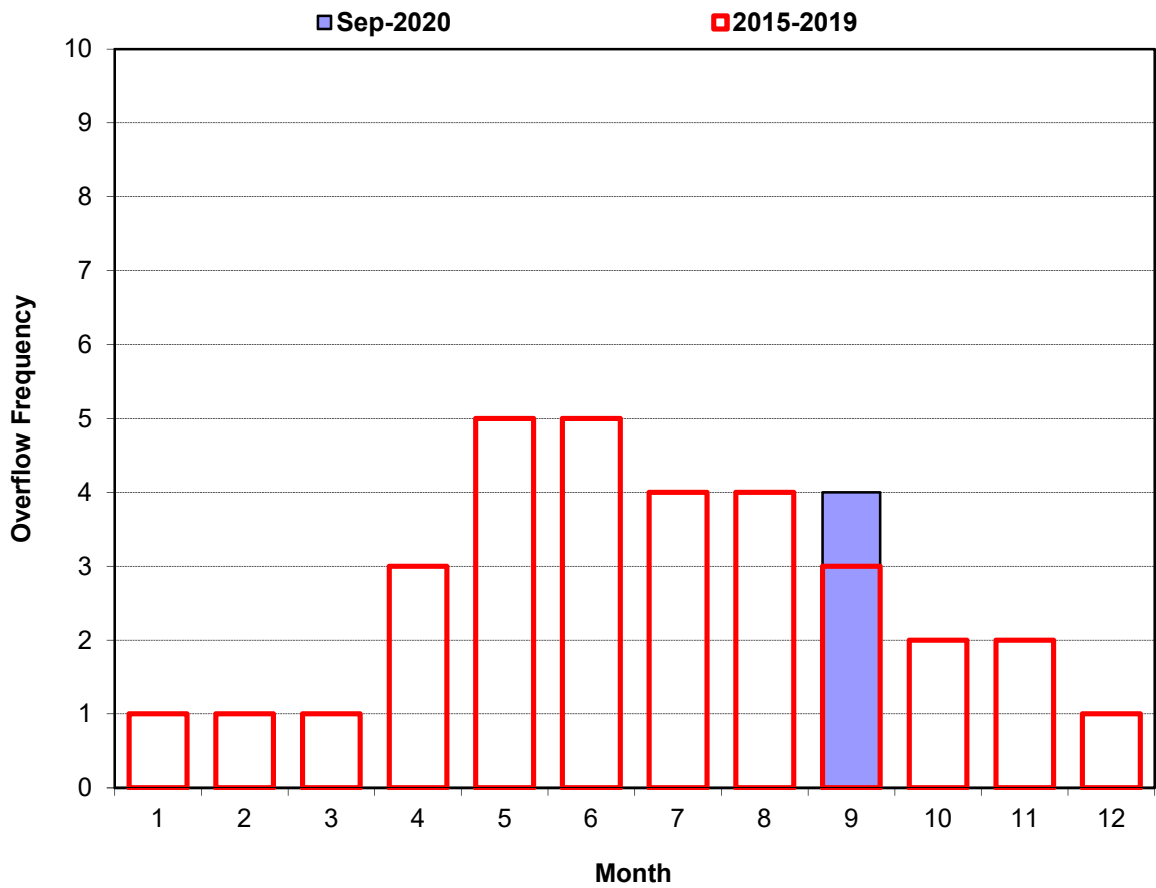
**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
4	6.93	21.92	2.40	2.00	13.75

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

<sup>(3)</sup> Overflow event continued on the following day.

### City of Richmond, Virginia Overflow Frequency by Month



**CSO14 - Stockton  
 Overflow Model Summary  
 Current Month: September 2020**

Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
9/1/20	1	0.98	2.50	1.56	2	2.17
9/2/20		0.01	0.08	0.12		
9/3/20						
9/4/20		0.01	0.08	0.12		
9/5/20						
9/6/20						
9/7/20						
9/8/20						
9/9/20		0.25	1.58	0.48		
9/10/20		0.08	0.42	0.48		
9/11/20		0.13	0.42	1.08		
9/12/20		0.01	0.08	0.12		
9/13/20						
9/14/20						
9/15/20						
9/16/20						
9/17/20	1	2.77	8.50	1.68	9.1	7.50
9/18/20		0.24	1.42	0.36		
9/19/20						
9/20/20						
9/21/20						
9/22/20						
9/23/20						
9/24/20						
9/25/20	1	0.67	2.67	2.28	0.78	0.92
9/26/20		0.10	0.75	0.24		
9/27/20						
9/28/20						
9/29/20	1 <sup>(3)</sup>	1.61	2.83	2.40	4.7	2.50
9/30/20		0.07	0.58	0.12	0.23	0.67

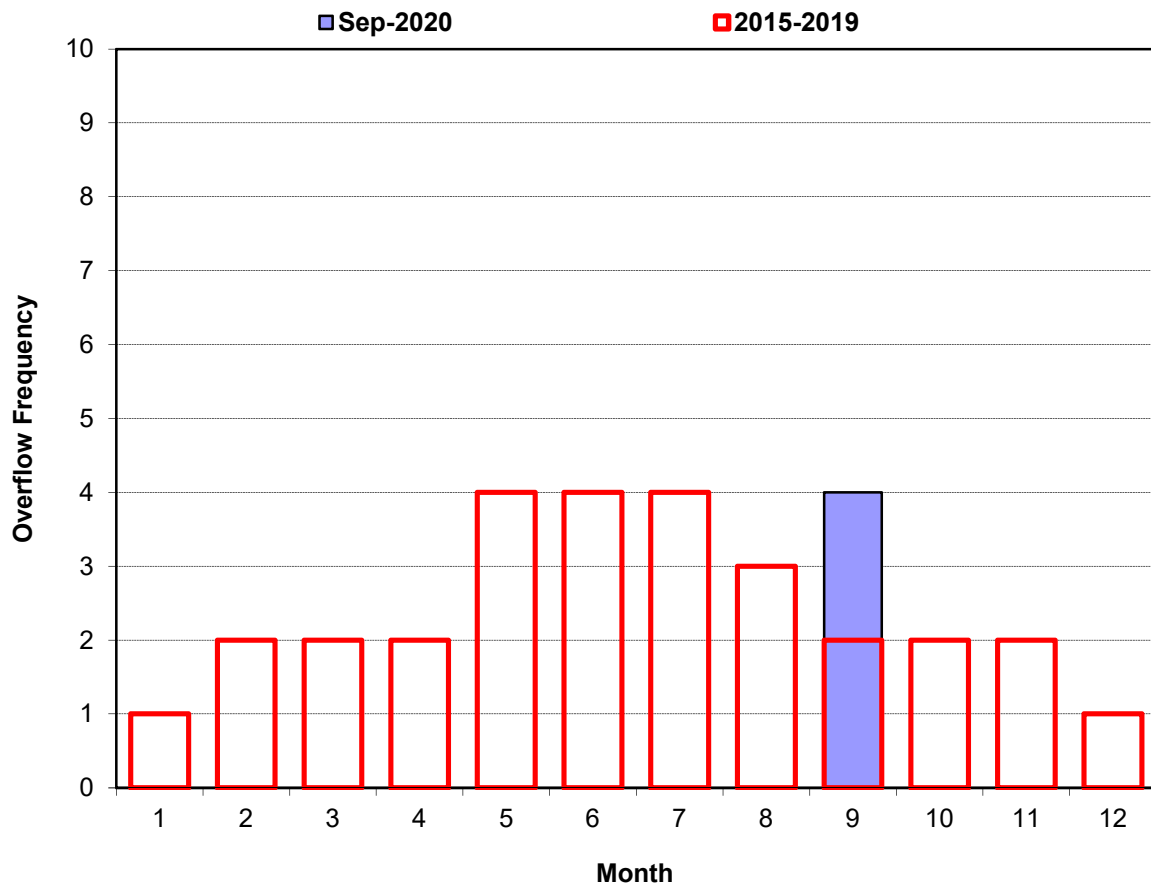
**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
4	6.93	21.92	2.40	16.80	13.75

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

<sup>(3)</sup> Overflow event continued on the following day.

### City of Richmond, Virginia Overflow Frequency by Month



**CSO15 - Canoe Run  
 Overflow Model Summary  
 Current Month: September 2020**

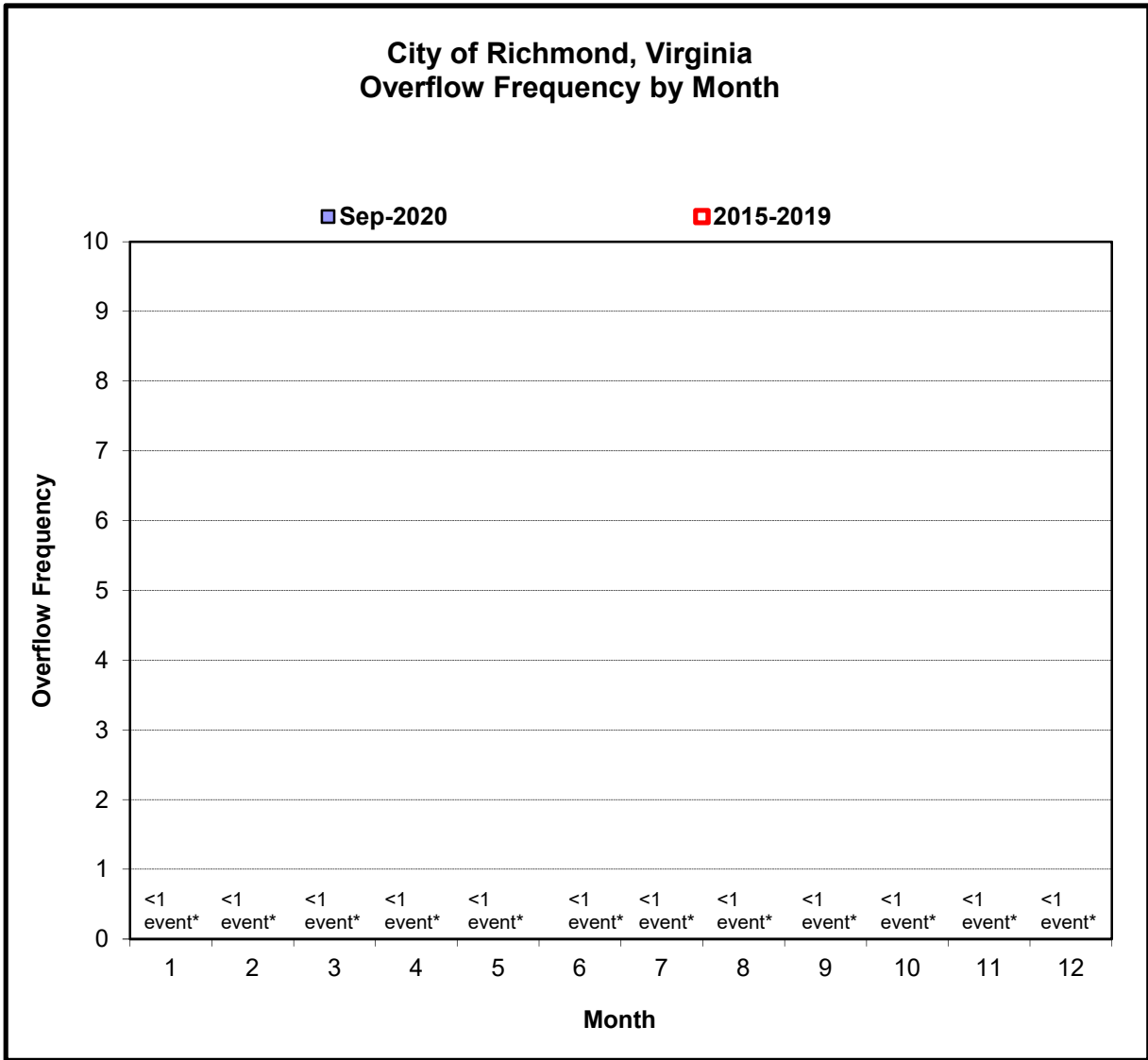
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
9/1/20		0.98	2.50	1.56		
9/2/20		0.01	0.08	0.12		
9/3/20						
9/4/20		0.01	0.08	0.12		
9/5/20						
9/6/20						
9/7/20						
9/8/20						
9/9/20		0.25	1.58	0.48		
9/10/20		0.08	0.42	0.48		
9/11/20		0.13	0.42	1.08		
9/12/20		0.01	0.08	0.12		
9/13/20						
9/14/20						
9/15/20						
9/16/20						
9/17/20		2.77	8.50	1.68		
9/18/20		0.24	1.42	0.36		
9/19/20						
9/20/20						
9/21/20						
9/22/20						
9/23/20						
9/24/20						
9/25/20		0.67	2.67	2.28		
9/26/20		0.10	0.75	0.24		
9/27/20						
9/28/20						
9/29/20		1.61	2.83	2.40		
9/30/20		0.07	0.58	0.12		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
0	6.93	21.92	2.40	0.00	0.00

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month



\* Average Overflow Frequency is less than once in the month.

**CSO16 - Woodland  
Overflow Model Summary  
Current Month: September 2020**

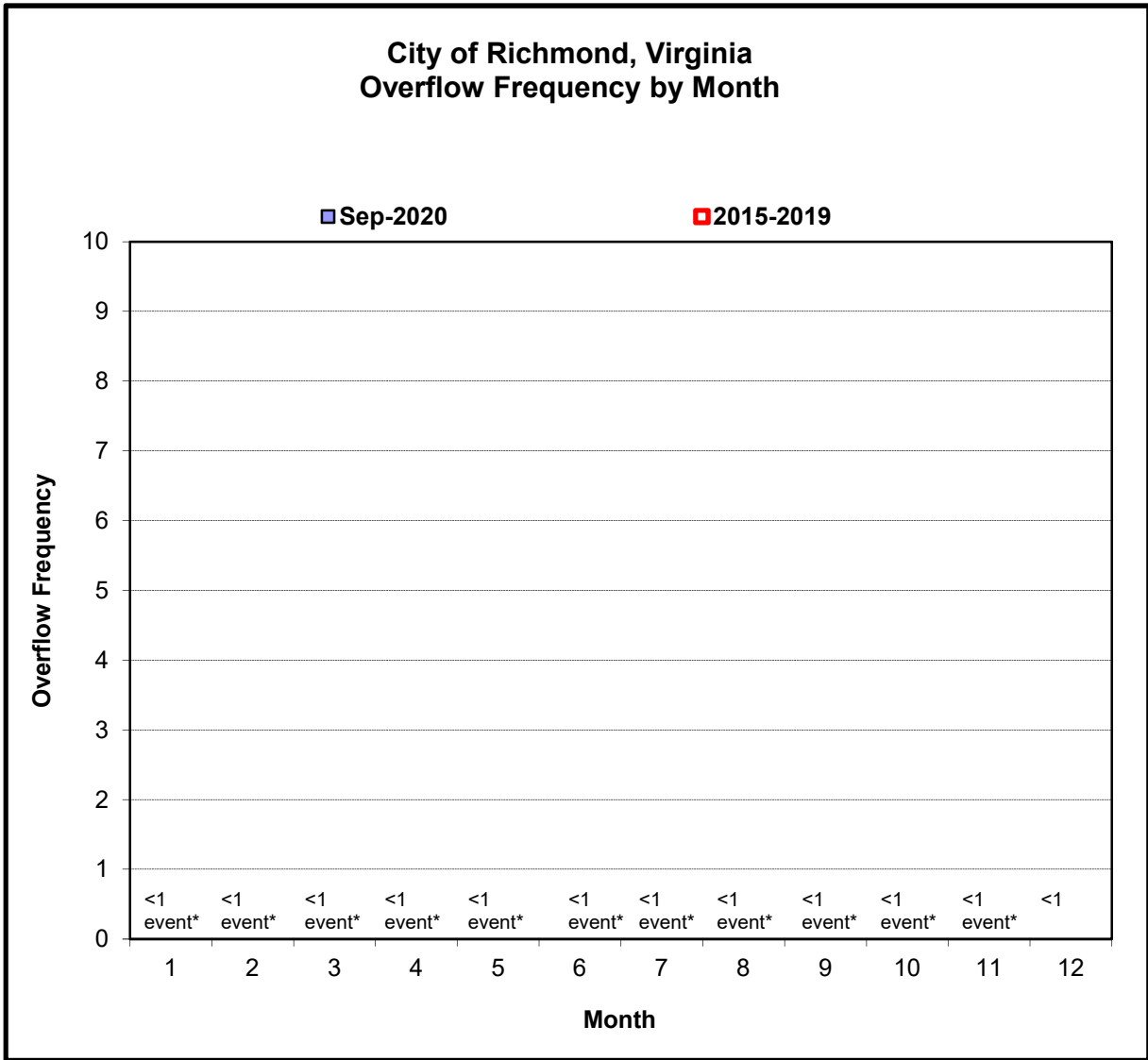
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
9/1/20		0.98	2.50	1.56		
9/2/20		0.01	0.08	0.12		
9/3/20						
9/4/20		0.01	0.08	0.12		
9/5/20						
9/6/20						
9/7/20						
9/8/20						
9/9/20		0.25	1.58	0.48		
9/10/20		0.08	0.42	0.48		
9/11/20		0.13	0.42	1.08		
9/12/20		0.01	0.08	0.12		
9/13/20						
9/14/20						
9/15/20						
9/16/20						
9/17/20		2.77	8.50	1.68		
9/18/20		0.24	1.42	0.36		
9/19/20						
9/20/20						
9/21/20						
9/22/20						
9/23/20						
9/24/20						
9/25/20		0.67	2.67	2.28		
9/26/20		0.10	0.75	0.24		
9/27/20						
9/28/20						
9/29/20		1.61	2.83	2.40		
9/30/20		0.07	0.58	0.12		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
0	6.93	21.92	2.40	0.00	0.00

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month



\* Average Overflow Frequency is less than once in the month.



**CSO17 - Reedy Creek  
 Overflow Model Summary  
 Current Month: September 2020**

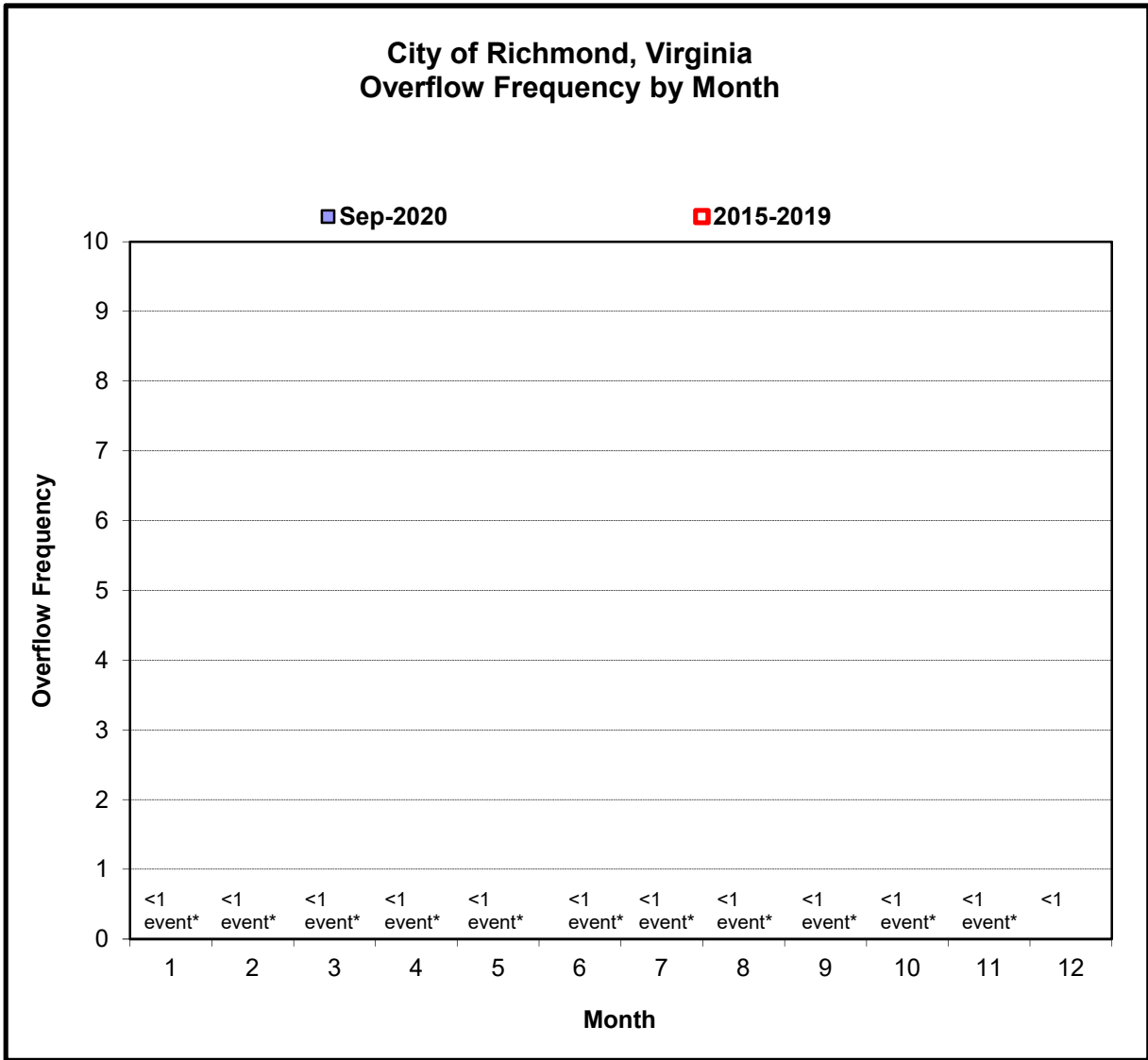
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
9/1/20		0.98	2.50	1.56		
9/2/20		0.01	0.08	0.12		
9/3/20						
9/4/20		0.01	0.08	0.12		
9/5/20						
9/6/20						
9/7/20						
9/8/20						
9/9/20		0.25	1.58	0.48		
9/10/20		0.08	0.42	0.48		
9/11/20		0.13	0.42	1.08		
9/12/20		0.01	0.08	0.12		
9/13/20						
9/14/20						
9/15/20						
9/16/20						
9/17/20		2.77	8.50	1.68		
9/18/20		0.24	1.42	0.36		
9/19/20						
9/20/20						
9/21/20						
9/22/20						
9/23/20						
9/24/20						
9/25/20		0.67	2.67	2.28		
9/26/20		0.10	0.75	0.24		
9/27/20						
9/28/20						
9/29/20		1.61	2.83	2.40		
9/30/20		0.07	0.58	0.12		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
0	6.93	21.92	2.40	0.00	0.00

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month



\* Average Overflow Frequency is less than once in the month.

**CSO18 - 42nd Street  
 Overflow Model Summary  
 Current Month: September 2020**

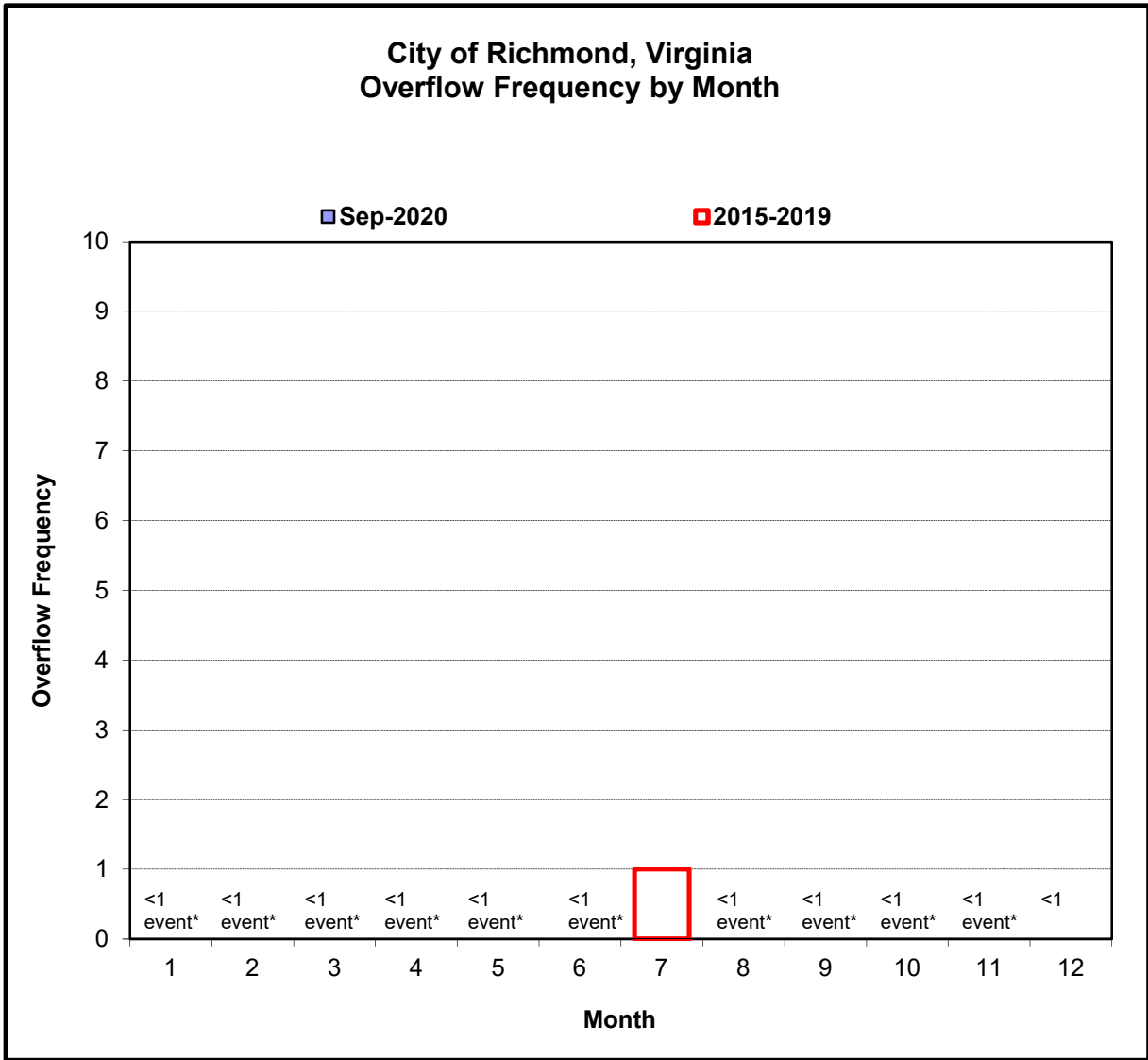
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
9/1/20		0.98	2.50	1.56		
9/2/20		0.01	0.08	0.12		
9/3/20						
9/4/20		0.01	0.08	0.12		
9/5/20						
9/6/20						
9/7/20						
9/8/20						
9/9/20		0.25	1.58	0.48		
9/10/20		0.08	0.42	0.48		
9/11/20		0.13	0.42	1.08		
9/12/20		0.01	0.08	0.12		
9/13/20						
9/14/20						
9/15/20						
9/16/20						
9/17/20		2.77	8.50	1.68		
9/18/20		0.24	1.42	0.36		
9/19/20						
9/20/20						
9/21/20						
9/22/20						
9/23/20						
9/24/20						
9/25/20		0.67	2.67	2.28		
9/26/20		0.10	0.75	0.24		
9/27/20						
9/28/20						
9/29/20		1.61	2.83	2.40		
9/30/20		0.07	0.58	0.12		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
0	6.93	21.92	2.40	0.00	0.00

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month



\* Average Overflow Frequency is less than once in the month.

**CSO19 - Hampton  
 Overflow Model Summary  
 Current Month: September 2020**

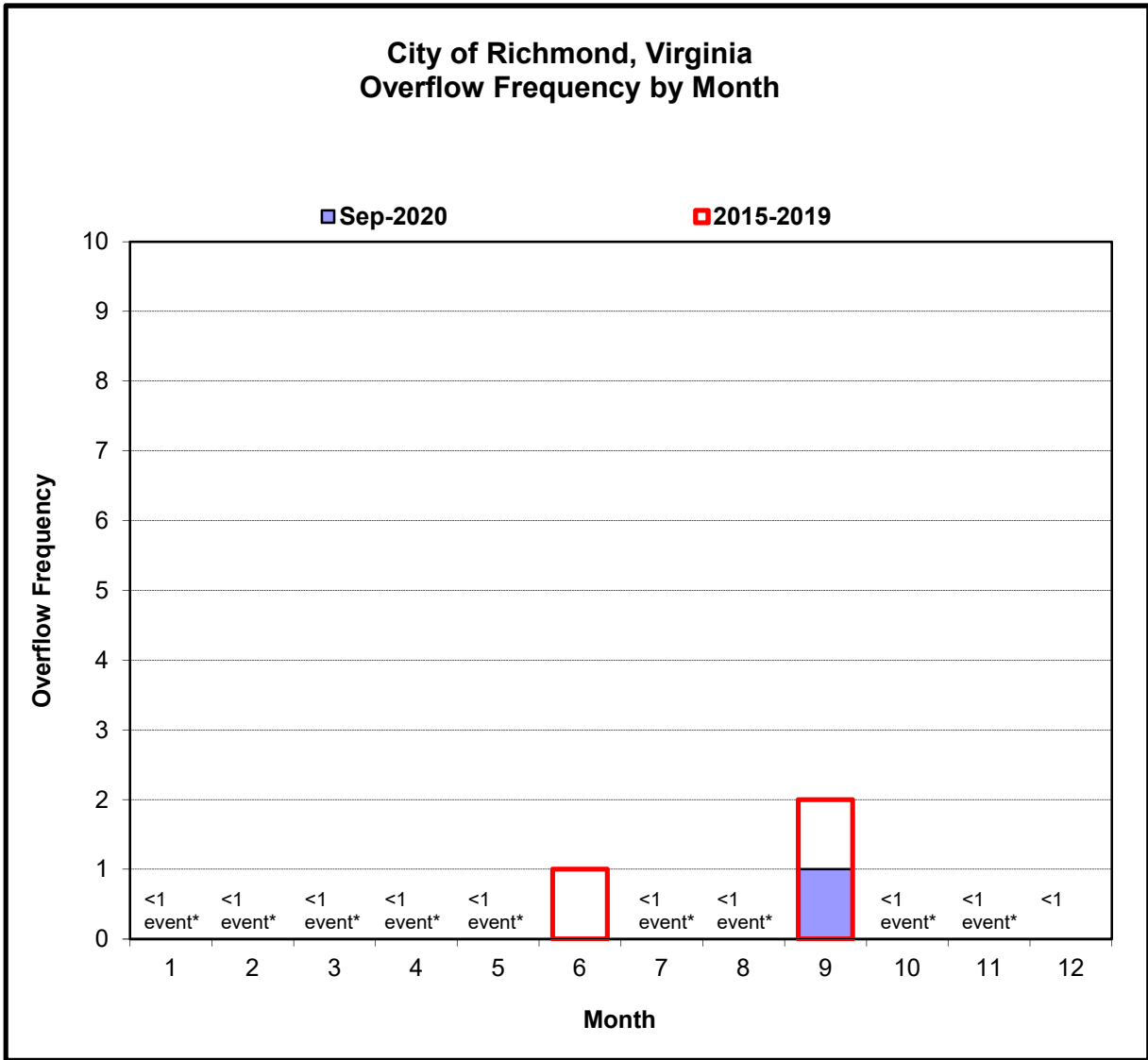
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
9/1/20		0.98	2.50	1.56		
9/2/20		0.01	0.08	0.12		
9/3/20						
9/4/20		0.01	0.08	0.12		
9/5/20						
9/6/20						
9/7/20						
9/8/20						
9/9/20		0.25	1.58	0.48		
9/10/20		0.08	0.42	0.48		
9/11/20		0.13	0.42	1.08		
9/12/20		0.01	0.08	0.12		
9/13/20						
9/14/20						
9/15/20						
9/16/20						
9/17/20	1	2.77	8.50	1.68	0.5	2.83
9/18/20		0.24	1.42	0.36		
9/19/20						
9/20/20						
9/21/20						
9/22/20						
9/23/20						
9/24/20						
9/25/20		0.67	2.67	2.28		
9/26/20		0.10	0.75	0.24		
9/27/20						
9/28/20						
9/29/20		1.61	2.83	2.40		
9/30/20		0.07	0.58	0.12		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
1	6.93	21.92	2.40	0.50	2.83

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month



\* Average Overflow Frequency is less than once in the month.

**CSO20 - Mc Cloy  
Overflow Model Summary  
Current Month: September 2020**

Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
9/1/20		0.98	2.50	1.56		
9/2/20		0.01	0.08	0.12		
9/3/20						
9/4/20		0.01	0.08	0.12		
9/5/20						
9/6/20						
9/7/20						
9/8/20						
9/9/20		0.25	1.58	0.48		
9/10/20		0.08	0.42	0.48		
9/11/20		0.13	0.42	1.08		
9/12/20		0.01	0.08	0.12		
9/13/20						
9/14/20						
9/15/20						
9/16/20						
9/17/20	1 <sup>(3)</sup>	2.77	8.50	1.68	0.43	2.08
9/18/20		0.24	1.42	0.36	0.06	1.00
9/19/20						
9/20/20						
9/21/20						
9/22/20						
9/23/20						
9/24/20						
9/25/20		0.67	2.67	2.28		
9/26/20		0.10	0.75	0.24		
9/27/20						
9/28/20						
9/29/20		1.61	2.83	2.40		
9/30/20		0.07	0.58	0.12		

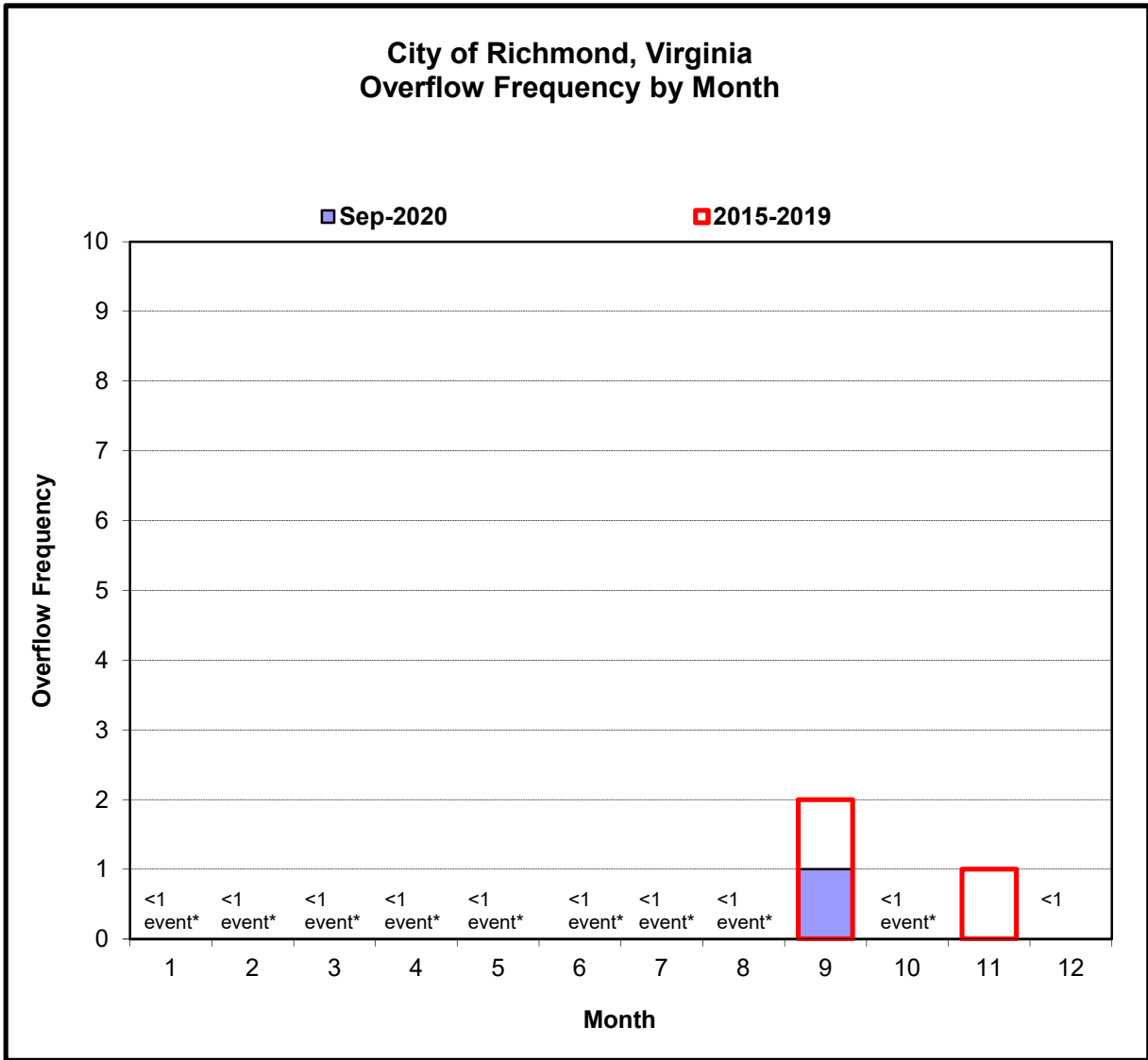
**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
1	6.93	21.92	2.40	0.49	3.08

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

<sup>(3)</sup> Overflow event continued on the following day.

### City of Richmond, Virginia Overflow Frequency by Month



\* Average Overflow Frequency is less than once in the month.



**CSO21 - Gordon Ave  
Overflow Model Summary  
Current Month: September 2020**

Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
9/1/20	1	0.98	2.50	1.56	1.10	0.75
9/2/20		0.01	0.08	0.12		
9/3/20						
9/4/20		0.01	0.08	0.12		
9/5/20						
9/6/20						
9/7/20						
9/8/20						
9/9/20		0.25	1.58	0.48		
9/10/20		0.08	0.42	0.48		
9/11/20		0.13	0.42	1.08		
9/12/20		0.01	0.08	0.12		
9/13/20						
9/14/20						
9/15/20						
9/16/20						
9/17/20	1 <sup>(3)</sup>	2.77	8.50	1.68	30.10	9.58
9/18/20		0.24	1.42	0.36	3.30	4.00
9/19/20						
9/20/20						
9/21/20						
9/22/20						
9/23/20						
9/24/20						
9/25/20	1	0.67	2.67	2.28	0.85	0.67
9/26/20		0.10	0.75	0.24		
9/27/20						
9/28/20						
9/29/20	1 <sup>(3)</sup>	1.61	2.83	2.40	6.90	2.50
9/30/20		0.07	0.58	0.12	4.00	2.67

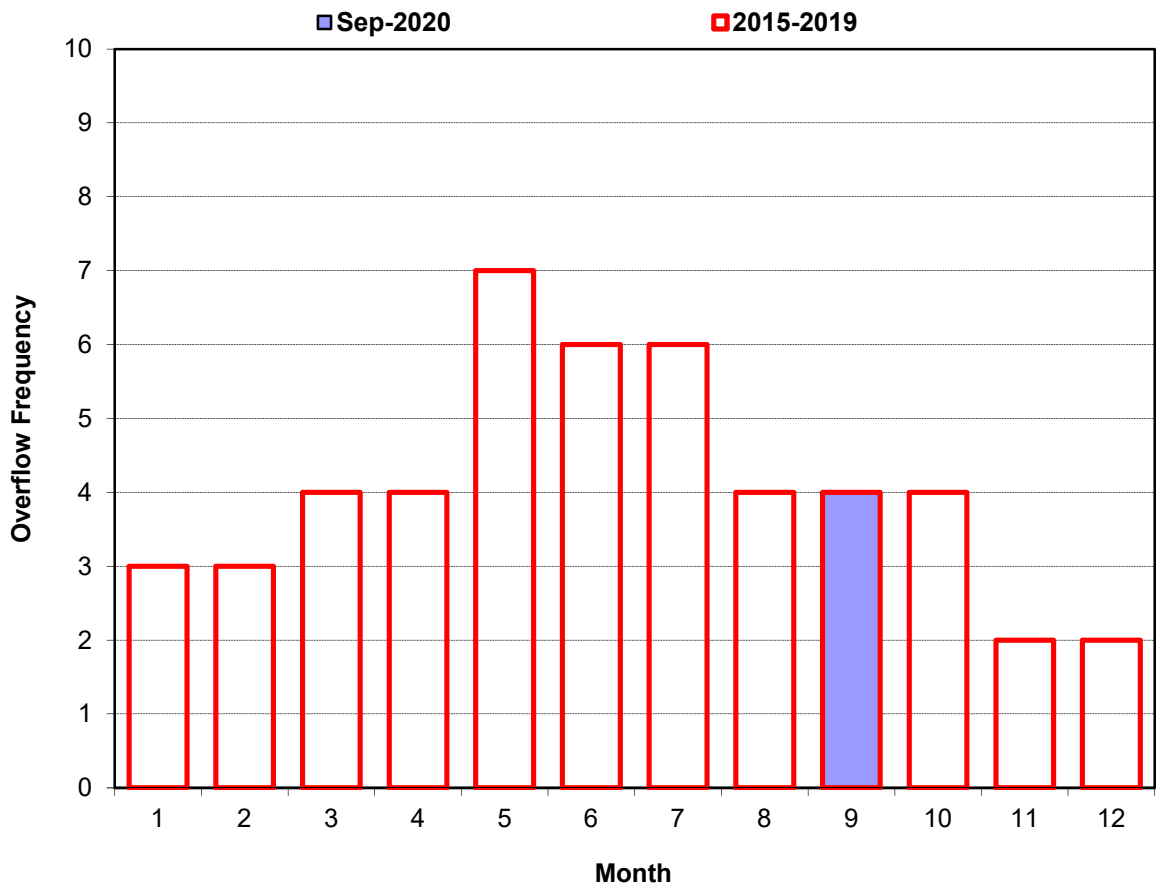
**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
4	6.93	21.92	2.40	46.20	20.17

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

<sup>(3)</sup> Overflow event continued on the following day.

### City of Richmond, Virginia Overflow Frequency by Month



**CSO24 - Gillies & Varina  
 Overflow Model Summary  
 Current Month: September 2020**

Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
9/1/20	1	0.98	2.50	1.56	0.04	0.50
9/2/20		0.01	0.08	0.12		
9/3/20						
9/4/20		0.01	0.08	0.12		
9/5/20						
9/6/20						
9/7/20						
9/8/20						
9/9/20		0.25	1.58	0.48		
9/10/20		0.08	0.42	0.48		
9/11/20		0.13	0.42	1.08		
9/12/20		0.01	0.08	0.12		
9/13/20						
9/14/20						
9/15/20						
9/16/20						
9/17/20	1	2.77	8.50	1.68	0.85	5.92
9/18/20		0.24	1.42	0.36		
9/19/20						
9/20/20						
9/21/20						
9/22/20						
9/23/20						
9/24/20						
9/25/20		0.67	2.67	2.28		
9/26/20		0.10	0.75	0.24		
9/27/20						
9/28/20						
9/29/20	1 <sup>(3)</sup>	1.61	2.83	2.40	0.33	1.50
9/30/20		0.07	0.58	0.12	0.04	0.83

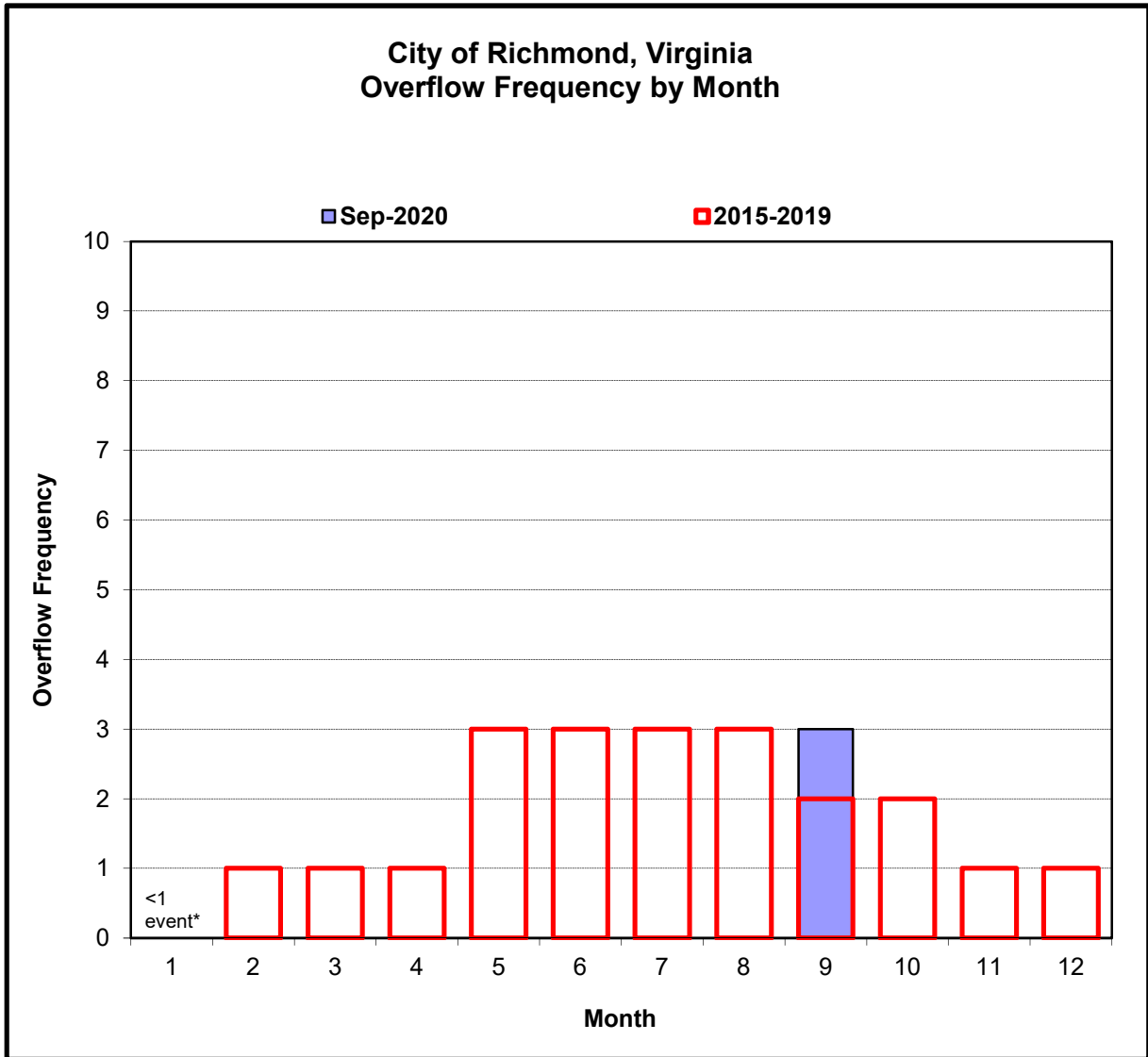
**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
3	6.93	21.92	2.40	1.30	8.75

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

<sup>(3)</sup> Overflow event continued on the following day.

### City of Richmond, Virginia Overflow Frequency by Month



\* Average Overflow Frequency is less than once in the month.

**CSO25 - Briel & Gillies Cr  
 Overflow Model Summary  
 Current Month: September 2020**

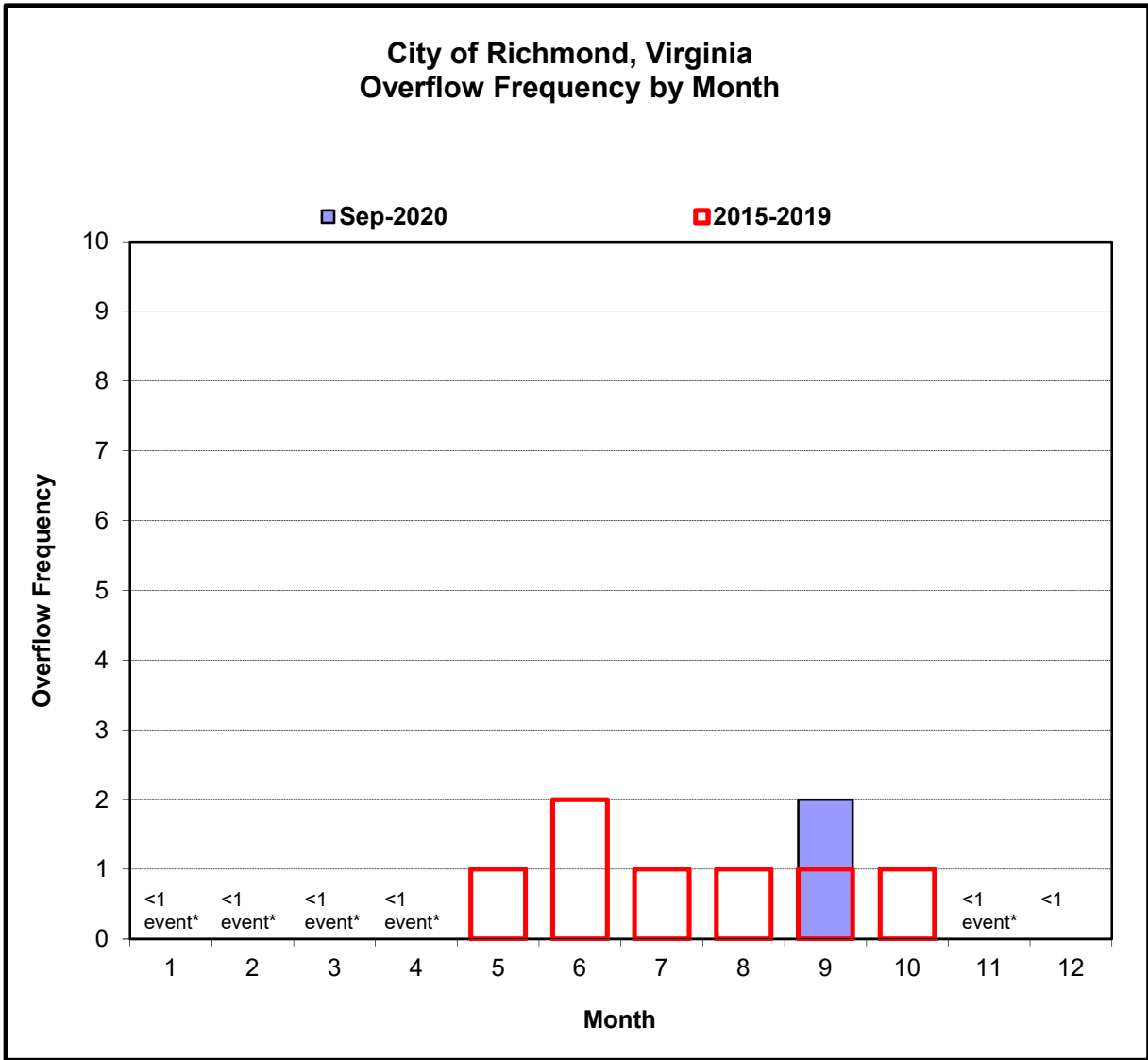
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
9/1/20		0.98	2.50	1.56		
9/2/20		0.01	0.08	0.12		
9/3/20						
9/4/20		0.01	0.08	0.12		
9/5/20						
9/6/20						
9/7/20						
9/8/20						
9/9/20		0.25	1.58	0.48		
9/10/20		0.08	0.42	0.48		
9/11/20		0.13	0.42	1.08		
9/12/20		0.01	0.08	0.12		
9/13/20						
9/14/20						
9/15/20						
9/16/20						
9/17/20	1	2.77	8.50	1.68	0.21	2.42
9/18/20		0.24	1.42	0.36		
9/19/20						
9/20/20						
9/21/20						
9/22/20						
9/23/20						
9/24/20						
9/25/20		0.67	2.67	2.28		
9/26/20		0.10	0.75	0.24		
9/27/20						
9/28/20						
9/29/20	1	1.61	2.83	2.40	0.15	1.42
9/30/20		0.07	0.58	0.12		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
2	6.93	21.92	2.40	0.35	3.83

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month



\* Average Overflow Frequency is less than once in the month.

**CSO26 - Govt Road & NSRR  
Overflow Model Summary  
Current Month: September 2020**

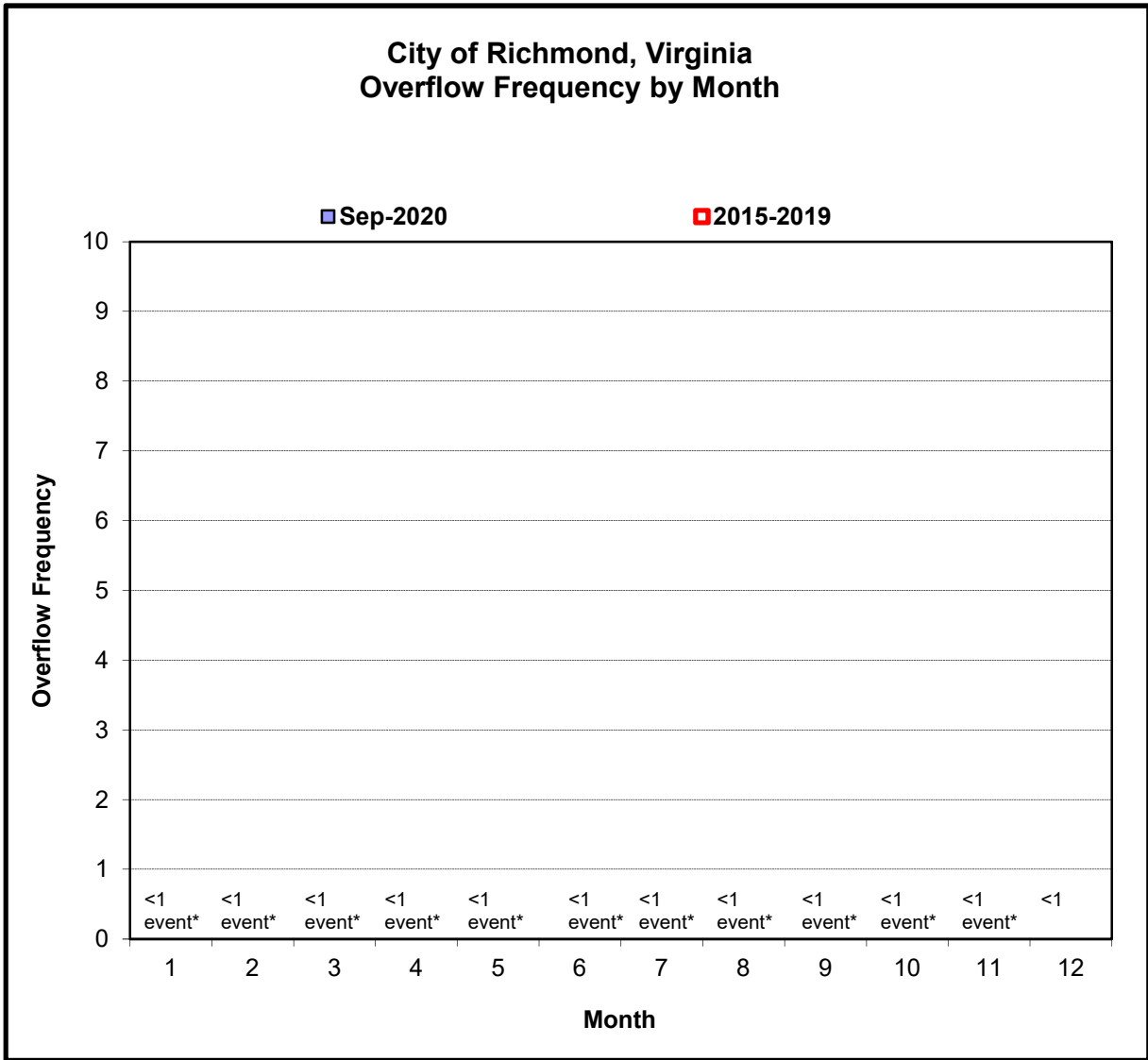
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
9/1/20		0.98	2.50	1.56		
9/2/20		0.01	0.08	0.12		
9/3/20						
9/4/20		0.01	0.08	0.12		
9/5/20						
9/6/20						
9/7/20						
9/8/20						
9/9/20		0.25	1.58	0.48		
9/10/20		0.08	0.42	0.48		
9/11/20		0.13	0.42	1.08		
9/12/20		0.01	0.08	0.12		
9/13/20						
9/14/20						
9/15/20						
9/16/20						
9/17/20		2.77	8.50	1.68		
9/18/20		0.24	1.42	0.36		
9/19/20						
9/20/20						
9/21/20						
9/22/20						
9/23/20						
9/24/20						
9/25/20		0.67	2.67	2.28		
9/26/20		0.10	0.75	0.24		
9/27/20						
9/28/20						
9/29/20		1.61	2.83	2.40		
9/30/20		0.07	0.58	0.12		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
0	6.93	21.92	2.40	0.00	0.00

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month



\* Average Overflow Frequency is less than once in the month.



**CSO31 - Oakwood Cem  
Overflow Model Summary  
Current Month: September 2020**

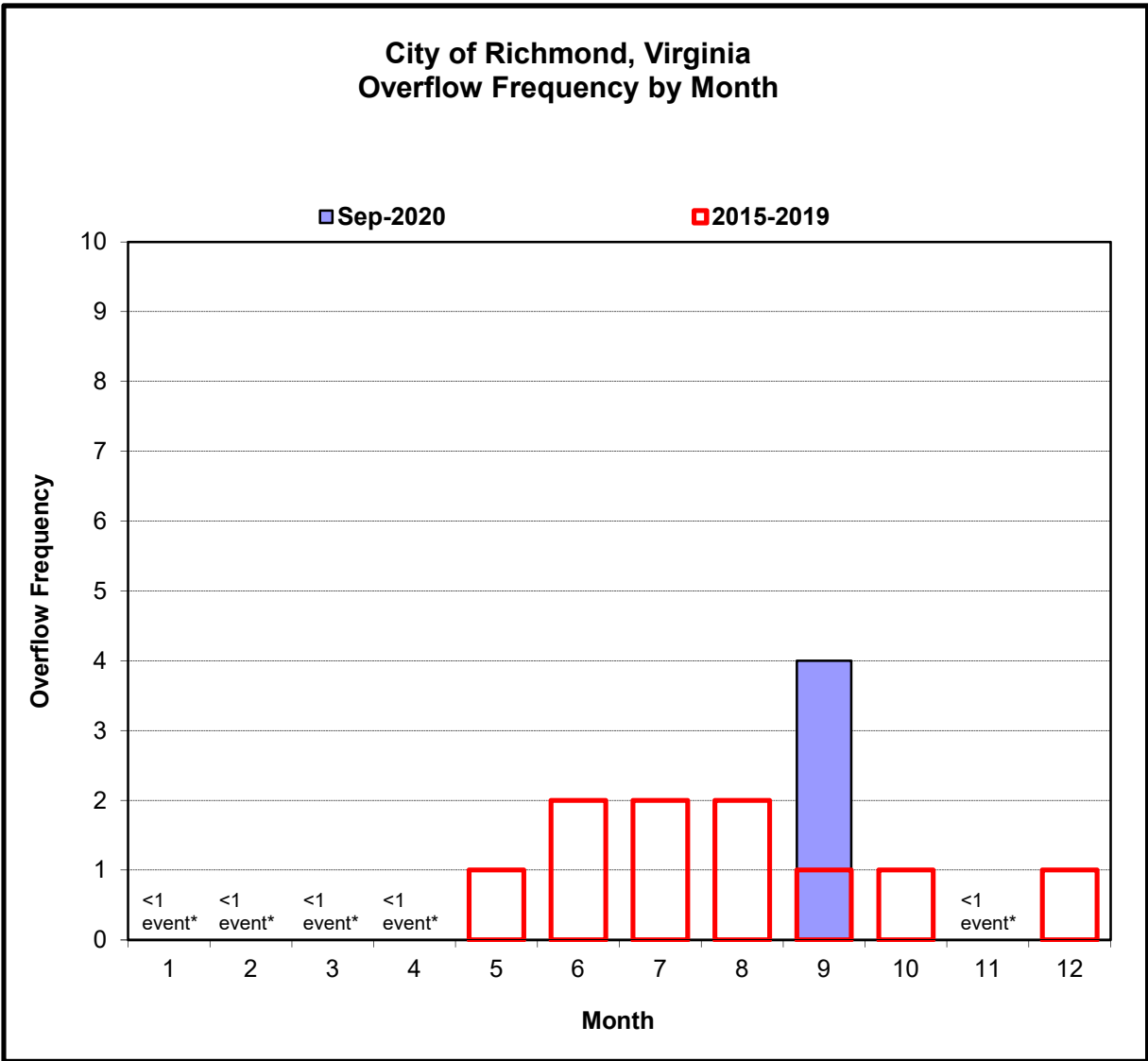
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
9/1/20	1	0.98	2.50	1.56	0.04	0.33
9/2/20		0.01	0.08	0.12		
9/3/20						
9/4/20		0.01	0.08	0.12		
9/5/20						
9/6/20						
9/7/20						
9/8/20						
9/9/20		0.25	1.58	0.48		
9/10/20		0.08	0.42	0.48		
9/11/20		0.13	0.42	1.08		
9/12/20		0.01	0.08	0.12		
9/13/20						
9/14/20						
9/15/20						
9/16/20						
9/17/20	1	2.77	8.50	1.68	0.19	1.58
9/18/20		0.24	1.42	0.36		
9/19/20						
9/20/20						
9/21/20						
9/22/20						
9/23/20						
9/24/20						
9/25/20	1	0.67	2.67	2.28	0.01	0.17
9/26/20		0.10	0.75	0.24		
9/27/20						
9/28/20						
9/29/20	1	1.61	2.83	2.40	0.27	1.17
9/30/20		0.07	0.58	0.12		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
4	6.93	21.92	2.40	0.51	3.25

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month



\* Average Overflow Frequency is less than once in the month.

**CSO33 - Shields Lake  
Overflow Model Summary  
Current Month: September 2020**

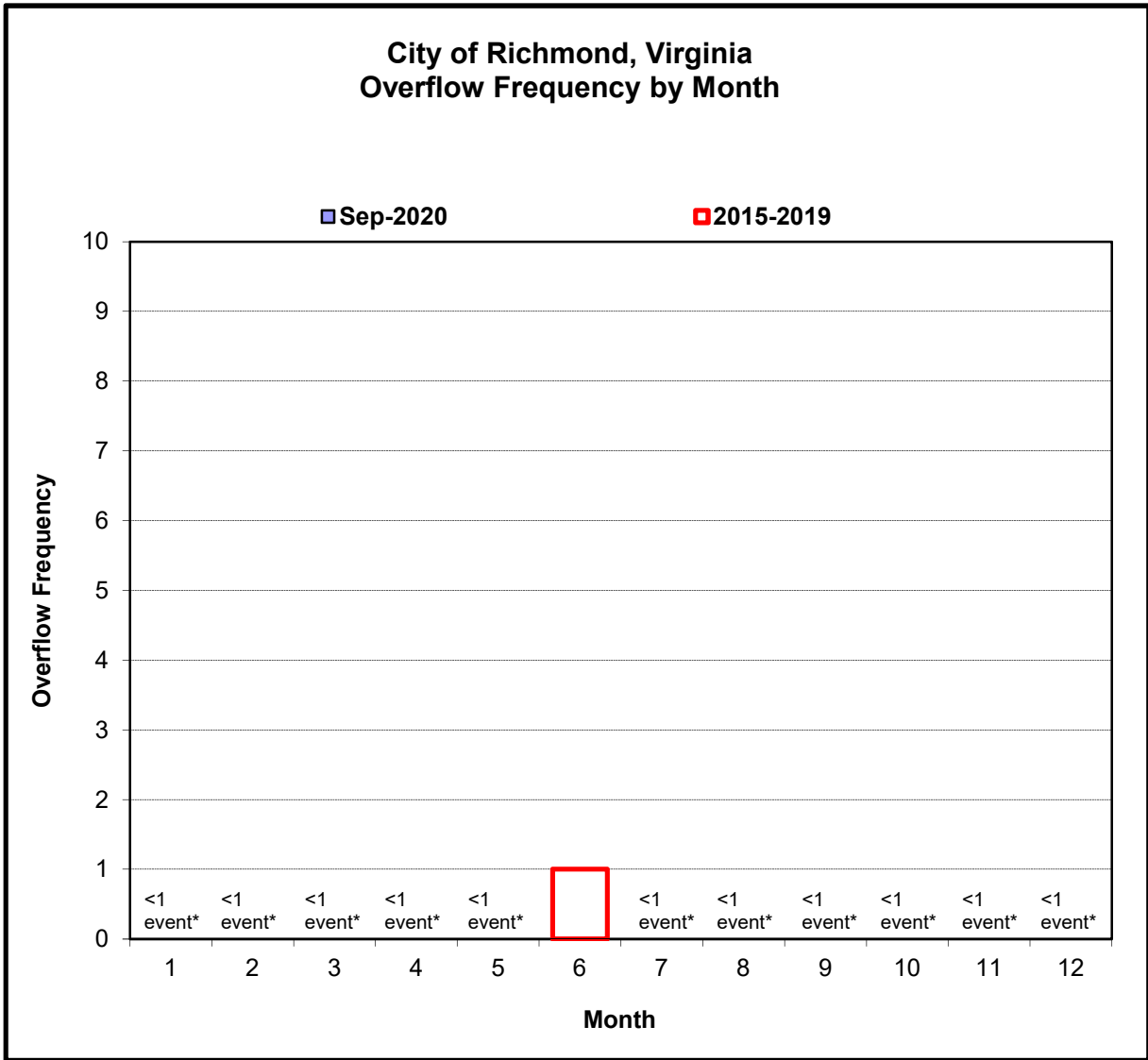
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
9/1/20		0.98	2.50	1.56		
9/2/20		0.01	0.08	0.12		
9/3/20						
9/4/20		0.01	0.08	0.12		
9/5/20						
9/6/20						
9/7/20						
9/8/20						
9/9/20		0.25	1.58	0.48		
9/10/20		0.08	0.42	0.48		
9/11/20		0.13	0.42	1.08		
9/12/20		0.01	0.08	0.12		
9/13/20						
9/14/20						
9/15/20						
9/16/20						
9/17/20		2.77	8.50	1.68		
9/18/20		0.24	1.42	0.36		
9/19/20						
9/20/20						
9/21/20						
9/22/20						
9/23/20						
9/24/20						
9/25/20		0.67	2.67	2.28		
9/26/20		0.10	0.75	0.24		
9/27/20						
9/28/20						
9/29/20		1.61	2.83	2.40		
9/30/20		0.07	0.58	0.12		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
0	6.93	21.92	2.40	0.00	0.00

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month



\* Average Overflow Frequency is less than once in the month.

**CSO34 - 19th & Dock  
 Overflow Model Summary  
 Current Month: September 2020**

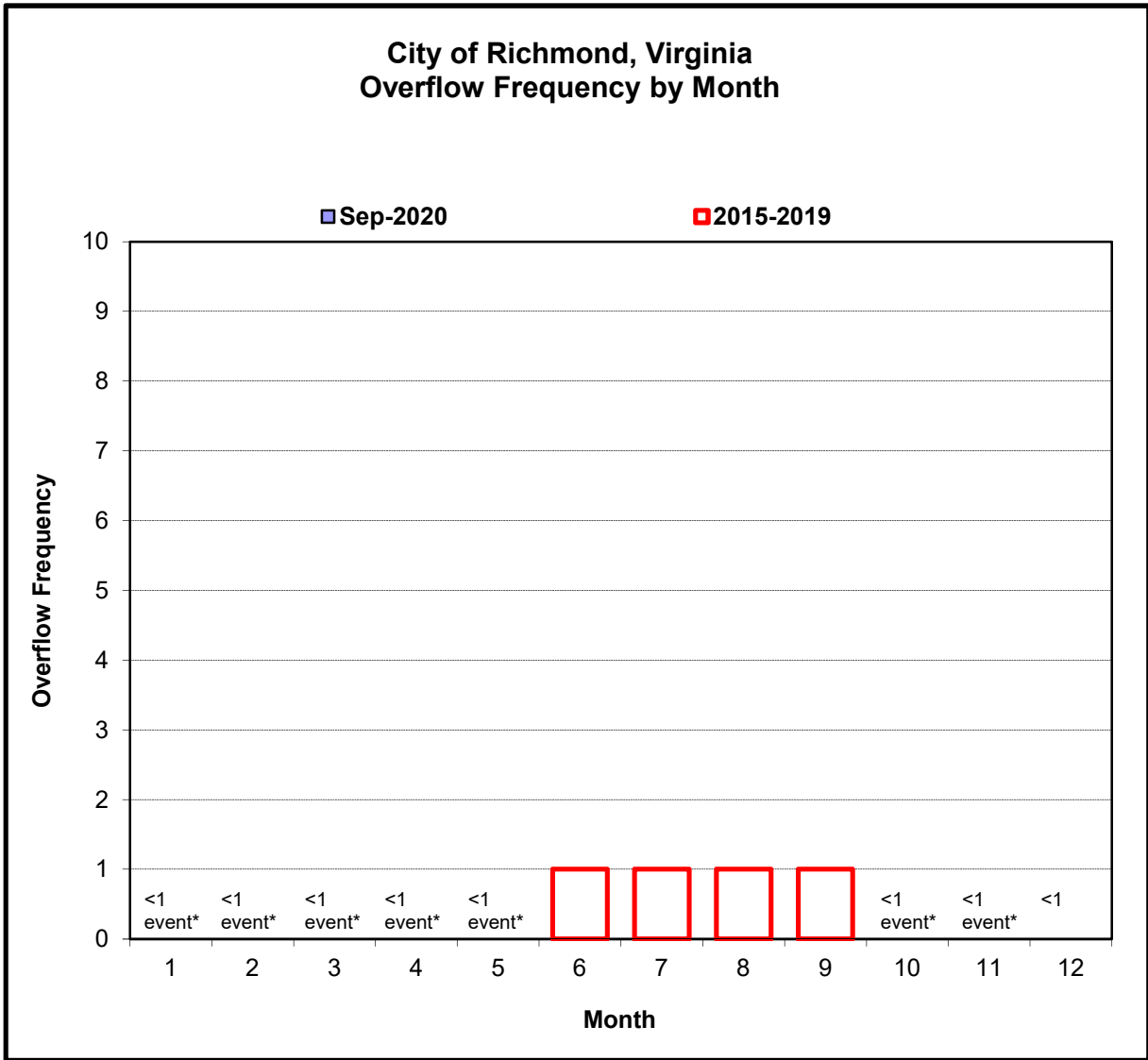
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
9/1/20		0.98	2.50	1.56		
9/2/20		0.01	0.08	0.12		
9/3/20						
9/4/20		0.01	0.08	0.12		
9/5/20						
9/6/20						
9/7/20						
9/8/20						
9/9/20		0.25	1.58	0.48		
9/10/20		0.08	0.42	0.48		
9/11/20		0.13	0.42	1.08		
9/12/20		0.01	0.08	0.12		
9/13/20						
9/14/20						
9/15/20						
9/16/20						
9/17/20		2.77	8.50	1.68		
9/18/20		0.24	1.42	0.36		
9/19/20						
9/20/20						
9/21/20						
9/22/20						
9/23/20						
9/24/20						
9/25/20		0.67	2.67	2.28		
9/26/20		0.10	0.75	0.24		
9/27/20						
9/28/20						
9/29/20		1.61	2.83	2.40		
9/30/20		0.07	0.58	0.12		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
0	6.93	21.92	2.40	0.00	0.00

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month



\* Average Overflow Frequency is less than once in the month.

**CSO35 - 29th & Dock  
 Overflow Model Summary  
 Current Month: September 2020**

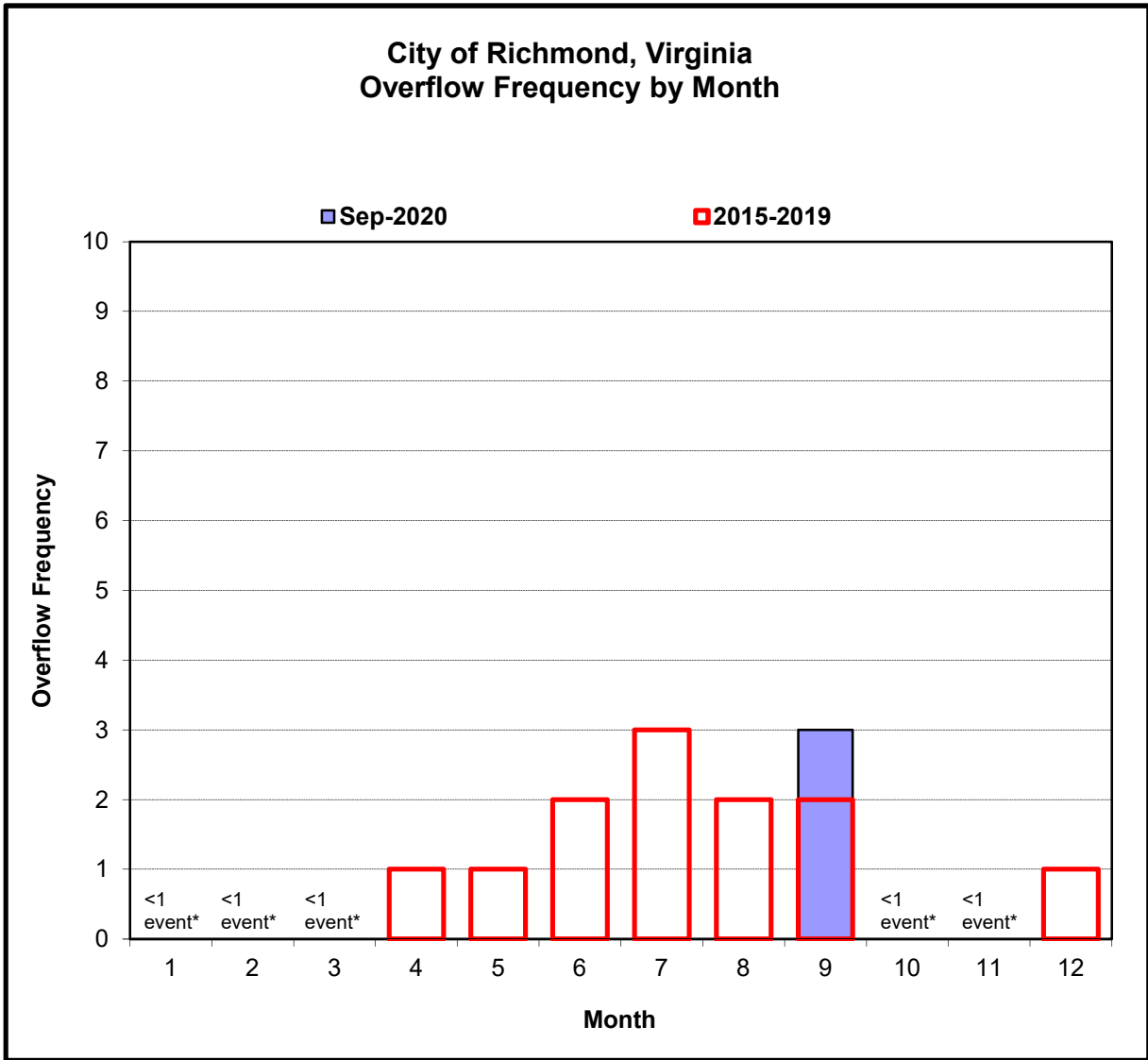
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
9/1/20		0.98	2.50	1.56		
9/2/20		0.01	0.08	0.12		
9/3/20						
9/4/20		0.01	0.08	0.12		
9/5/20						
9/6/20						
9/7/20						
9/8/20						
9/9/20		0.25	1.58	0.48		
9/10/20		0.08	0.42	0.48		
9/11/20		0.13	0.42	1.08		
9/12/20		0.01	0.08	0.12		
9/13/20						
9/14/20						
9/15/20						
9/16/20						
9/17/20	1	2.77	8.50	1.68	0.01	0.42
9/18/20		0.24	1.42	0.36		
9/19/20						
9/20/20						
9/21/20						
9/22/20						
9/23/20						
9/24/20						
9/25/20	1	0.67	2.67	2.28	0.001	0.08
9/26/20		0.10	0.75	0.24		
9/27/20						
9/28/20						
9/29/20	1	1.61	2.83	2.40	0.01	0.92
9/30/20		0.07	0.58	0.12		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
3	6.93	21.92	2.40	0.03	1.42

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month



\* Average Overflow Frequency is less than once in the month.



**CSO39 - Govt Road & Gillies  
 Overflow Model Summary  
 Current Month: September 2020**

Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
9/1/20	1	0.98	2.50	1.56	0.29	1.83
9/2/20		0.01	0.08	0.12		
9/3/20						
9/4/20		0.01	0.08	0.12		
9/5/20						
9/6/20						
9/7/20						
9/8/20						
9/9/20		0.25	1.58	0.48		
9/10/20		0.08	0.42	0.48		
9/11/20		0.13	0.42	1.08		
9/12/20		0.01	0.08	0.12		
9/13/20						
9/14/20						
9/15/20						
9/16/20						
9/17/20	1	2.77	8.50	1.68	1.4	7.00
9/18/20		0.24	1.42	0.36		
9/19/20						
9/20/20						
9/21/20						
9/22/20						
9/23/20						
9/24/20						
9/25/20	1	0.67	2.67	2.28	0.1	0.83
9/26/20		0.10	0.75	0.24		
9/27/20						
9/28/20						
9/29/20	1 <sup>(3)</sup>	1.61	2.83	2.40	0.76	2.50
9/30/20		0.07	0.58	0.12	0.05	0.67

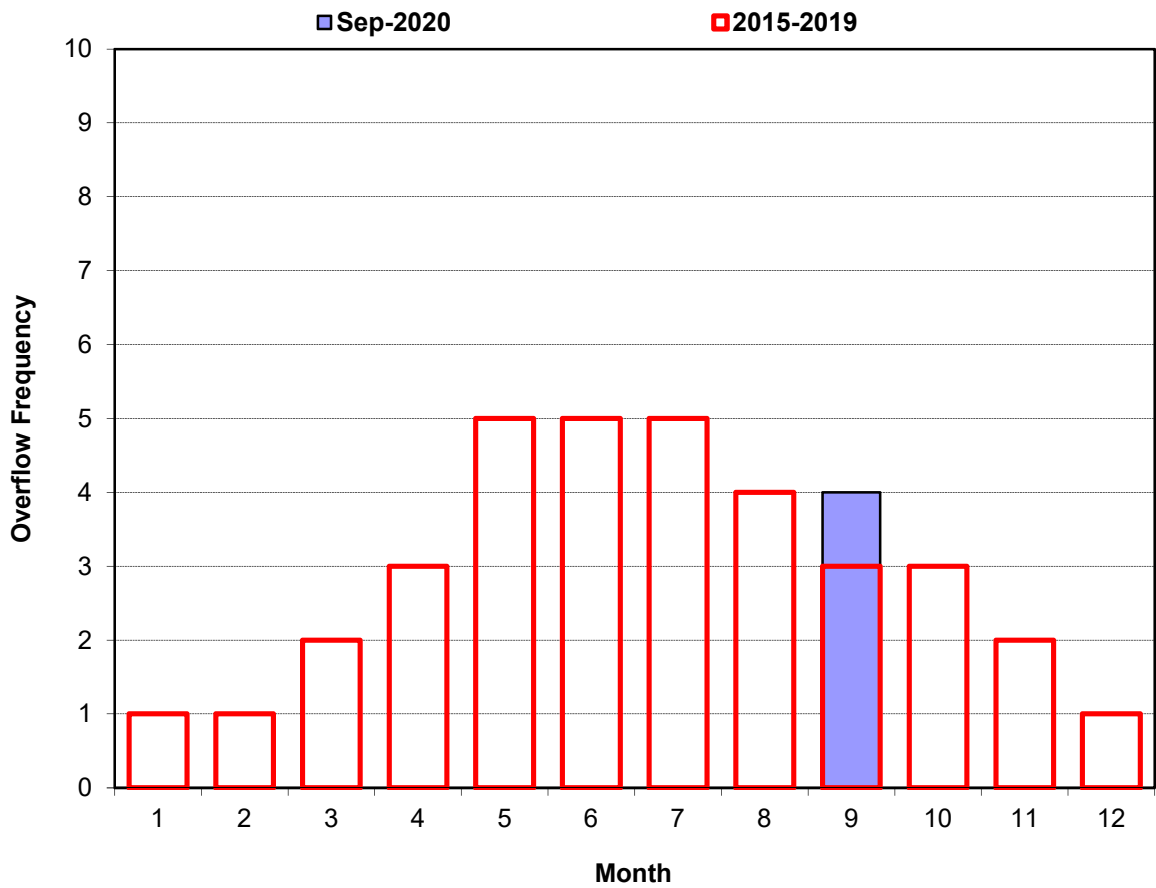
**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
4	6.93	21.92	2.40	2.6	12.83

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

<sup>(3)</sup> Overflow event continued on the following day.

### City of Richmond, Virginia Overflow Frequency by Month



**CSO40 - Diff User**  
**Overflow Model Summary**  
**Current Month: September 2020**

Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
9/1/20	1	0.98	2.50	1.56	1.3	4.92
9/2/20		0.01	0.08	0.12		
9/3/20						
9/4/20		0.01	0.08	0.12		
9/5/20						
9/6/20						
9/7/20						
9/8/20						
9/9/20		0.25	1.58	0.48		
9/10/20		0.08	0.42	0.48		
9/11/20		0.13	0.42	1.08		
9/12/20		0.01	0.08	0.12		
9/13/20						
9/14/20						
9/15/20						
9/16/20						
9/17/20	1 <sup>(3)</sup>	2.77	8.50	1.68	6.1	8.17
9/18/20		0.24	1.42	0.36	0.23	2.67
9/19/20						
9/20/20						
9/21/20						
9/22/20						
9/23/20						
9/24/20						
9/25/20	1	0.67	2.67	2.28	0.53	2.17
9/26/20		0.10	0.75	0.24		
9/27/20						
9/28/20						
9/29/20	1 <sup>(3)</sup>	1.61	2.83	2.40	3.4	3.25
9/30/20		0.07	0.58	0.12	0.77	2.83

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
4	6.93	21.92	2.40	12.30	24.00

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

<sup>(3)</sup> Overflow event continued on the following day.

### City of Richmond, Virginia Overflow Frequency by Month

