

QUARTERLY Report  
APRIL 1 – JUNE 30, 2022



Hampton Roads Sanitation District  
1434 Air Rail Avenue  
Virginia Beach, VA 23455

September 26, 2022

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## 1. Introduction and Purpose

On September 26, 2007, the Hampton Roads Sanitation District (HRSD) entered into a Special Order by Consent (SOC) with the Virginia Department of Environmental Quality (DEQ) and thirteen (13) area Localities for the purpose of resolving certain alleged violations of environmental laws and regulations related to Sanitary Sewer Overflows (SSOs). On February 23, 2010, HRSD entered into an Amended Consent Decree (“Consent Decree”) with the United States of America and the Commonwealth of Virginia for the purpose of fulfilling the objectives of the Clean Water Act and the Virginia State Water Control Law. This Consent Decree has been modified five times by agreement of all parties in 2011, 2013, 2014, 2017, and 2022. In December 2014, the SOC was eliminated by DEQ and HRSD is no longer under state enforcement. On February 8, 2022, the Fifth Amendment to the Consent Decree was entered.

The Fifth Amendment to the Consent Decree requires:

“HRSD will submit quarterly SSO reports to VADEQ and EPA, in which HRSD will identify all SSOs, SSDs, Prohibited Bypasses, or unauthorized discharges from the HRSD SS System or the HRSD STPs. HRSD will identify those SSOs, SSDs, Prohibited Bypasses, or unauthorized discharges for which it asserts a claim of force majeure. If HRSD asserts a force majeure claim, it shall document the basis for such claim in the quarterly SSO reports. It will pay the associated undisputed stipulated penalties for all SSOs, SSDs, Prohibited Bypasses, or unauthorized discharges for which it did not assert a claim of force majeure within 90 days of the close of each calendar quarter. In addition, HRSD will submit all of HRSD’s post-storm synopses reports for rain events during the quarterly reporting period to VADEQ and EPA as part of the quarterly reports for rain events that satisfy HRSD’s current criteria for publishing a post-storm analysis, i.e.: (a.) one or more rain gauge sites meet a two-year or greater rainfall recurrence interval and at least 50% of sites in any treatment plant service area receive one inch of rainfall or greater; (b.) a rain gauge meets a five-year or greater rainfall recurrence interval; or (c.) a weather-related SSO occurs.”

This quarterly report is submitted pursuant to Section XVII.D of the Consent Decree. HRSD has prepared this quarterly report in accordance with the above requirements to apprise the EPA (representing the United States of America) and the DEQ (representing the Commonwealth of Virginia) of steps taken toward meeting the obligations of the Consent Decree. Specifically, this quarterly report summarizes all Sanitary Sewer Overflows (SSOs), Sanitary Sewer Discharges (SSDs), Prohibited Bypasses, or unauthorized discharges from the HRSD Sanitary Sewer System or the HRSD Sewage Treatment Plants from April 1, 2022, through June 30, 2022, the associated post-storm synopses reports, claims of force majeure, and undisputed stipulated penalties.

During the reporting period, there were a total of seven (7) SSOs, SSDs, Prohibited Bypasses, and unauthorized discharges from the HRSD SS System or the HRSD STPs. These are summarized in Tables 1 & 2.

## 2. Claim of Force Majeure

### 2.1. Sanitary Sewer Overflow

There were two (2) SSOs from the HRSD SS System during the 3-month reporting period. HRSD asserts a force majeure claim for two (2) of the SSOs.

#### 2.1.1. Basis of Claim

As to pipe and equipment failures, HRSD thinks the agencies should judge HRSD based upon the quality of HRSD's condition assessment program. All sewer systems will have unpredictable component failures. Age of pipe has been proven not to be a primary indicator of pipe failure. HRSD believes it has one of the leading condition assessment programs in the nation and the agencies should focus on the dollars HRSD puts into that program because that is what drives system renewal and, hence, overflow reduction. If HRSD has a leading program, EPA should not fine HRSD for the occasional pipe failure unless there was some specific reason why we should have identified that specific failure location.

In addition to these general considerations, we ask that EPA and VDEQ consider the following information before making a final stipulated penalty demand for the period in question.

#### **APRIL 23 (Gum Court)**

#### **SF-027-6674) – 36" Ductile Iron Pipe (1991)**

- **Failure Mode:** 2-3-inch hole formed in the bottom of the pipe (w/ 15" crater surrounding the hole).
- **Failure Cause:** Exterior Graphitic Corrosion
- **Repair Performed:** Installed a full circumferential repair clamp on the 36" DIP (point of failure) while actively spilling approximately 300 gpm. Emergency repair cost \$115,194.77.
  - Due to the repair taking place during an active spill, Hazen was unable to get a photograph of the point of failure (felt with hand only)
- **Condition Assessment (Performed prior to failure)**
  - November 2020 – Soil Corrosivity Assessment (*failure location is noted to be within the extents of the assessment*)
    - Soil resistivity / soil sampling in close vicinity to the point of failure found the soils to be progressively less corrosive / moderately corrosive
    - Severely corrosive soils were found to be further north and east of the failure location
  - March 2021 – Localized condition assessment
    - Strategically selected two localized condition assessment sites within the 1,400 LF of 36" DIP.
    - Condition assessment sites were selected based on operational and environmental factors

- Excavated and exposed the 36" DIP in the selected locations to perform visual inspections of the pipe/fittings, perform UltraSonic Thickness (UST), and inspect / replace corroded hardware
- The 36" DIP at the two strategically selected sites were found to be in good condition (minimal wall loss over 30 yrs of service)
- Appurtenance hardware was observed to be severely corroded at the bottom of the pipe. Contractor replaced corroded hardware while on site.
- **Condition Assessment (Opportunistic during failure):**
  - Single point USTs were performed on the 36" ductile iron pipe in close vicinity to the failure.
    - Pipe visually appeared to be in good condition, however, further assessment with Grid UST found the pipeline to have a significantly reduced iron content
    - USTs performed at the top of the pipe found the pipe to have nominal wall thickness for Class 52 pipe
    - USTs performed at the bottom of the pipe were found to have significant wall loss (exceeding 60% of the nominal wall thickness)
- **Condition Assessment (Performed after failure)**
  - July 2022 – Localized condition assessment
    - Excavated and exposed the 36" DIP approximately 50-60 LF upstream of the failure location to perform visual inspections of the pipe and to perform Grid USTs
      - The intent of assessment was to determine condition of the pipeline just west of I-664 for replacement planning purposes
    - Pipe visually appeared to be in good condition, however, further assessment with Grid UST found the pipeline to have a significantly reduced iron content
    - USTs performed at the top of the pipe found the pipe to have nominal wall thickness for Class 52 pipe
    - USTs performed at the bottom of the pipe were not able to be obtained (unable to expose bare metal surface to perform UST)
    - Pipe began to form an extremely slow drip during surface preparation for USTs. A repair clamp was installed around the exposed area and the bottom of the pipe was re-supported with flowable fill
- **HRSD Action Taken**
  - The 36" DIP was determined to require full replacement based on the post-failure condition assessment performed in June 2022
    - The replacement work was deemed an emergency declaration and is currently underway (expedited work order development / material acquisition)
    - The 1,400 LF of 36" DIP is expected to be on bypass by the end of October 2022 and be fully replaced by December 2022
    - Emergency replacement cost \$3,110,087.62

**JUNE 4 (Lawnes Neck Drive)**

Bushing cracked below ball valve during air venting operation. The Lawnes Pointe community system is in Isle of Wight but it is not connected to the regional system. HRSD currently pumps and hauls the Lawnes Point flow.

**2.2. Unusual Discharges (Sanitary Sewer Discharge, Prohibited Bypasses, Unauthorized Discharge)**

There were seven (5) unusual discharges from the HRSD SS System or the HRSD STPs during the 3-month reporting period. HRSD asserts a force majeure claim for two (2) Unusual Discharges that were non potable water or final effluent.

**2.2.1. Basis of Claim**

A description of the circumstances supporting a claim of force majeure is included in Table 2.

### 3. Undisputed Stipulated Penalties

#### 3.1. Sanitary Sewer Overflow

There were two (2) SSOs from the HRSD SS System during the 3-month reporting period. HRSD will pay undisputed stipulated penalties for zero (0) SSOs.

##### 3.1.1. Basis of Undisputed Stipulated Penalties

Calculation of undisputed stipulated penalties is outlined in Section XX “Stipulated Penalties” paragraph 110 of the Consent Decree. The calculated stipulated penalties are shown in Table 1.

<u>Volume of the SSD or Prohibited Bypass</u>	<u>Penalty from the date of entry</u>
Less than 100 gallons	\$ 100
100 to 2,499 gallons	\$ 750
2,500 to 9,999 gallons	\$ 1,250
10,000 to 99,999 gallons	\$ 4,700
100,000 to 999,999 gallons	\$ 10,000
1,000,000 gallons or greater	\$ 15,000

#### 3.2. Unusual Discharges (Sanitary Sewer Discharge, Prohibited Bypasses, Unauthorized Discharge)

There were five (5) unusual discharges from the HRSD SS System or the HRSD STPs during the 3-month reporting period. HRSD will pay undisputed stipulated penalties in the amount of \$6,700 for three (3) Unusual Discharges.

##### 3.2.1. Basis of Undisputed Stipulated Penalties

Calculation of undisputed stipulated penalties is outlined in Section XX “Stipulated Penalties” paragraph 110 of the Consent Decree. The calculated stipulated penalties are shown in Table 2.

<u>Volume of the SSD or Prohibited Bypass</u>	<u>Penalty from the date of entry</u>
Less than 100 gallons	\$ 100
100 to 2,499 gallons	\$ 750
2,500 to 9,999 gallons	\$ 1,250
10,000 to 99,999 gallons	\$ 4,700
100,000 to 999,999 gallons	\$ 10,000
1,000,000 gallons or greater	\$ 15,000

#### **4. Post-Storm Synopses Reports**

Post-Storm Synopses Reports are generated when:

- One or more rain gauge sites meets a two year or greater rainfall recurrence interval and 50% of sites receive one inch or greater rainfall
- A rain gauge meets a five-year or greater rainfall recurrence interval or
- A capacity related wet weather SSO occurs

Post-Storm Synopses Reports are attached for the 3-month reporting period.



QUARTERLY REPORT APRIL 1 – JUNE 30, 2022

Table 1. Detailed Listing of HRSD SSOs (April 1, 2022, to June 30, 2022)												
Date and Time of Incident	Location	Sewer System Component	Potential Receiving Waters	Spilled In Jurisdiction	SSO Classification	Description of Incident from SSORS	SSO Duration	Action Taken and Explanation of SSO	Discharge Quantity (gallons)**	Amount Reaching State Waters (gallons)**	DEQ IR	Force Majeure Rationale or Stipulated Penalty
4/23/2022 1:51 AM	3025 Gum Court	SF-027-6674	Drum Point Creek to Western Branch of Elizabeth River	Chesapeake	Infrastructure	A failure occurred on a 36-in ductile iron pipe force main. This force main is just west of I-664. The failure was caused by external corrosion which resulted in graphitization on the exterior of the pipe.	27 hour(s) 3 minute(s)	HRSD staff and contractors excavated to the location of the failure and installed a full circle clamp. HRSD staff then cleaned and treated the impacted areas. Approximately 20,000 gallons of sewage was recovered during this process.	472,000	452,000	SSORS#2022-T-106121	HRSD has world class Condition Assessment program; specific condition assessment details described in section 2.1.1.
6/4/2022 2:00 PM	1140 Lawnes Neck Drive	LPT-1007-02	Lawnes Creek to James River	Isle of Wight	Infrastructure	HRSD staff was on site checking system pressures in the Lawnes Point Service Area due to customer complaints of grinder stations not being able to pump into the system. Several air vents in the vicinity of the complaint have blow off stacks to check pressures and bleed off air. While one of the blow off stack was accessed, a bushing cracked below the ball valve and sprayed wastewater for several minutes.	0 hour(s) 4 minute(s)	System pressures dropped quickly and the spill was over in 4 minutes. A vacuum truck was sent in to recover much of the spilled volume and clean the area. Crews installed a DC plug and repaired the broken bushing and put the air vent back in service.	250	50	SSORS#2022-T-106135	HRSD has world class Condition Assessment program; specific condition assessment details described in section 2.1.1.  Condition could not be determined through assessment methods.

QUARTERLY REPORT APRIL 1 – JUNE 30, 2022

Table 2. Detailed Listing of HRSD Treatment Plant Unusual Discharges

(April 1, 2022 to June 30, 2022)

Date	Location	Description/Cause	Duration of Event (minutes)	Corrective Action	Estimated Quantity Discharged (gallons)	Estimated Quantity to State Waters (gallons)	Type of Overflow	Receiving Water	Force Majeure Rationale Or Stipulated Penalty
5/4/2022	Nansemond	On 05/03/22 at ~15:25 a contractor shut down Non-Potable Water (NPW) to the Regional Residual Facility (RRF) for a tie in, the RRF self-priming wetwell pumps lost prime when NPW was secured. When NPW was turned back on at ~17:00, the pumps did not prime properly, though the NPW for priming continued to run and flooded the pad overnight. The pad in front of the RRF was flooded, as well as part of the grease facility construction site, and the grass behind the RRF. An estimated maximum spill 64,380 gallons made it to the ground. ~40,000 gallons was recovered from the pad, and ~20,000 gallons recovered from the construction site and grass area. This leaves a maximum of 4,380 gallons discharged to the creek.	0	Plant Staff primed the wet well pumps and pumped the water that was on the pad back to the plant, plant staff and contractors recovered as much of the water that made it to ground as well.	34380	4380	NPW/Pump Station Waste	Ground, Streeter Creek	\$1,250
5/20/2022	Nansemond	While contractors were performing work in the MCC room of the SWIFT Research Center, they accidentally bumped the power switch inside the interposing relay cabinet. This caused the drain pump station to trip. When flow was restarted to the SRC the drain pumps were in manual mode and not turned on, causing the drain pump station to overflow.	5	Drain pumps were restarted and pumped down the drain pump station. Staff are working with Emerson (programmers) to ensure pumps default to AUTO after a loss of power.	200	200	Floc-Sed Effluent	Ground	\$750
5/31/2022	Virginia-Initiative	On April 22 a Norfolk Southern employee reported a possible sewage spill south of the HRSD VIP Plant. Plant staff investigated and did not find a source of release. HRSD TSD staff performed HF183 testing and determined sewage was likely entering a Norfolk storm drain south of the plant draining to the Elizabeth River. After extensive investigation by HRSD and the City of Norfolk, the issue was found to be supernatant flow from the VIP primary clarifier scum concentrator. It was discovered that an old storm drain manhole had been converted to direct flow to the plant drain, and the plug preventing flow from entering the storm drain had failed.	275	Promptly after this discovery on May 31, the old plug was removed and replaced with a new brick and concrete plug. A stainless steel plate coated with epoxy adhesive was also installed to prevent the possibility of accidental leakage. Approximately 10,000 gallons of primary scum supernatant entered a storm drain to the Elizabeth River between April 22 and May 31.	10000	10000	Primary Sum Supernatant	Elizabeth River	\$4,700

QUARTERLY REPORT APRIL 1 – JUNE 30, 2022

Table 2. Detailed Listing of HRSD Treatment Plant Unusual Discharges

(April 1, 2022 to June 30, 2022)

Date	Location	Description/Cause	Duration of Event (minutes)	Corrective Action	Estimated Quantity Discharged (gallons)	Estimated Quantity to State Waters (gallons)	Type of Overflow	Receiving Water	Force Majeure Rationale Or Stipulated Penalty
6/10/2022	Virginia-Initiative	A small leak was found at a seam in the concrete flow conduit between the chlorine contact tank and Parshall flume. Flow was found seeping from the seam into the ground. A sample was taken, and a small amount of chlorine residual (0.06 mg/L) was present, so it was determined to be chlorinated plant effluent leaking from the conduit.	120	A trench was dug to contain the leakage and a submersible pump was installed to pump the leakage into the plant process drain. The leak was estimated at about 1-1.5 gallons per minute.	200	200	Plant Effluent	Ground	Final Effluent not pay
6/14/2022	Nansemond	A PVC 2" NPW line was discovered spraying out of the contact tanks by a contractor, who then reported to HRSD staff.	5	Secured NPW cutoff valve in the street and the flow of NPW is secured. Once secured, HRSD staff was able to identify a glue joint had failed and slipped out of the PVC Tee. The joint was repaired.	200	200	Non-Potable Water (NPW)	Ground	NPW not pay

Note: NPW (non-potable water) is fully treated and chlorinated final effluent.

**Appendix A. Post-Storm Synopses Reports**

# Hampton Roads Sanitation District

## Post-Storm Report



**June 27-28, 2022**

## **DISCLAIMER:**

### **About the information on this HRSD server**

This report is intended to provide the HRSD regional community summary information about the HRSD system during select wet weather events/anomalies. The attached report contains a selection of *official* Interceptor and Treatment data, as well as other environmental and meteorological data provided through other services. In an effort to enhance the HRSD system, the attached products have been made accessible on this server and care must be taken when using such products as they are intended for informational and not operational, legal, or other purposes.

This report is located on an HRSD server and is intended to be available 24 hours a day, seven days a week. However, timely availability and/or delivery of data and products from this server through the Internet is subject to numerous potential constraints and is, therefore, not guaranteed. Official HRSD dissemination of information is available only through a written response to a formal written request for data from the user.

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### Summary

On June 27<sup>th</sup>, there was an approximate 12-hour rainfall event that resulted in 4 sites on the North Shore that met a 1 to 5-year rainfall recurrence interval throughout the HRSD rain gauge network. Hampton Roads saw scattered showers and pockets of thunderstorms. North Shore sites averaged around 1.09 inches of rain while South Shore sites averaged around 0.42 inches. There was minimal impact on groundwater levels compared to June 2021. See Appendix C for the Historical Shallow Well comparison. This report will be for North Shore only.

No HRSD interceptor weather-related overflow(s) were reported.

HRSD flow and pressure meters met data reliability requirements per the MOM program. For all pressure meters in the aggregate and all pressure-side flow meters in the aggregate for each treatment plant service area listed below, at least 90% reliable data was achieved, based on the duration of system response to this rainfall event. The data reliability for the gravity flow meters is not included in this synopsis.

- Duration of system response: See Table Below
- Aggregate flow meter validity: 96.56%
- Aggregate pressure meter validity: 98.37%

Currently, rainfall recurrence intervals are only analyzed for a maximum of 96-hours. Rainfall analysis begins after 0.1 inches of rain has occurred. A 72-hour dry period of less than 0.1 inches of rain is typically used to signify two separate events. However, if a site returns to “dry weather” conditions prior to the next rainfall that occurs within 72 hours of the previous event, it is also considered for separate analysis. See Appendix A for the Rainfall Total System Maps.

The current criteria for publishing a post-storm analysis are the following:

- One or more rain gauge sites meet a two-year or greater RRI (rainfall recurrence interval) and at least 50% of sites in any treatment plant service area receive one inch of rainfall or greater,
- A rain gauge site meets a five-year or greater RRI, or
- A weather-related SSO occurs.

Treatment Plant Data: *(Data obtained from Telog Database)*  
 See Appendix B for HRSD Treatment Plant Flows

**HRSD Treatment Plant Data**  
**6/27/2022 – 6/28/2022**

North Shore				
Treatment Plant	Date of Peak Hourly Flow	Peak Hourly Flow (MGD)	Peak Hour	TPSA Total Rainfall Avg (in)
Boat Harbor	6/27/2022	18.24	21:00	0.52
	6/28/2022	12.81	00:00	0.00
James River	6/27/2022	23.18	19:00	0.81
	6/28/2022	14.87	21:00	0.00
Williamsburg	6/27/2022	21.25	19:00	1.25
	6/28/2022	13.21	21:00	0.00
York River	6/27/2022	16.46	19:00	0.74
	6/28/2022	14.41	01:00	0.00

**North Shore**

**Weather:**

Rainfall (HRSD Rainfall Gauges): *Recurrence intervals based on NOAA Atlas 14*

Rain Gauge Site	Peak Rainfall RI (Duration)	Jurisdiction
<i>Boat Harbor Treatment Plant Service Area<sup>1</sup></i>		
Bayshore PS	DNQ	HAMP
Bridge Street Tide Gate	DNQ	HAMP
Boat Harbor	DNQ	NEWP
Copeland Park PS	DNQ	NEWP
Hampton PS 159	DNQ	HAMP
<i>James River Treatment Plant Service Area<sup>1</sup></i>		
Hilton School PS	DNQ	NEWP
James River Main Flow (Influent)	DNQ	NEWP
Lee Hall PRS	DNQ	NEWP
Lucas Creek PS	DNQ	NEWP
Morrison PS	DNQ	NEWP
<i>Williamsburg Treatment Plant Service Area<sup>1</sup></i>		
Ford's Colony	1-year (1hr)	JCSA
Fort Eustis PS	DNQ	NEWP
Greensprings PS	DNQ	JCA
Solarex	1-year (1hr)	JCSA
Williamsburg Main Flow (Effluent)	DNQ	JCSA
Williamsburg PS	DNQ	WILL
York Skimino Hills PS	5-year (1hr)	YORK
<i>York River Treatment Plant Service Area<sup>1</sup></i>		



Big Bethel PRS	DNQ	HAMP
Freeman PS	DNQ	HAMP
Gloucester Court House	5-year (1hr)	GLOU
Guinea Rd at Maryus Rd	DNQ	GLOU
Ordinary PCV	DNQ	GLOU
Poquoson PS 6	DNQ	POQ
Wolf Trappe PCV	DNQ	YORK
York Kiln Creek 1 PS	DNQ	YORK
York PS 15	DNQ	YORK
York River Main Flow (Influent)	DNQ	YORK
York River Crossing (York River Rectifier)	DNQ	GLOU

Note:

1. Typical treatment plant service area.

## Newport News-Williamsburg International (PHF)

o Wind and Rainfall (daily total):

Date	Gust (max)	Sustained (max)	Sustained (avg)	Direction	Rainfall (in)
6/27/2022	46 mph	14 mph	5 mph	SSW	1.00
6/28/2022	20 mph	9 mph	3 mph	N	0.00

Tide:

- Yorktown USCG Training Center:
  - Storm Surge: An approximate 0.67-foot storm surge was observed.

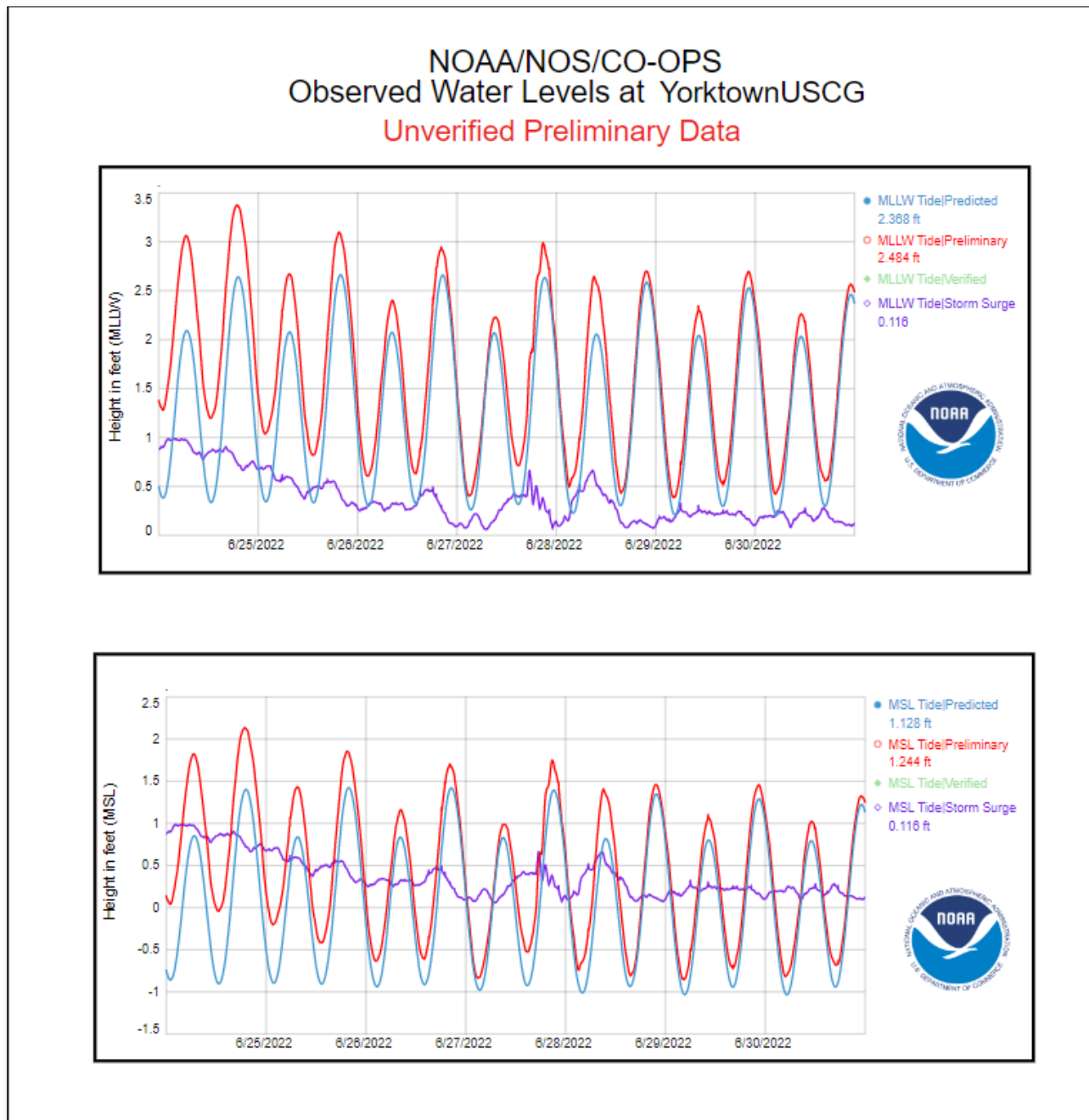


Figure 1. Preliminary data obtained from NOAA and a connection with Open Weather

- Sewells Point Tide Station:
  - Storm Surge: An approximate 0.67 foot storm surge was observed.

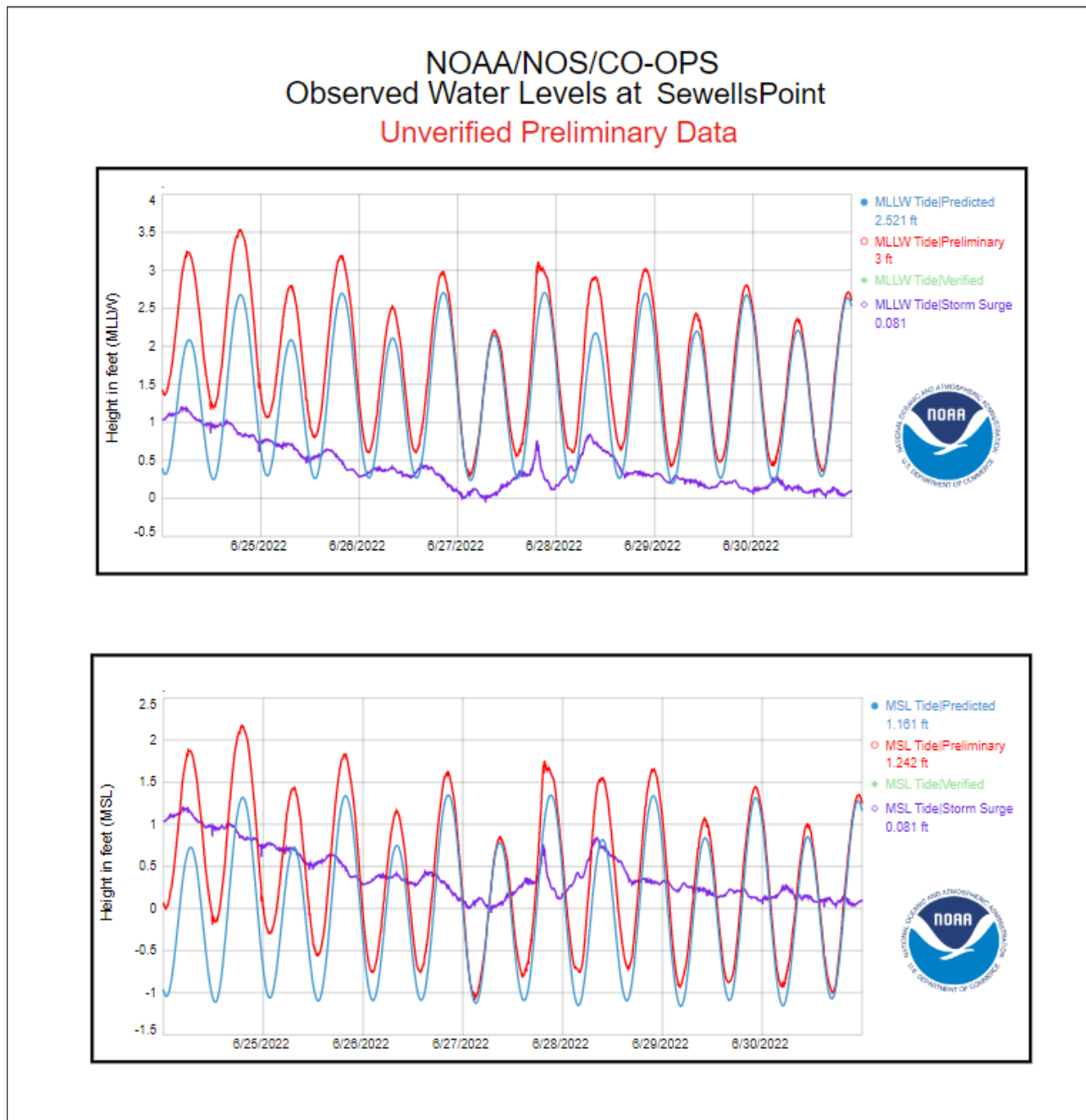


Figure 2. Preliminary data obtained from NOAA and a connection with Open Weather

**Shallow Well Analysis:**

Shallow wells are located at/or near HRSD Pump Stations to measure groundwater levels. The water column is measured using a pressure transducer located near the bottom of the well. The installed sensor measures gauge pressure in inches of water. The Shallow Well\_NAVD88 measurement referenced in Appendix C refers to the elevation (referenced as NAVD 88) of the sensor plus the gauge measurement in feet.

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## **Appendix A**

### HRSD Rain Gauge Network Rainfall Totals

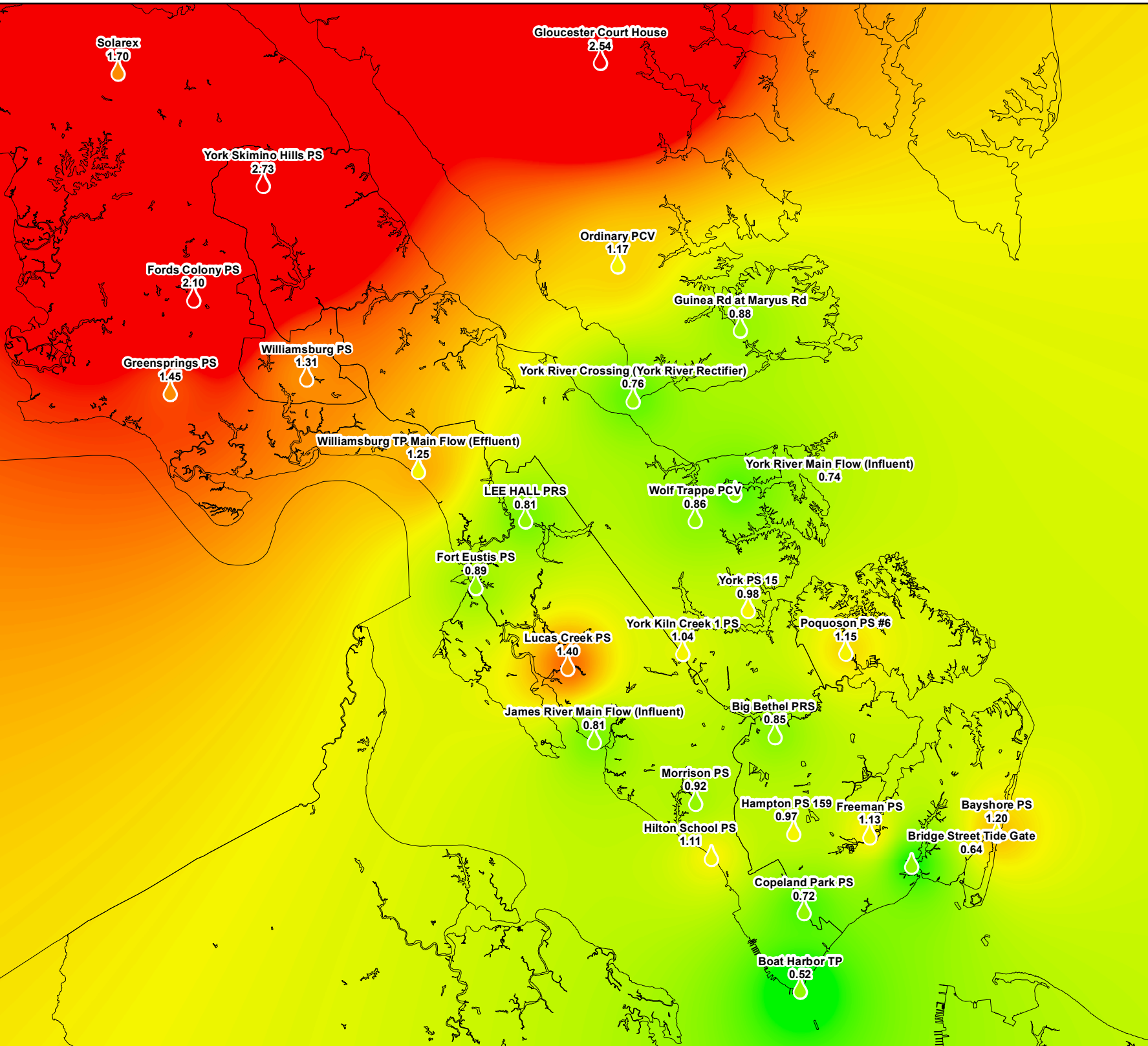
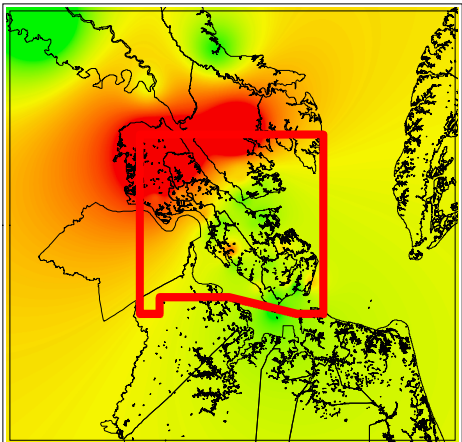
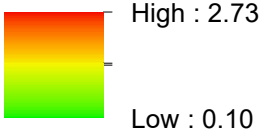
# North Shore

## June 27-28, 2022 Rainfall Analysis Total Rainfall

### Rain Gauges (in):

-  1.71 - 2.73
-  1.26 - 1.70
-  0.93 - 1.25
-  0.11 - 0.92
-  0.00 - 0.10

### Value

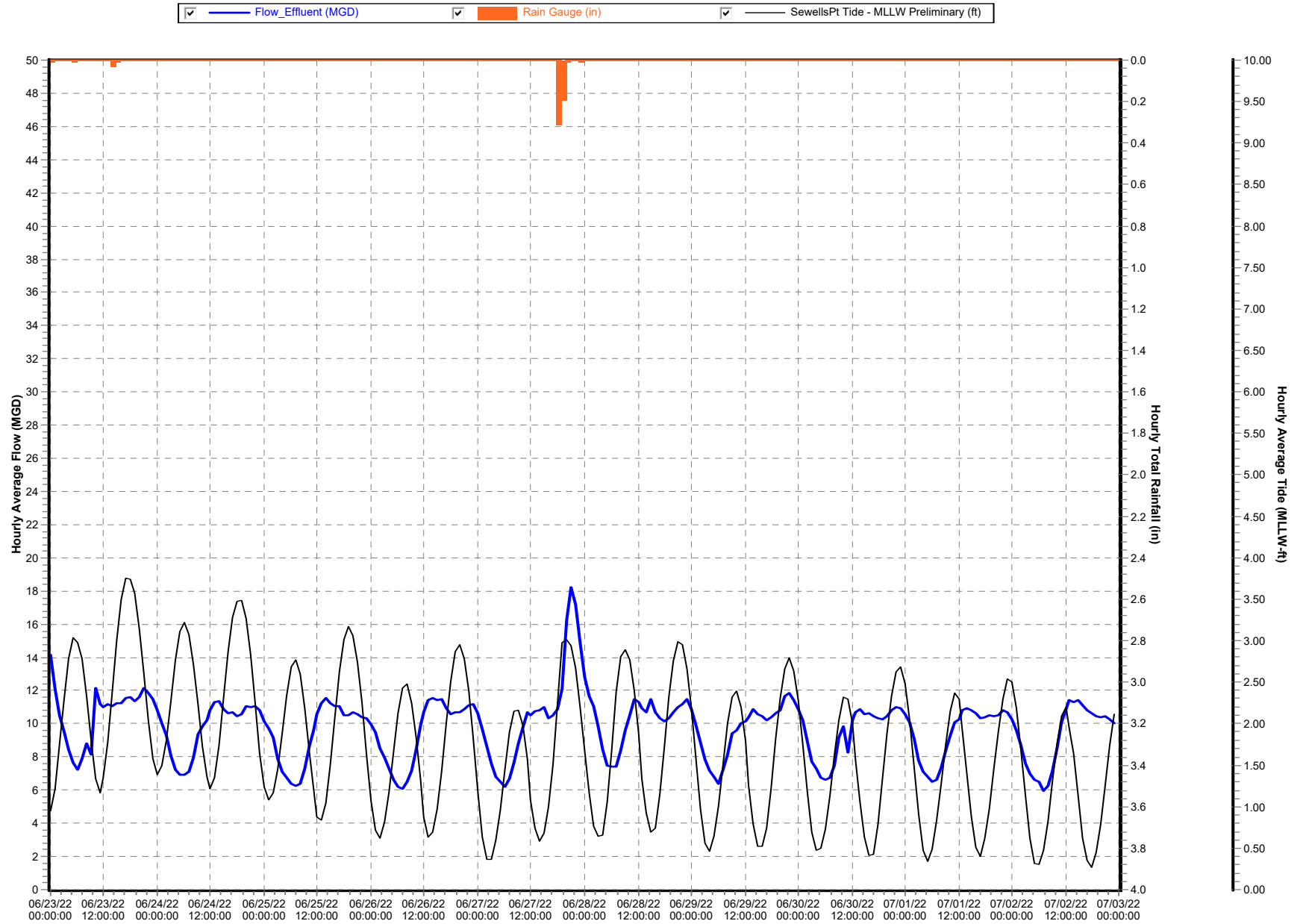


## **Appendix B**

### HRSD Treatment Plant Flows

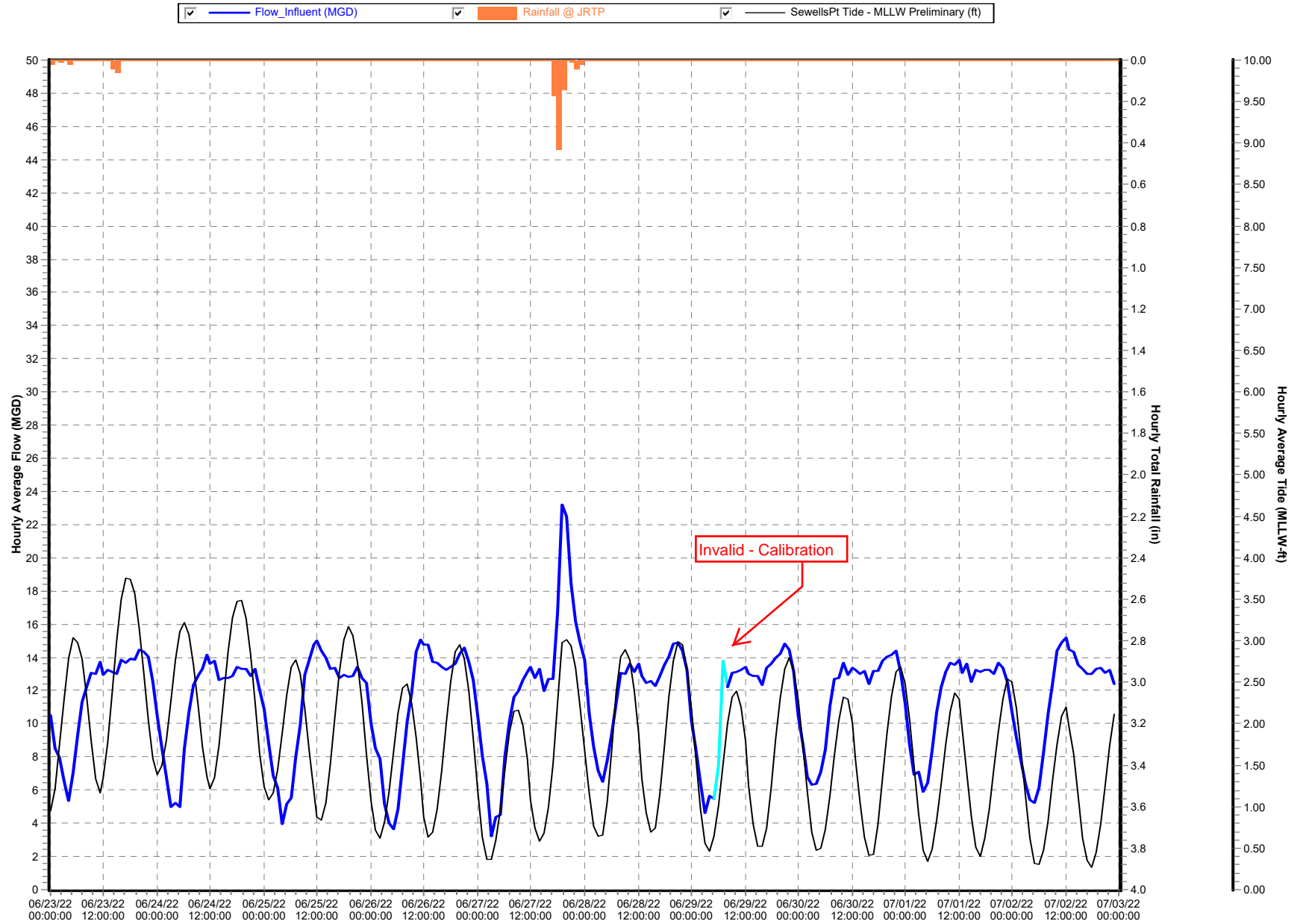
# Boat Harbor Treatment Plant

MMPS-075 (06/23/22 to 07/03/22)





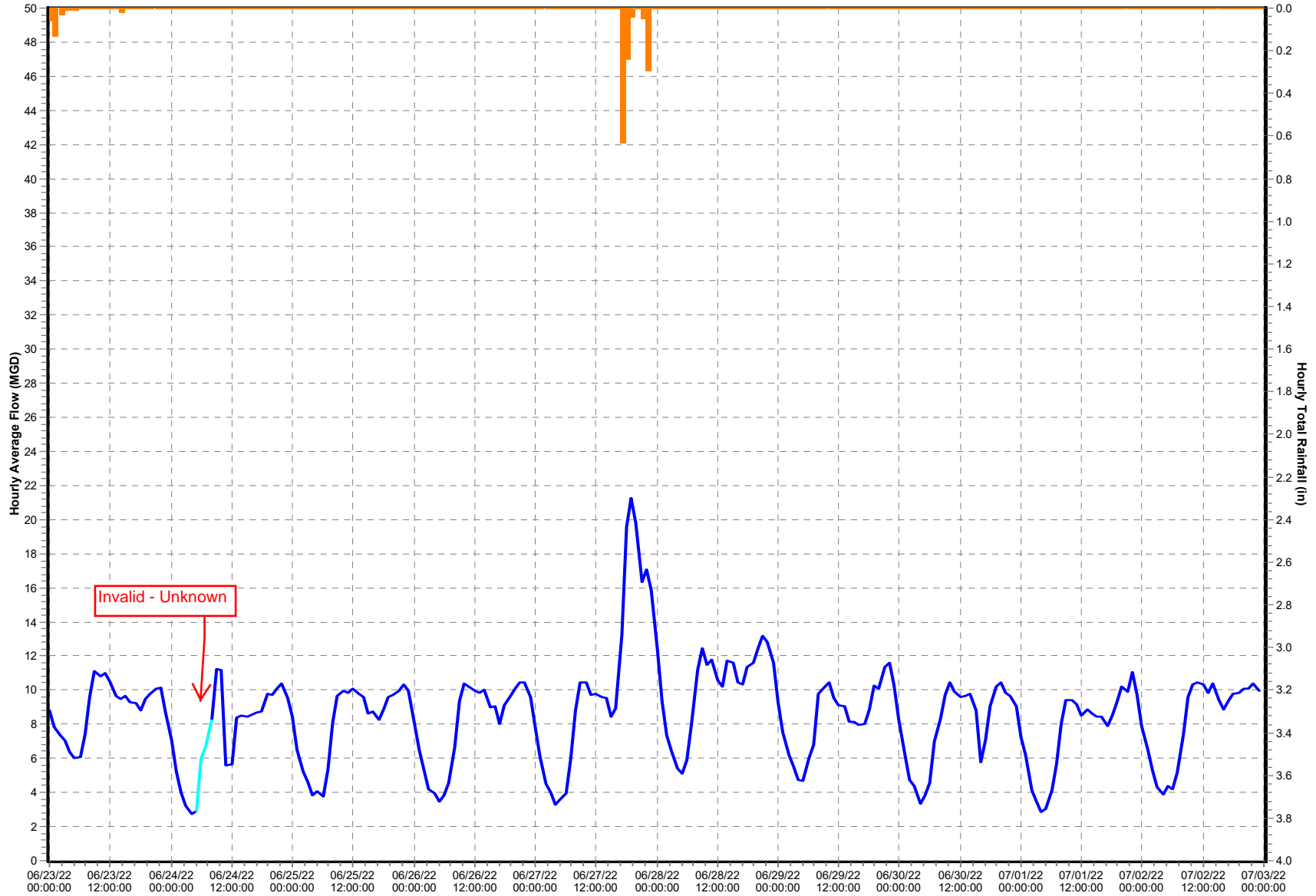
**James River Treatment Plant**  
MMPS-184 (06/23/22 to 07/03/22)



# Williamsburg Treatment Plant

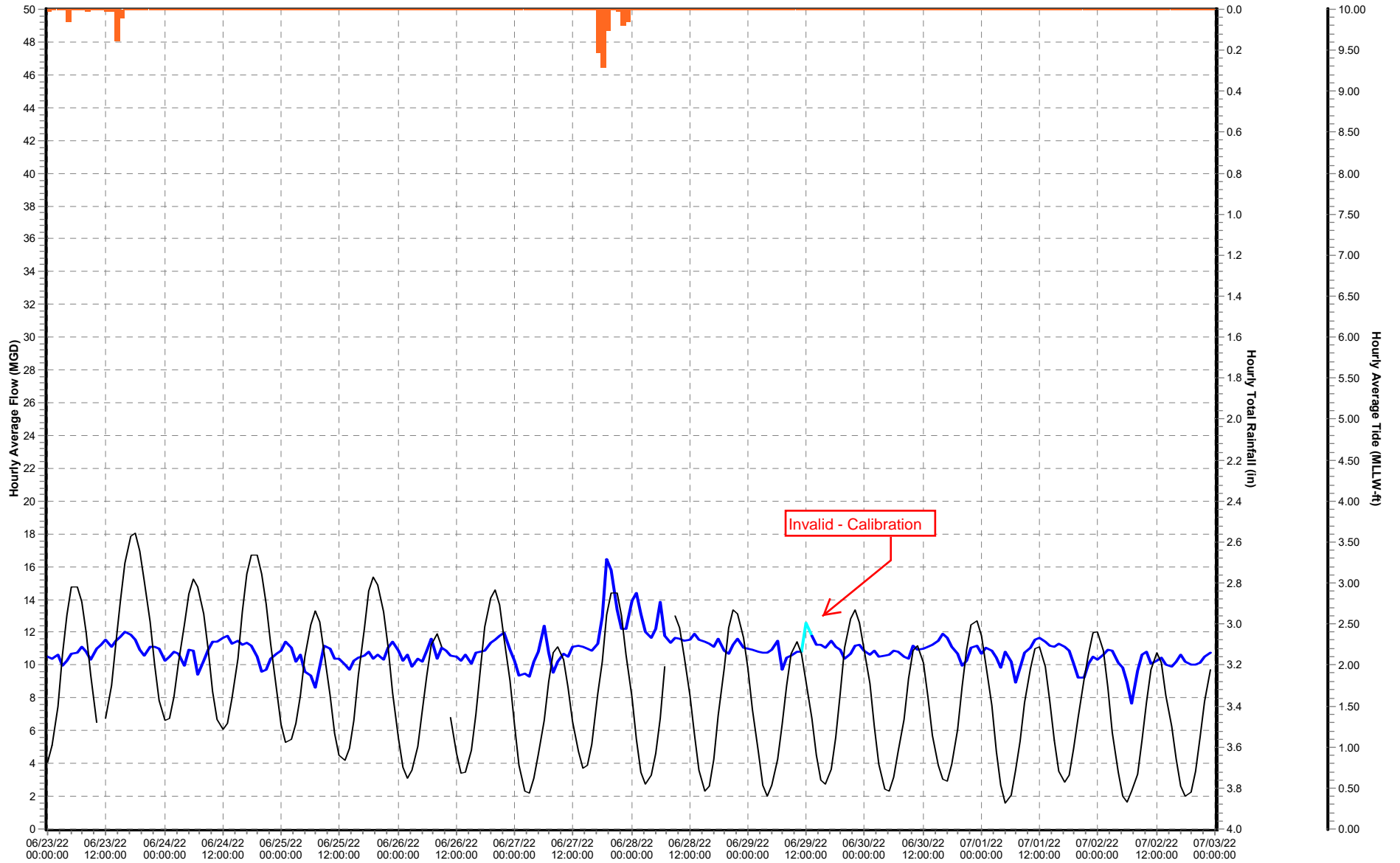
MMPS-222 (06/23/22 to 07/03/22)

Flow\_Effluent (MGD)  Rainfall @ WBTP



York River Treatment Plant  
MMPS-235 (06/23/22 to 07/03/22)

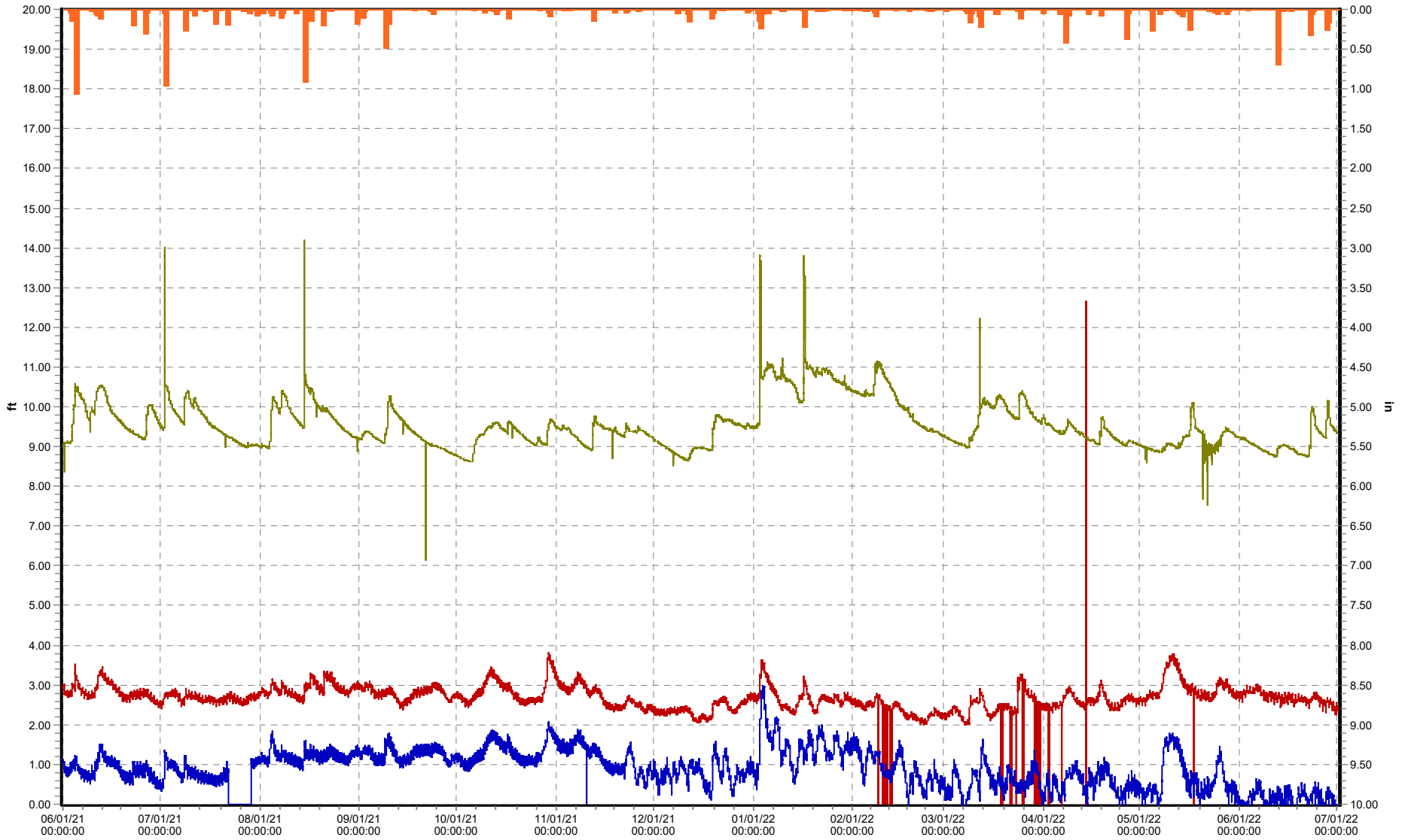
Flow\_Influent (MGD)     Rain Gauge (in)     YorktownUSCG Tide - MLLW Preliminary (ft)\*



## **Appendix C**

### Shallow Well Analysis

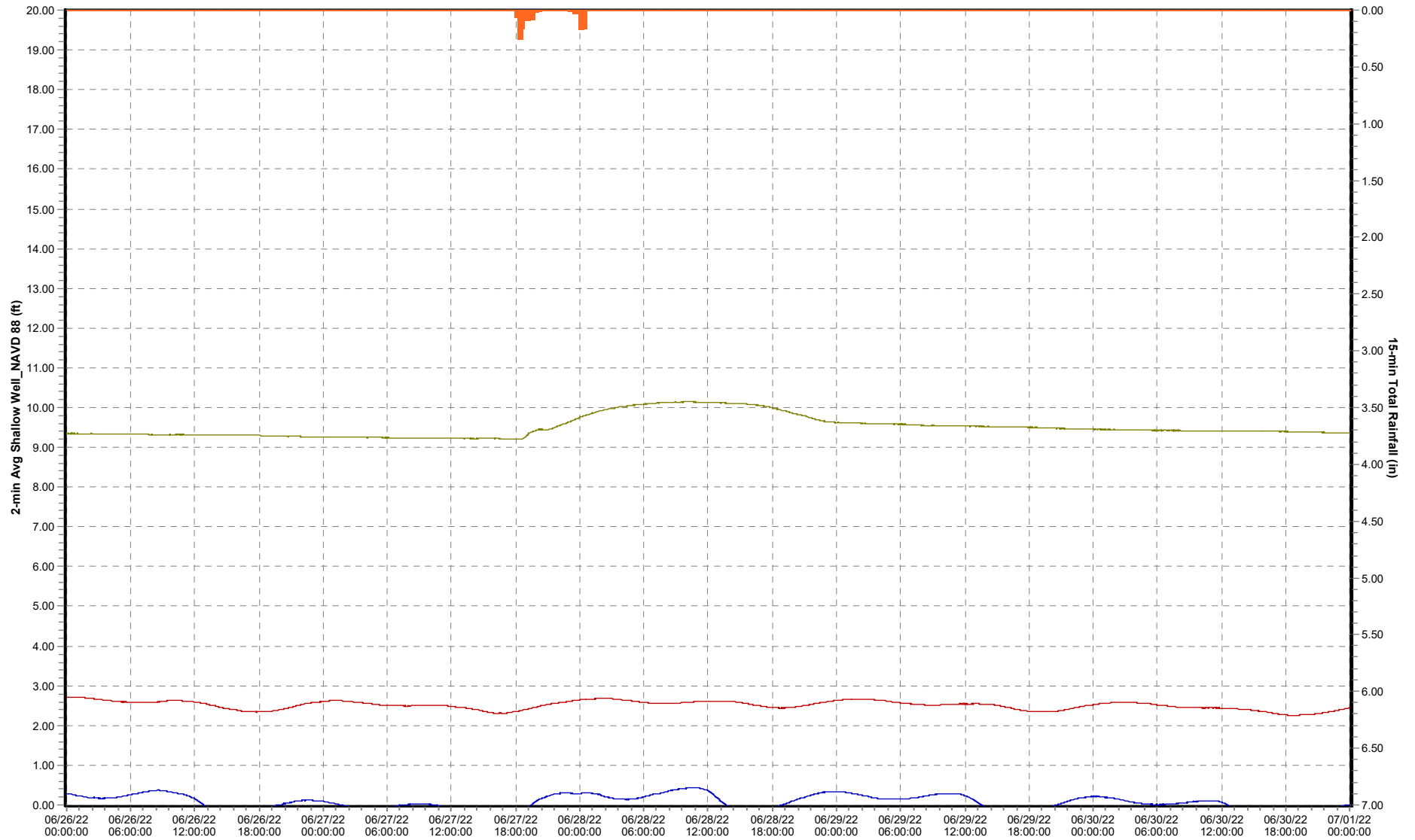
1-year  
North Shore Shallow Well Graphs  
MMPS-148 (06/01/21 to 07/01/22)



# 5-day North Shore Shallow Well Graphs

06/26/22 to 07/01/22

<input checked="" type="checkbox"/> <span style="color: red;">—</span> MMPS - 148 Lucas Creek PS Shallow Well NAVD88	<input checked="" type="checkbox"/> <span style="color: blue;">—</span> MMPS - 180 Willard Ave PS Shallow Well NAVD88	<input checked="" type="checkbox"/> <span style="color: green;">—</span> MMPS - 011 Copeland Park PS Shallow Well NAVD88
<input checked="" type="checkbox"/> <span style="color: orange;">█</span> MMPS - 116 Bayshore PS Rain Guage (in)		



**Appendix B. Definitions**

“Bypass” shall mean the intentional diversion of waste streams from any portion of a treatment facility, as defined by 40 C.F.R. § 122.41(m).

“HRSD SS System” or “HRSD Sanitary Sewer System” shall mean the wastewater collection and transmission systems, including all pipes, Force Mains, Gravity Sewer Lines, lift stations, Pumping Stations, Pressure Reducing Stations, manholes, and any other appurtenances thereto, which are owned or operated by HRSD as of the Effective Date of this Consent Decree, and which serve the Localities. It does not include the portions of the sewer system that serves the Middle Peninsula communities within King William County, King and Queen County, Middlesex County, and Mathews County.

“Non-potable water (NPW)” is fully treated and chlorinated final effluent.

“Prohibited Bypass” shall mean a Bypass within the meaning of 40 C.F.R § 122.41(m)(4).

“Sanitary Sewer Overflow” or “SSO” shall mean an overflow, spill, diversion, or release of wastewater from or caused by the Regional SS System. This term shall include: (i) discharges to waters of the State or United States from the Regional SS System and (ii) any release of wastewater from the Regional SS System to public or private property that does not reach waters of the United States or the State, including Building/Private Property Backups.

“Sanitary Sewer Discharge” or “SSD” shall mean any discharge to waters of the State or the United States from the HRSD SS System through a point source not authorized in any Permit.