



# Middletown

## AGENDA FOR THE WATER & SEWER COMMITTEE MEETING

April 27, 2022

7:00 p.m.

- **Monthly Water & Sewer Operations Report**
- Update on Water & Sewer Projects
  - Booster Station Upgrade
  - I&I Study
  - RFP – West WWTP Upgrade
  - Remsberg Park Waterline Loop
  - Linden Blvd Waterline Replacement
- **Review of Proposed Amendments to Hydrant Meter Policy**
- Update on Superintendent Position
- **Draft Water & Sewer Capacity Plans – Raw Numbers**

**Public Works Monthly Report**  
**April 7, 2022**

**COMPLETED WORK**

**Public Works**

Water and Sewer budgets submitted, General fund walk through 60% complete. Both departs have been quite busy with maintenance projects. One particular is staff fabricating a stainless steel bar screen for the EWWTP. This has been time consuming for our newest staff member but he has done an excellent job. His work for this project may have cost the town up to \$3,000.00 to contract saving the Town \$1800.00 by doing it in-house. He also fabricated a new stainless rotopress screen for the West WWTP. The cost of a new screen was \$6,000.00 and his repair cost was \$500.00. Town staff also installed new muffin monster's at the West plant and Cone Branch PS. The Assistant Director of PW has been instrumental in accomplishing all of these tasks with town staff. EWWTP is operating very well with our newest licensed operator in charge of the plant.

**New Projects or Requests**

**Unbudgeted Expenses:**

No sludge hauled savings (+\$2990/month), July, August, September, October, November = \$14950.00  
 Well 14 Pump OOS \$4,500 replacement.

Sludge cost for FY \$ not updated, 33,000 gal hauled, 41,922 gal bedded **Total hauled** 60,000 gal **Bedded** 155,000 Gal  
**Water Use (Average Daily for the Month, Flows stated in gallons per day)**

**Permit Limits (gal) 387,000/504,000 AD/MMU 250,000 AD 250,000 AD**  
**Base flow 176,000 Base flow 159,000**

MONTH	WATER USE		SPRING FLOW		East WWTP		West WWTP		Rain
	past yr	present yr	past yr	present yr	past yr	present yr	past yr	present yr	
January	317,614	300,936	100,405	85,469	260,000	241,963	224,000	147,012	2.5
February	300,936	311,685	109,250	105,258	291,000	263,000	179,000	195,000	2.8
March **	297,775	293,702	144,800	118,808	281,442	235,867	208,134	169,018	3.4
April **	290,726	316,218	143,076	147,075	214,000	221,150	222,000	220,184	3.5
May	290,109	318,004	143,632	149,126	239,000	234,000	327,000	261,000	5.3
June	306,095	327,808	139,857	136,400	185,000	183,167	175,000	183,360	4.15
July	329,237	312,871	106,703	95,242	167,000	176,000	147,000	144,000	2.9
August	300,267	321,358	80,583	72,415	178,000	185,000	168,000	154,000	8.2
September	300,687	300,680	64,513	91,340	175,000	312,000	147,000	342,000	10.2
October **	313,370	318,893	52,296	88,721	173,000	213,309	128,000	198,997	3.2
November**	285,014	287,629	50,700	86,898	194,000	204,000	137,000	143,000	1.05
December	29,383	287,269	68,898	81,035	305,000	180,706	199,000	101,370	1.9

Avg Daily/yr 280,101 308,088 100,393 104,816 221,870 220,847 188,428 188,245  
 Avg Yr Flw 102.24 112.45 36.64 38.26 80.98 80.61 68.78 68.71

\*\*Hydrants flushed this month

October 2019 531,958, Spring 2020 not flushed. Fall 2020 582,024 Spring 2021 704,842 Fall 2021 744,925

**Sewer Flow**

August flow up from July +20% EWWTP and +18% WWTP, Sept flow up from August +47% EWWTP, 98% WWTP  
 October flow down -41% EWWTP, -40% WWTP, November flow down -7% EWWTP, -30% WWTP. December flow  
 down -9% EWWTP, -27% WWTP, January flow down -23%, -21% EWWTP, -26% WWTP. February flow up 6%,  
 EWWTP -2%, WWTP +19%. March flow down 2% (404,885), EWWTP down 1%, WWTP down 4%.

**Planned Work**

EWWTP Reed Bed Sludge removal: need to obtain Waste Permit then schedule the work, schedule trucking contractor.  
 MDE water inspection corrections and emergency plan update, water capacity request from MDE (email)  
 Regulatory: West Plant Capacity Reports and Permit requirements

**ARP Budget and WS Projects:** Staff meets and updates costs and project biweekly. DPW has initiated 4 waterline  
 projects at this date (I&I, Remsburg Park Connector Water, Linden Blvd Waterline). Brookridge PS grinder installation  
 project is in the design phase.

## **Open Projects**

**I & I Walnut to Jefferson St.:** Submitted plans for permit, easement document created. Construction documents at 95% and ready to bid when the budget is available. **Easements In Progress.** 11/17/2021 plans resubmitted to county for permit. Permits have been received.

**ADA sidewalk ramp reconstructions:** No Action

**W WWTP.** RFP to be finalized and submitted to MDE for review. This RFP is for the PER (Preliminary Engineering Report).

**Develop Grease Trap Ordinance and Education Program:** No Action

**Water System:**

**Hydraulic Model:**

**System: Emergency Response Plan Certification is due Dec 31, 2021 99% complete.**

**Broad St Streetscape:** The base paving is complete for the project. Excavation and paving on Franklin St is in progress. Staff will provide a Memorandum for the segmental retaining wall in the near future regarding the design, construction and maintenance for the property Owners with a wall on the property frontage. There will be resources in the memo for their future use if needed.

**SSO and I&I:** Regulating flow daily to meet the flow discharge in our permits. Public Announcement for I & I Project and to disconnect illegally connected sump pumps (provide early notice). MDE has sent a letter of assessment for SSO's back to 2019. Agreeing to settle for \$3157.00 we will appeal with information to support our appeal. Contract executed and met with B & L to review manholes for flow measuring. Rain gauges and flow meters have been installed and captures a good dry season base line. The beginning of the wet season is upon us.

**MDE /Permits:** East WWTP Discharge Permit (exp Dec 2021) submitted 22 months prior to expiration and then revised 14 months before expiration. MDE advertised the reapplication. We have requested an increase in discharge flow from 250,000 to 350,000. No action.

**MDE MS4 Permit Reports:** Completed, Oct 2021. Waiting for comments. Received a Proposal from FSA or inspection and survey MS4 stream improvements to justify the MS4 credits and have placed in the General Fund budget.

**West Wastewater Treatment Plant:** No issues.

**East WWTP:** Permit renewal complete (exp Dec 2021). Operating staff is cleaning all facilities and making repairs and improvements scheduled in the budget.

**Municipal Center:** no action

**Maintenance Facility:** Contract has been executed with Triad Engineering. We have received a preliminary sketch. No action.

**Washington Street:** Plans and specs at 100%. Town Staff replaced 3 – 8" water valves and has 2 more to replace prior to the project beginning. April 21, 2022 bid date.

**Pedestrian Blinker signs:** One in reserve waiting for a location. No action

**Wiles Branch Stream Rehabilitation (MS4):** Survey work has begun. Change order to add additional length upstream to Main St. No Action

**Linden Boulevard Culvert Replacement:** RFP meeting with Frederick Seibert completed. Proposal has been received and is being reviewed. Proposal amount of \$31,600 was accepted and awarded. Change order to add additional length to Main St and 100 feet below the culvert. (MS4 qualification). Gas and other structures will be relocated. Consultant has provided plans for Linden. Submitting for permit with waterway MDE/Army Corp.

**Brookridge PS:** Clogging pumps has occurred several times weekly. Met with a vendor for grinder and will need to provide information to receive an accurate quote for installation of a manhole to house the grinder.

**Booster Station Process Pipe Upgrade:** Work is nearing completion and startup has been set for April 26. The final work to be performed is the most difficult and time consuming and will involve meticulous planning to complete.

**West WWTP ENR Upgrade:** The final RFP will be submitted to MDE prior to sending it to the short listed firms.

**Remsburg Park Waterline Extension:** Plans have been received for review and approval to submit to MDE for the stream crossing. The projected start of this project is not firm but could be October 2022.

## **Developments**

**Middletown Library:** Improvement plans have been reviewed. No action

**ADMAR Annexation:** Design for treatment plant in progress, Staff has reviewed the WTP online but has yet to receive the 70% submittal. The plans are being prepared in 3D and a virtual headset will be used to "walk through" the plant. This is a virtual review, highly technical and very precise showing every detail in an effort to correct deficiencies before construction.

**Chesterbrook IP's:** Fourth building under construction. Developer has paved the widening and placed curb.

**Middletown Municipal Hall:** Approved water meter vault submittal. On-site review of alley and parking plan to be submitted to the PC.

**Horman Property Caroline's View:** No action.

## **Future Budget Considerations**

**W&S:** Comprehensive sewer plan, West WWTP ENR plant replacement (non process component for Town budget), upsize CB pumps ( part of the facility review or ENR upgrade)

**GF:** Additional 1 ton truck. New Skilled labor position

## HYDRANT METER LEASING POLICY

Adopted March 11, 2002

Revised August 13, 2007

Revised – Add Date

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### **1. Leasing a Hydrant Meter:**

Town of Middletown leases hydrant meters on a temporary basis to Town residents and local businesses only. Using a fire hydrant allows water to be drawn from the public water system when the water does not return to the public sewer system. There are no sewer charges associated with the water that registers on fire hydrant meters. Some examples of use are: filling swimming pools (permitted only during Code Blue), washing streets or filling tanker trucks. Water must be for use within the Town limits. It is not the intention of this policy to promote water resale. Water is to be used within the Town's water service area.

### **TOWN OF MIDDLETOWN FIRE HYDRANT METERS MAY NOT BE USED FOR POTABLE WATER.**

The Town of Middletown's fire hydrant can be used within the Town of Middletown (Maryland). Yellow fire hydrants are not the property of the Town of Middletown and the Town of Middletown hydrant meters may not be used on these hydrants. The easiest way to identify a Town of Middletown hydrant is by its color; ~~all of~~ all the Town of Middletown's fire hydrants are painted red.

Fire Hydrants can be leased from 2 weeks up to a maximum of 12 months or any 3-month interval.

### **2. Where can I lease a fire hydrant meter?**

The fire hydrant meter can be picked up only from the Municipal Center. At that time, the customer will provide all account billing information to the administrative assistant.

Only the Town of Middletown owned fire hydrants (red) can be used. Meters may be picked up at:

Town of Middletown  
Municipal Center  
31 West Main Street  
Middletown, MD 21769  
(301) 371-6171  
8 a.m. to 4 p.m. (M-F)

### **3. What do I need when I lease a fire hydrant meter?**

Generally, leasing a fire hydrant meter requires a security deposit. The security deposit must be in the form of a certified check, ~~cashier's~~ cashier's check, treasurer's ~~check~~ check, or money order. However, if you have a current water/sewer account with the Town of Middletown that is in "good standing" (3 years of on time payments and no returned checks), no deposit is required. Also, a customer "in good standing" may waive the deposit and have the charges applied to their water/sewer account by:

- Picking-up the meter from the Municipal Center and arranging billing with the administrative assistant.
- The Town does not provide the required fire hose and its connections that is attached to the hydrant meter and is used to fill the container the water will be transported in.

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Fire Hydrant Meter Information	
Size	3"
Flow Range	Up to 350 gallons per min. or 15,000 per hour
Hose Type	2 1/2" Fire Hose
Security Deposit	<del>\$1,250.00</del> Current cost of replacement meter on the day of the meter rental.

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Leasing Requirements	
Deposit (if required)	3" meter <del>\$1,250.00</del> \$1,250.00 Current cost of replacement meter on the day of the meter rental.
Documentation Requirements	For all users, the "Statement of Intended Use" form must be completed before the meter is released. This form is available at all Fire Hydrant Leasing locations. The following information is required to complete the form: <ol style="list-style-type: none"> <li>1. Name of the resident or local business.</li> <li>2. Street address of the individual/business using the meter (no P.O. Boxes).</li> <li>3. Federal Tax ID number (businesses) or Social Security number (individuals).</li> <li>4. Telephone number of the individual/business using the meter.</li> <li>5. The intended use of the meter (i.e. filling pool, washing streets).</li> <li>6. If chemicals are used in conjunction with the meter, we need the specific name of the chemical(s) used.</li> </ol>
ID Requirements	The person signing the permit(s) must have a valid Driver's License (Maryland, Virginia, or Washington , DC) for identification purposes. <b>NO OTHER OUT-OF-STATE LICENSES WILL BE ACCEPTED.</b>

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**4. What is the cost of leasing a fire hydrant meter?**

<b>Fees and Charges</b>		
NOTE: All fees and charges will be deducted from your deposit. If the fees and charges exceed your deposit, you will be mailed an invoice for the balance. If the fee and charges are less than your deposit, you will be mailed a refund within 30 days after the meter is returned. If no deposit was required, charges will be billed to your Town of Middletown water/sewer account.		
<b>Size</b>	3"	
<b>Water Charge</b>	<del>\$3.03 per 1,000 gallons</del> <u>Current charge per 1000 gallons on the day of the meter rental.</u>	
<b>Minimum Water Consumption Charge</b>	<del>\$235.23</del> <u>(Current charge for approximately 33,000 gallons on the day of the meter rental)</u>	
<b>Service Charge</b>	\$50.00 (2 Week Lease Period); \$100.00 (3 Month Lease Period); \$150.00 (6 Month Lease Period); \$200.00 (9 Month Lease Period) and \$250.00 (12 Month Lease Period)	
<b>Late Fees</b>	\$5.00 for each business day the meter is not returned after the permit has expired.	
<b>Other Fees</b>	<b>Damaged Meters</b>	If meter is damaged, the customers will be billed for parts and labor required to repair the meter. Customers are also responsible for the consumption and service charges.
	<b>Lost/Stolen Meters</b>	If the meter is lost or stolen, a meter replacement cost (which is equal to the deposit) as well as the minimum consumption and service charge will be assessed.

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**5. Where do I return my fire hydrant meter?**

<b>Location</b>	<b>Address</b>	<b>Hours (M – F)</b>	<b>Phone Number</b>
Town of Middletown Municipal Center	31 W. Main Street Middletown, MD 21769	8:00 a.m. – 4:00 p.m.	301-371-6171

**6. Limits on Hydrant use.**

The Town of Middletown reserves the right to recall the hydrant meter at anytime for any reason. Water use will be limited to maximum of 50,000 gallons in 90 days. The Middletown Water Conservation Public Alert System (Ordinance 97-09-02) shall be observed and govern the use of the hydrant meters as follows:

**Code Blue:** Normal use, no restrictions.

**Code Yellow:** Voluntary water conservation is requested. Tank trucks for construction dust control may be filled, hydro seeders and other service-oriented tanks may be filled. Washing of streets directly from the hydrant is not permitted, but street-washing trucks equipped with a booster pump may be used. While topping off of pools is permitted, filling of pools is prohibited.

**Code Red:** Hydrant meters will be recalled by the Town. The meter will be returned to the applicant when the code red is removed. No fees will be assessed for the hydrant meter during a code red. For activities that are permitted in a code red see the Public Alert System Ordinance 97-09-02. Fees will be applicable for any permitted use in a code red.

**HYDRANT METER  
STATEMENT OF INTENDED USE**

**DATE:** \_\_\_\_\_

**NAME OF USER:** \_\_\_\_\_

**EXISTING ACCOUNT NUMBER:** \_\_\_\_\_

**ADDRESS:** \_\_\_\_\_

**TAX ID OR SS NUMBER:** \_\_\_\_\_

**TELEPHONE NUMBER:** \_\_\_\_\_

**INTENDED USE OF METER:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

**CHEMICALS TO BE USED IN CONJUNCTION WITH THE METER:**

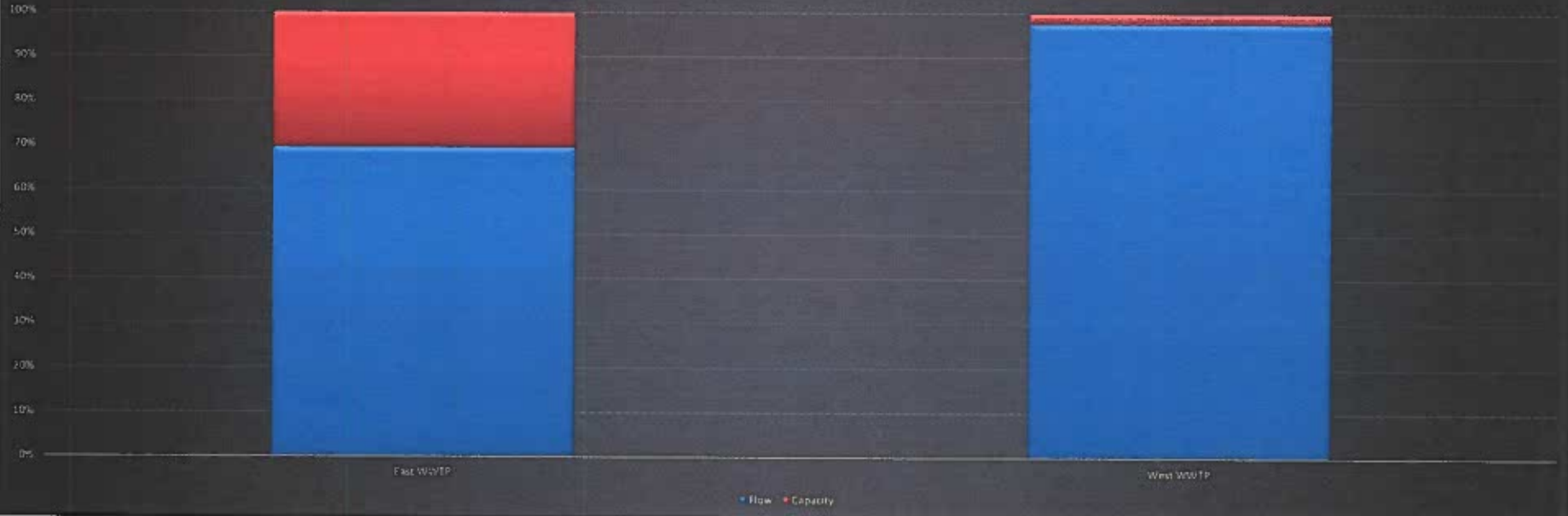
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**I AGREE TO PAY ALL FEES AND CHARGES ASSOCIATED WITH THE LEASING  
OF THIS METER IN ACCORDANCE WITH THE TOWN OF MIDDLETOWN  
HYDRANT LEASING POLICY.**

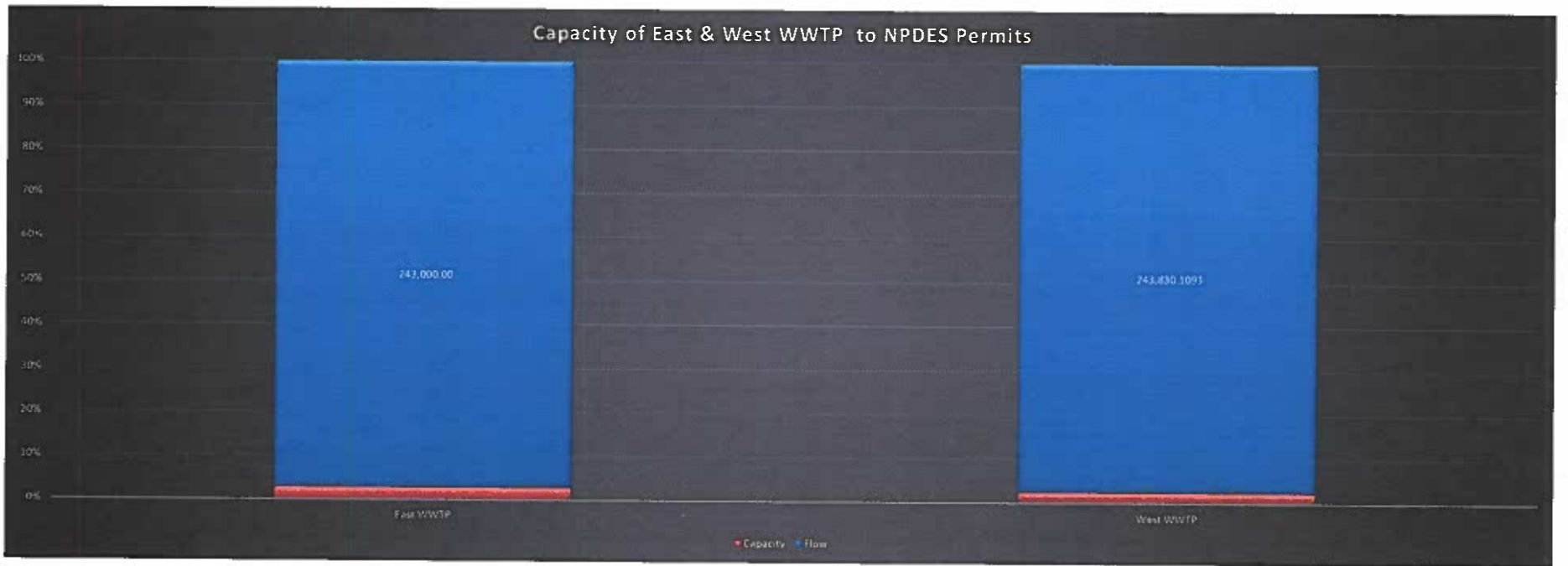
**SIGNATURE:** \_\_\_\_\_



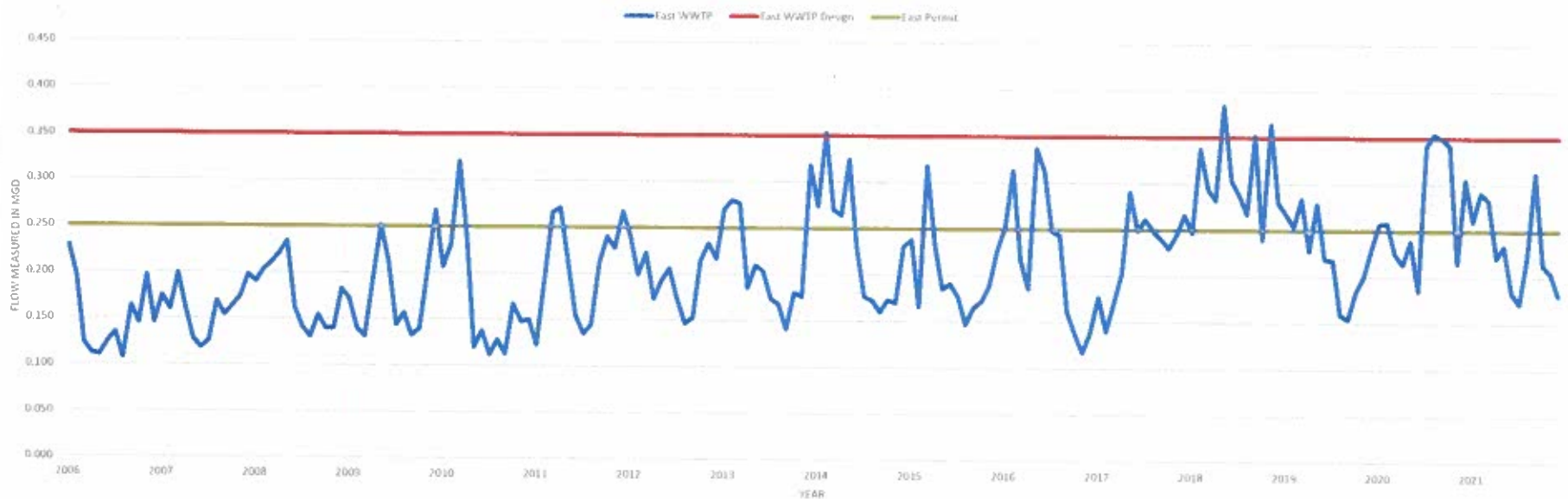
Capacity of East & West WWTP to Plant Design Capacity



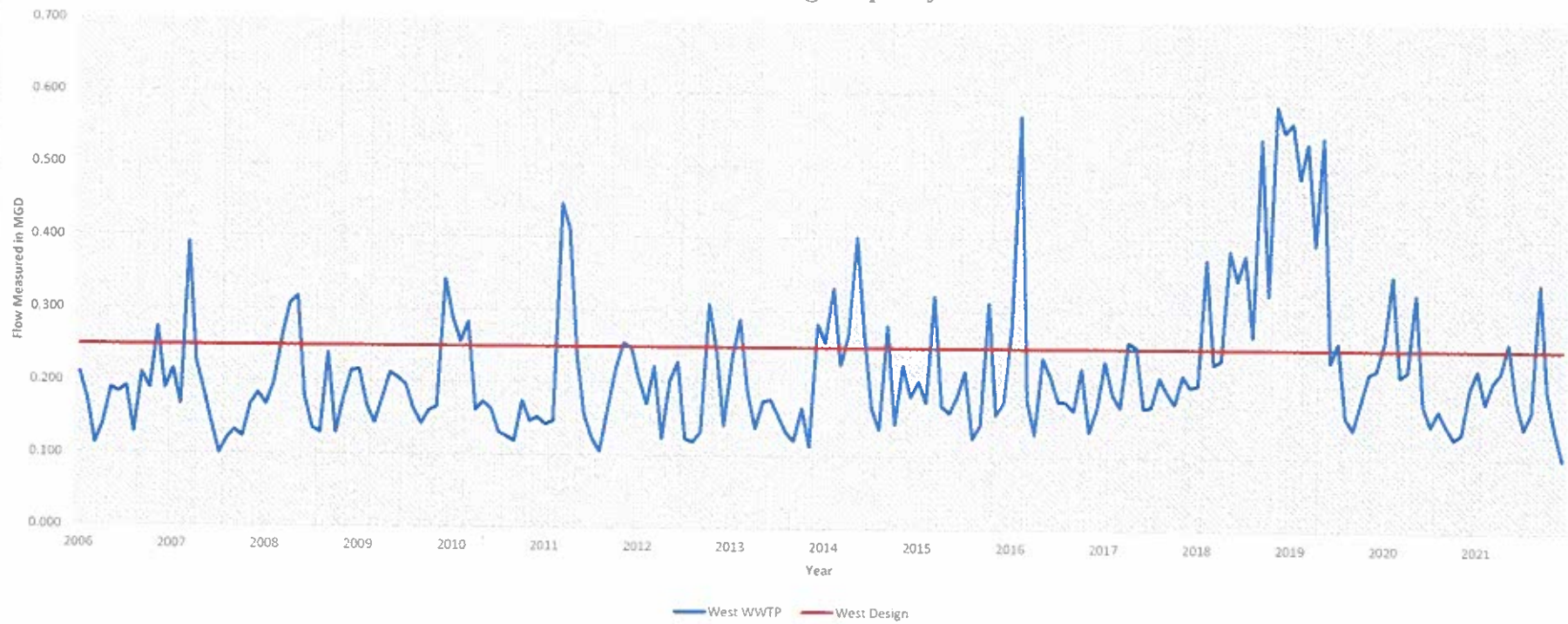
Capacity of East & West WWTP to NPDES Permits



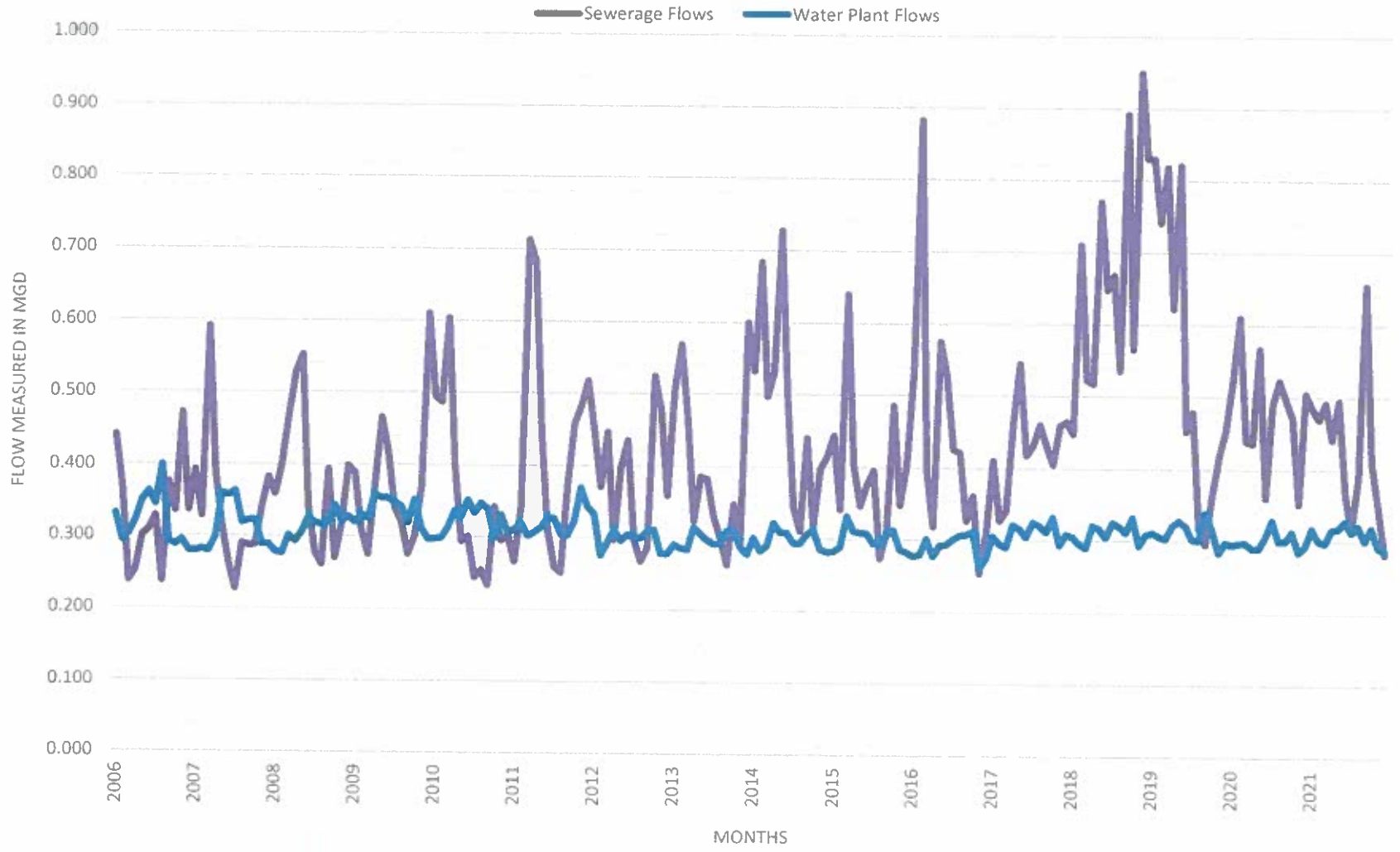
### East WWTP Flows vs Design Capacity



West WWTP  
Flows vs Design Capacity



# Inflow and Infiltration



	East WWTP	West WWTP	Combined	Rainfall	WTP	I&I
2019 January	0.268	0.562	0.830	4.00	0.311	0.519
February	0.254	0.487	0.741	3.55	0.306	0.435
March	0.284	0.534	0.818	5.05	0.303	0.515
April	0.228	0.394	0.622	4.95	0.321	0.301
May	0.279	0.542	0.821	8.45	0.328	0.493
June	0.219	0.233	0.452	4.20	0.321	0.131
July	0.218	0.260	0.478	6.55	0.302	0.176
August	0.159	0.158	0.317	1.55	0.301	0.016
September	0.154	0.141	0.295	0.80	0.339	-0.044
October	0.184	0.180	0.364	5.90	0.316	0.048
November	0.200	0.218	0.418	2.75	0.284	0.134
December	0.230	0.223	0.453	4.45	0.298	0.155
2020 January	0.257	0.262	0.519	3.40	0.295	0.224
February	0.258	0.352	0.610	4.00	0.297	0.313
March	0.225	0.214	0.439	2.85	0.298	0.141
April	0.214	0.222	0.436	4.15	0.290	0.146
May	0.239	0.327	0.566	4.45	0.290	0.276
June	0.185	0.175	0.360	3.95	0.306	0.054
July	0.342	0.147	0.489	1.75	0.329	0.160
August	0.354	0.168	0.522	5.90	0.300	0.222
September	0.349	0.147	0.496	2.40	0.300	0.196
October	0.342	0.129	0.471	1.90	0.313	0.158
November	0.215	0.137	0.352	3.45	0.285	0.067
December	0.305	0.199	0.504	6.25	0.293	0.211
2021 January	0.260	0.224	0.484	2.55	0.318	0.167
February	0.291	0.179	0.469	4.85	0.301	0.168
March	0.283	0.208	0.491	2.70	0.298	0.193
April	0.221	0.220	0.441	3.50	0.316	0.125
May	0.234	0.261	0.494	5.30	0.318	0.176
June	0.184	0.183	0.367	4.25	0.328	0.039
July	0.171	0.144	0.315	3.55	0.313	0.002
August	0.223	0.167	0.390	7.60	0.321	0.069
September	0.312	0.342	0.654	11.65	0.301	0.354
October	0.213	0.194	0.408	3.15	0.319	0.089
November	0.204	0.143	0.347	1.05	0.293	0.055
December	0.181	0.101	0.282	2.70	0.287	-0.005
<b>3 Year Average</b>	0.243	0.244	0.487			
<b>Design Capacity</b>	0.350	0.250	0.600			
<b>% Capacity</b>	69.37%	97.53%	81.10%			

#### Annual Average Calculations

Average Annual Flow for 2019	0.551
Average Annual Flow for 2020	0.480
Average Annual Flow for 2021	0.429
<b>Overall Average</b>	<b>0.487</b>

#### Inflow & Infiltration Calculations

Average Annual I&I for 2019	0.240
Average Annual I&I for 2020	0.181
Average Annual I&I for 2021	0.119
<b>Overall Average</b>	<b>0.180</b>