pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southcentral Regional Office
CLEAN WATER PROGRAM

NPDES/WQM PERMITS FACT SHEET INDIVIDUAL SFTF/SRSTP

Application Type	**New**	Application No.	**PA0267244 & WQM 0120401**
Wastewater Type	**Sewage**	APS ID	**1021209**
Facility Type	**SRSTP**	Authorization ID	**1322973 & 1322974 WQM**

Applicant, Facility and Project Information

Applicant Name	**Floyd Paul Walters**	Facility Name	**Paul Walters-Single Family**
Applicant Address	140 Village Square Drive	Facility Address	660 Shrivers Corner Road
	Marietta, PA 17547		Gettysburg, PA 17325-8133
Applicant Contact	Floyd Walters	Facility Contact	Floyd Walters
Applicant Phone	(717) 426-4547	Facility Phone	(717) 426-4547
Client ID	357825	Site ID	844397
SIC Code	8811	Municipality	Straban Township
SIC Description	Services - Private Households	County	Adams
Date Application Received	August 5, 2020	WQM Required	
Date Application Accepted	September 15, 2020	WQM App. No.	0120401

Project Description: NPDES and WQM permits applications for a new SRSTP.

Summary of Review

This fact sheet supports the issuance of new NPDES and WQM permits for discharge of treated sewage from the single residence sewage treatment plant (SRSTP) located in Straban Township, Adams County. The annual average design flow is 400 gallons per day. The discharge will be to Unnamed Tributary to Rock Creek which is classified as Warm Water & Migratory Fishes (WWF & MF).

The WQM permit for the construction of the treatment system with permit No. 0120401 is concurrently under review. DEP Planning for the project was approved under Code No. A3-01929-330-3s.

DEP has prepared this report for the applications for both NPDES and WQM permits. Based on the review outlined in this report, it is recommended that the NPDES permit be drafted and a Bulletin Notice will be published in the Pennsylvania Bulletin for public comments for 30 days.

Approve	Deny	Signatures	Date
X		*Hilaryle* Hilary H. Le / Environmental Engineering Specialist	March 26, 2021
		Daniel W. Martin, P.E. / Environmental Engineer Manager	

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	.0004
Latitude	39º 53' 59.50"	Longitude	-77º 12' 25.73"
Quad Name	Biglerville	Quad Code	
Wastewater Description:	Sewage Effluent		
Receiving Waters	Unnamed Tributary to Rock Creek (WWF, MF)	Stream Code	59169
NHD Com ID	53319382	RMI	3.24 miles
Drainage Area	1.47 mi.^{2}	Yield (cfs/mi^2)	0.027
Q_{7-10} Flow (cfs)	0.04	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	552.7	Slope (ft/ft)	
Watershed No.	13-D	Chapter 93 Class.	WWF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status		Name	
Nearest Downstream Public Water Supply Intake	City of Frederick, MD		
PWS Waters	Monocacy River	Flow at Intake (cfs)	
PWS RMI	unknown	Distance from Outfall (mi)	Approximately 18 miles to PA-MD Border

Changes Since Last Permit Issuance: none because the application type is new.

Drainage Area/Stream Flows
The discharge is to Unnamed Tributary 59169 to Rock Creek at RMI 3.24 mile. A drainage area upstream of the discharge is estimated to be 1.47 mi.^{2}, according to USGS StreamStats available at https://streamstats.usgs.gov/ss/. USGS StreamStats also produced a Q7-10 flow of 0.04 cfs at the point of proposed discharge.

Unnamed Tributary to Rock Creek
Under 25 Pa Code §93.9z, Unnamed Tributary to Rock Creek is designated as Warm-Water & Migratory Fishes (WWF & MF). Rock Creek does not support a Class A Wild Trout fishery. Therefore, no Class A Wild Trout fishery is impacted by this discharge.

Based on integrated report 2018, Unnamed Tributary to Rock Creek, assessment ID 12952, is not impaired.

Public Water Supply Intake
According to DEP's eMapPA available at http://www.depgis.state.pa.us/emappa/, the nearest downstream public water supply intake is City of Frederick, MD located on Monocacy River, approximately 18 miles from the point of proposed discharge to PA-MD boarder. Given the nature and distance, the proposed discharge is not expected to impact the water supply.

Treatment Facility Summary

The facility is proposed to serve the three-bedroom single family residence (400 GPD) located at 660 Shrivers Corner Road, Gettysburg, PA 17325. The facilities will be owned and maintained by Floyd P. Walters. The proposed treatment process, according to the application, is as follows:

1000-gallon compartment concrete septic tank (or equivalent) → Zabel A300 effluent filter (or equal) → ECOFLO Rotomoule EC7-500-P-P-PACK (Filter) → DiUV disinfection unit → Outfall.

The proposed septic tank will have enough capacity to handle the proposed design flow. An effluent filter will be provided at the end of the septic tank to reduce settleable and floatable solids in the effluent. A Premier Tech ECOFLO Rotomoule EC7-500-P-P PACK (filter) will be provided, which has been demonstrated to produce effluent that does not exceed 10 mg/L BOD_5 and 10 mg/L TSS. The proposed UV disinfection system will be able to provide an effluent fecal coliform concentration less than or equal to 200 No./100 mL.

The primary treatment tank sludge levels will be monitored yearly and pumped out no longer than 3-year intervals. The outlet of the tank will have an effluent filter, preventing solids from leaving the tank. The surface filter will be inspected annually. The UV unit will be accessible from the ground surface, allowing the UV bulb to be replaced or cleaned. The UV unit has an alarm-light system to alert for a treatment malfunction, and one or more spare bulbs will be kept on site for emergency replacement.

Compliance History

On April 6, 2017, DEP approved the Act 537 planning as a revision to the Act 537 official sewage facilities plan of Reading Township (DEP Code No. C3-01929-330-3s).

This is a new facility; therefore, there are no effluent sample results / inspection reports associated with this facility. The Department's database indicates that there is currently no open violation associated with the facility or the applicant.

Development of Effluent Limitations and Monitoring Requirements

The effluent limitations and monitoring requirements are derived from DEP's Standard Operating Procedure (SOP) for New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Applications (SOP No. BPNPSM-PMT-003, revised May 17, 2019). Since the facility will utilize ultraviolet (UV) disinfection, monitoring requirements for total residual chlorine are not applicable.

According to the SOP referenced above, water quality monitoring using PentoxSD and/or WQM are not required for SRSTPs. The permittee will be required to submit a completed Annual Maintenance Report (AMR) as part of the permit requirements. No DMR is necessary for any facilities that are required to report effluent monitoring results on AMRs annually.

The draft permit will include the following Part C conditions:

a. Small Flow Treatment Facility Maintenance, including measurement of the depth of septage and scum, 3-year septic tank pumping requirement, reporting requirement of a completed Annual Maintenance Form.
b. Stormwater Prohibition
c. Property Rights
d. Proper Disposal of Solids

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (362-0400-001), SOPs and/or BPJ.

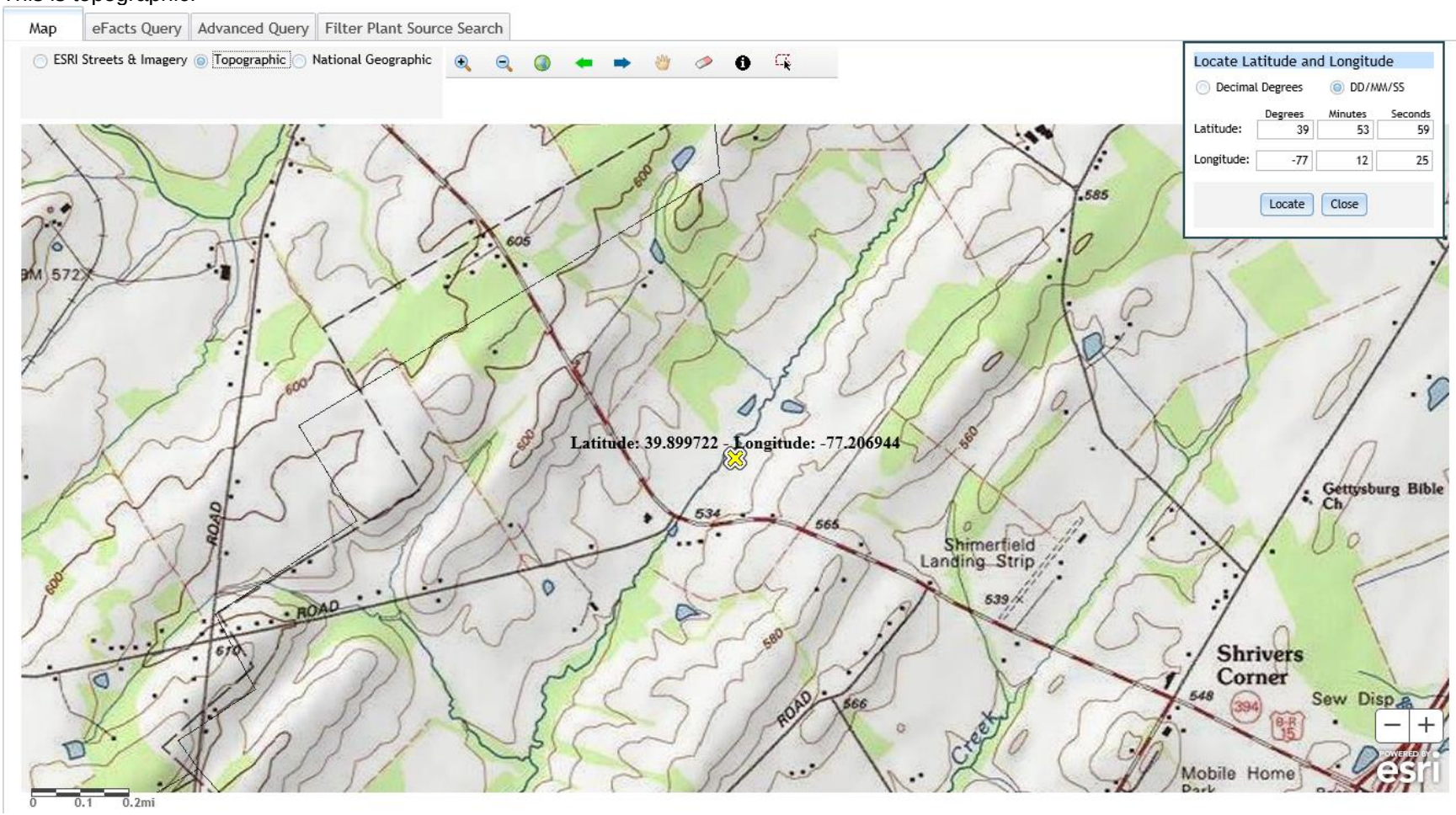
Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Annual Average	Maximum	Instant. Maximum		
Flow (MGD)	Report Annl Avg	XXX	XXX	XXX	XXX	XXX	1/year	Estimate
BOD_5	XXX	XXX	XXX	10.0	XXX	20.0	1/year	Grab
TSS	XXX	XXX	XXX	10.0	XXX	20.0	1/year	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200	XXX	XXX	1/year	Grab

Compliance Sampling Location:

Other Comments:

This is topographic.



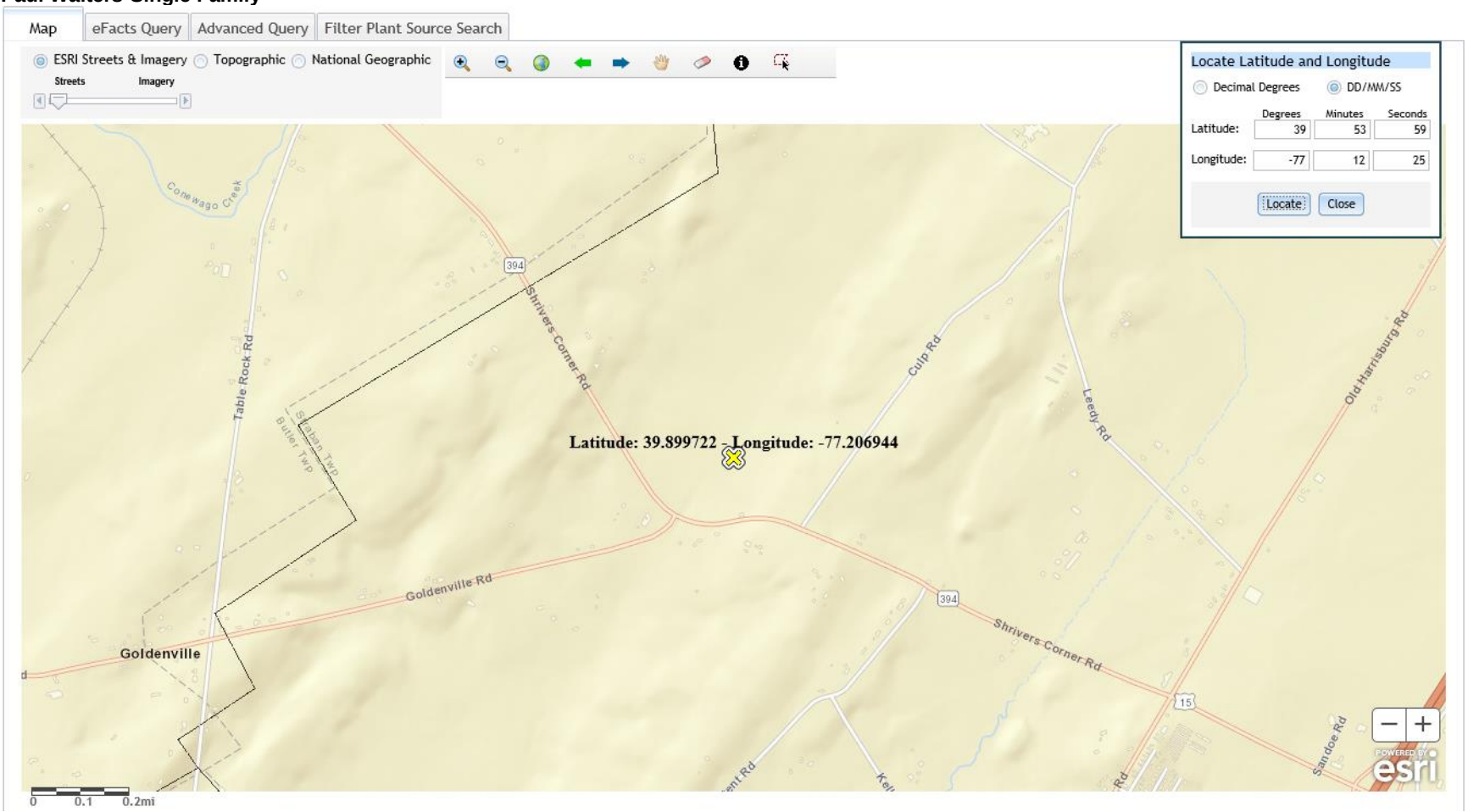

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Table Rock Rd
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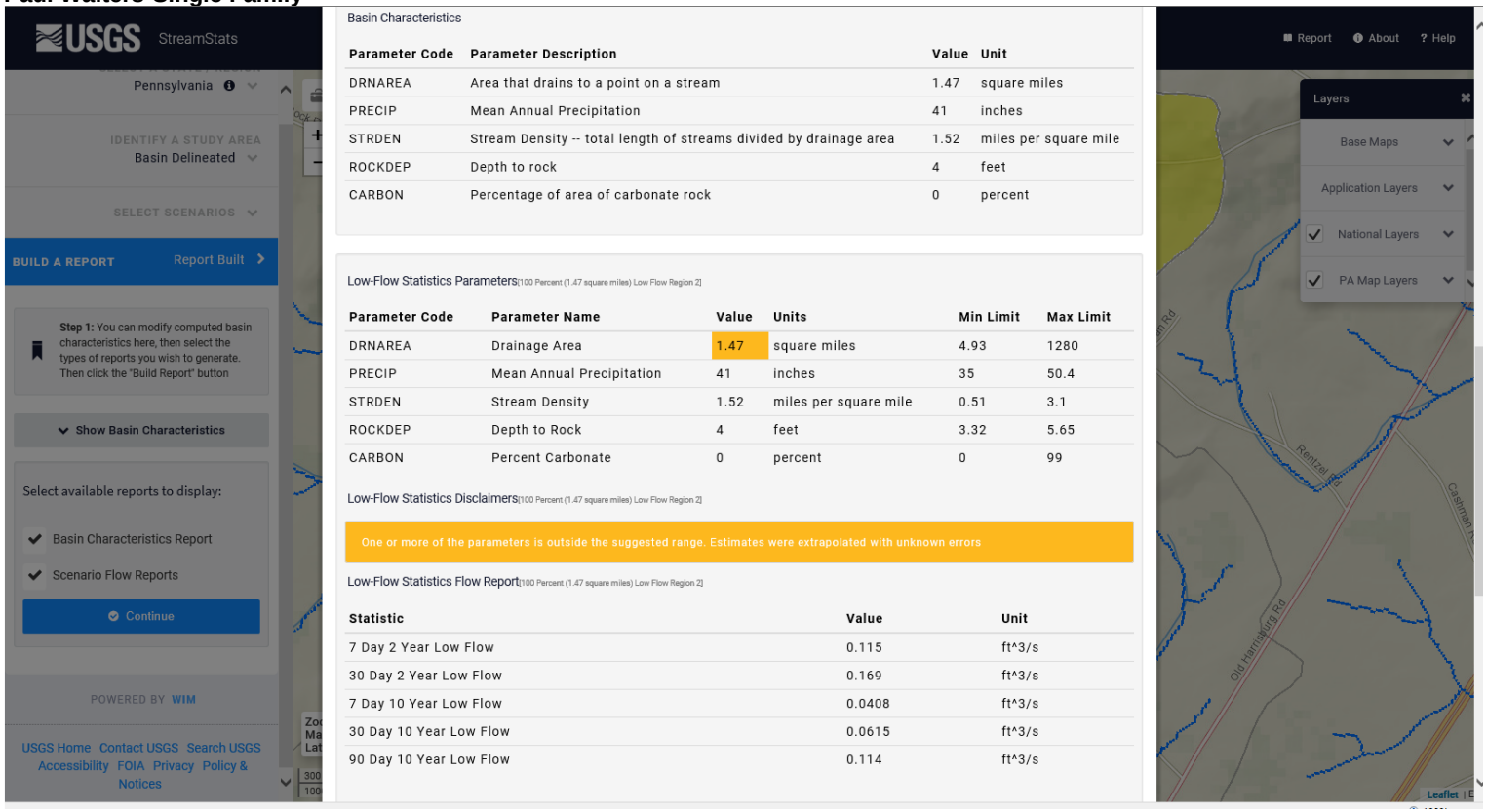

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	1.47	square miles
PRECIP	Mean Annual Precipitation	41	inches
STRDEN	Stream Density -- total length of streams divided by drainage area	1.52	miles per square mile
ROCKDEP	Depth to rock	4	feet
CARBON	Percentage of area of carbonate rock	0	percent

Low-Flow Statistics Parameters[100 Percent (1.47 square miles) Low Flow Region 2]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	1.47	square miles	4.93	1280
PRECIP	Mean Annual Precipitation	41	inches	35	50.4
STRDEN	Stream Density	1.52	miles per square mile	0.51	3.1
ROCKDEP	Depth to Rock	4	feet	3.32	5.65
CARBON	Percent Carbonate	0	percent	0	99

Low-Flow Statistics Disclaimers[100 Percent (1.47 square miles) Low Flow Region 2]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors

Low-Flow Statistics Flow Report[100 Percent (1.47 square miles) Low Flow Region 2]

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.115	ft^3/s
30 Day 2 Year Low Flow	0.169	ft^3/s
7 Day 10 Year Low Flow	0.0408	ft^3/s
30 Day 10 Year Low Flow	0.0615	ft^3/s
90 Day 10 Year Low Flow	0.114	ft^3/s