pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**New**	Application No.	**PA0267431**
Wastewater Type	**Sewage**	APS ID	**1034776**
Facility Type	**SRSTP**	Authorization ID	**1347306**

NPDES PERMIT FACT SHEET
INDIVIDUAL SFTF/SRSTP

Applicant, Facility and Project Information

Applicant Name	**John M. Egloff**	Facility Name	**Egloff Residence**
Applicant Address	305 Swift Run Road	Facility Address	276 Coleman Road
	Gettysburg, PA 17325		Gettysburg, PA 17325
Applicant Contact	John Egloff	Facility Contact	John Egloff
Applicant Phone	(717) 338-9313	Facility Phone	(717) 338-9313
Client ID	361726	Site ID	844666
SIC Code	8811	Municipality	Straban Township
SIC Description	Services - Private Households	County	Adams
Date Application Received	March 24, 2021	WQM Required	
Date Application Accepted	March 29, 2021	WQM App. No.	0121401

Project Description: NPDES permit applications for new SRSTP.

Summary of Review

This fact sheet supports the issuance of new NPDES permit 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 Swift Run which is classified as Warm Water & Migratory Fishes (WWF & MF).

The WQM permit for the construction of the treatment system with permit No. 0121401 is concurrently under review. DEP Planning for the project was approved under Code No. A3-01929-355-3s. It has been determined that the 10/1/2020 DEP Planning approval letter incorrectly stated that there will be a proposed dry stream discharge tributary to Swift Run. Per the permit application and the engineers report, the discharge will be directly to Swift Run and not a dry stream discharge tributary to Swift Run. This has been verified 5/4/21 via email reply from the consulting engineer along with DEP Planning concurrence in a 5/12/21 email from Planning.

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 published in the Pennsylvania Bulletin for public comments for 30 days.

Approve	Deny	Signatures	Date
X		*Hilaryle* Hilary H. Le / Environmental Engineering Specialist	April 23, 2021 revised 5/12/2021
X		/s/ Daniel W. Martin, P.E. / Environmental Engineer Manager	May 12, 2021

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	0.0004
Latitude	39º 51' 51.60"	Longitude	-77º 8' 30.92"
Quad Name	Gettysburg	Quad Code	
Wastewater Description:	Sewage Effluent		
Receiving Waters	Swift Run	Stream Code	08960
NHD Com ID	57474017	RMI	1.600 miles
Drainage Area	0.13 mi.^{2}	Yield (cfs/mi^2)	See comments below
Q_{7-10} Flow (cfs)	See comments below	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	601.9	Slope (ft/ft)	
Watershed No.	7-F	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	Wrightsville Borough Municipal, York County		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	
PWS RMI	28.5 miles	Distance from Outfall (mi)	Approximate 70 miles

Changes since last permit Issuance: new

Drainage Area/Stream Flows
The discharge is to Swift Run at RMI 1.6 mile. A drainage area upstream of the discharge is estimated to be 0.13 mi.^{2}, according to USGS StreamStats available at https://streamstats.usgs.gov/ss/.

Stream flows
A USGS station, Juniata River at Huntingdon, PA (01574000), was used to determine the site stream flow. Based on the recent USGS StreamStats flow report available at https://streamstats.usgs.gov/ss/, the Q_{7-10} and drainage area at the station are 39.2 cfs and 512 mi.^{2}, respectively. The Q_{7-10} yield is 0.08 cfs/mi.^{2} (39.2 cfs / 512 mi.^{2}) and the Q_{7-10} at discharge is 0.01 cfs (0.08 cfs/mi.^{2} x 0.13 mi.^{2}) for the drainage area at discharge as calculated by StreamStats is 0.13 mi.^{2}.

Unnamed Tributary to Swift Run to Conewago Creek
Under 25 Pa Code §93.9o, Swift Run is designated as Warm-Water & Migratory Fishes (WWF & MF). No TMDL has been developed yet to address this stream. Swift Run does not support a Class A Wild Trout Fishery. Therefore, no Class A Wild Trout fishery is impacted by this discharge. Based on integrate report of 2018, Swift Run, assessment IDs 11591 & 18581, 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 Wrightsville Borough Municipal Authority, York County located on Susquehanna River, approximately 70 miles. 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 276 Coleman Road, Gettysburg, PA 17325. The facilities will be owned and maintained by John M. Egloff. The proposed treatment process, according to the application, is as follows:

Two (2) 1000-gallon compartment concrete septic tanks (or equivalent) → 500-gal transfer tank → ECOFLO Model EC7-500-P-P Unit (Filter) → DiUV disinfection unit → Outfall.

The proposed septic tanks 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 Model EC7-500-P-P Unit (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 October 1, 2020, DEP approved the Act 537 planning as a revision to the Act 537 official sewage facilities plan of Reading Township (DEP Code No. A3-01929-355-3s).

This is a new facility; therefore, there are no effluent sample results, nor any 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 Toxic Management Spreadsheet 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.

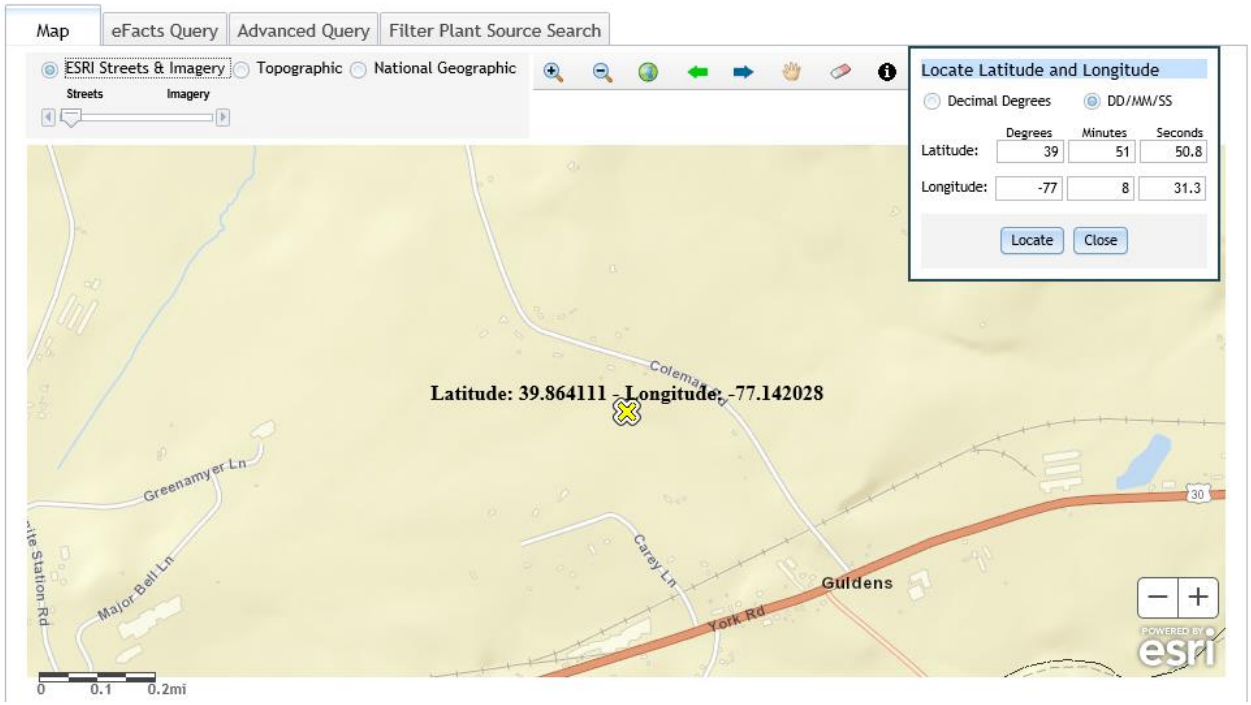
Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.

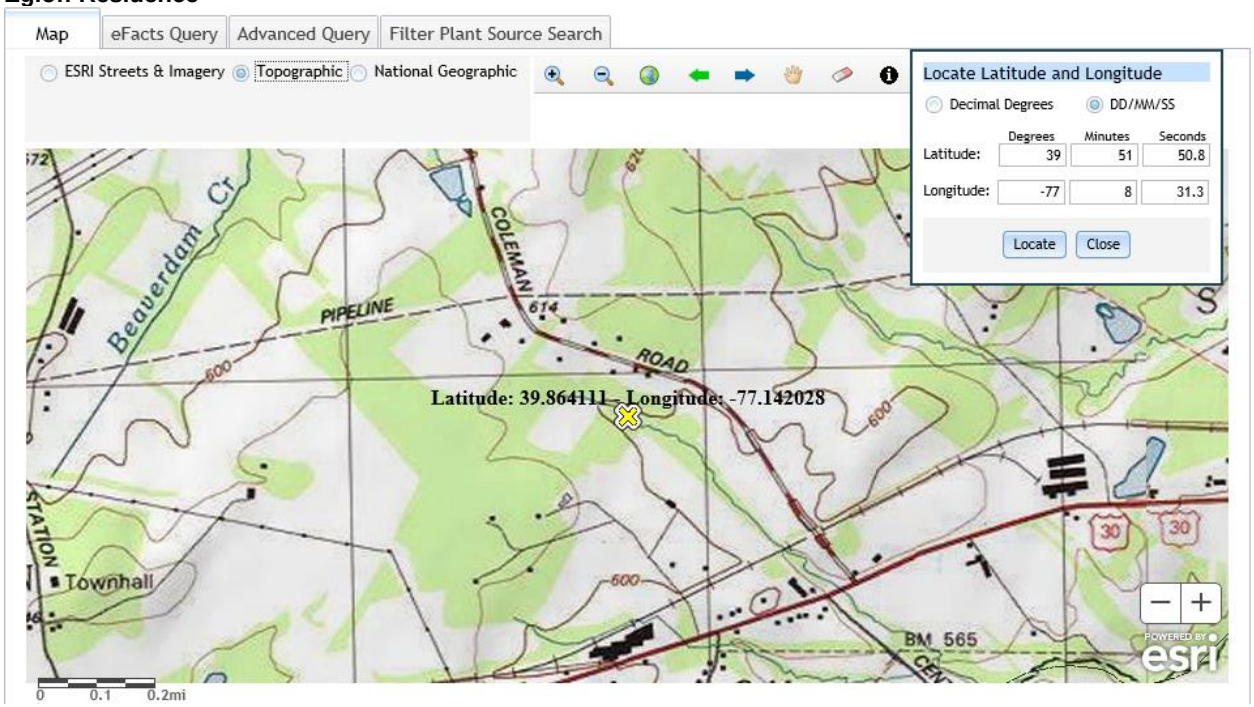
Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Annual Average	Maximum	Instant. Maximum		
Flow (MGD)	Report Annl Avg	XXX	XXX	XXX	XXX	XXX	1/year	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.




Map
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Latitude: 39 51 50.8
Longitude: -77 8 31.3
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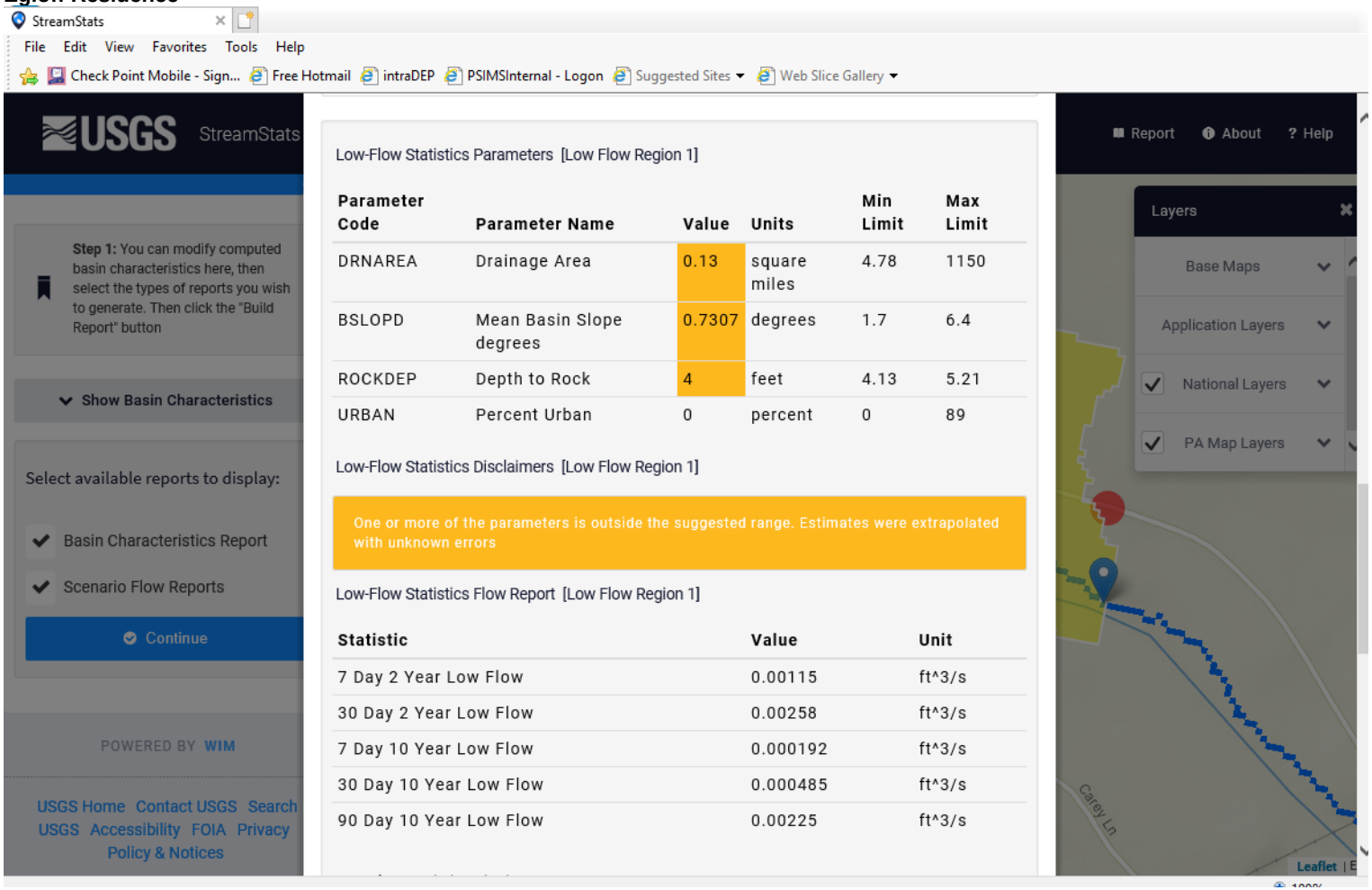
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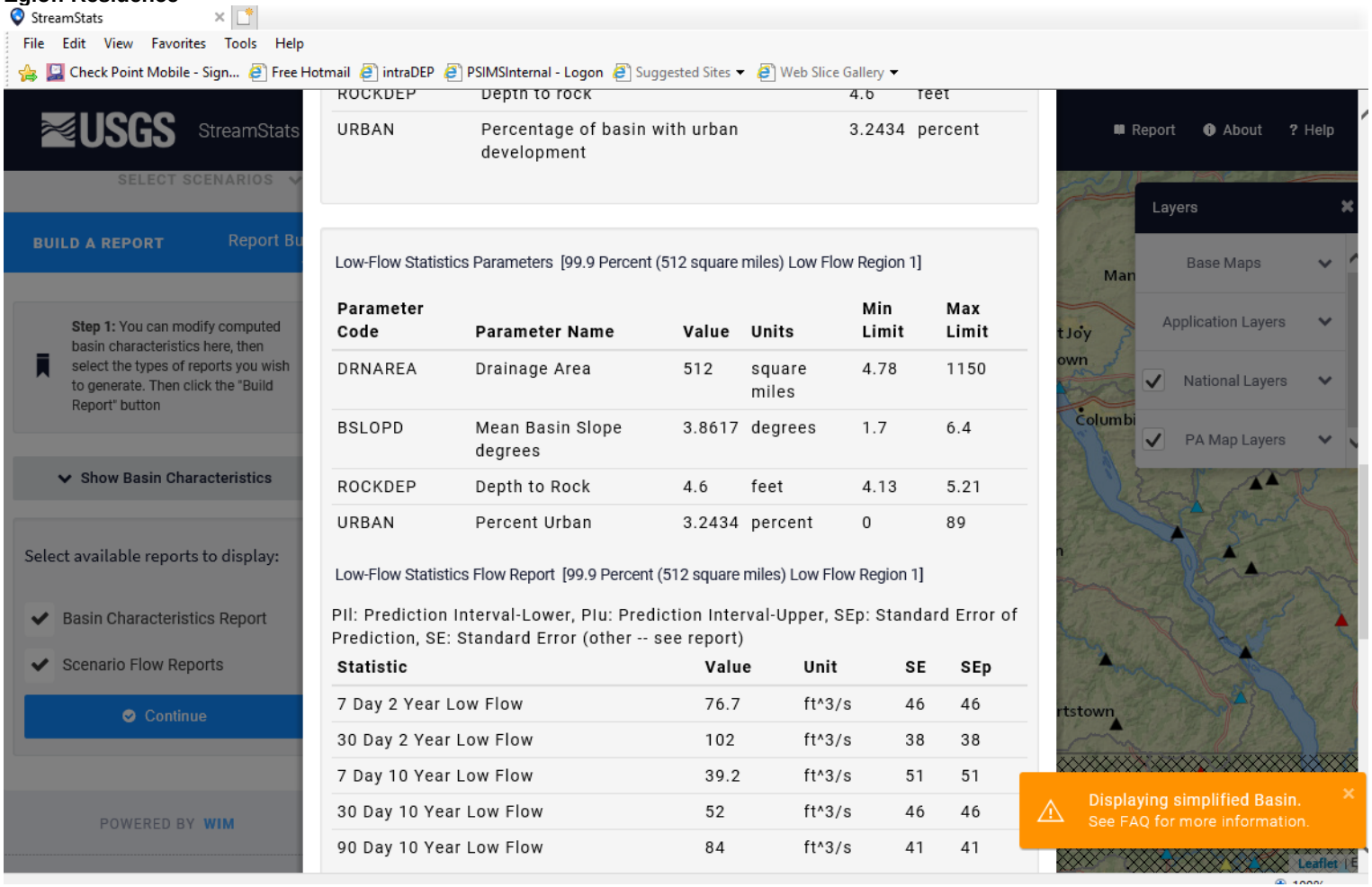
USGS StreamStats
Step 1: You can modify computed basin characteristics here, then select the types of reports you wish to generate. Then click the "Build Report" button
Show Basin Characteristics
Select available reports to display:
Basin Characteristics Report
Scenario Flow Reports
Continue
POWERED BY WIM
USGS Home Contact USGS Search USGS Accessibility FOIA Privacy Policy & Notices
Low-Flow Statistics Parameters [Low Flow Region 1]
Parameter Code | Parameter Name | Value | Units | Min Limit | Max Limit
DRNAREA | Drainage Area | 0.13 | square miles | 4.78 | 1150
BSLOPD | Mean Basin Slope degrees | 0.7307 | degrees | 1.7 | 6.4
ROCKDEP | Depth to Rock | 4 | feet | 4.13 | 5.21
URBAN | Percent Urban | 0 | percent | 0 | 89
Low-Flow Statistics Disclaimers [Low Flow Region 1]
One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors
Low-Flow Statistics Flow Report [Low Flow Region 1]
Statistic | Value | Unit
7 Day 2 Year Low Flow | 0.00115 | ft^3/s
30 Day 2 Year Low Flow | 0.00258 | ft^3/s
7 Day 10 Year Low Flow | 0.000192 | ft^3/s
30 Day 10 Year Low Flow | 0.000485 | ft^3/s
90 Day 10 Year Low Flow | 0.00225 | ft^3/s
Report About Help
Layers
Base Maps
Application Layers
National Layers
PA Map Layers
Carey Ln
Leaflet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USGS StreamStats
SELECT SCENARIOS
BUILD A REPORT
Report Bu
Step 1: You can modify computed basin characteristics here, then select the types of reports you wish to generate. Then click the "Build Report" button
Show Basin Characteristics
Select available reports to display:
Basin Characteristics Report
Scenario Flow Reports
Continue
POWERED BY WIM
ROCKDEP Depth to rock 4.6 feet
URBAN Percentage of basin with urban development 3.2434 percent
Low-Flow Statistics Parameters [99.9 Percent (512 square miles) Low Flow Region 1]
Parameter Code | Parameter Name | Value | Units | Min Limit | Max Limit
DRNAREA | Drainage Area | 512 | square miles | 4.78 | 1150
BSLOPD | Mean Basin Slope degrees | 3.8617 | degrees | 1.7 | 6.4
ROCKDEP | Depth to Rock | 4.6 | feet | 4.13 | 5.21
URBAN | Percent Urban | 3.2434 | percent | 0 | 89
Low-Flow Statistics Flow Report [99.9 Percent (512 square miles) Low Flow Region 1]
PII: Prediction Interval-Lower, PIu: Prediction Interval-Upper, SEp: Standard Error of Prediction, SE: Standard Error (other -- see report)
Statistic | Value | Unit | SE | SEp
7 Day 2 Year Low Flow | 76.7 | ft^3/s | 46 | 46
30 Day 2 Year Low Flow | 102 | ft^3/s | 38 | 38
7 Day 10 Year Low Flow | 39.2 | ft^3/s | 51 | 51
30 Day 10 Year Low Flow | 52 | ft^3/s | 46 | 46
90 Day 10 Year Low Flow | 84 | ft^3/s | 41 | 41
Report About Help
Layers
Base Maps
Application Layers
National Layers
PA Map Layers
Displaying simplified Basin.
See FAQ for more information.
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