



WHERE'S THE WATER



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Water Use Section Responsibilities

- Statewide Water Management Plan
- Large quantity user registration
- Stream Flow, GW Map & Mine Pool study
- Water Withdrawal Guidance Tool update
- Marcellus frac water tracking
- Stream gauge network enhancement
- Review Water Management Plans

Water Management Plans In Accordance With HB 401 & 35CSR08



Water Management Plans Include:



- ✓ Location
- ✓ Volume
- ✓ Months
- ✓ Additives
- ✓ Disposal
- ✓ Enforcement

Water Management Plans Include:



- ✓ Public Intakes
- ✓ Adequate Pass-by flow
- ✓ Designated Uses
- ✓ Protect Aquatic Life
- ✓ Signage
- ✓ 24-48 hour Notification

The Water Management Plan becomes enforceable as a permit condition



www.dep.wv.gov

The screenshot shows the homepage of the West Virginia Department of Environmental Protection (DEP). At the top, there is a navigation bar with the West Virginia state logo, the text 'State Agency Directory | Online Services', and a search box labeled 'Search WV DEP'. Below this is the DEP logo and the text 'west virginia department of environmental protection - Promoting a Healthy Environment'. A secondary navigation bar includes links for 'DEP Offices | News | Outlook Web Access | Text size A A A'. The main content area features a large banner image of a pond with reeds. Below the banner are four columns of links, each with a representative image: 'Air' (clouds), 'Land' (green hills), 'Water and Waste' (waterfalls), and 'Inside DEP' (the state capitol building). A blue arrow points to the 'Permit Application Forms' link in the Air section. The bottom section contains four columns of links: 'Permitting', 'How Do I...?', 'GIS and Maps', and 'Events'. Each link is accompanied by a brief description and a 'See More' button.

west virginia State Agency Directory | Online Services Search WV DEP

dep west virginia department of environmental protection
- Promoting a Healthy Environment

DEP Offices | News | Outlook Web Access | Text size A A A

Home > Office of Oil and Gas

Office of Oil and Gas

The Office of Oil and Gas is responsible for monitoring and regulating all actions related to the exploration, drilling, storage and production of oil and natural gas.

- It maintains records on over 55,000 active and 12,000 inactive oil & gas wells.
- It manages Abandoned Well Plugging and Reclamation Program.
- It ensures surface/groundwater is protected from oil and gas activities.

Contact Information

Pollution and Emergency Spills:
1-800-642-3074

On-going programs and projects:

Horizontal Drilling Permits Page

- Public Notice Forms
- Centralized Pits - Design and Construction Standards ****NEW ITEM****
- Announcement: Passage of Horizontal Well Act, 12-14-2011 ****NEW ITEM****
 - Link to Full Legislation
 - Penalty Memorandum Advisory
- Casing and Cementing Standards ****NEW ITEM****
- Well Site Safety Plan Standards ****NEW ITEM****
- Emergency Rule for Horizontal Drilling ****NEW ITEM****

(A blue arrow points to the 'Water Management Plans' link in the left sidebar.)

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Home > Office of Oil and Gas > Water Management Plans

Water Management Plans

Posted December 7, 2011

Effective August 29, 2011, West Virginia Code of State Rules § 35-8 mandates that all horizontal well permit applications submitted to the Office of Oil and Gas include a Water Management Plan if more than two hundred ten thousand (210,000) gallons of water will be used in conjunction with drilling, fracturing, or stimulating that well. Water Management Plan/Water Addendum application forms and instructions are now available below.

Water Management Plan Introduction Memo

Water Management Plan Application

Water Management Plan Instructions

The link below will direct you to the WV DEP Water Guidance Tool :

WVDEP Water Withdrawal Guidance Tool

The link below will direct you to the WV DEP Frac Water Reporting Website:

WVDEP Frac Water Reporting Website

DEP Offices | Contact Us | DEP Staff Directory | Site Map | Privacy Notice | DOP Homepage | DOP Vacancy Announcements

Privacy, Security and Accessibility | WV.gov | USA.gov | © 2012 State of West Virginia

(A blue arrow points to the 'Water Management Plans' link in the left sidebar.)

WMP#: _____



west virginia department of environmental protection
601 57th Street SE
Charleston, WV 25304-2345

**WATER MANAGEMENT PLAN/
WATER ADDENDUM**
For Horizontal Oil and Gas Well Permits
Office of Oil and Gas
Phone: (304) 926-0460

DEP Office Use only	
Date Received by Oil & Gas:	
Administratively Complete – Oil & Gas: <input type="checkbox"/> Yes <input type="checkbox"/> No:	
Date Received by Water Use:	
Complete – Water Use: <input type="checkbox"/> Yes <input type="checkbox"/> No	

Section I - Operator Information

API: 47 - [] - [] Modification?
County Permit

Operator Name:	
Operator ID:	*Registered in the Frac Water Reporting Website? Yes <input type="checkbox"/> No <input type="checkbox"/>
Mailing Address:	Contact Name/Title (Water Resources Manager):
Contact Phone:	Contact Email:

*If no, the operator will be required to register with the WVDEP Water Use Section; contact dep.water.use@wv.gov

Section II - Well Overview

Operator's Well Number:			
Anticipated Frac Date:	Location (decimal degrees, NAD 83)		
	Latitude:	Longitude:	County:

Section III – Source Water Overview (check all that apply)

Streams/Rivers <input type="checkbox"/>	Lakes/Reservoirs <input type="checkbox"/>	Ground Water <input type="checkbox"/>	Purchased Water (PSD) <input type="checkbox"/>
Purchased Water (Private) <input type="checkbox"/>	Recycled Frac Water <input type="checkbox"/>	Multi-Site Impoundment <input type="checkbox"/>	
Other (describe):			
Total anticipated water volume to be used (gal):			

Section III(a) - Surface Water Source (to be completed for each surface water withdrawal location, print additional pages as necessary)

Source Name:		
Location (decimal degrees, NAD 83)		
Latitude:	Longitude:	County:
Landowner name and address:		Phone:
Obtained Landowner Permission? Yes <input type="checkbox"/> No <input type="checkbox"/>		

Proposed Withdrawal Details

Start Date:	End Date:	Total Withdrawal from Source (gal):	Max. Pump Rate (gpm):
No. of Pump Trucks:	Max. Pump Rate per Truck (gpm):	No. Trucks Simultaneously Pumping:	

Determination that sufficient flow is available downstream from proposed intake point

Allow passby to be calculated by the DEP (Preferred)? Yes <input type="checkbox"/> No <input type="checkbox"/>
(If no, advance written authorization by DEP is required. Attach authorization and details.)

Aquatic Life Protection

Describe Entrainment and Impingement Prevention Plan:
Describe Invasive Species Transfer Prevention Plan:

Stream details

DEP Office Use Only			
Contact Recreation <input type="checkbox"/>	Aquatic Life-Trout Water <input type="checkbox"/>	Aquatic Life-Warm Water <input type="checkbox"/>	Drinking Water Supply <input type="checkbox"/>
Industrial <input type="checkbox"/>	Agriculture <input type="checkbox"/>	Irrigation <input type="checkbox"/>	Reference Gauge:
Gauged Stream : <input type="checkbox"/>	Stream Final Code:	Regulated by:	
Trout? <input type="checkbox"/>	Sensitive Aquatic Species? <input type="checkbox"/>	Tier 3 Stream? <input type="checkbox"/>	Within 1 mile upstream of a PSD? Yes <input type="checkbox"/> No <input type="checkbox"/>
Mussels? <input type="checkbox"/>	Upstream Drainage Area?		

Section III(b) - Ground Water Source (to be completed for each groundwater withdrawal location, print additional pages as necessary)

Well Permit #:		Well name:		
Location (decimal degrees, NAD 83)				
Latitude:		Longitude:		County:
Aquifer: (if known)				
Landowner name and address:			Phone:	
Obtained Landowner Permission?			<input type="checkbox"/> *New well (Drill date:) <input type="checkbox"/> Existing well	
Yes <input type="checkbox"/> No <input type="checkbox"/>				
*If drilling a new well, please submit well logs to DEP's Water Use Section; Wells must be drilled and plugged in accordance with DHHR regulations				
Total Depth:	Type of Casing:	Casing Diameter:	Screen Interval:	Screen Size:
Static Water Elevation:	Top of Casing Elevation:	Surface Elevation:	Type of Well Cap:	
Withdrawal Details				
Start Date:	End Date:	Total Withdrawal from Source (gal):	Max. Pump Rate (gpm):	

Analysis of potential groundwater impacts

Static Water Level Prior to Test: _____ feet below grade
Drawdown (Water Level/Elevation During Pump Test): _____ feet
Duration of Pump Test: _____ hours
Gallons Per Minute During Pump Test: _____ gpm
Time to Return to Static Water Level After Pump Test: _____ hours

Section III(c) - Purchased Water Source (to be completed for each water supplier, print additional pages as necessary)

Supplier Name and Contact Information:			
Location(decimal degrees, NAD 83)			
Latitude:		Longitude:	County:
Public Water Provider <input type="checkbox"/>	Waste Water Treatment Plant <input type="checkbox"/>	Industrial (intake locations must be provided) <input type="checkbox"/>	
Commercial Supplier (intake locations must be provided) <input type="checkbox"/>		Private (intake locations must be provided) <input type="checkbox"/>	
Purchase Details			
Start Date:	End Date:	Total Purchase from Source (gal):	Max. daily purchase (gal):
Supplier intake details:			

Section III(d) - Lake/Reservoir Water Source (to be completed for each lake/reservoir)

Lake/Reservoir Name:			
Location (decimal degrees, NAD 83)			
Latitude:	Longitude	County:	
Landowner name and address:			
Permission to withdraw obtained from owner: Yes <input type="checkbox"/> No <input type="checkbox"/>	Minimum release (cfs):		
Withdrawal Details			
Start Date:	End Date:	Total Withdrawal from Source (gal):	Max. Pump Rate (gpm):

Section III(e) - Multi-Site impoundment (to be completed for each source, print additional pages as necessary)

Impoundment Name and Owner:			
Referenced WMP#:			
Location (decimal degrees, NAD83)			
Latitude:	Longitude:	County:	Registered LQU? Yes <input type="checkbox"/> No <input type="checkbox"/>
Landowner name and address:			
Permission to Withdraw Obtained from Owner: Yes <input type="checkbox"/> No <input type="checkbox"/>		Intake type: Permanent Structure <input type="checkbox"/> or Temporary Structure <input type="checkbox"/>	
Withdrawal Details from Impoundment to well-site			
Start Date:	End Date:	Total Withdrawal from Source (gal):	

Impoundment filling details – source

Source Name:		
Location of intake (decimal degrees, NAD 83)		
Latitude:	Longitude:	County:

Section III(f) - Reused Frac Water (to be completed for each source, print additional pages as necessary)

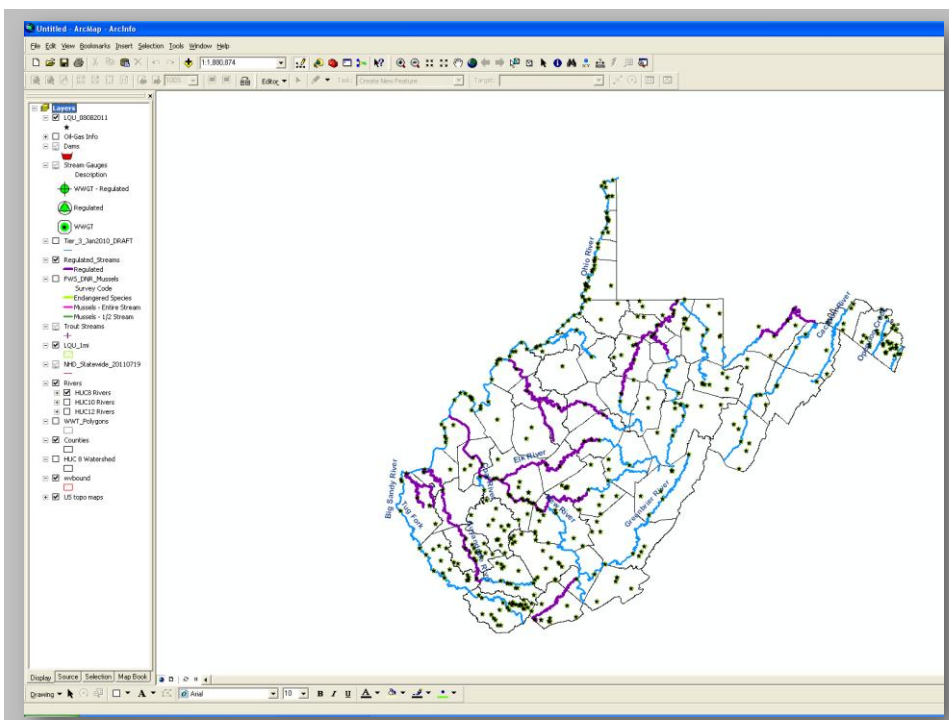
API # of Previous Well (where water was obtained from):	Total withdrawal from source (gal):
Date of Water Transfer	
Start Date:	End Date:

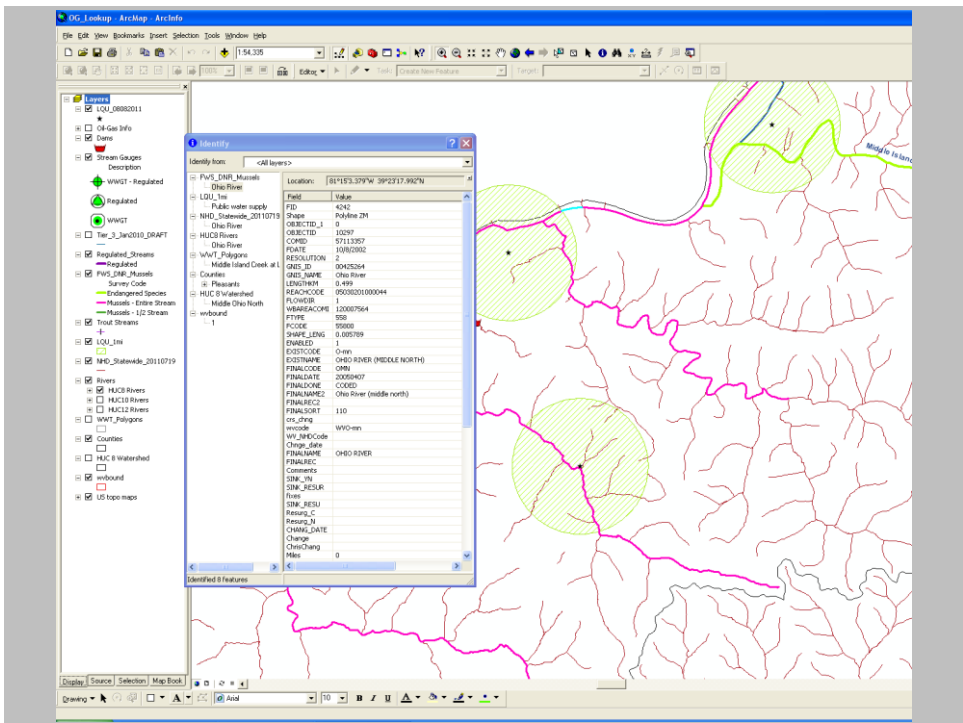
Section IV – Planned Disposal Method

	Name	Location (decimal degrees, NAD 83)	Estimate % each facility is to receive			
			Permit #	Fracturing	Stimulation	Production
UIC		Lat: Long:				
NPDES (Treatment Plant)		Lat: Long:				
Re-Use		Lat: Long:				
Other		Lat: Long:				

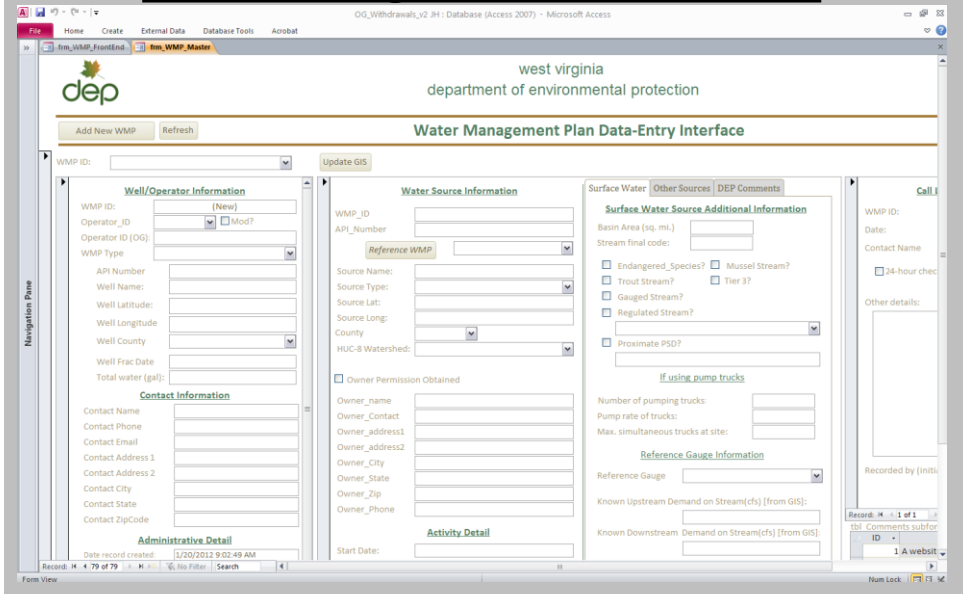
Section V - Planned Additives to be used in Fracturing or Stimulations (attach list to form)

Section VI - Operator Comments







WVDEP Water Use Section Water Management Plan Database



west virginia department of environmental protection



Water Management Plan:
Surface Water and Purchased Water Sources



DEP is aware that some intake points will be used for multiple wells and well sites. In these cases, the thresholds set by the Water Management Plan are to be interpreted as total withdrawal limits for each location over the specified date range regardless of how many wells are supported by that intake.

For all purchased water intakes, determinations of water availability are made at the original source intake location. It is the responsibility of the Oil and Gas Operator, not the seller, to cease withdrawal of water from the seller when flows are less than the minimum gauge reading at the stream gauge referenced by the Water Management Plan in order to protect stream uses.


Note that the determinations made herein are based on the best available data, but it is impossible to predict water availability in the future. While the DEP has carefully established these minimum withdrawal thresholds, it remains the operator's responsibility to protect aquatic life at all times. Approval to withdrawal is contingent upon permission from the land owner. It is the responsibility of the operator to secure and maintain permission prior to any withdrawals.

The operator is reminded that 24-48 hours prior to withdrawing (or purchasing) water, DEP must be notified by email at DEP.water.use@wv.gov.


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west virginia department of environmental protection



Water Management Plan:
Surface Water and Purchased Water Sources



WMP: _____ API Number: _____ Operator: _____

Important:

For each proposed surface water intake location (including source intakes for purchased water sources) identified in your water management plan, and summarized herein, DEP has made an evaluation concerning water availability over the specified date range. DEP's assessment is based on the following considerations:

- Statistical analysis of historical USGS stream gauge data (transferred to un-gauged locations as necessary);
- Identification of sensitive aquatic life (endangered species, mussels, etc.);
- Quantification of known existing demands on the water supply (Large Quantity Users);
- Minimum flows required by the Army Corps of Engineers; and
- Designated stream uses.

Based on these factors, DEP has provided, for each intake location (and origination point for purchased water), a reference gauge location and discharge flow reading which must be surpassed prior to withdrawals. Additionally, DEP has established a minimum passby flow at the withdrawal location which must also be surpassed prior to withdrawals. These thresholds are considered terms of the permit and are enforceable as such.

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Source Summary

WMP: 00112 API Number: Operator:

Stream/River

- Source: **Monongahela River WP**

Start Date	End Date	Total Volume (gal)	Max. daily purchase (gal)	Intake Latitude	Intake Longitude
10/1/2012	11/30/2012	4,032,000		39.604042	-79.969827

Regulated Stream? Ref. Gauge ID: 3057000 TYGART VALLEY RIVER AT COLFAX, WV

Max. Pump rate (gpm): **1,500** Min. Gauge Reading (cfs): **414.07** Min. Passby (cfs): **528.34**

DEP Comments:
- Source:

Start Date	End Date	Total Volume (gal)	Max. daily purchase (gal)	Intake Latitude	Intake Longitude
10/1/2012	11/1/2012	4,032,000		39.655559	-79.640195

Regulated Stream? Ref. Gauge ID: 3070500

Max. Pump rate (gpm): **1,500** Min. Gauge Reading (cfs): **70.42** Min. Passby (cfs): **33.00**

DEP Comments:
- Source:

Start Date	End Date	Total Volume (gal)	Max. daily purchase (gal)	Intake Latitude	Intake Longitude
10/1/2012	11/30/2012	4,032,000		39.650388	-79.721806

Regulated Stream? Ref. Gauge ID: 3070500

Max. Pump rate (gpm): **1,000** Min. Gauge Reading (cfs): **71.57** Min. Passby (cfs): **9.94**

DEP Comments:

APPROVED JAN 2 3 2012

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<http://waterdata.usgs.gov/wv/nwis/current/?type=flow>

USGS Real-Time Data for West Virginia_ Streamflow - Windows Internet Explorer

http://waterdata.usgs.gov/wv/nwis/current/?type=flow

USGS
science for a changing world

National Water Information System: Web Interface

USGS Water Resources (Computer Access)

News updated Nov, 2011

Real-Time Data for West Virginia: Streamflow -- 137 site(s) found

PROVISIONAL DATA SUBJECT TO REVISION

Predefined displays: West Virginia Streamflow Table Group table by: Major River Basin (or) Select sites by number or name: []

Customize table to display other real-time parameters

Station Number	Station name	Date/Time	Gage height, feet	Dis-charge, ft ³ /s	Lake or reservoir elevation, NGVD, feet	Long-term median flow 1/17
POTOMAC RIVER BASIN						
01598000	NORTH BRANCH POTOMAC RIVER AT BARNUM, WV	01/17 12:15 EST	4.08	871	--	410
01598500	NORTH BRANCH POTOMAC RIVER AT LUKE, MD	01/17 13:00 EST	3.34	1,380	--	572
01604500	PATTERSON CREEK NEAR HEADSVILLE, WV	01/17 12:30 EST	4.47	442	--	95.0
01605500	SOUTH BRANCH POTOMAC RIVER AT FRANKLIN, WV	01/17 12:30 EST	2.84	257	--	120
01606000	N F SOUTH BR POTOMAC R AT CABINS, WV	01/17 13:00 EST	5.54	837	--	390
01606500	SO. BRANCH POTOMAC RIVER NR PETERSBURG, WV	01/17 13:00 EST	5.26	1,070	--	495
01607500	SO FK SO BR POTOMAC R AT BRANDYWINE, WV	01/17 13:00 EST	2.14	127	--	56.0
01608000	SO FK SOUTH BRANCH POTOMAC R NR MOOREFIELD, WV	01/17 12:00 EST	3.78	473	--	130
01608500	SOUTH BRANCH POTOMAC RIVER NEAR SPRINGFIELD, WV	01/17 12:30 EST	3.86	2,250	--	860
01610400	WAITES RUN NEAR WARDENSVILLE, WV	01/17 13:00 EST	3.74	29	--	14.0
01611500	CACAPON RIVER NEAR GREAT CACAPON, WV	01/17 12:00 EST	3.55	1,150	--	317
01613030	WARM SPRINGS RUN NEAR BERKELEY SPRINGS, WV	01/17 12:45 EST	2.24	--	--	--
01614000	BACK CREEK NEAR JONES SPRINGS, WV	01/17 12:30 EST	2.96	255	--	131

USGS Real-Time Data for West Virginia_ Streamflow - Windows Internet Explorer

http://waterdata.usgs.gov/wv/nwis/current/?type=flow

USGS Real-Time Data for West Virginia_ Streamflow

Number	Station name	Date/Time	feet	cfs	feet	1/17
● POTOMAC RIVER BASIN						
01595800	NORTH BRANCH POTOMAC RIVER AT BARNUM, WV	01/17 12:15 EST	4.08	871	--	410
01598500	NORTH BRANCH POTOMAC RIVER AT LUKE, MD	01/17 13:00 EST	3.34	1,380	--	572
01604500	PATTERSON CREEK NEAR HEADSVILLE, WV	01/17 12:30 EST	4.47	442	--	95.0
01605500	SOUTH BRANCH POTOMAC RIVER AT FRANKLIN, WV	01/17 12:30 EST	2.84	257	--	120
01606000	N F SOUTH BR POTOMAC R AT CABINS, WV	01/17 13:00 EST	5.54	837	--	390
01606500	SO. BRANCH POTOMAC RIVER NR PETERSBURG, WV	01/17 13:00 EST	5.26	1,070	--	495
01607500	SO FK SO BR POTOMAC R AT BRANDYWINE, WV	01/17 13:00 EST	2.14	127	--	56.0
01608000	SO FK SOUTH BRANCH POTOMAC R NR MOOREFIELD, WV	01/17 12:00 EST	3.78	473	--	130
01608500	SOUTH BRANCH POTOMAC RIVER NEAR SPRINGFIELD, WV	01/17 12:30 EST	3.86	2,250	--	860
01610400	WAITES RUN NEAR WARDENSVILLE, WV	01/17 13:00 EST	3.74	29	--	14.0
01611500	CACAPON CREEK NEAR GREAT CACAPON, WV	01/17 12:00 EST	3.55	1,150	--	317
01613030	WARM SPRINGS RUN NEAR BERKELEY SPRINGS, WV	01/17 12:45 EST	2.24	--	--	--
01614000	BACK CREEK NEAR JONES SPRINGS, WV	01/17 12:30 EST	2.96	255	--	131
01616400	MILL CREEK AT BUNKER HILL, WV	01/17 12:45 EST	1.85	--	--	--
01616500	OPEQUON CREEK NEAR MARTINSBURG, WV	01/17 13:00 EST	2.94	251	--	175
01617000	TUSCARORA CREEK ABOVE MARTINSBURG, WV	01/17 12:30 EST	2.72	18	--	8.40
01618100	ROCKYMARSH RUN AT SCRABBLE, WV	01/17 12:30 EST	1.29	21	--	9.90
01636464	BULLSKIN RUN BELOW KABLETOWN, WV	01/17 12:30 EST	1.78	19	--	15.0
01636500	SHENANDOAH RIVER AT MILLVILLE, WV	01/17 12:30 EST	4.67	4,910	--	2,170
● MONONGAHELA RIVER BASIN						
03050000	TYGART VALLEY RIVER NEAR DAILEY, WV	01/13 20:00 EST	2.81	458	--	265
03050500	TYGART VALLEY RIVER NEAR ELKINS, WV	01/17 12:30 EST	4.80	--	--	--
03051000	TYGART VALLEY RIVER AT BELINGTON, WV	01/17 12:30 EST	5.07	1,320	--	734
03052000	MIDDLE FORK RIVER AT AUDRA, WV	01/13 17:30 EST	3.53	457	--	377
03052120	BUCKHANNON RIVER AT ALTON, WV	01/17 13:00 EST	6.98	746	--	--
03052450	BUCKHANNON R AT BUCKHANNON, WV	01/17 12:30 EST	8.18	--	--	--
03052500	SAND RUN NEAR BUCKHANNON, WV	01/17 13:00 EST	3.15	144	--	24.0
03053500	BUCKHANNON RIVER AT HALL, WV	01/17 12:30 EST	6.15	1,080	--	560
03054500	TYGART VALLEY RIVER AT PHILIPPI, WV	01/17 13:00 EST	5.67	2,470	--	1,810
03056000	TYGART VALLEY R AT TYGART DAM NR GRAFTON, WV	01/17 12:00 EST	8.24	2,990	--	2,440
03056250	THREE FORK CREEK NR GRAFTON, WV	01/17 12:30 EST	7.13	1,030	--	155
03057000	TYGART VALLEY RIVER AT COLFAX, WV	01/17 12:00 EST	7.21	3,840	--	3,060
03057300	WEST FORK RIVER AT WALKERSVILLE, WV	01/17 12:00 EST	5.87	--	--	--
03058000	WEST FORK R BL STONEWALL JACKSON DAM NR WESTON	01/17 12:00 EST	8	89	--	113
03058020	WEST FORK RIVER AT WESTON, WV	01/17 12:30 EST	--	--	--	--
03058500	W.F. RIVER AT BUTCHERVILLE, WV	01/17 12:30 EST	2.92	--	--	--

USGS Real-Time Water Data for USGS 03057000 TYGART VALLEY RIVER AT COLFAX, WV - Windows Internet Explorer

http://waterdata.usgs.gov/wv/nwis/uv/?site_no=03057000&PAR=meter_cd=00065,00060,62614

USGS Real-Time Water Data for USGS 03057000 TYG...

This station managed by the Charleston Field Office.

Available Parameters

All 5 Available Parameters for this site

00060 Discharge

00065 Gage height

00010 Temperature, water

00095 Specific cond at 25C

00400 pH

Output format

Graph

Graph w/ stats

Graph w/o stats

Table

Tab-separated

Days

7 (1-120) GO

Summary of all available data for this site

Discharge, cubic feet per second

Most recent instantaneous value: 3,990 01-17-2012 13:00 EST

USGS 03057000 TYGART VALLEY RIVER AT COLFAX, WV

Discharge, cubic feet per second

Jan 10 2012 Jan 11 2012 Jan 12 2012 Jan 13 2012 Jan 14 2012 Jan 15 2012 Jan 16 2012 Jan 17 2012

Provisional data Subject to Revision

△ Median daily statistic (56 years) — Discharge

Create [presentation-quality / stand-alone](#) graph. Subscribe to [WaterAlert](#) P030600001

Daily discharge statistics, in cfs, for Jan 17 based on 56 years of record

Min (1956)	25th percentile	Median	Mean	Most Recent Instantaneous Value Jan 17	75th percentile	Max (1974)
599	1050	3060	3840	3990	5640	13600

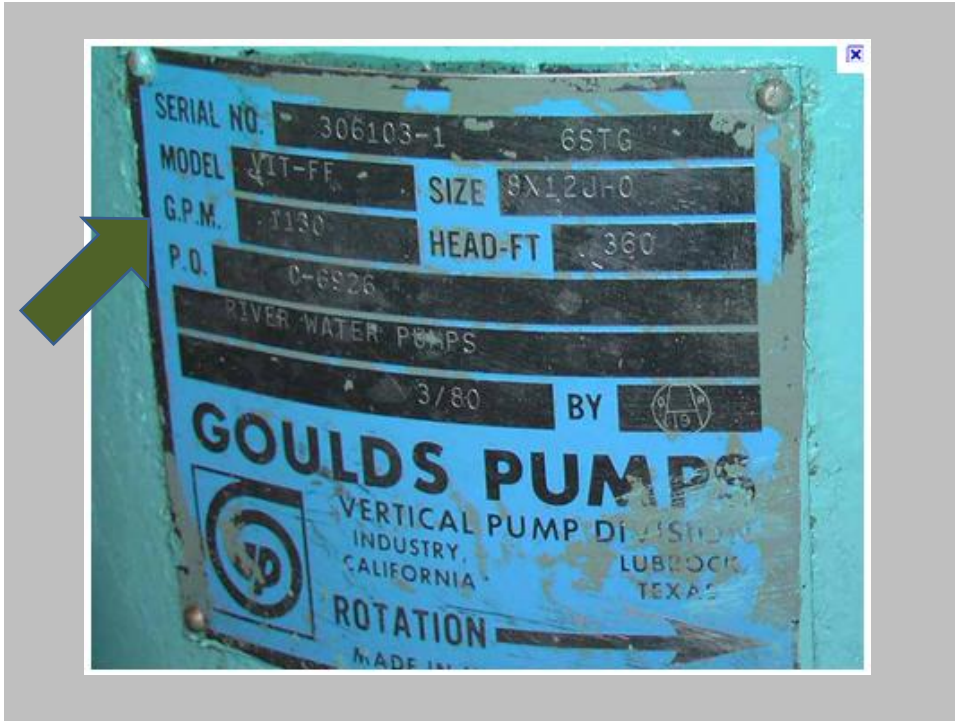
Gage height, feet

Most recent instantaneous value: 7.50 01-17-2012 13:00 EST

USGS 03057000 TYGART VALLEY RIVER AT COLFAX, WV

Gage height, feet

7.50



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Source Summary

WMP: 00112	API Number: 47-077-00591	Operator: Chesapeake Energy
Mary Matheny PRN GH - 834551		

Stream/River

Source: Monongahela River WP 1 (Morgantown Industrial Park)

Start Date	End Date	Total Volume (gal)	Max. daily purchase (cfs)	Intake Latitude	Intake Longitude
10/1/2012	11/30/2012	4,032,000	414.07	39.604042	-79.969827

Regulated Stream? Ref. Gauge ID: 3057000 TYGART VALLEY RIVER AT COLFAK, WV

Max. Pump rate (gpm): 1,500 Min. Gauge Reading (cfs): 414.07 Min. Passby (cfs) 528.34

DEP [unclear] ts:

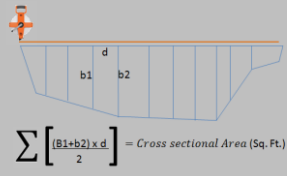
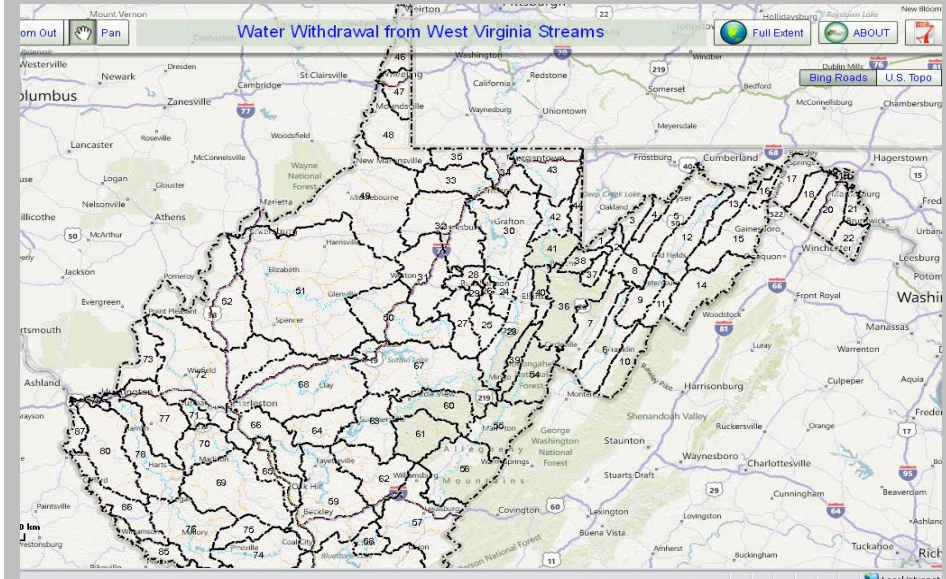
Daily discharge statistics, in cfs, for Jan 25 based on 56 years of record.[more](#)

Min (1946)	25th percentile	Median	Mean	Most Recent Instantaneous Value Jan 25	75th percentile	Max (1982)
464	1540	3340	4060	4770	5920	11500

Daily discharge statistics, in cfs, for Jan 25 based on 88 years of record.[more](#)

Min (1966)	25th percentile	Median	Most Recent Instantaneous Value Jan 25	Mean	75th percentile	Max (1937)
14	83	169	316	317	370.	2400

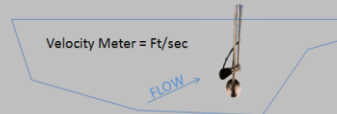
THIS TOOL HAS LIMITATIONS
WE HAVE GOTTEN SMARTER BUT THE TOOL HAS NOT



Verification of Stream Flow



X



= Flow in Cubic Feet/Second (cfs)

1 cfs = 448.8 gal/min

