# WATER QUALITY VOLUNTEER COALITION

(Short Form)

### WATER MONITORING SITE PHYSICAL & CHEMICAL DATA PAGE-1

Pavisad	November	2023
Revisea	November	2023

SITE ID #	
SITE NAME	
DATE	TIME
RECORDER	MONITOR/#
MONITOR/#	MONITOR/#
MONITOR/#	MONITOR/#
MONITOR/#	MONITOR/#

PRECIPITATION			
choose one	choose one		
CURRENT	PAST 24 HR		
Storm	Storm		
Rain (continuous)	Rain (continuous)		
Shower (intermittent)	Showers (intermittent)		
Overcast	Overcast		
Clear	Clear		

WATER APPEARANCE			
choose at least	one by check mark		
Clear	Foamy		
Orange/red	Milky/white		
Dark brown	Muddy/cloudy		
Green	Multi-colored		
Other (describe)	Other (describe below):		

STREAM TYPE			
choose at least one by check mark			
Straight	Channelized		
Meandering/curved	Pool/Riffle		
	Yes		
Any other dams present?	No		
Level of high water above the present stream level			
(meters) m			

Is this an estimate?

Yes No

STREAM BANK		
X-Section Shape Erosion		
V-Shape	No sign of erosion	
U-Shape	Occasional areas of erosion	
Rectangular	Extensive erosion	
Banks undercut	Rock/concrete stabl. present	

WATER ODORS			
choose at least	choose at least one by check mark		
Chlorine	Fishy		
Sulfur	Sewage		
Musty	Earthy		
Manure	Spicy		
Other (describe)	below):		
No unusual sme	No unusual smells		
Non-wadable str	Non-wadable stream		

SED	SEDIMENT DEPOSITS						
choose a	choose at least one by check mark						
Sludge	Sludge Gravel Paper Fiber						
Silt	ilt Mud Sand						
Other (describe below):							
No unusua	No unusual sediments						

STREAM BOTTOM			
At least one entry			
<b>INORGANIC + ORGANIC MUST = 100%</b>			
INORGANIC	%	ORGANIC	%
Bedrock (solid)		Muck-mud	
Boulder >25 cm		Pulpy peat	
Cobble 6.25 - 25 cm		Fibrous peat	
Gravel 0.25 - 6.25 cm		Detritus	
Sand up to 0.25 cm		Logs, limbs	
Silt soft fine sand		Marl (gray, shell frag)	
Clay sticky fine sand		Other:	
Other:		Non-wadable stream	
		<b>TOTAL = 10</b>	0%

**Observations/Notes:** 

Internal Use Only:

Flow Factor: 0.8 or 0.9

# WATER QUALITY VOLUNTEER COALITION

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WATER MONITORING SITE PHYSICAL & CHEMICAL DATA PAGE-2

#### PREDOMINANT SURROUNDING LAND USE

Es	stimate	d by percentage	
At	least of	ne entry required	
%			
Wetlands		Commercial	
Forest		Industrial	
Cropland		Unused/abandoned	
Pasture		Shrubs/small trees	
Residential		Other:	
No change in land use from previous sampling			
		TOTAL = 2	100%

AVERAGE TEMPERATURE					
A :	$(\_\°F + \_\°F)/2 = \_\°F$				
Air	$(\°C + \°C)/2 = \°C$				
	$(\°F + \°F)/2 = \°F$				
Water	$(\°C + \°C)/2 = \°C$				

### AVERAGE STREAM DEPTH

Conversion:

ft \* 0.3048 = \_\_\_\_\_ meters

meters

Average (m): Non-Wadable

#### AVERAGE STREAM WIDTH

Conversion:

ft \* 0.3048 = \_\_\_\_\_

Average (m): Non-Wadable

### AVERAGE STREAM VELOCITY

Velocity (m/s) = distance (m) / average time (s)

Velocity (m/s):

### STREAM FLOW VOLUME

Flow Volume = width (m) \* depth (m) \* velocity (m/s)

Flow Meter ID (if applicable)

Flow Volume (m<sup>3</sup>/s)

Non-wadable stream

Internal Use: (Vol \* Factor) -> Final Flow Vol =

For questions or concerns, contact <u>noellelafaver@lancasterconservation.org</u> or amandagoldsmith@lancasterconservation.org

## CHEMICAL DATA

Readings deemed unusual for the site should be questioned Every 6 visits perform a duplicate for quality

Every 6 visits, perform a duplicate for quality					
assurance					
Parameter	*Water Quality Guidelines*	Original Reading	Duplicate Reading		
$pH^1 \; ({\tt pH} \; {\tt Units})$	6.0 - 9.0				
Dissolved Oxygen <sup>1</sup> (mg/l)	$\geq 6.0$ mg/l				
Specific Conductivity <sup>2</sup> (µS/cm)	50 – 1,500 μS/cm				
$Nitrates^1 (ppm = mg/l)$	$\leq 10$ mg/l as Nitrogen				
Phosphates (ppm)	-				
Salinity <sup>3</sup> (ppt)	$\leq 1 ppt$				
Total Alkalinity <sup>1</sup>	$\geq 20$ mg/l				
$TDS^1 \; (\text{mg/l})$	$\leq 750$ mg/l				
Turbidity (FAU=NTU)	-				
Calibration Data	Specific Conductivity	pH			
Calibration Std.		4.01	7.01		
Std. Solution Readback (Check)					

\*Water Quality Guidelines derived from PA Code 25, Chapter 93<sup>1</sup>, US EPA<sup>2</sup>, and USGS<sup>3</sup>. These values help indicate the health of a stream and should only be used as a reference. They do not indicate the range of the instrument\*

# Reagent Lot Numbers/Exp Date: Conservation District

- Nitrate:
- Phosphate:
- Bromocresol Green:

#### Equipment

- pH Probe ID:
- Colorimeter #:

#### **Observations/Notes:**

Final Flow Vol =