# Susquehanna River Source Water Protection Monitoring

POTOMAC RIVER BASIN DRINKING WATER SOURCE PROTECTION PARTNERSHIP QUARTERLY MEETING

AUGUST 4<sup>TH</sup> 2021

TYLER SHENK

## Early Warning System

•Purpose- Provide Drinking Water Suppliers access to real-time Stream conditions upstream of Drinking water intakes.

- Established in 2003 on five Main stem Susquehanna Sites
- Expanded to 4 site in NY on 2009.
- Expanded to Major Tribs in Lower Susquehanna in 2018

### **EWS Data Collection**

Collect 3 common parameters at all sites-

Temperature, Turbidity, and pH

Other Additional Parameters-

 Dissolved Oxygen, Conductivity, Total Organic Carbon





## **EWS Website**

•Recently merged all SRBC Continuous Instream Monitoring into one location on Website (over 70 sites currently

https://www.srbc.net/continuous-instream-monitoring



#### **Recent Results**

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	Monitoring Station	Temperature \$	Specific Conductivity   (mS/cm)	рН ∳	Turbidity (NTU+)	<b>DO</b>
<b>⊕</b> ⊞ 🗠 🕈	Tioga River near Fall Brook, PA 07/26/2021 08:00 AM	15.35	0.05	6.99	2.73	9.73
<b>⊕</b> ⊞ 🗠 🕈	Trout Brook near McGraw, NY 07/26/2021 09:45 AM	18.01	0.24	8.62	0.97	11.85
<b>⊕</b> ⊞ 🗠 🕈	Trout Run near Shawville, PA 07/26/2021 04:00 AM	19.19	0.05	6.48	8.56	8.38
<b>⊕</b> ⊞ 🗠 🕈	Tuscarora Creek near Woodhull, NY 07/26/2021 10:00 AM	Offline	Offline	Offline	Offline	Offline
<b>⊕</b> ⊞ 🗠 🕈	West Branch Pine Creek near Galeton, PA 07/26/2021 10:00 AM	14.16	0.04	6.93	2.39	9.84
<b>⊕</b> ⊞ 🗠 🕈	West Branch Susquehanna River near Milton, PA 07/26/2021 09:00 AM	23.18	0.15	7.57	5.31	9.06
<b>⊕</b> ⊞ 🗠 🕈	West Creek near Weber City, PA 07/26/2021 11:00 AM	20.00	0.07	7.31	15.77	9.85
<b>⊕</b> ⊞ 🗠 🕈	Yellow Breeches Creek near Lisburn, PA 07/26/2021 10:00 AM	21.40	0.33	7.89	3.26	8.17
<b>6</b> ⊞ ⊬ <b>?</b>	Young Woman's Creek near North Bend, PA 07/26/2021 11:00 AM	16.71	0.04	6.95	1.20	9.30



#### Provisional Data: Yellow Breeches Creek near Lisburn, PA

Watershed Profile Graph Zoom to Results Map

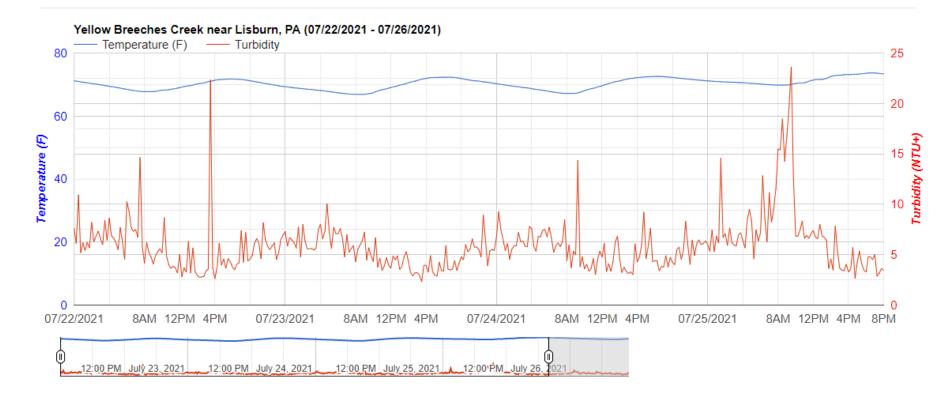
nitoring Station		Start Date End Date			
'ellow Breeches Creel	k near Lisburn, PA	07/01/2021 🗖 07/26/2021		Query Data	Excel Export
Show 100 🕶 entrie	es				
	Toggle Unit: C/F				
Sample Time	Temperature (C)	Specific Conductivity (mS/cm)	рН ∳	Turbidity (NTU+)	<b>DO</b> (mg/L)
07/01/2021 00:00	25.06	0.31	7.66	11.65	6.24
07/01/2021 00:15	24.98	0.31	7.64	10.43	6.14
07/01/2021 00:30	24.93	0.31	7.65	15.09	6.20
07/01/2021 00:45	24.88	0.31	7.64	12.26	6.14
07/01/2021 01:00	24.82	0.31	7.64	9.81	6.10
07/01/2021 01:15	24.77	0.31	7.63	13.92	6.04
07/01/2021 01:30	24.74	0.31	7.63	9.92	6.11
07/01/2021 01:45	24.69	0.31	7.63	9.84	6.08
07/01/2021 02:00	24.64	0.31	7.62	10.03	6.04
07/01/2021 02:15	24.59	0.32	7.61	15.50	6.00
07/01/2021 02:30	24.53	0.32	7.60	13.88	5.93
07/01/2021 02:45	24.49	0.32	7.60	14.55	5.97



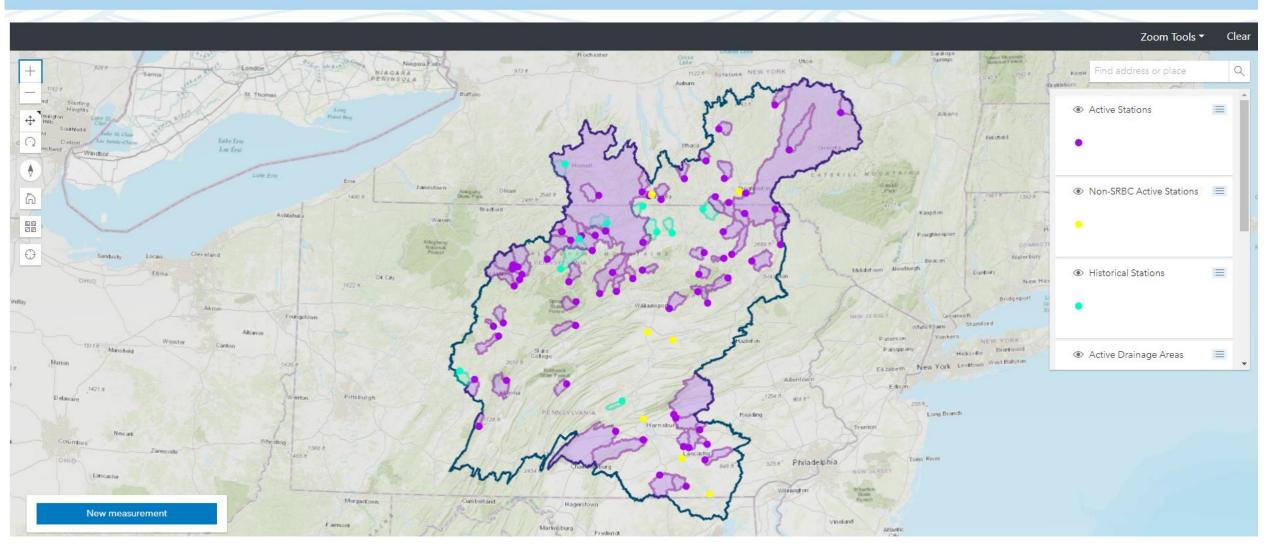
#### Graph: Yellow Breeches Creek near Lisburn, PA

Watershed Provisional Zoom to Profile Data Map

Monitoring Station	Start Date	End Date	Select Parameter(s)	
Yellow Breeches Creek near Lisburn, PA	07/22/2021	07/26/2021	× Temperature (F)	Graph
			× Turbidity (NTU+)	



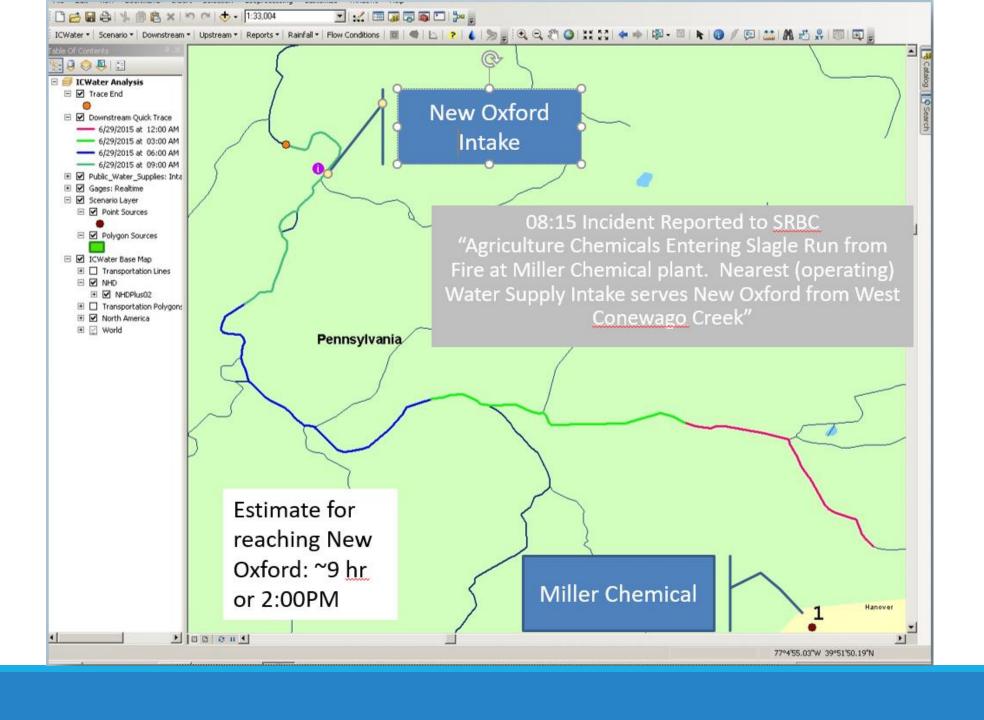


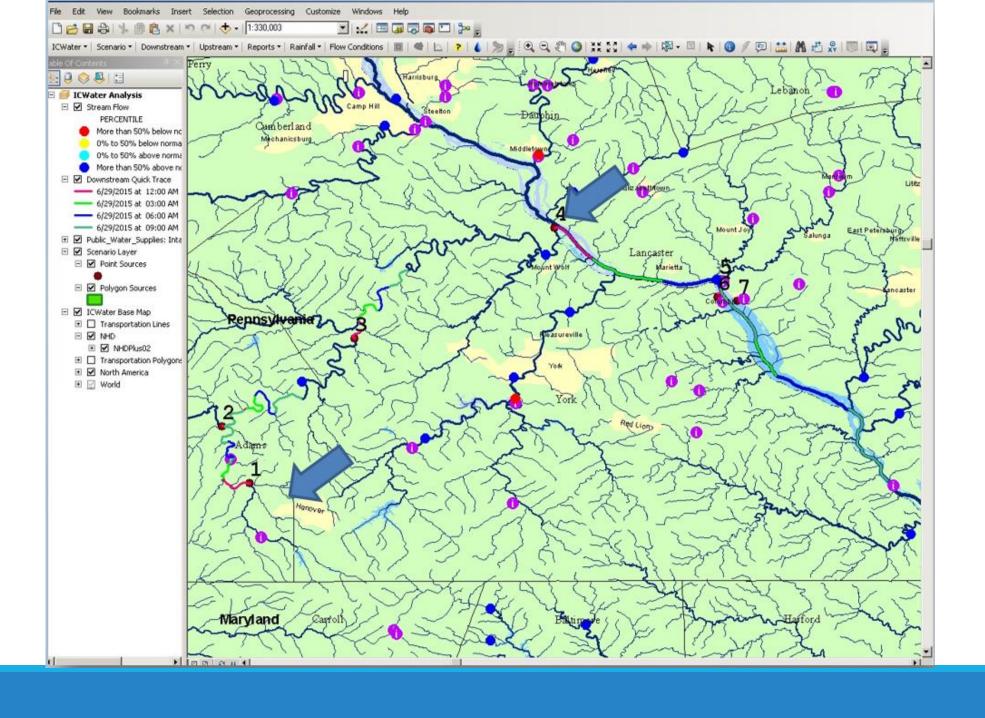


## Time of Travel- Spill Response

- Incident Command Tool- IC Water
  - ArcMap application extension designed for emergency response teams to respond to chemical, biological and radiological materials incidents within river systems.
- •SRBC works in conjunction with PADEP staff to assist with spill response.
  - 24 hour response available.







## Questions

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