

Luzerne County Stream Team Data Interpretation Workbook

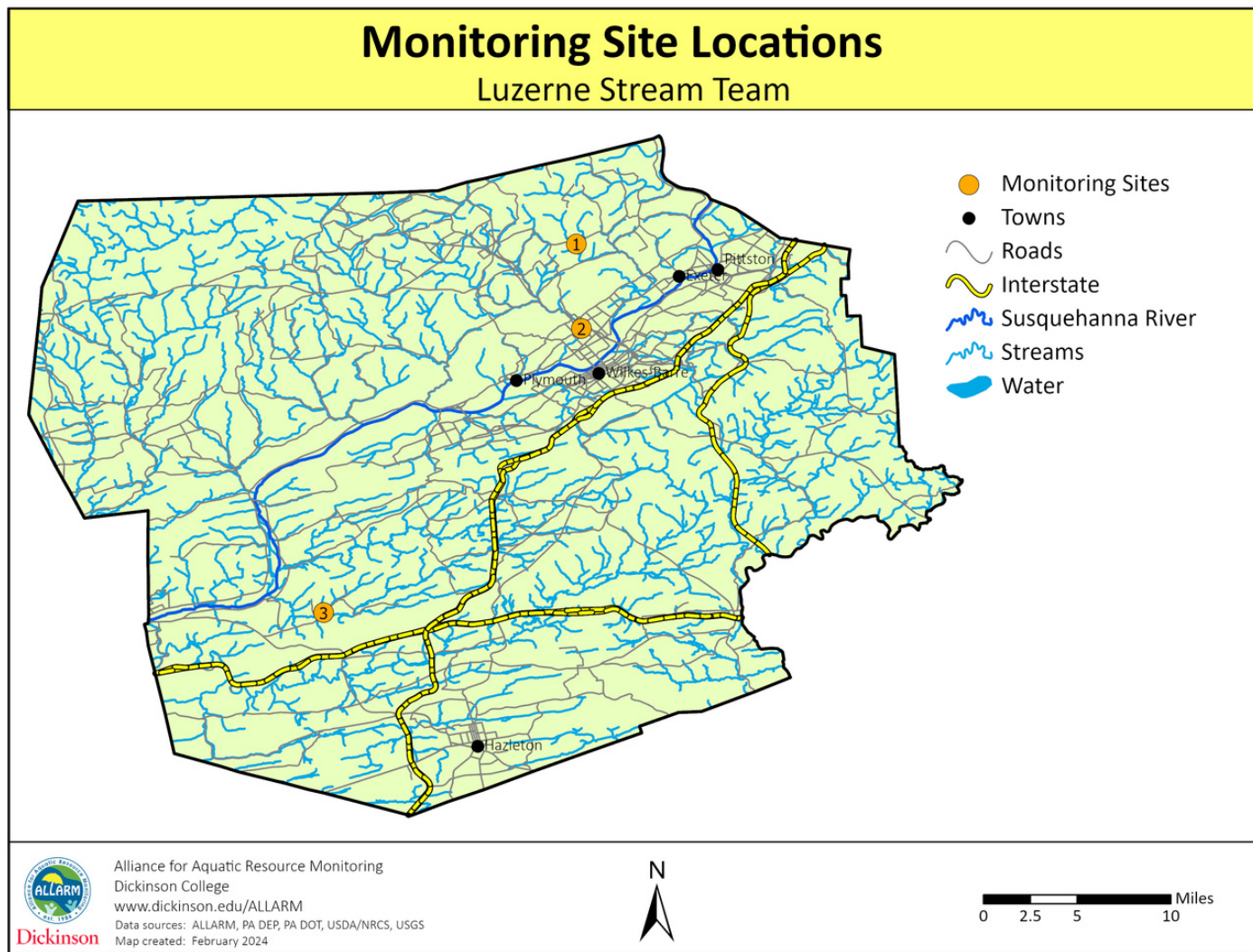


Dickinson

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Alliance for Aquatic Resource Monitoring (ALLARM)
dickinson.edu/ALLARM | [@ALLARMwater](https://www.instagram.com/ALLARMwater) | 717.245.1565



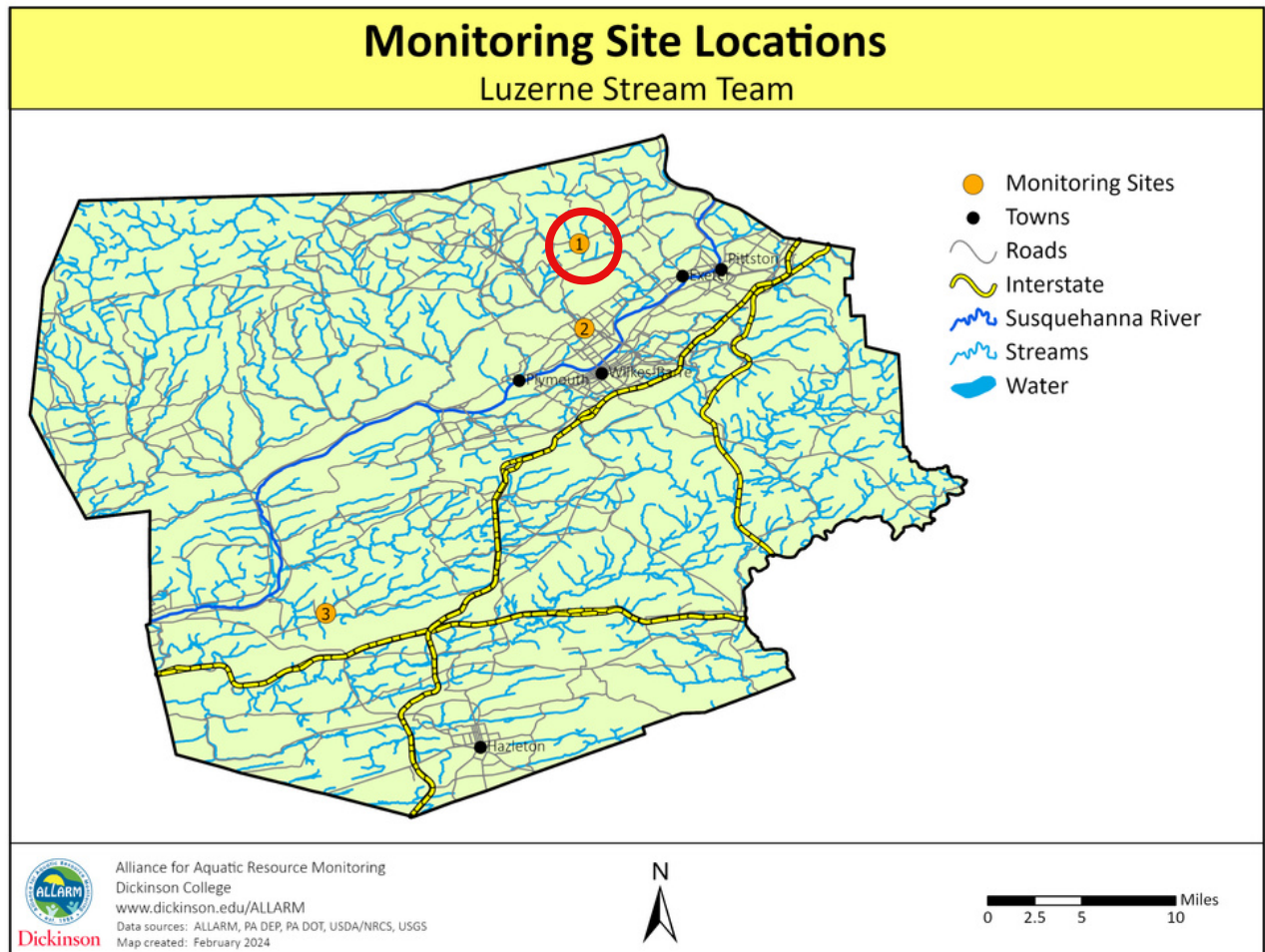
Monitoring Site Locations



Site Number	Name	Site ID
1	Abrahams Creek	ABCRE8.79
2	Toby Creek	TOBCRE2.39
3	Wapwallopen Creek	WAPCRE3.87

Abrahams Creek (ABRCRE8.79)

Monitor(s): Christine & Joe Boyle



Site information:

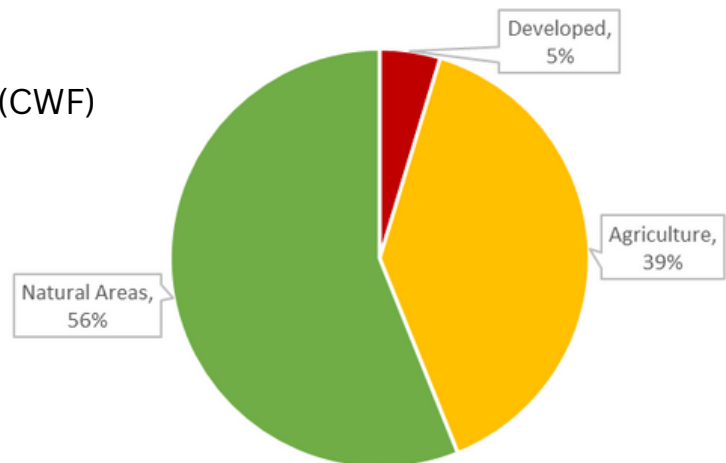
Drains: 3 mi²

Impaired: No

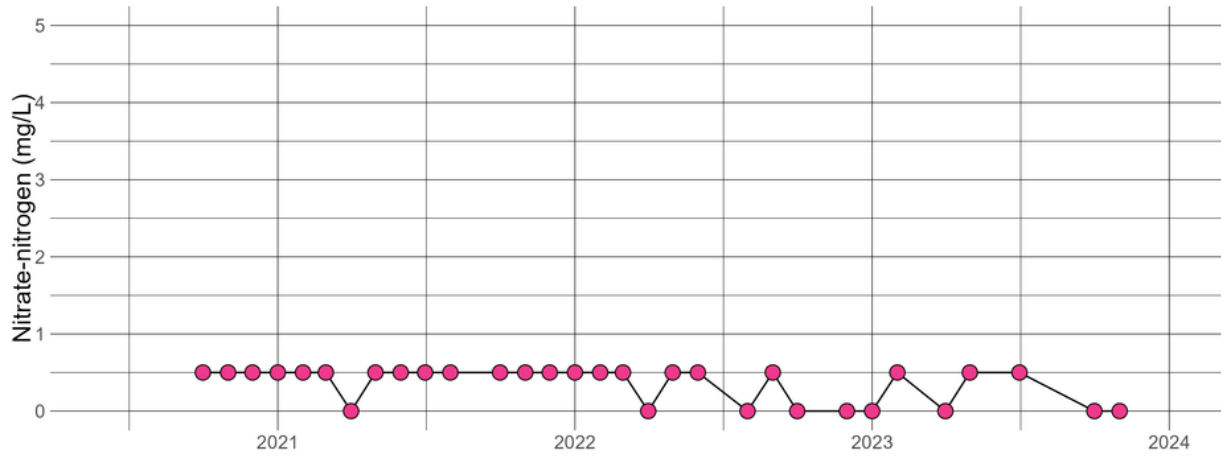
Designation: Cold Water Fishes (CWF)

Geology: 100% Non-calcareous

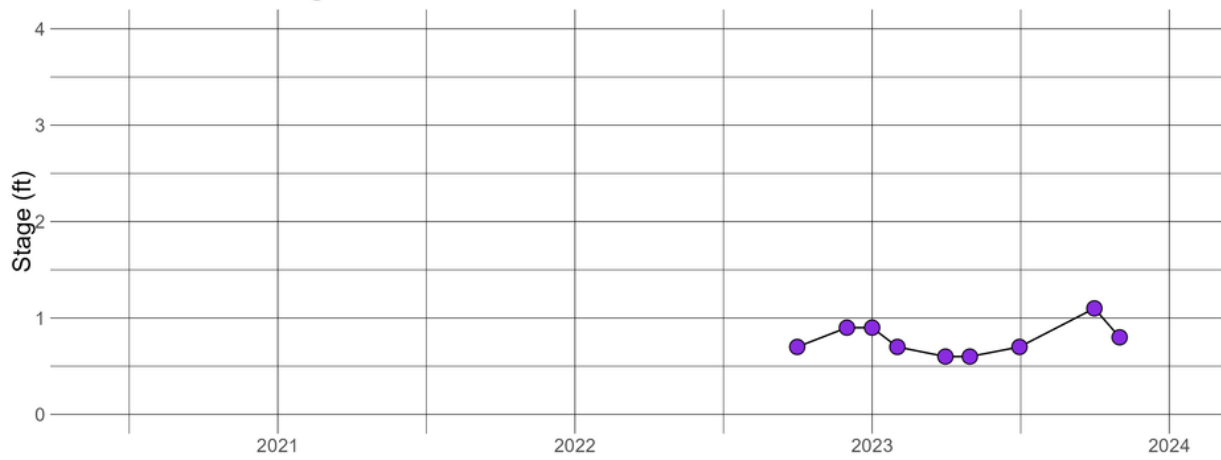
Land Use



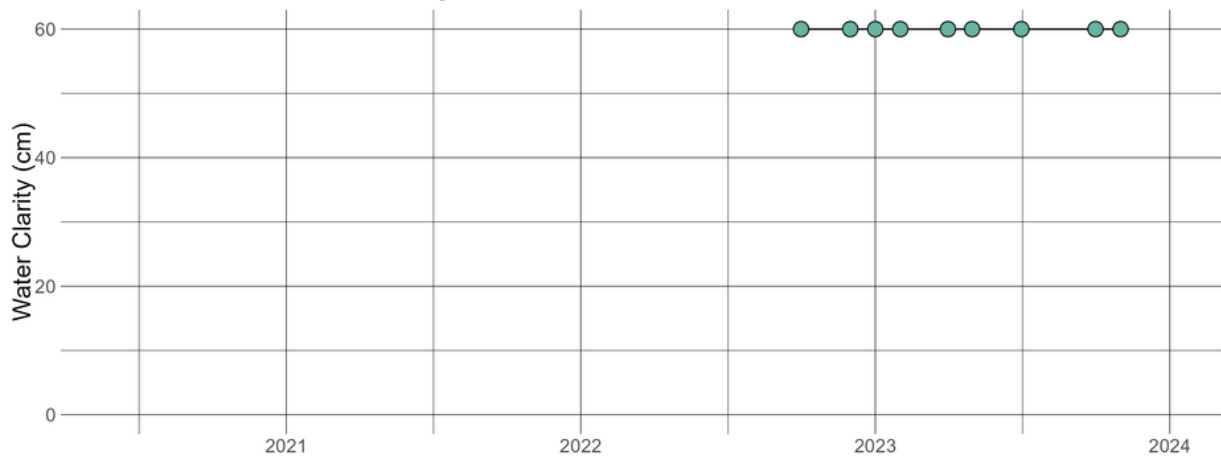
ABRCRE8.79 - Nitrate-nitrogen



ABRCRE8.79 - Stage



ABRCRE8.79 - Water Clarity



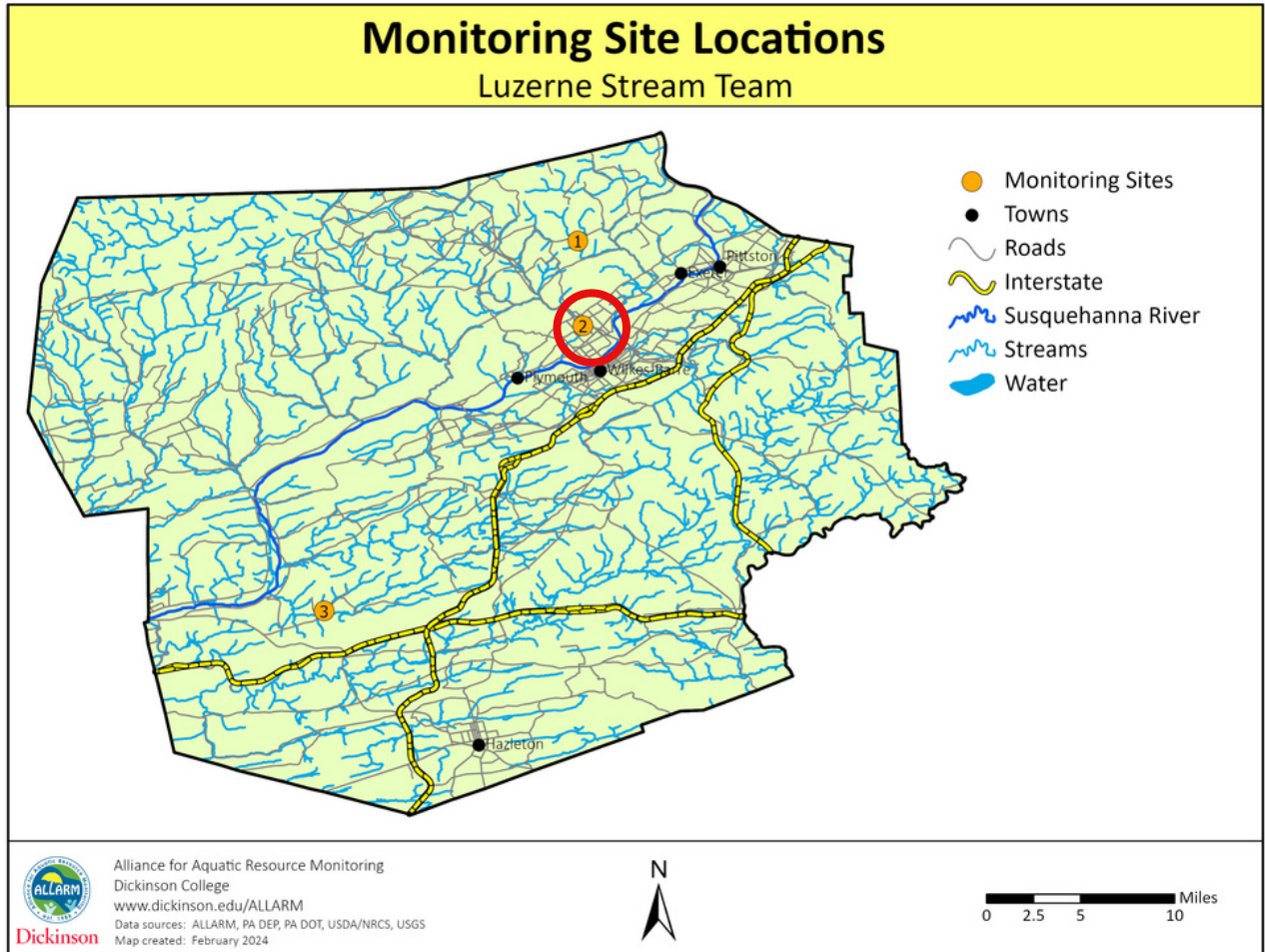
Raw Data and Summary Statistics

date	con	nitrate	ph	stage	clarity	watemp
Oct-20	199.7	0.5	7			9
Nov-20	208	0.5	7			6.1
Dec-20	192.7	0.5	7			0.3
Jan-21	168	0.5	7			1.6
Feb-21	171.3	0.5	7			0.7
Mar-21	124.6	0.5	7			4.3
Apr-21	142.5	0	7			8.6
May-21	146.5	0.5	7			22.8
Jun-21	165.4	0.5	7			20.6
Jul-21	162.7	0.5	7			22.8
Aug-21	141.2	0.5	7			22.8
Oct-21	166.4	0.5	7			12
Nov-21	124.3	0.5	7			4.1
Dec-21	150.2	0.5	7			6.2
Jan-22	182.3	0.5	7			2
Feb-22	131.1	0.5	6.5			1.3
Mar-22	133.2	0.5	7			9.8
Apr-22	119.1	0	7			8.6
May-22	136.1	0.5	7			20.4
Jun-22	176.4	0.5	7			22.3
Aug-22	256	0	7			17.2
Sep-22	211	0.5	7			21.6
Oct-22	201	0	7	0.7	60	7.5
Dec-22	158	0	7	0.9	60	2.6
Jan-23	136.7	0	7	0.9	60	2.9
Feb-23	169.8	0.5	7	0.7	60	2.7
Apr-23	163.5	0	7	0.6	60	11.6
May-23	169.4	0.5	7	0.6	60	14.7
Jul-23	148.9	0.5	7	0.7	60	21.9
Oct-23	120.4	0	6.75	1.1	60	12.7
Nov-23	149.7	0	7	0.8	60	7

Variable	Min	Max	Range	Average	Median
Conductivity	119	256	137	162	163
Nitrate-Nitrogen	0	0.5	0.5	0.35	0.5
pH	6.5	7	0.5	7	7
Stage	0.6	1.1	0.5	0.78	0.7
Water Clarity	60	60	0	60	60
Water Temp.	0.3	23	22	11	8.6

Toby Creek (TOBCRE2.39)

Monitor(s): Michelle Schasberger & Cosima Wiese



Site information:

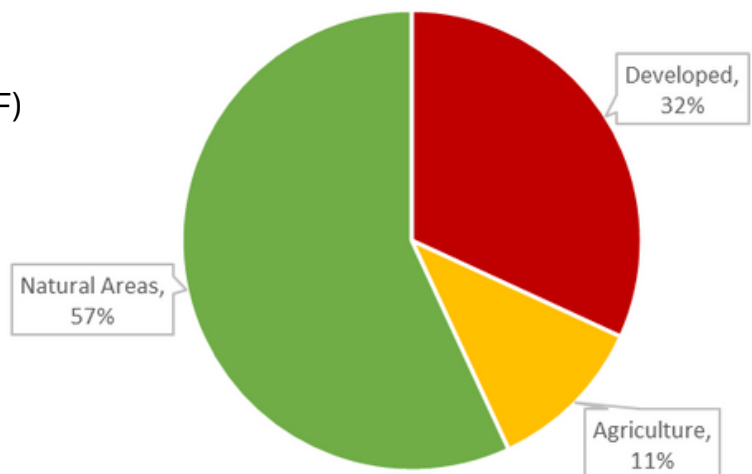
Drains: 18 mi²

Impaired: No

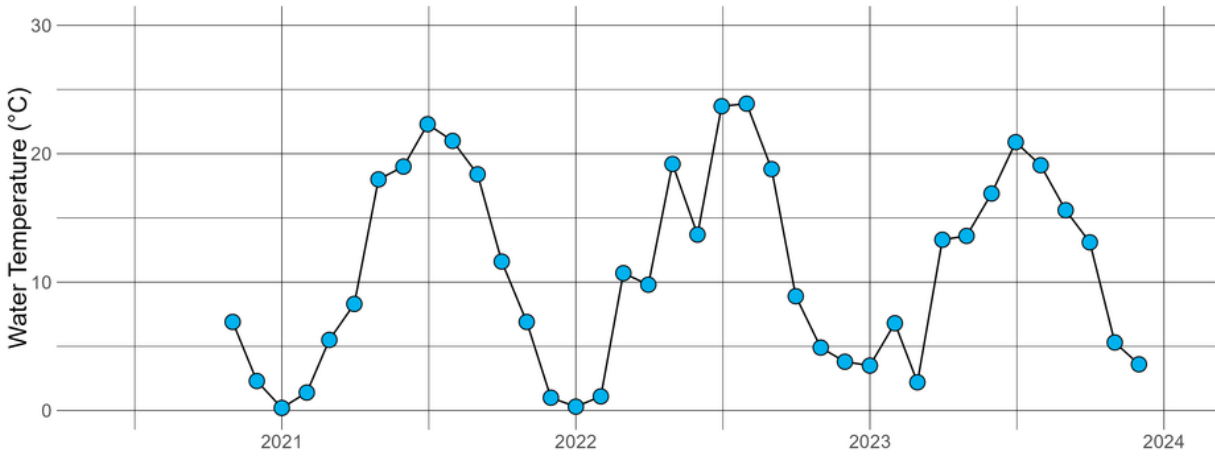
Designation: Trout Stocking (TSF)

Geology: 100% Non-calcareous

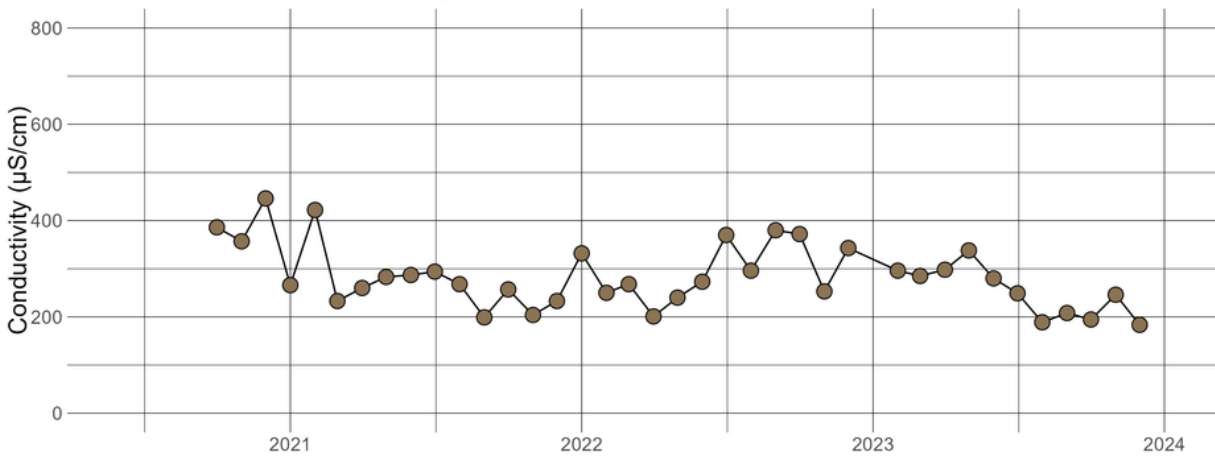
Land Use



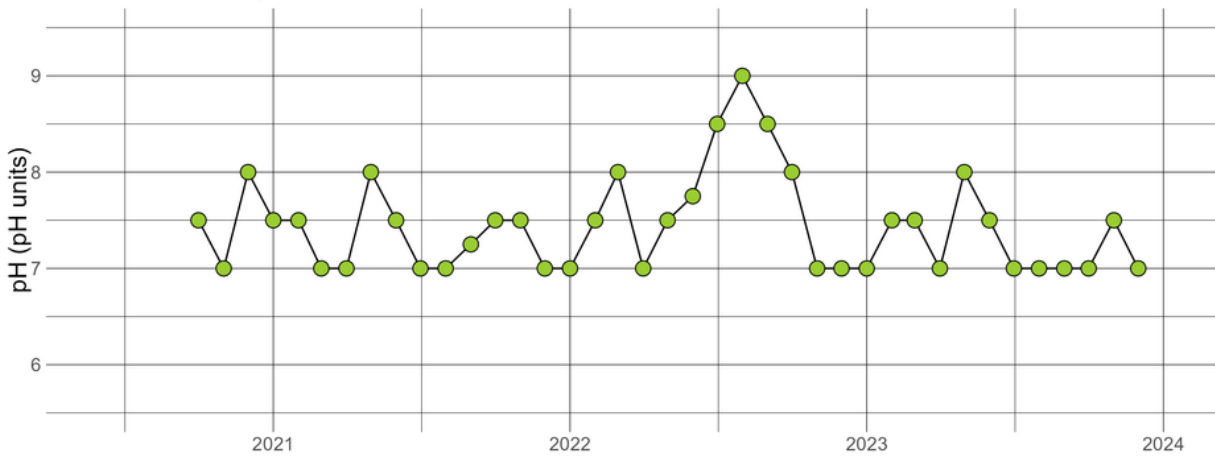
TOBCRE2.39 - Water Temperature



TOBCRE2.39 - Conductivity



TOBCRE2.39 - pH



Raw Data and Summary Statistics

date	con	nitrate	ph	stage	clarity	watemp
Oct-20	386	0	7.5			
Nov-20	357	0	7			6.9
Dec-20	446	0	8			2.3
Jan-21	266	0	7.5			0.2
Feb-21	422	0	7.5			1.4
Mar-21	233	0	7			5.5
Apr-21	260	0	7			8.3
May-21	283	0	8			18
Jun-21	287	0	7.5			19
Jul-21	294	0	7			22.3
Aug-21	268		7			21
Sep-21	199	0	7.25			18.4
Oct-21	257	0	7.5			11.6
Nov-21	204	0	7.5			6.9
Dec-21	233	0	7			1
Jan-22	332	0	7			0.3
Feb-22	250	0	7.5			1.1
Mar-22	268	0	8			10.7
Apr-22	201	0	7			9.8
May-22	240	0	7.5			19.2
Jun-22	273	0	7.75			13.7
Jul-22	370	0	8.5			23.7
Aug-22	296	0	9			23.9
Sep-22	380	0	8.5			18.8
Oct-22	372	0	8	1	60	8.9
Nov-22	253	0	7	1.5	60	4.9
Dec-22	343	0	7		60	3.8

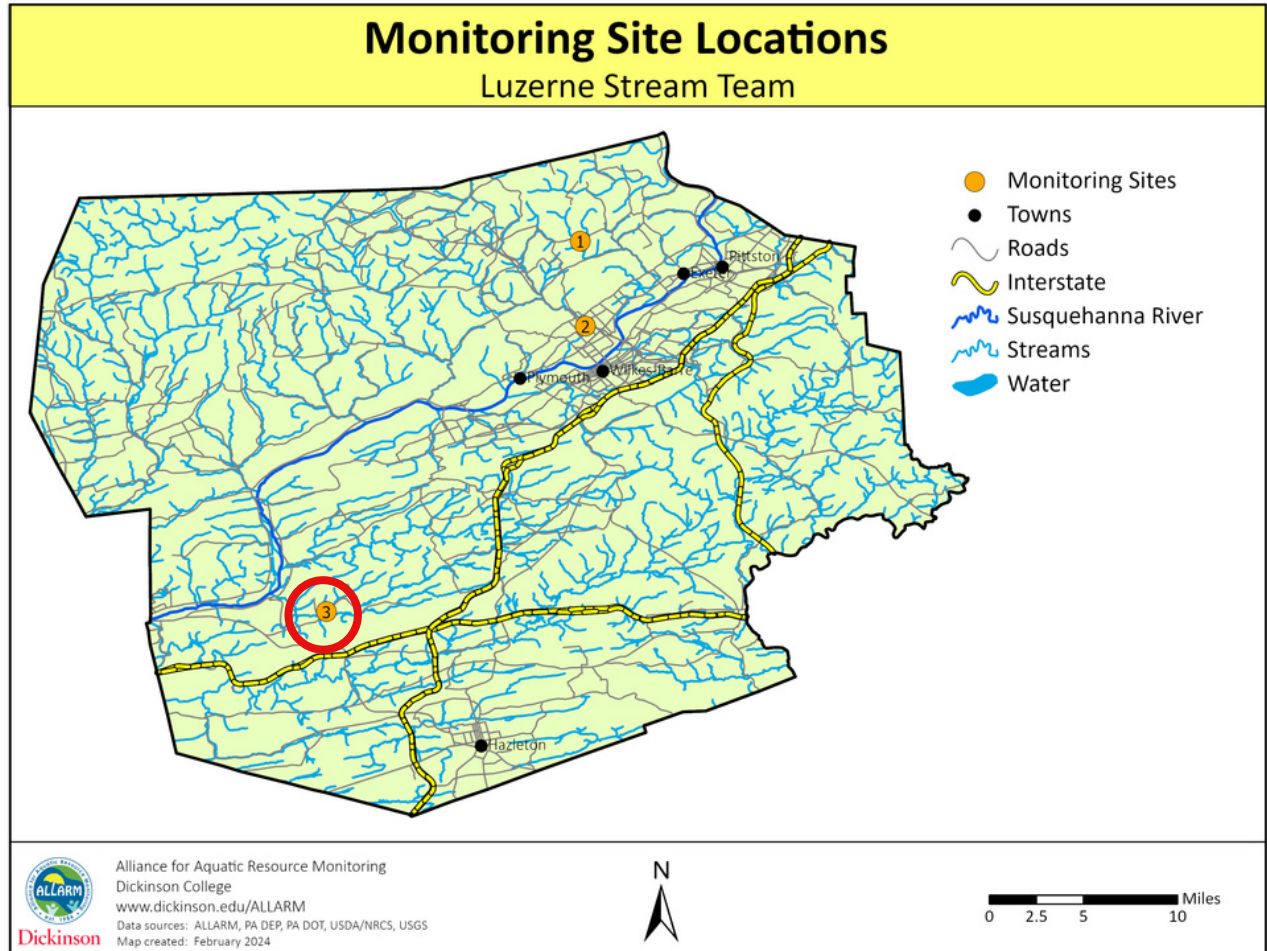
Raw Data and Summary Statistics

date	con	nitrate	ph	stage	clarity	watemp
Jan-23		0	7	0	60	3.5
Feb-23	296	0	7.5		60	6.8
Mar-23	285	0	7.5		60	2.2
Apr-23	298	0	7	1.1	60	13.3
May-23	338	0	8	1	60	13.6
Jun-23	280	0	7.5	1.1	60	16.9
Jul-23	249	0	7	0	60	20.9
Aug-23	188.8	0	7	1.7	60	19.1
Sep-23	208	0	7	1.9	60	15.6
Oct-23	194.6	0	7	1.8	60	13.1
Nov-23	246	0	7.5	1.6	60	5.3
Dec-23	183.5	0	7	1.7	60	3.6

Variable	Min	Max	Range	Average	Median
Conductivity	184	446	262	283	270
Nitrate-Nitrogen	0	0	0	0	0
pH	7	9	2	7.4	7.5
Stage	0	1.9	1.9	1.2	1.3
Water Clarity	60	60	0	60	60
Water Temp.	0.2	24	24	11	10

Wapwallopen Creek (WAPCRE3.87)

Monitor(s): Gary Leander & Judith Samler



Site information:

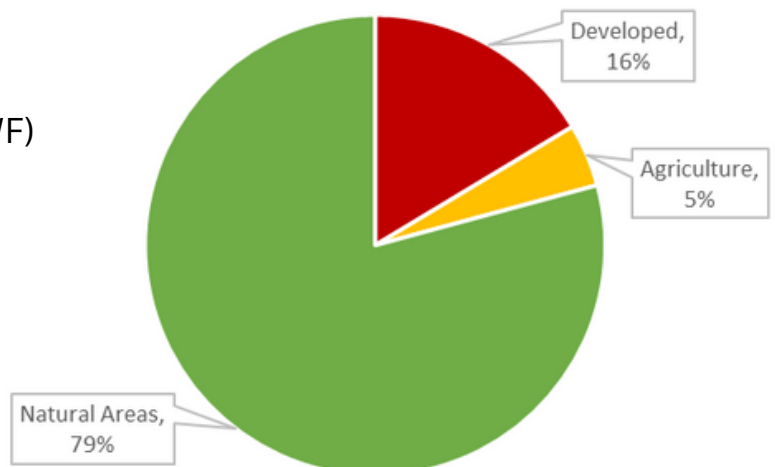
Drains: 42 mi²

Impaired: No

Designation: Cold Water Fishes (CWF)

Geology: 100% Non-calcareous

Land Use



Raw Data and Summary Statistics

date	con	nitrate	ph	clarity	watemp
Dec-20	264	1.5	7.5		1.7
Jan-21	260	0.5	7		2.4
Mar-21	264	1	7		7.9
Apr-21	236	1	7		8.3
May-21	229	0.5	7		20
Jul-21	344	0.5	8		23.5
Aug-21	221	0	7.25		22.4
Sep-21	152.8	0	8		18.8
Oct-21	238	0	7.5		13
Nov-21	155.5	0.5	7		5.1
Dec-21	196.6	0.5	7		4.6
Jan-22	198.6	0.5	7		1.7
Feb-22	241	0.5	7		0.6
Mar-22	220	0.5	7		9.8
Apr-22	133	0.5	7		12.2
May-22	146	0.5	7		19.8
Jun-22	222	0	7		16.3
Jul-22	353	0.5	8		25.4
Aug-22	334	0.5	7		22.3
Sep-22	234	0	7		19.4
Oct-22	268	0.5	7	60	8.8
Nov-22	187.5	0.5	7	60	
Dec-22	358	0.5	7	60	5.7
Jan-23	156.3	0.5	7	60	4.4
Feb-23	232	0.5	7	60	2.8
Mar-23	293	0.5	7	60	7.7
Apr-23	258	0.5	7	60	15
May-23	196	0.5	8	60	17.3
Jun-23	223	0.5	7	60	19.5
Jul-23	135.8	0.5	7	30	23.4
Sep-23	178.7	0.5	7	60	15.8
Oct-23	136.6	0.5	7	60	14.9
Nov-23	219	0.5	7	60	11.2
Dec-23	141.2	0.5	7	60	6.8

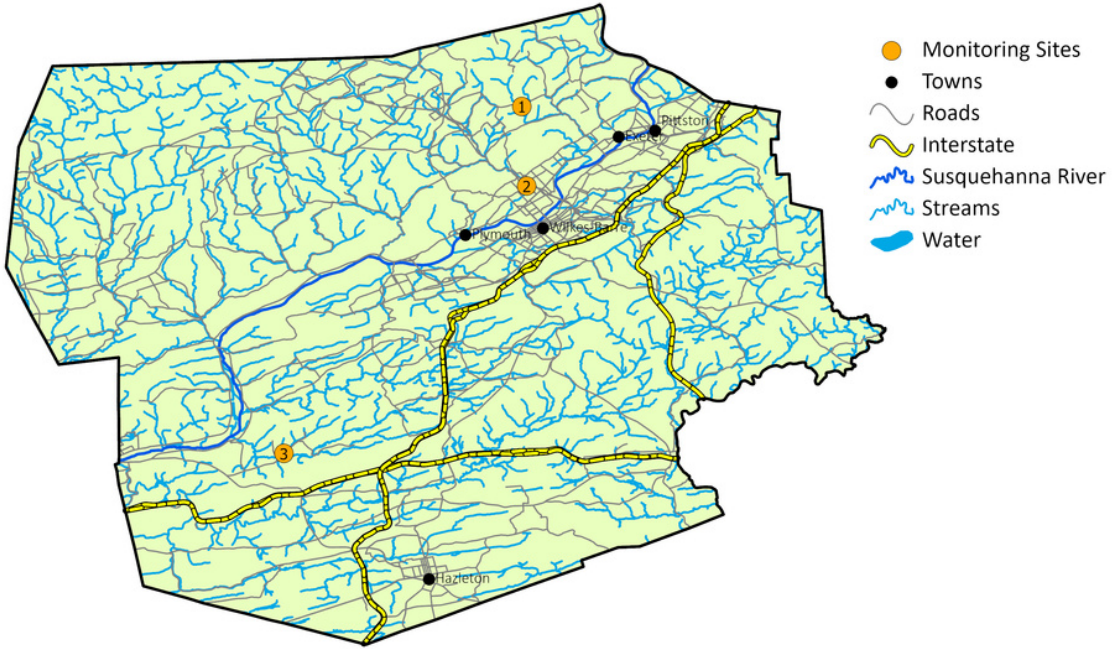
Variable	Min	Max	Range	Average	Median
Conductivity	133	358	225	224	222
Nitrate-Nitrogen	0	1.5	1.5	0.49	0.5
pH	7	8	1	7.2	7
Stage	1	7.9	6.9	1.6	1.5
Water Clarity	30	60	30	58	60
Water Temp.	0.6	25	25	12	12

*stage measurements from gage station

Supplemental Maps

Monitoring Site Locations

Luzerne Stream Team

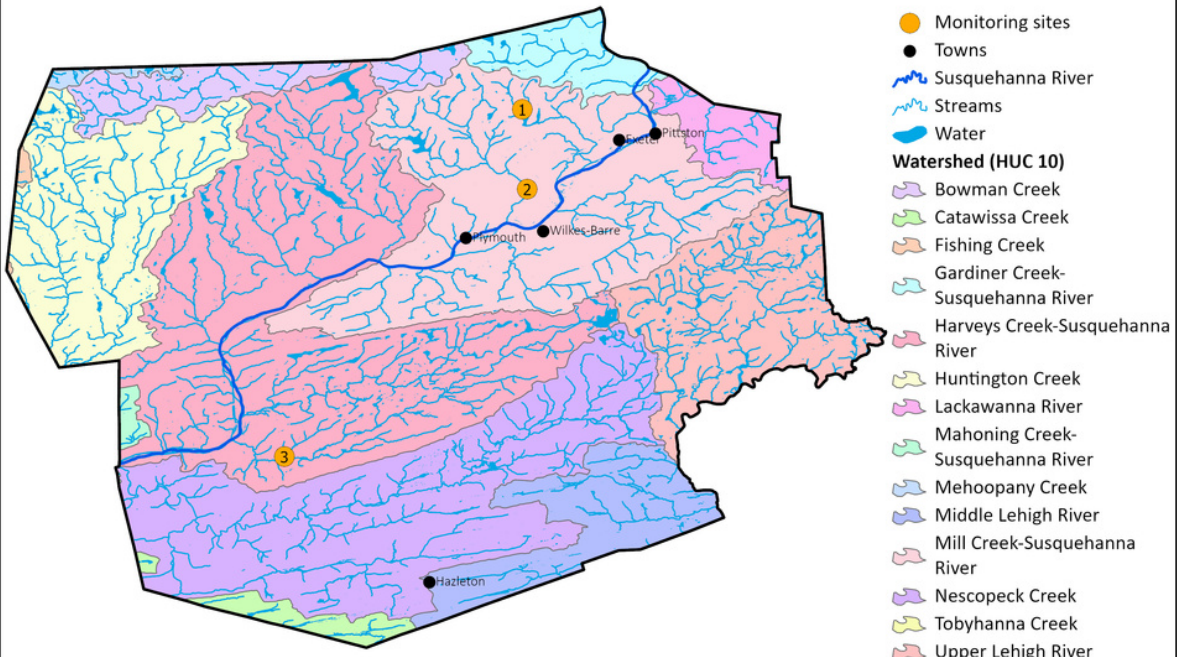


Alliance for Aquatic Resource Monitoring
Dickinson College
www.dickinson.edu/ALLARM
Data sources: ALLARM, PA DEP, PA DOT, USDA/NRCS, USGS
Map created: February 2024



Subwatersheds

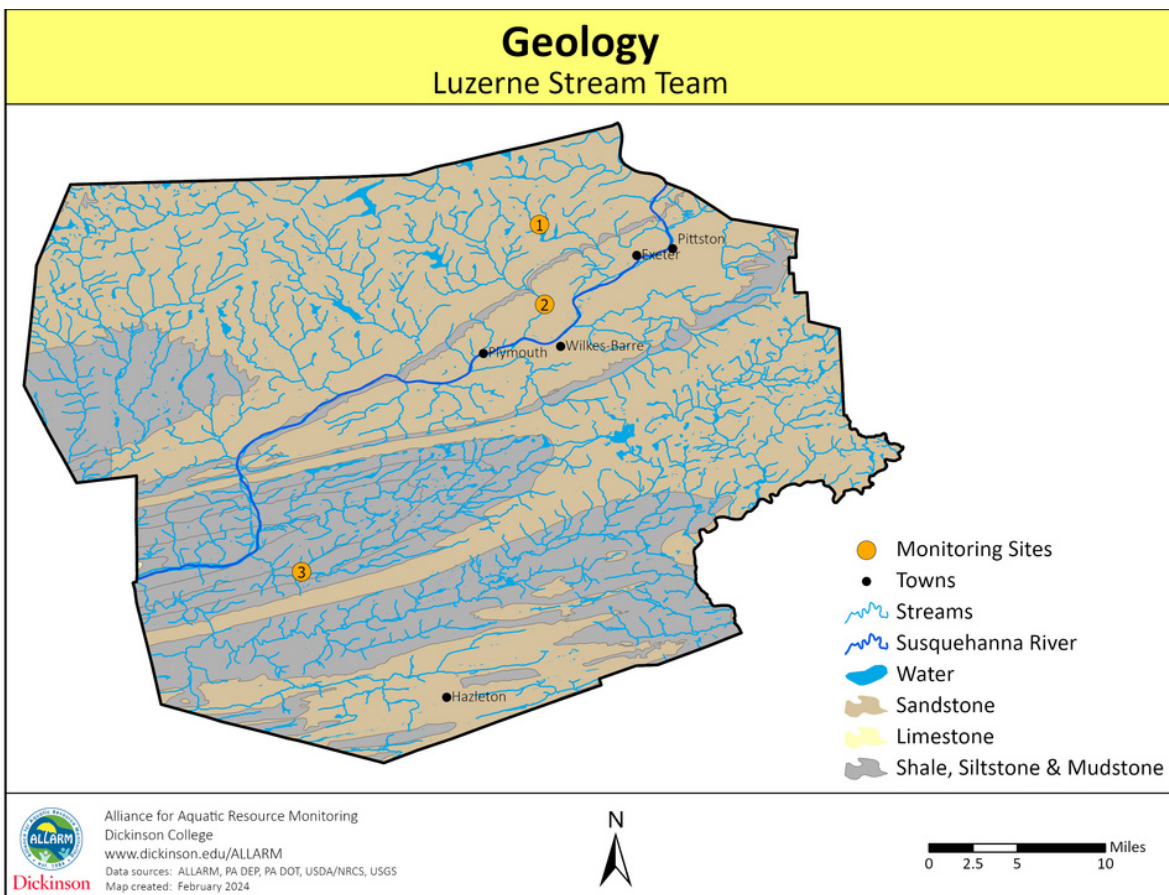
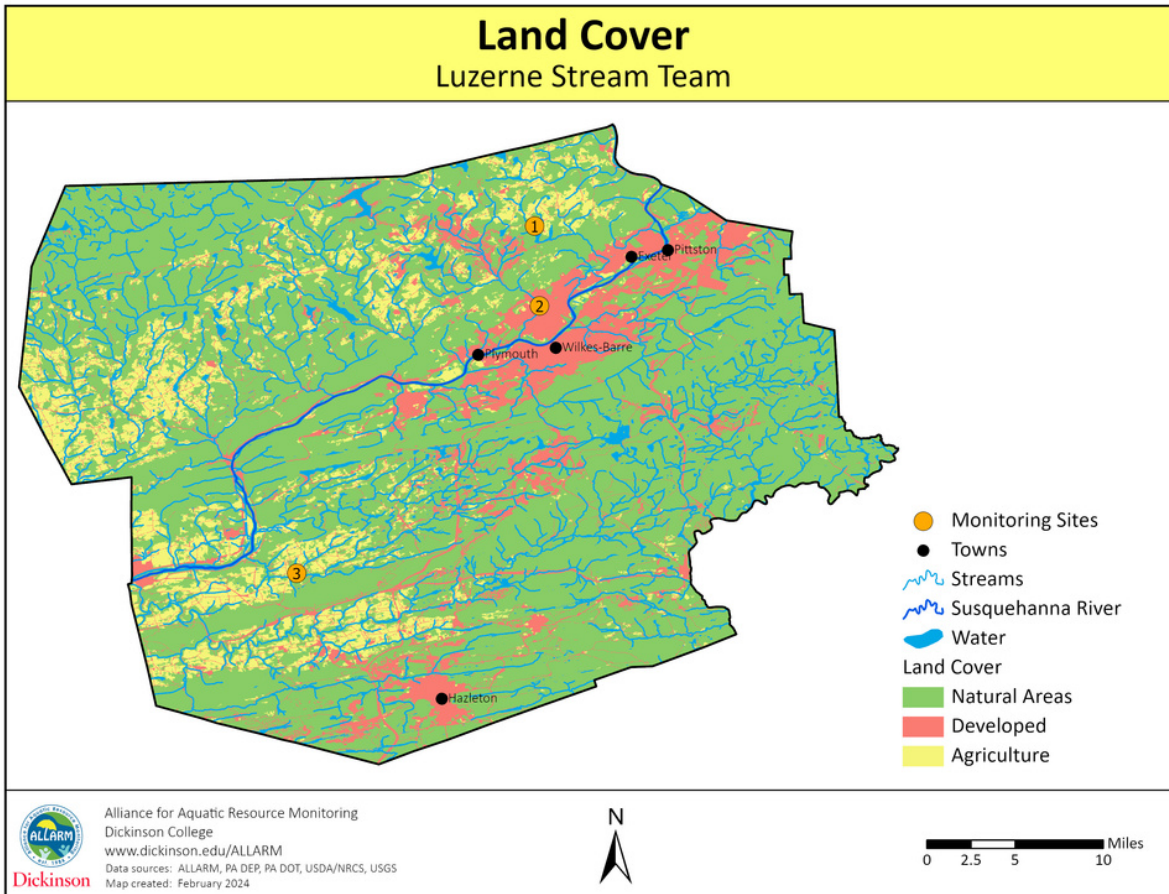
Luzerne Stream Team



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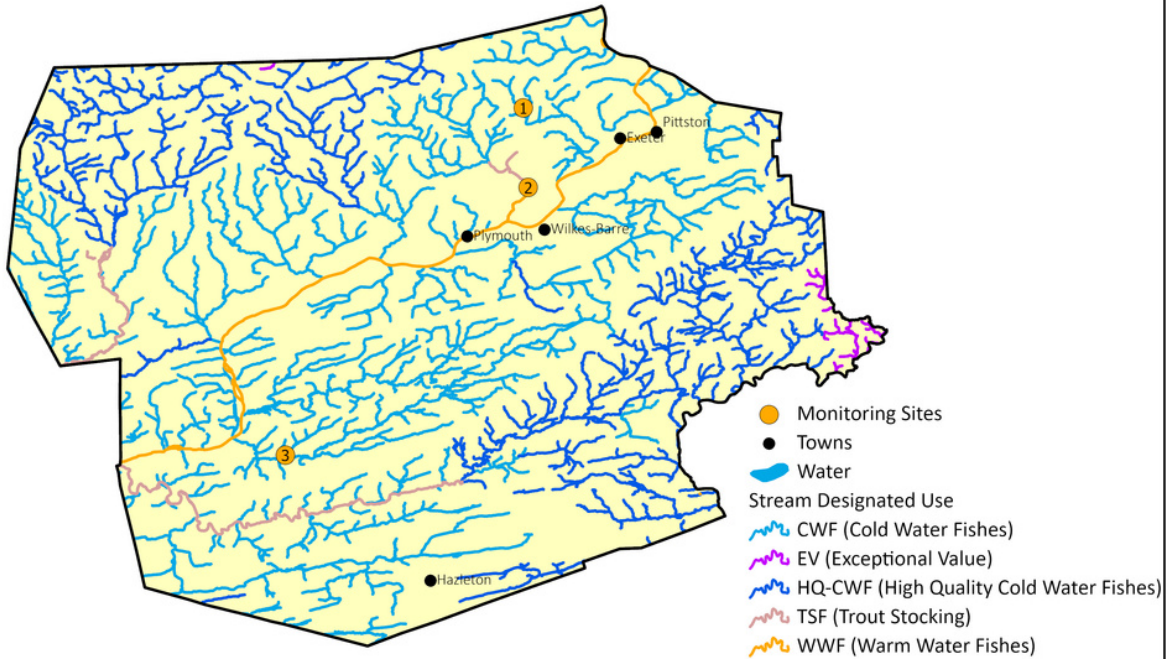
Supplemental Maps



Supplemental Maps

Stream Designated Uses

Luzerne Stream Team



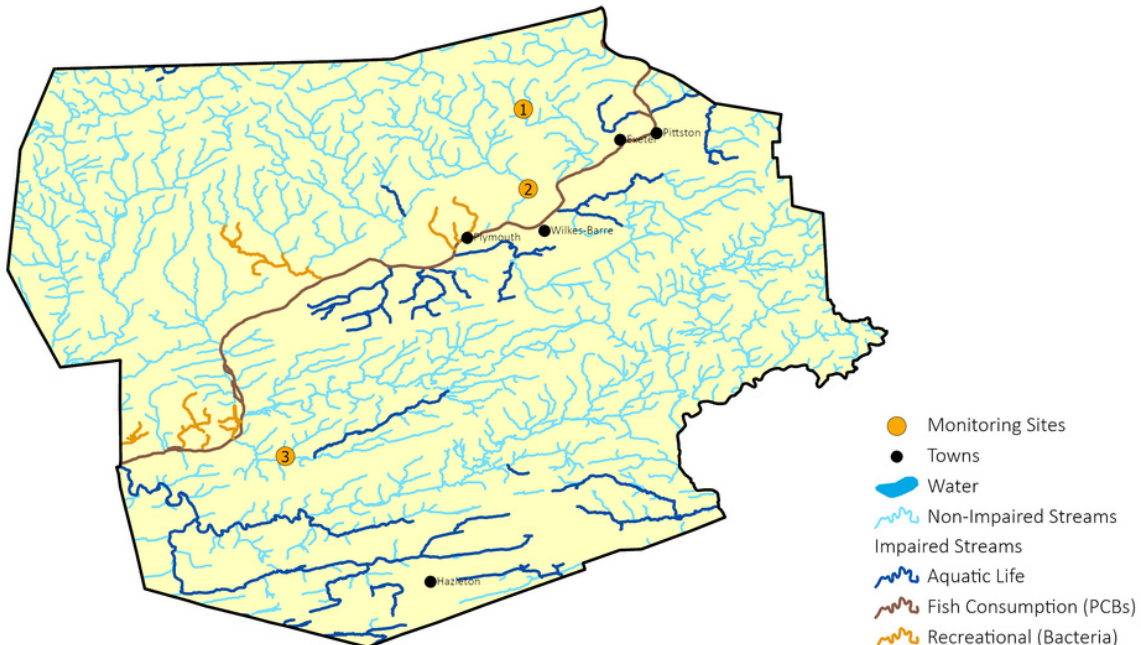
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Map created: February 2024



0 2.5 5 10 Miles

Impaired Streams

Luzerne Stream Team



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Data sources: ALLARM, PA DEP, PA DOT, USDA/NRCS, USGS
Map created: February 2024



0 2.5 5 10 Miles