

Lackawanna County Stream Team Data Interpretation Workbook



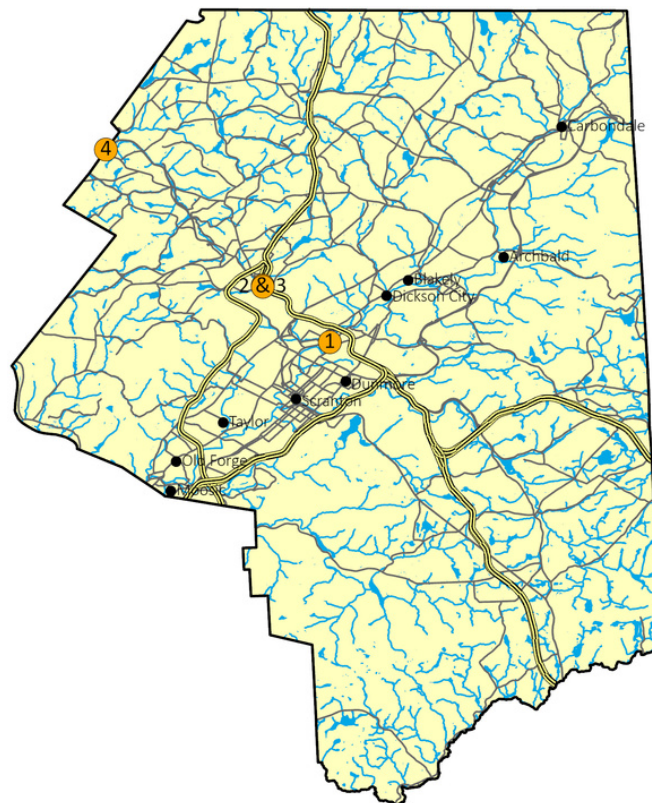
Dickinson

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



Monitoring Site Locations

Site Locations Lackawanna Stream Team



- Monitoring Sites
- Towns
- Interstates
- Roads
- Streams
- Water



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

Dickinson

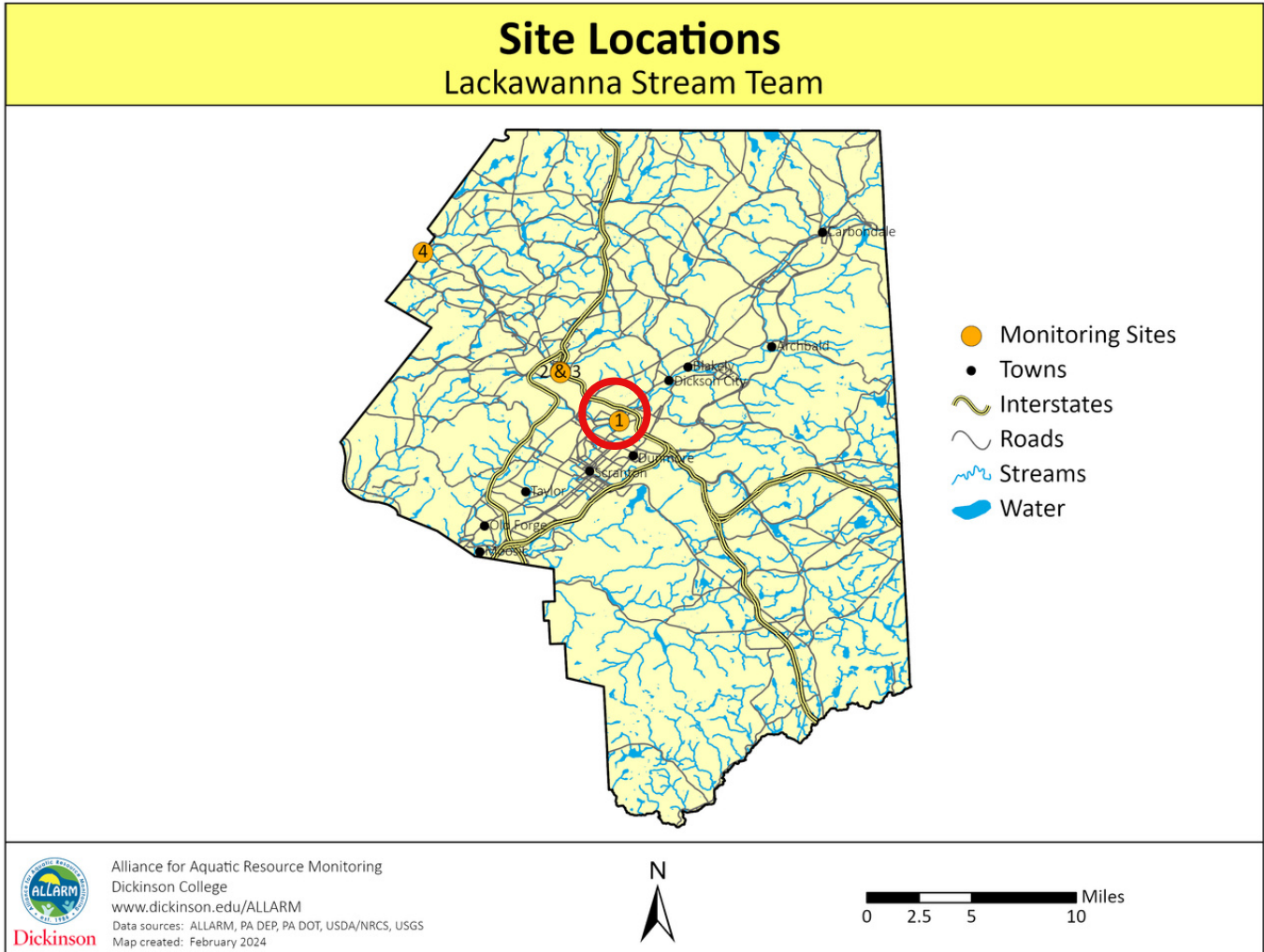


0 2.5 5 10 Miles

Site Number	Name	Site ID
1	Lackawanna River	LACRIV14.3
2	Leggetts Creek 1	LEGCRE12.92
3	Leggetts Creek 2	LEGCRE18.3
4	Tunkhannock Creek	TUNCRE13.8

Lackawanna River (LACRIV14.3)

Monitor(s): Paul Davis, Lexie Kelly, Kathy Celli, Barb Semian



Site information:

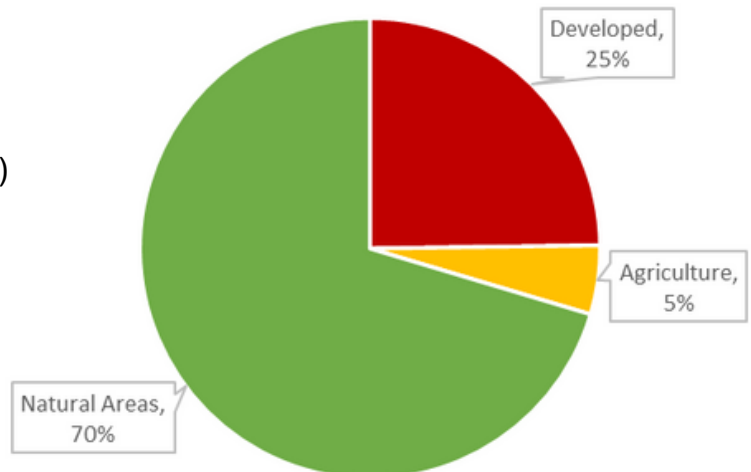
Drains: 110 mi²

Impaired: Yes, recreational - urban runoff, combined sewer overflows

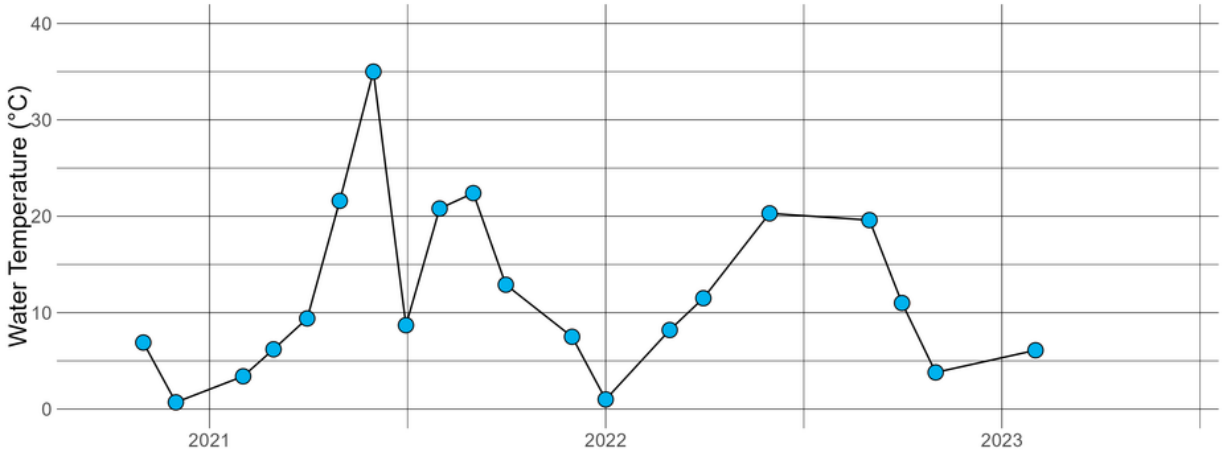
Designation: Cold Water Fishes (CWF)

Geology: 100% Non-calcareous

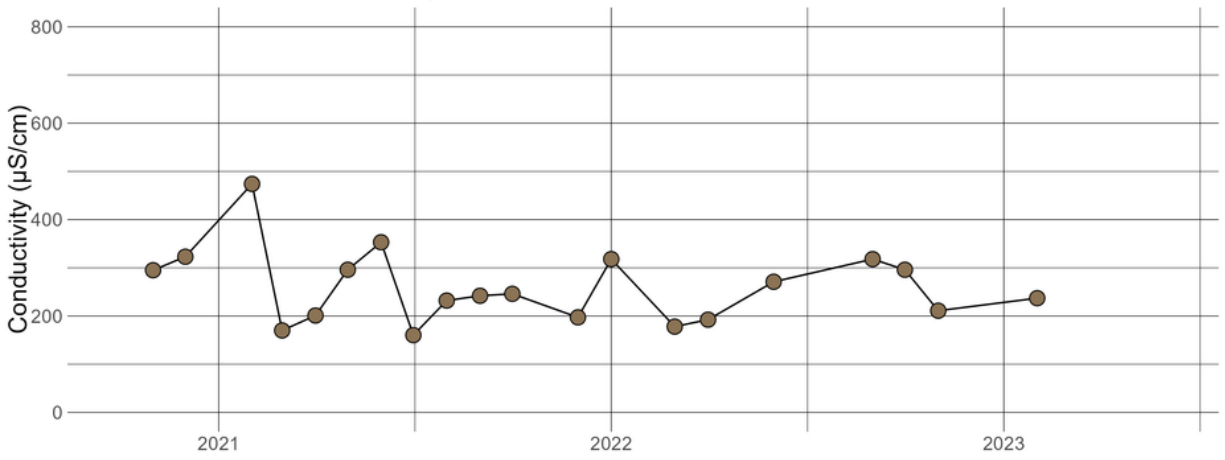
Land Use



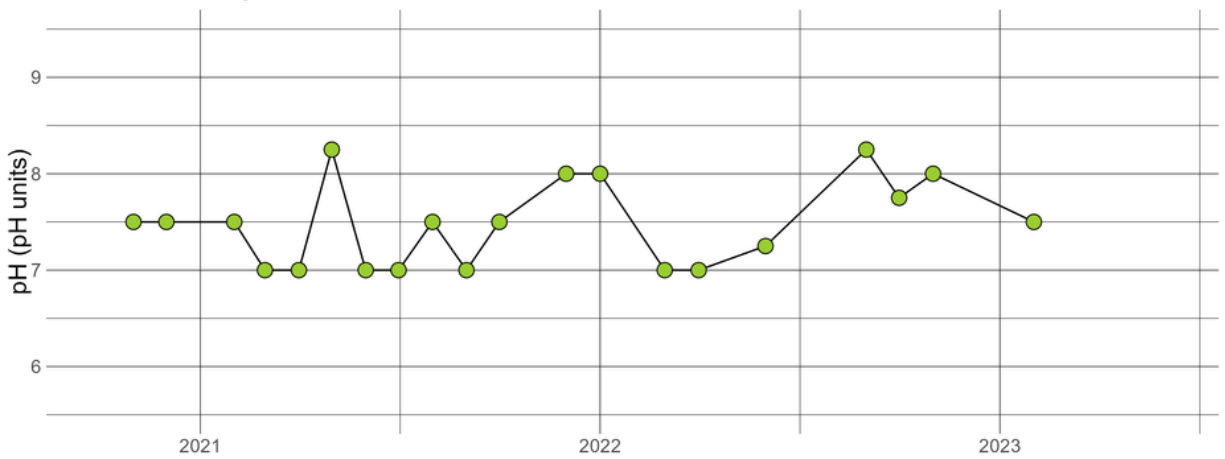
LACRIV14.3 - Water Temperature



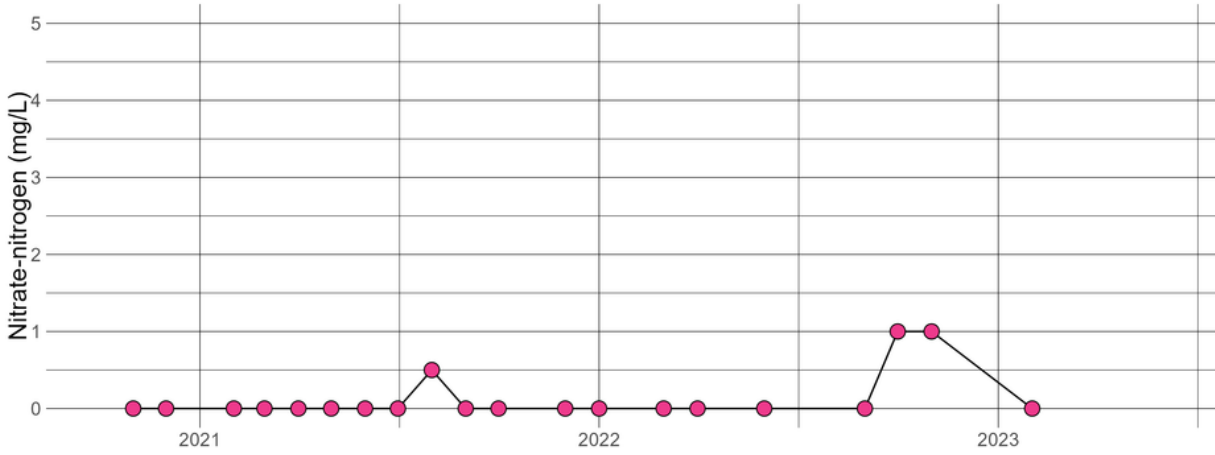
LACRIV14.3 - Conductivity



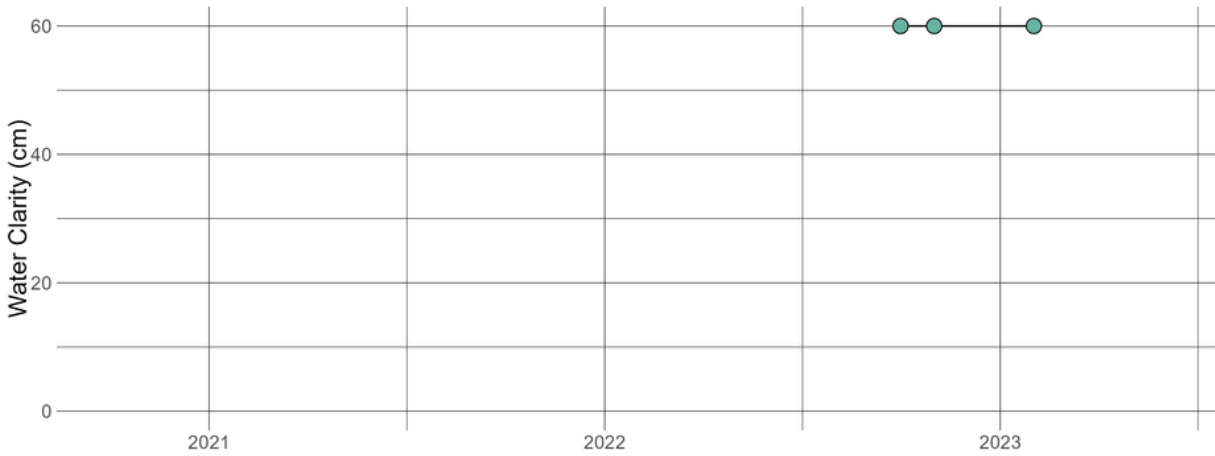
LACRIV14.3 - pH



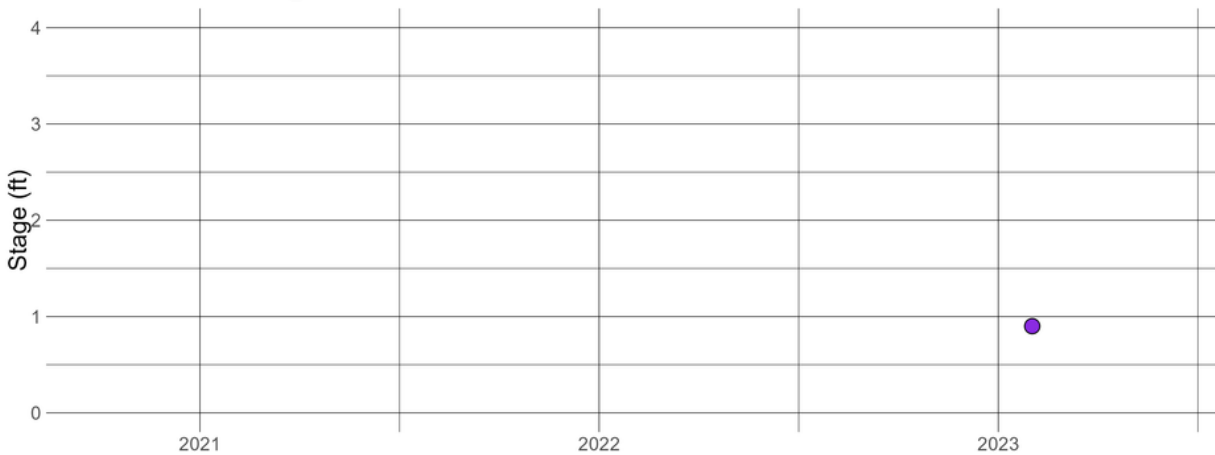
LACRIV14.3 - Nitrate-nitrogen



LACRIV14.3 - Water Clarity



LACRIV14.3 - Stage



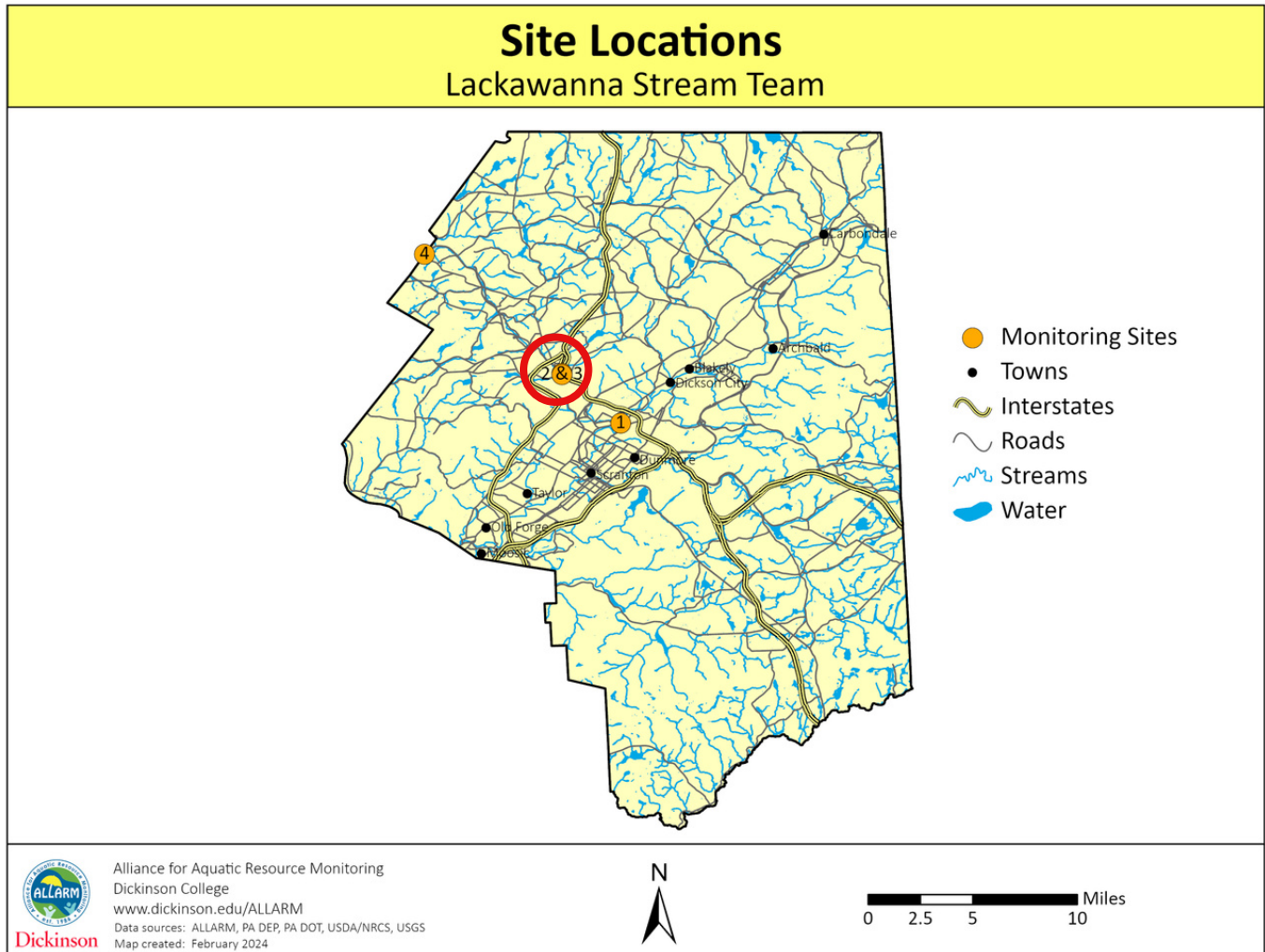
Raw Data and Summary Statistics

date	con	nitrate	ph	stage	clarity	watemp
Nov-20	295	0	7.5			6.9
Dec-20	323	0	7.5			0.7
Jan-21						
Feb-21	474	0	7.5			3.4
Mar-21	170	0	7			6.2
Apr-21	201	0	7			9.4
May-21	296	0	8.25			21.6
Jun-21	353	0	7			35
Jul-21	160.3	0	7			8.7
Aug-21	232	0.5	7.5			20.8
Sep-21	242	0	7			22.4
Oct-21	246	0	7.5			12.9
Dec-21	197.2	0	8			7.5
Jan-22	318	0	8			1
Mar-22	178	0	7			8.2
Apr-22	192.4	0	7			11.5
Jun-22	271	0	7.25			20.3
Sep-22	318	0	8.25			19.6
Oct-22	296	1	7.75		60	11
Nov-22	211	1	8		60	3.8
Feb-23	237	0	7.5	0.9	60	6.1

Variable	Min	Max	Range	Average	Median
Conductivity	160	474	314	261	244
Nitrate-Nitrogen	0	1	1	0.12	0
pH	7	8.2	1.2	7.5	7.5
Stage	0.9	0.9	0	0.9	0.9
Water Clarity	60	60	0	60	60
Water Temp.	0.7	35	34	12	9.1

Leggetts Creek 1 (LEGCRE12.92)

Monitor(s): Janet Sweeney & Paul Bechtel



Site information:

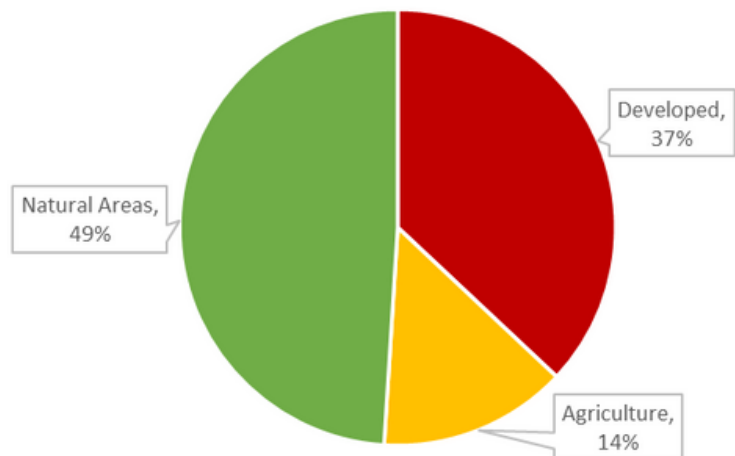
Drains: 12 mi²

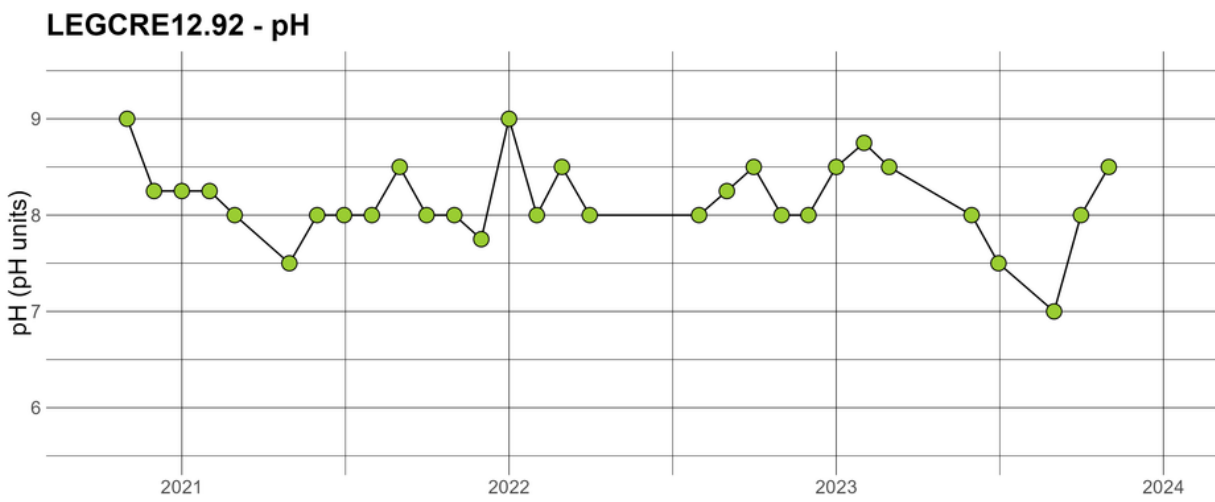
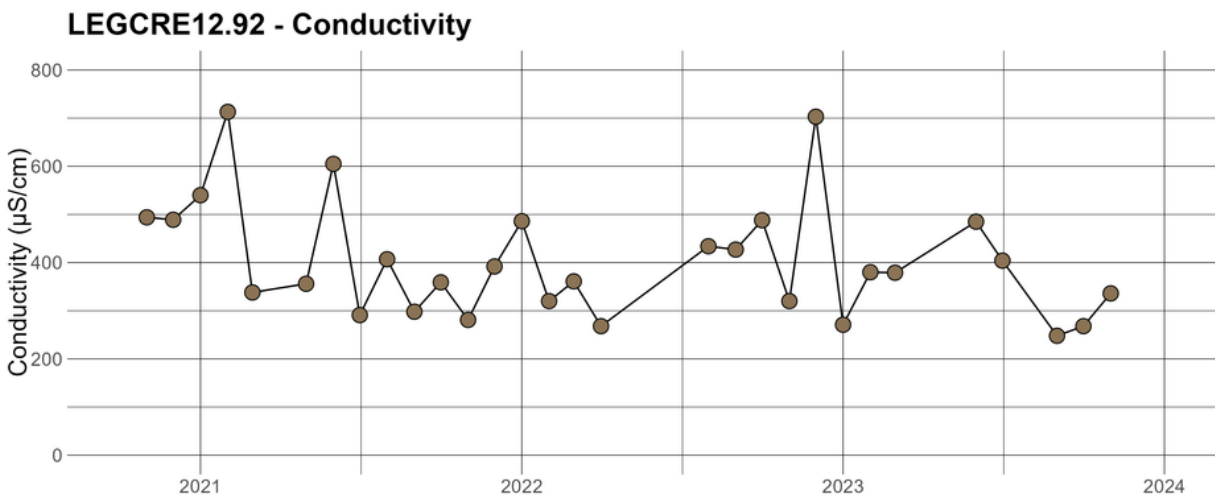
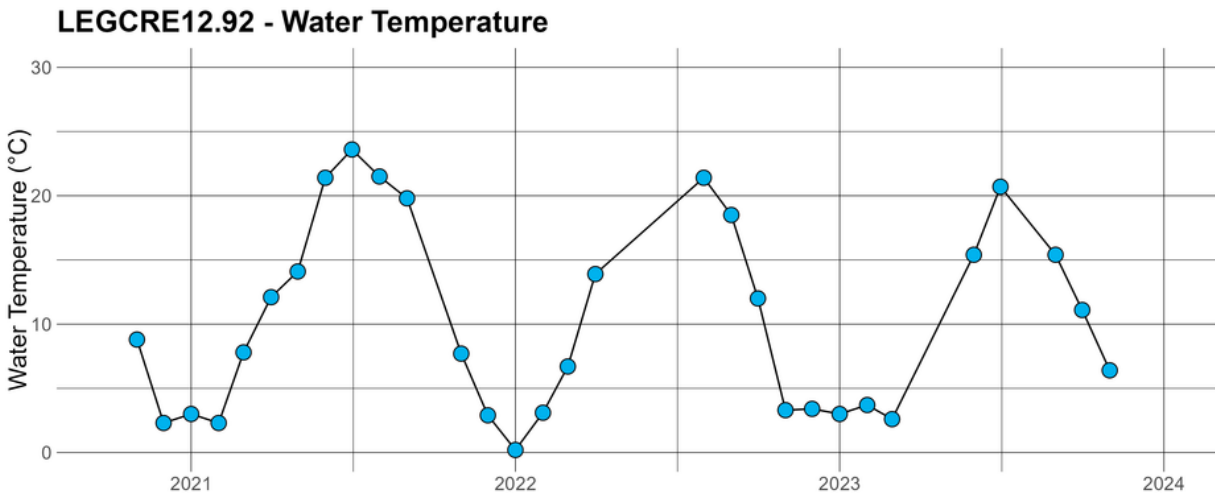
Impaired: Yes, aquatic life - urban runoff, siltation

Designation: Trout Stocking (TSF)

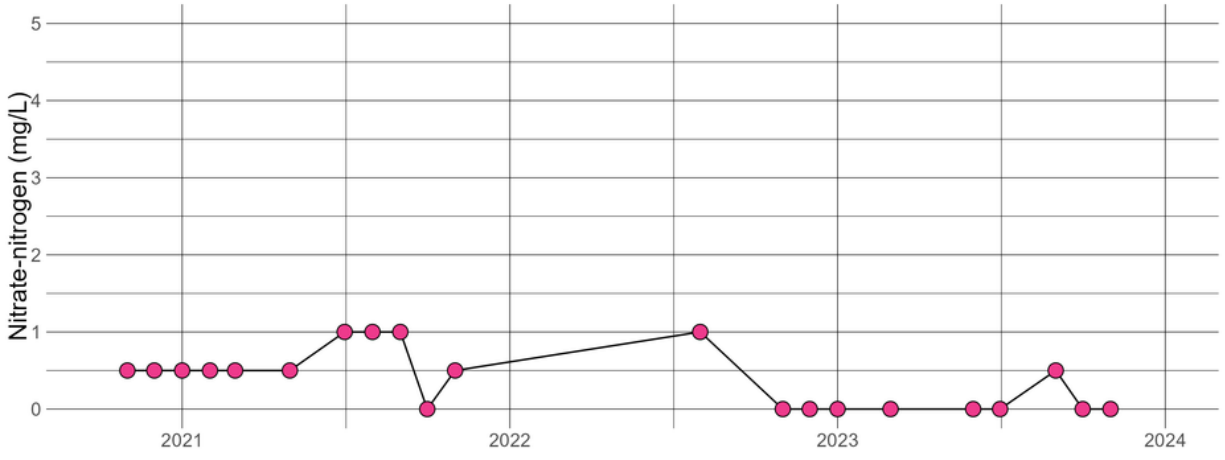
Geology: 100% Non-calcareous

Land Use

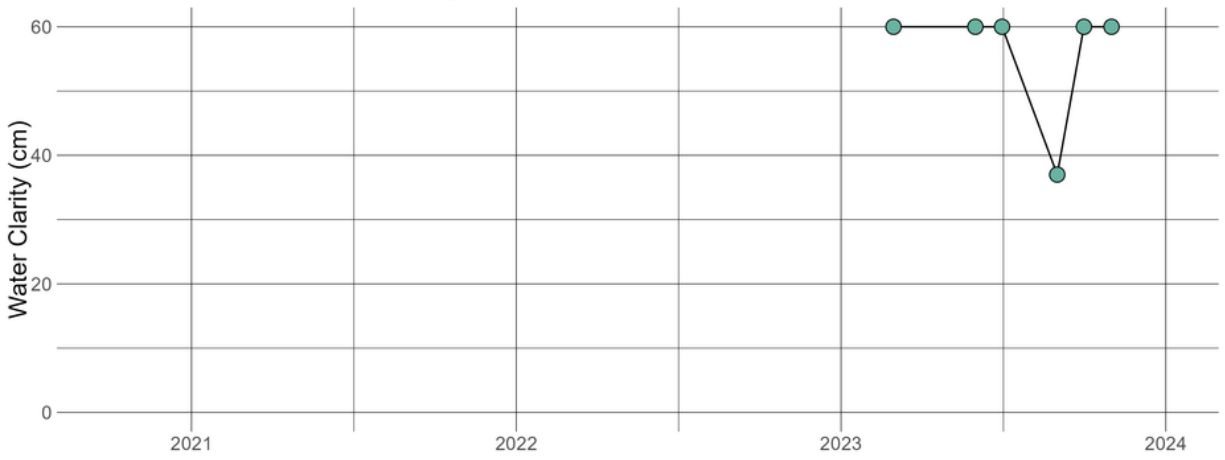




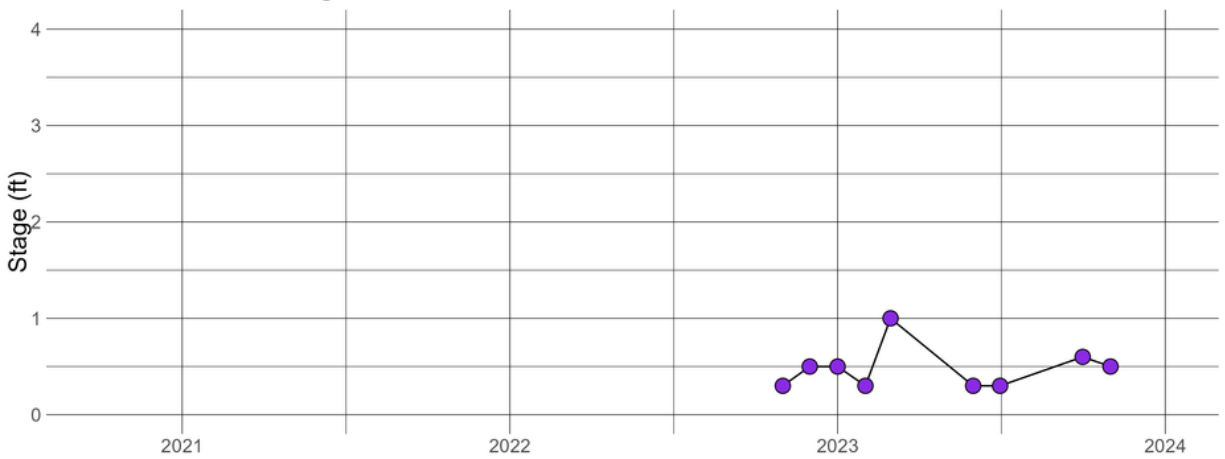
LEGCRE12.92 - Nitrate-nitrogen



LEGCRE12.92 - Water Clarity



LEGCRE12.92 - Stage



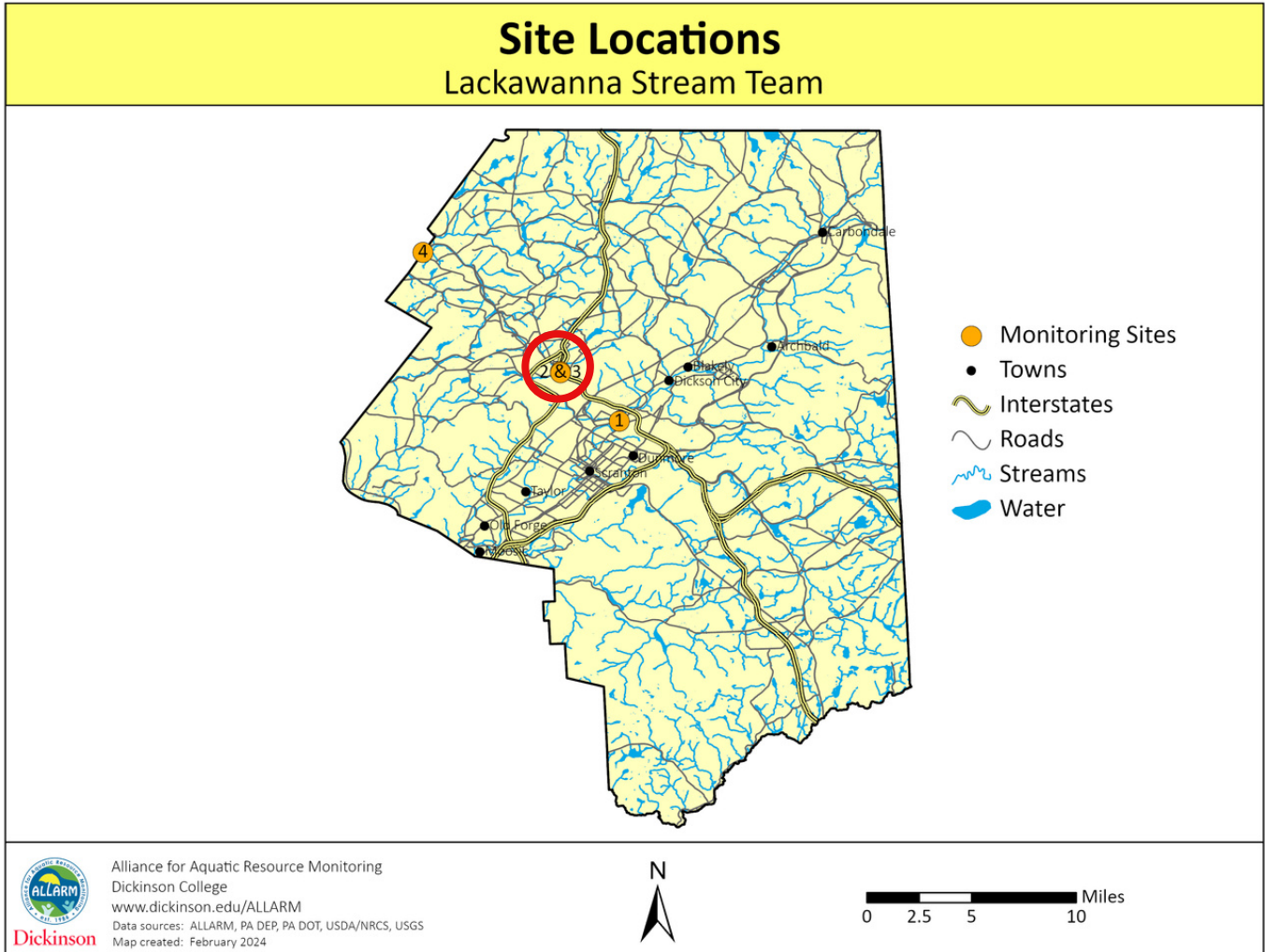
Raw Data and Summary Statistics

date	con	nitrate	ph	stage	clarity	watemp
Nov-20	494	0.5	9			8.8
Dec-20	489	0.5	8.25			2.3
Jan-21	540	0.5	8.25			3
Feb-21	713	0.5	8.25			2.3
Mar-21	338	0.5	8			7.8
Apr-21						12.1
May-21	356	0.5	7.5			14.1
Jun-21	605		8			21.4
Jul-21	291	1	8			23.6
Aug-21	407	1	8			21.5
Sep-21	298	1	8.5			19.8
Oct-21	359	0	8			
Nov-21	281	0.5	8			7.7
Dec-21	392		7.75			2.9
Jan-22	486		9			0.2
Feb-22	320		8			3.1
Mar-22	361		8.5			6.7
Apr-22	268		8			13.9
Aug-22	434	1	8			21.4
Sep-22	427		8.25			18.5
Oct-22	488		8.5			12
Nov-22	320	0	8	0.3		3.3
Dec-22	703	0	8	0.5		3.4
Jan-23	271	0	8.5	0.5		3
Feb-23	380		8.75	0.3		3.7
Mar-23	379	0	8.5	1	60	2.6
Jun-23	485	0	8	0.3	60	15.4
Jul-23	404	0	7.5	0.3	60	20.7
Sep-23	248	0.5	7		37	15.4
Oct-23	268	0	8	0.6	60	11.1
Nov-23	336	0	8.5	0.5	60	6.4

Variable	Min	Max	Range	Average	Median
Conductivity	248	713	465	405	380
Nitrate-Nitrogen	0	1	1	0.38	0.5
pH	7	9	2	8.2	8
Stage	0.3	1	0.7	0.48	0.5
Water Clarity	37	60	23	56	60
Water Temp.	0.2	24	23	10	8.3

Leggetts Creek 2 (LEGCRE18.3)

Monitor(s): Janet Sweeney & Paul Bechtel



Site information:

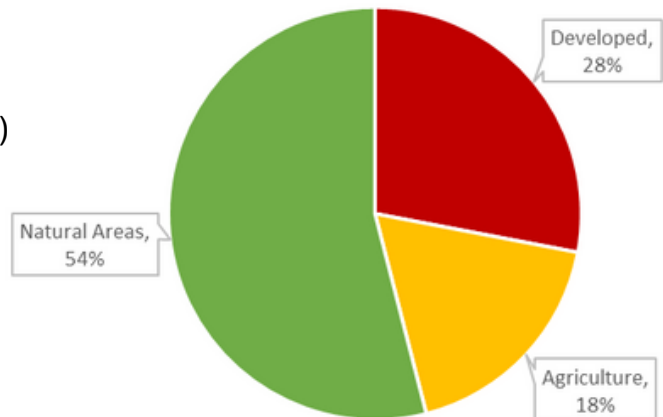
Drains: 8 mi²

Impaired: Yes, aquatic life - urban runoff, siltation

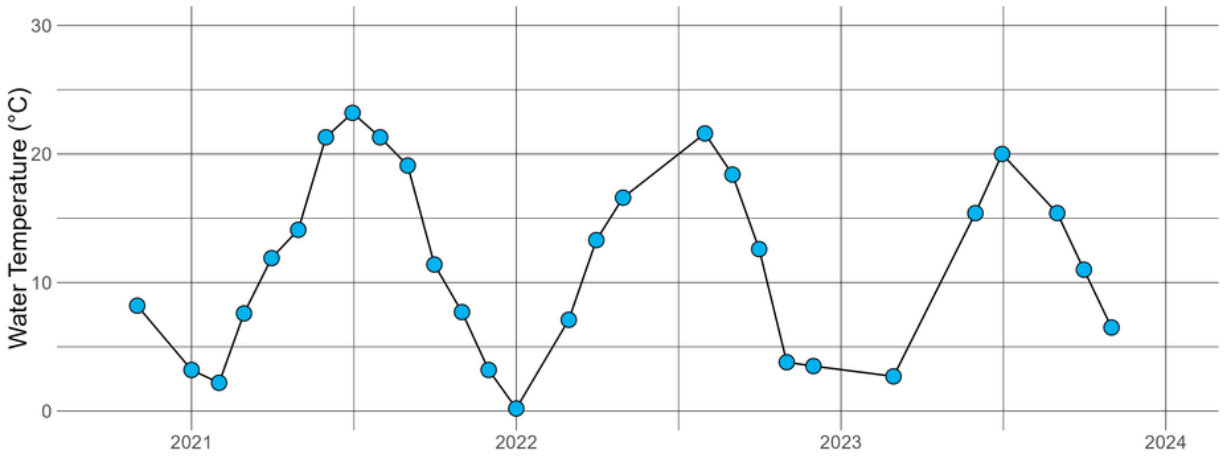
Designation: Cold Water Fishes (CWF)

Geology: 100% Non-calcareous

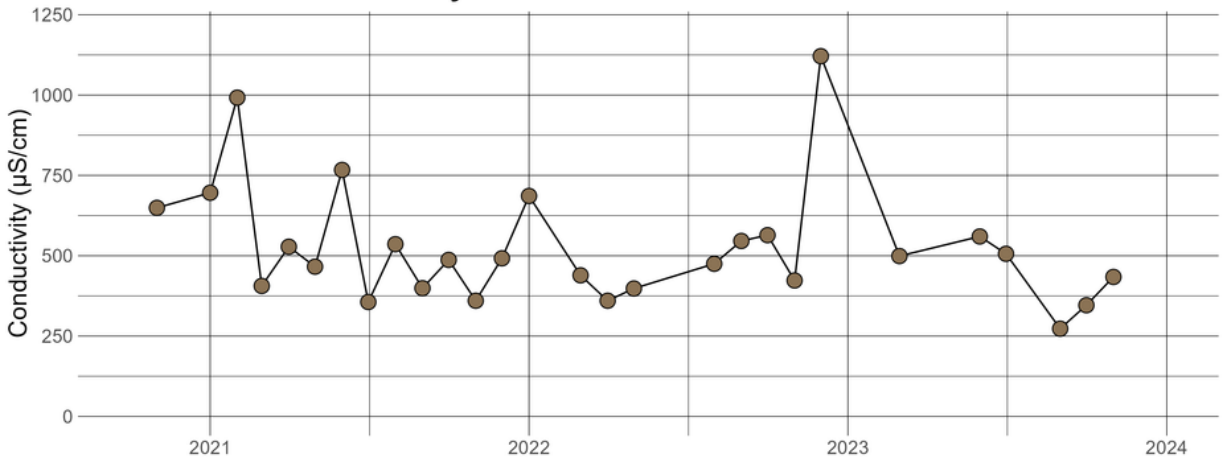
Land Use



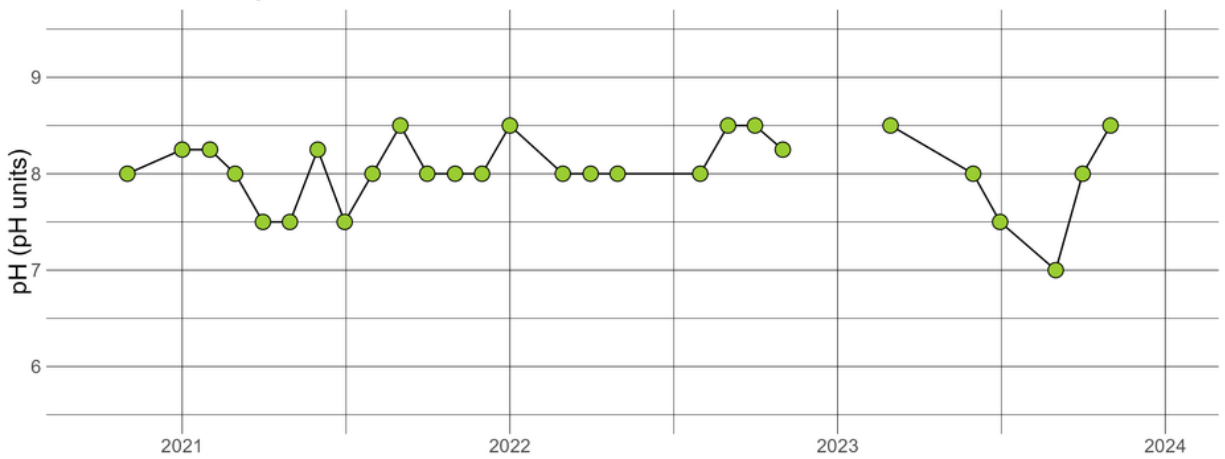
LEGRE18.3 - Water Temperature



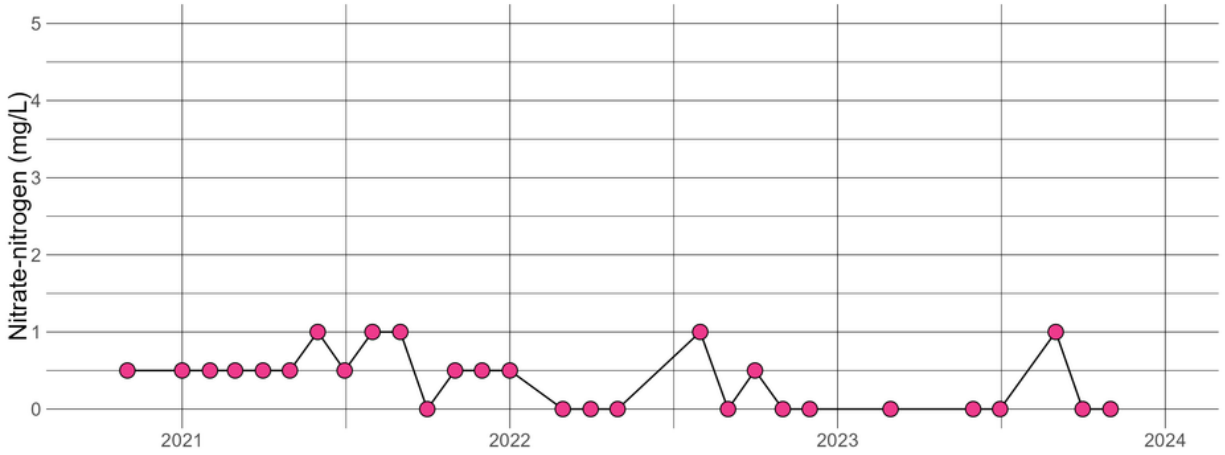
LEGRE18.3 - Conductivity



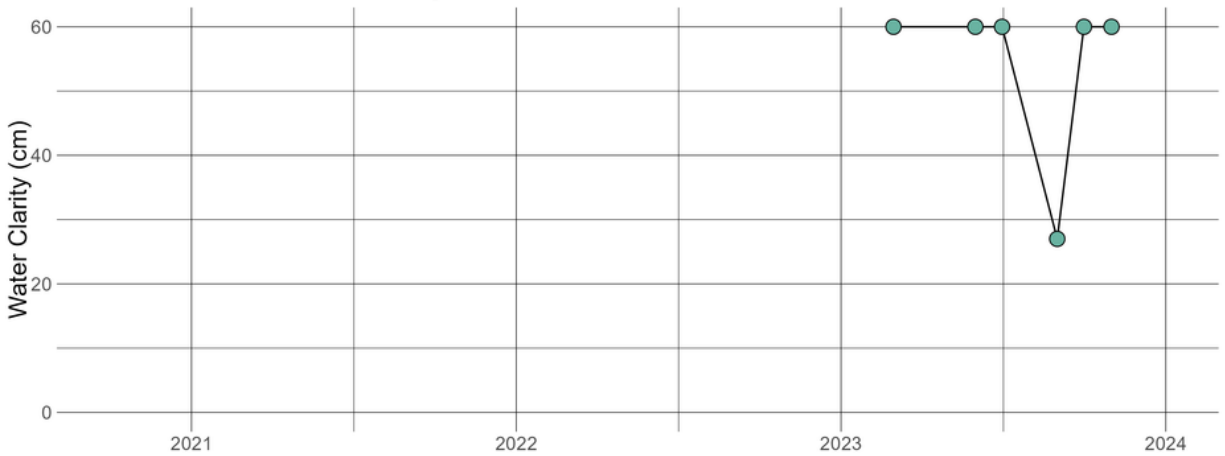
LEGRE18.3 - pH



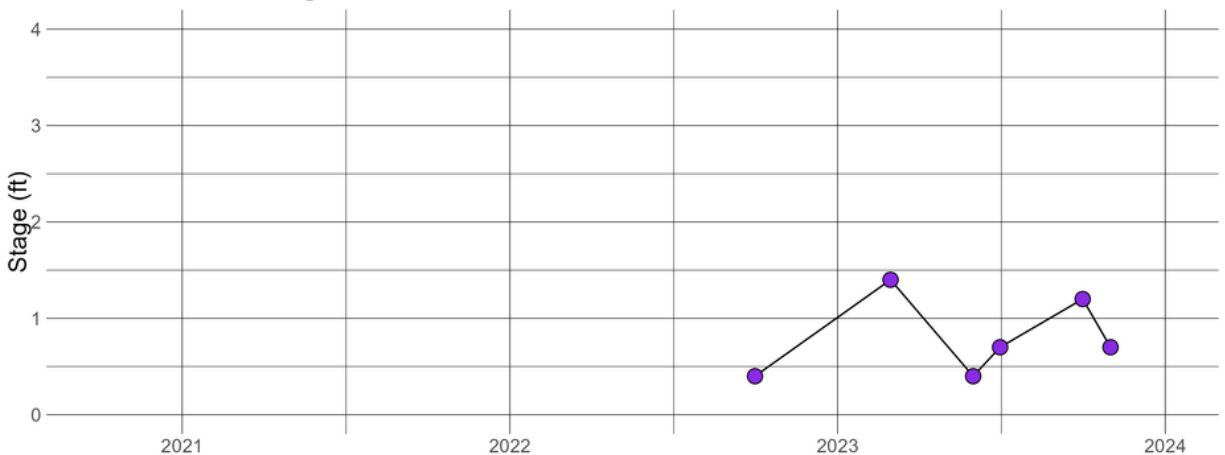
LEGCRE18.3 - Nitrate-nitrogen



LEGCRE18.3 - Water Clarity



LEGCRE18.3 - Stage



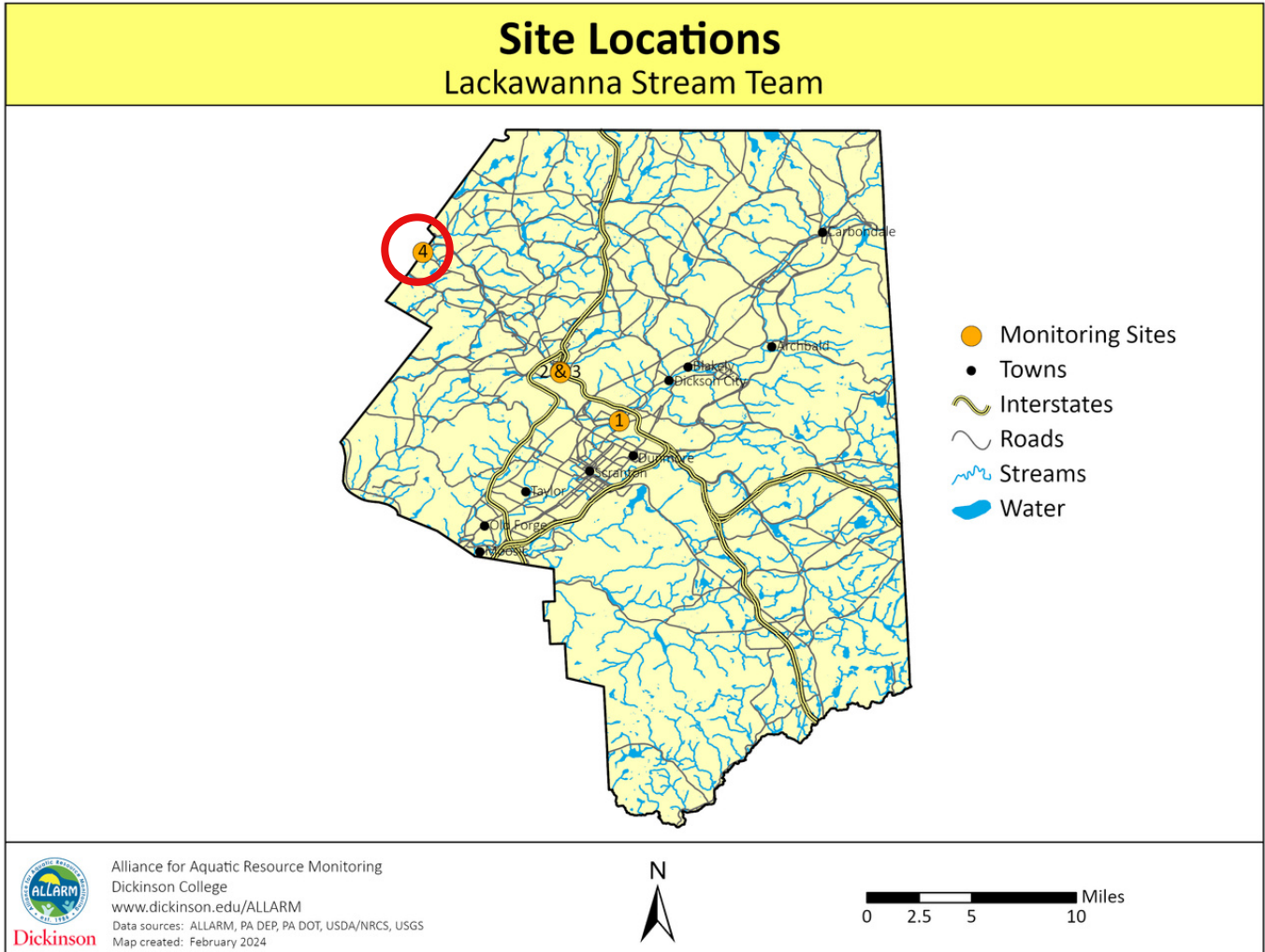
Raw Data and Summary Statistics

date	con	nitrate	ph	stage	clarity	watemp
Nov-20	649	0.5	8			8.2
Jan-21	696	0.5	8.25			3.2
Feb-21	992	0.5	8.25			2.2
Mar-21	406	0.5	8			7.6
Apr-21	528	0.5	7.5			11.9
May-21	466	0.5	7.5			14.1
Jun-21	767	1	8.25			21.3
Jul-21	356	0.5	7.5			23.2
Aug-21	536	1	8			21.3
Sep-21	399	1	8.5			19.1
Oct-21	487	0	8			11.4
Nov-21	360	0.5	8			7.7
Dec-21	492	0.5	8			3.2
Jan-22	686	0.5	8.5			0.2
Mar-22	439	0	8			7.1
Apr-22	360	0	8			13.3
May-22	398	0	8			16.6
Aug-22	475	1	8			21.6
Sep-22	546	0	8.5			18.4
Oct-22	564	0.5	8.5	0.4		12.6
Nov-22	423	0	8.25			3.8
Dec-22	1121	0	0			3.5
Mar-23	499	0	8.5	1.4	60	2.7
Jun-23	560	0	8	0.4	60	15.4
Jul-23	506	0	7.5	0.7	60	20
Sep-23	273	1	7		27	15.4
Oct-23	346	0	8	1.2	60	11
Nov-23	434	0	8.5	0.7	60	6.5

Variable	Min	Max	Range	Average	Median
Conductivity	273	1121	848	527	490
Nitrate-Nitrogen	0	1	1	0.38	0.5
pH	0	8.5	8.5	7.8	8
Stage	0.4	1.4	1	0.8	0.7
Water Clarity	27	60	33	54	60
Water Temp.	0.2	23	23	12	12

Tunkhannock Creek (TUNCRE13.8)

Monitor(s): Janet Crowther, Paul Davis & Lexie Kelly



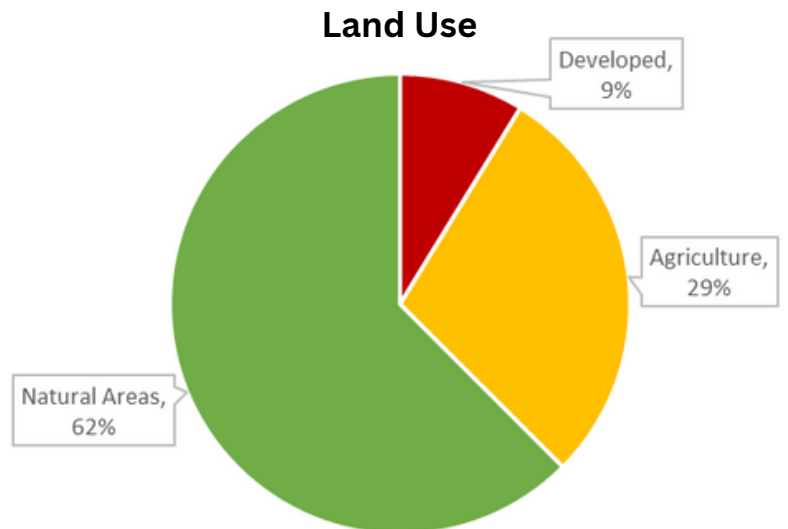
Site information:

Drains: 68 mi²

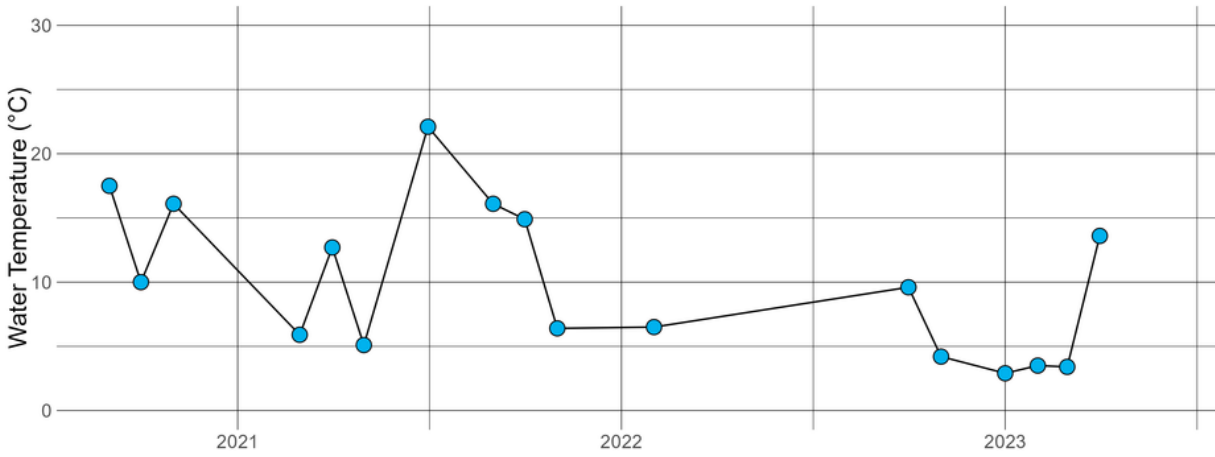
Impaired: No

Designation: Trout Stocking (TSF)

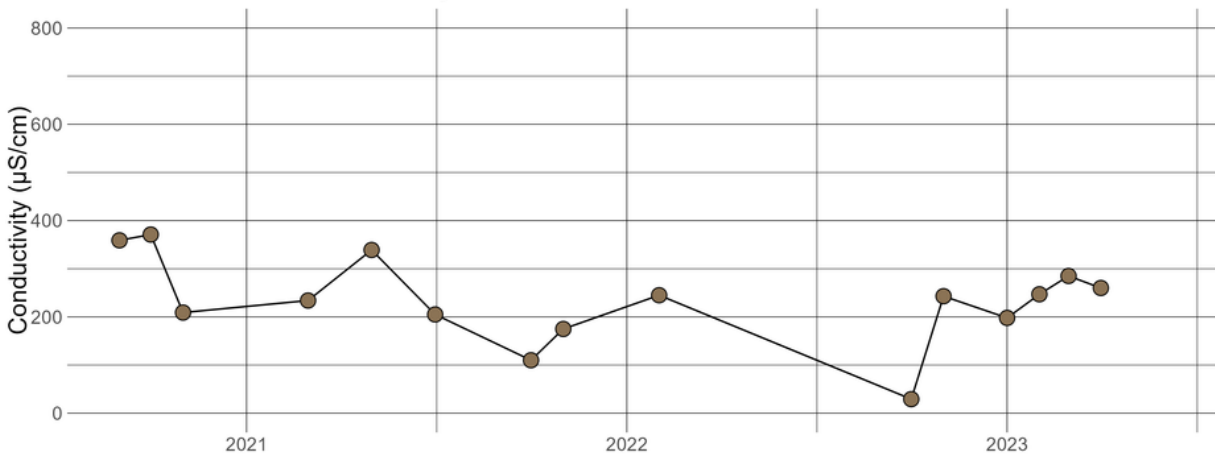
Geology: 100% Non-calcareous



TUNCRE13.8 - Water Temperature



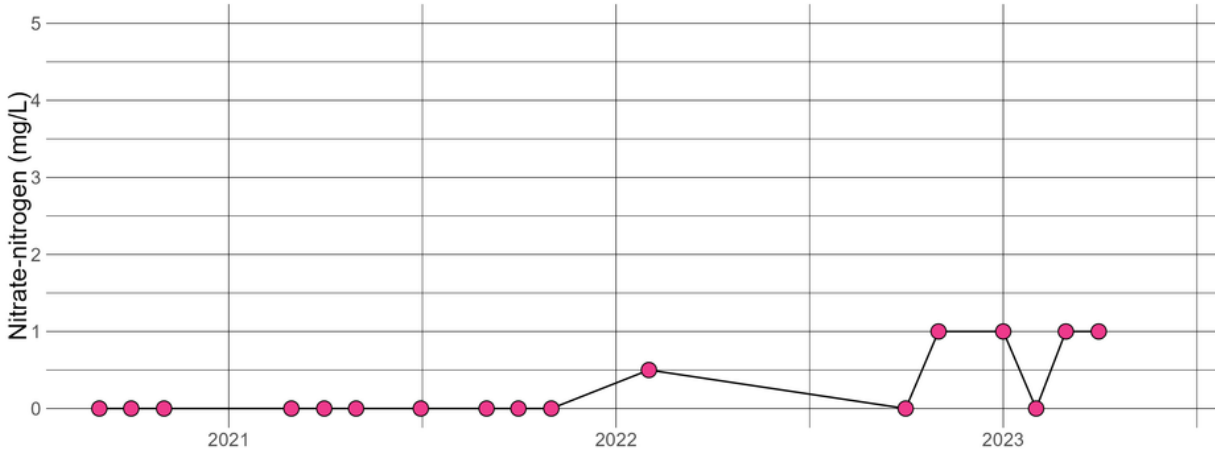
TUNCRE13.8 - Conductivity



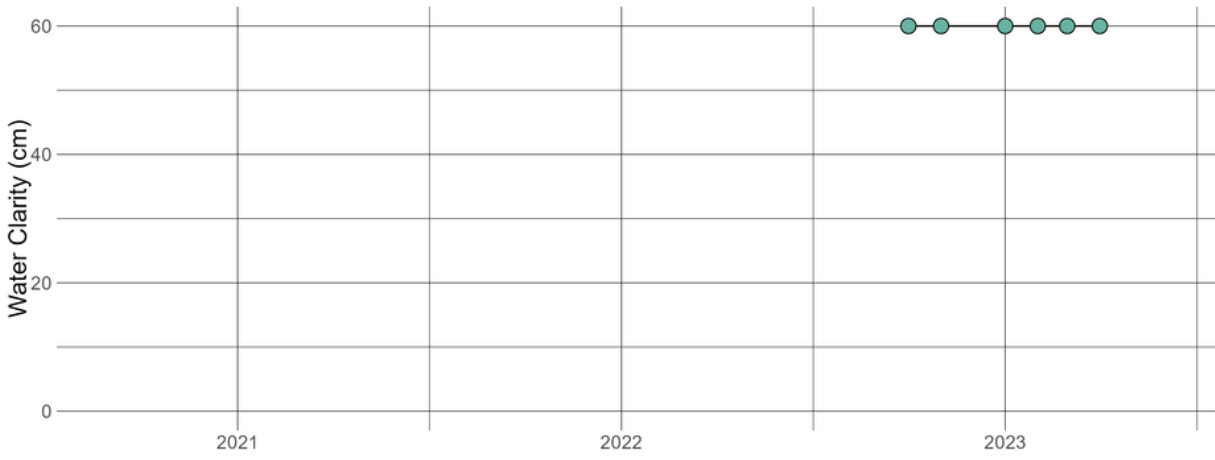
TUNCRE13.8 - pH



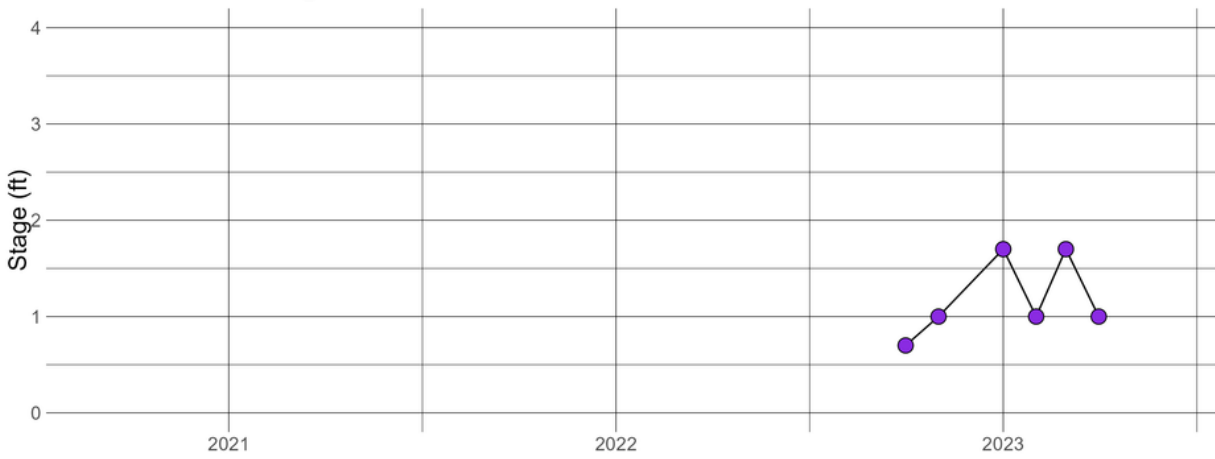
TUNCRE13.8 - Nitrate-nitrogen



TUNCRE13.8 - Water Clarity



TUNCRE13.8 - Stage

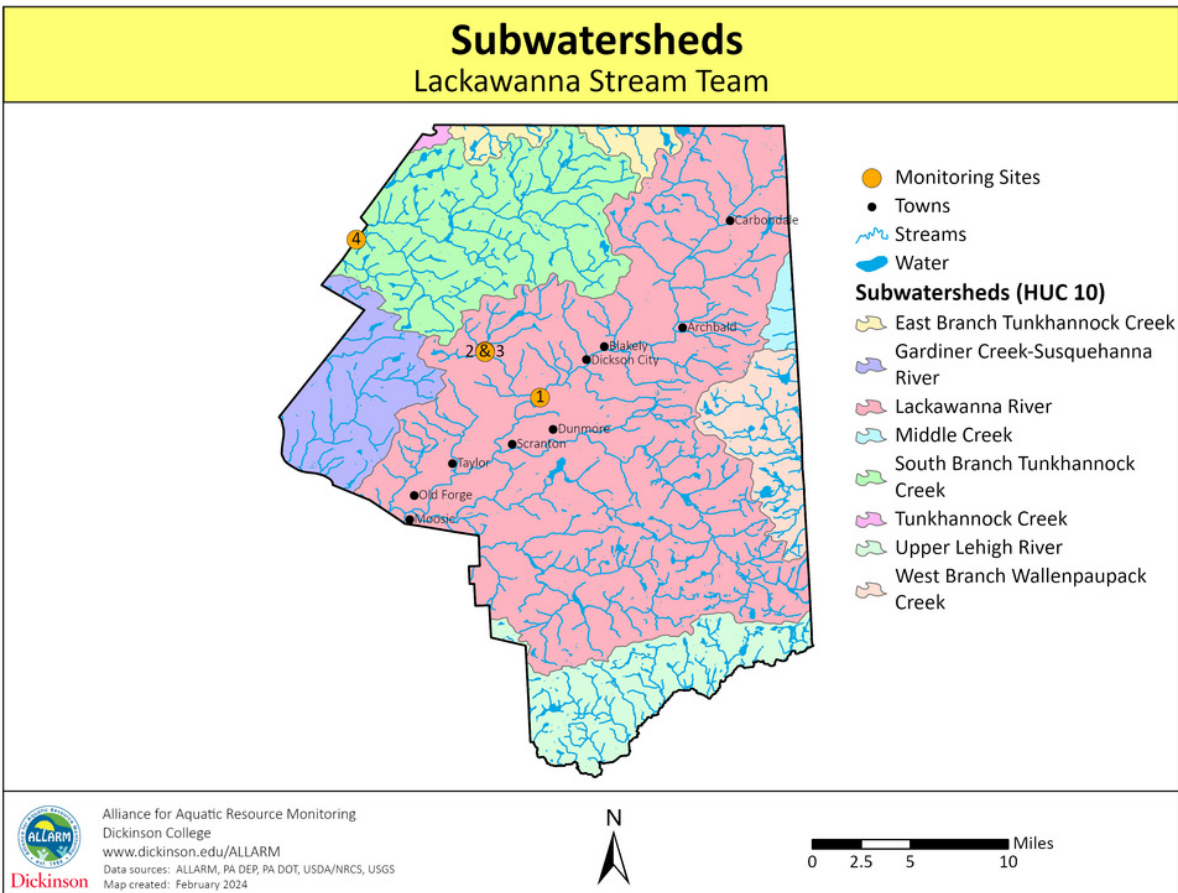
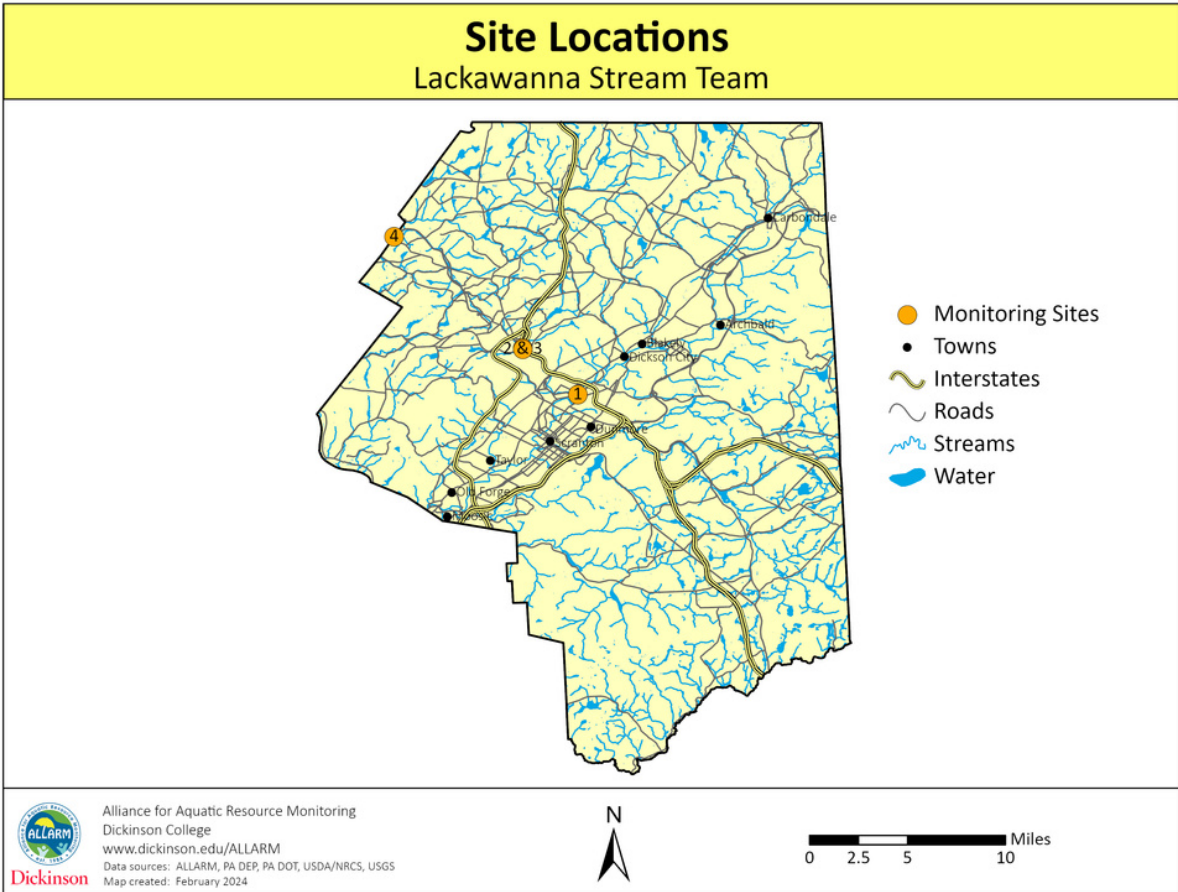


Raw Data and Summary Statistics

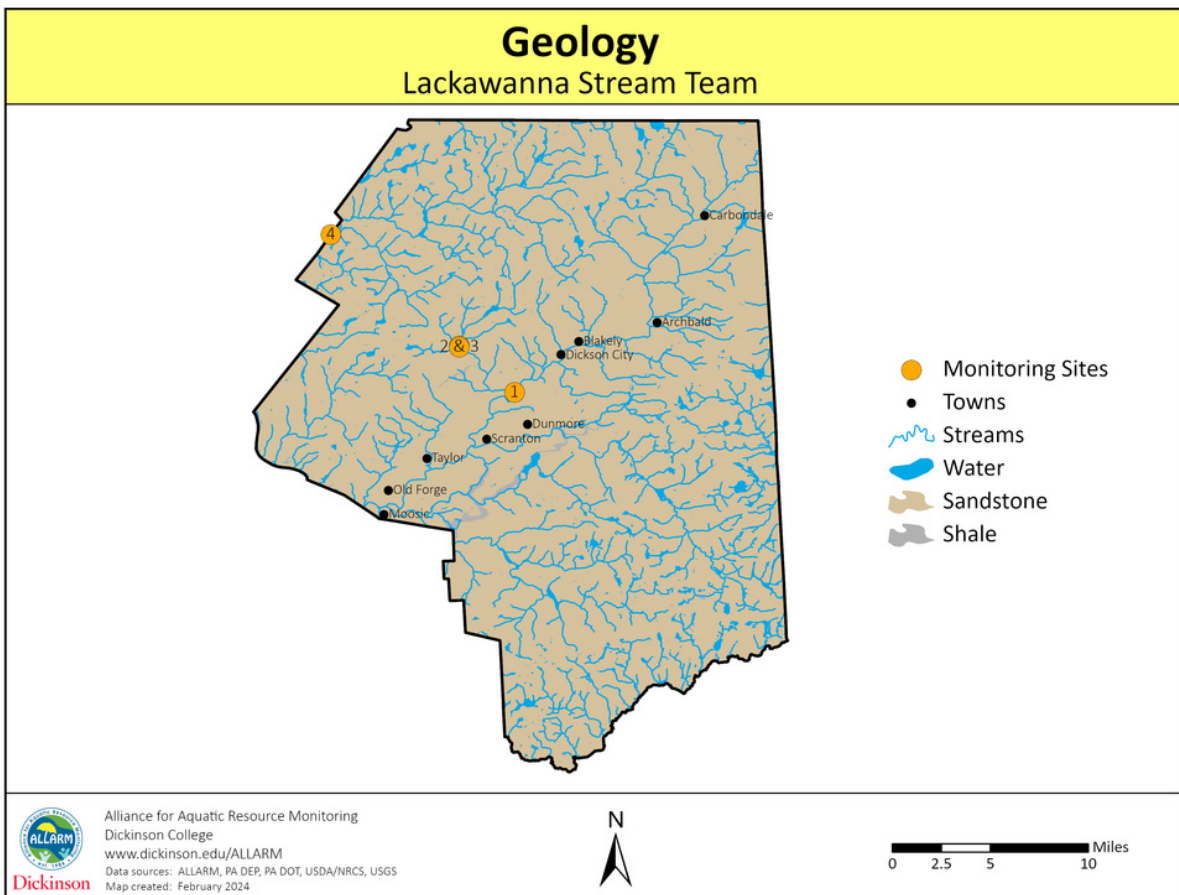
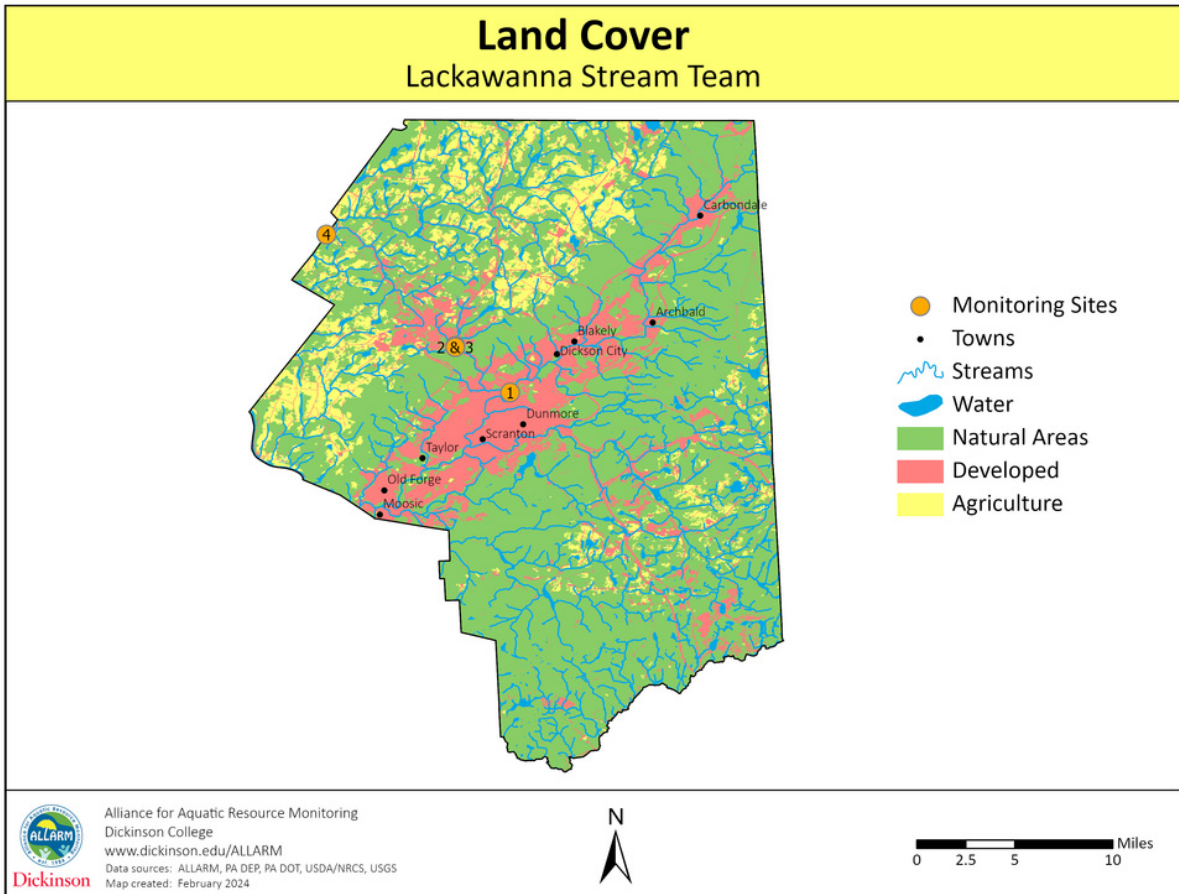
date	con	nitrate	ph	stage	clarity	watemp
Oct-22	79.4	0	7	1	60	8.9
Nov-22	68.1	0	7	0.8	60	5.1
Dec-22	90.8	0	7	0.8	60	1.6
Jan-23	64	0	7	0.8	60	5.2
Feb-23	79.2	0	7	0.4	60	2.2
Mar-23	73.5	0	7	0.6	43.6	3.5
Apr-23	81.8	0	7	0.8	60	11.8
May-23	75.7	7	8.25	2.5	60	17
Jun-23	109	0	7	0.2	60	16.2
Jul-23	110.7	0.5	7	0.2	60	20.3
Aug-23	46.6	0	7		15	19
Sep-23	80.5	0	7	0.4	60	18.6
Nov-23	82.5	0	7	1	60	2.2
Dec-23	56.7	0	7	0.4	60	1.4

Variable	Min	Max	Range	Average	Median
Conductivity	47	111	64	78	79
Nitrate-Nitrogen	0	7	7	0.54	0
pH	7	8.2	1.2	7.1	7
Stage	0.2	2.5	2.3	0.76	0.8
Water Clarity	15	60	45	56	60
Water Temp.	1.4	20	19	9.5	7.1

Supplemental Maps

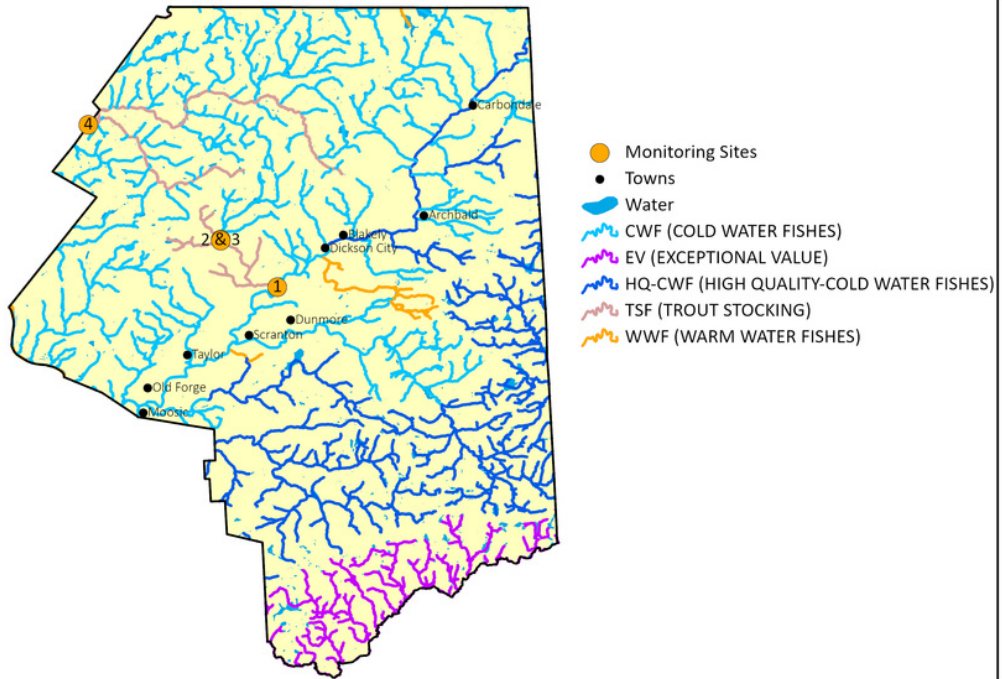


Supplemental Maps



Supplemental Maps

Stream Designated Uses Lackawanna Stream Team

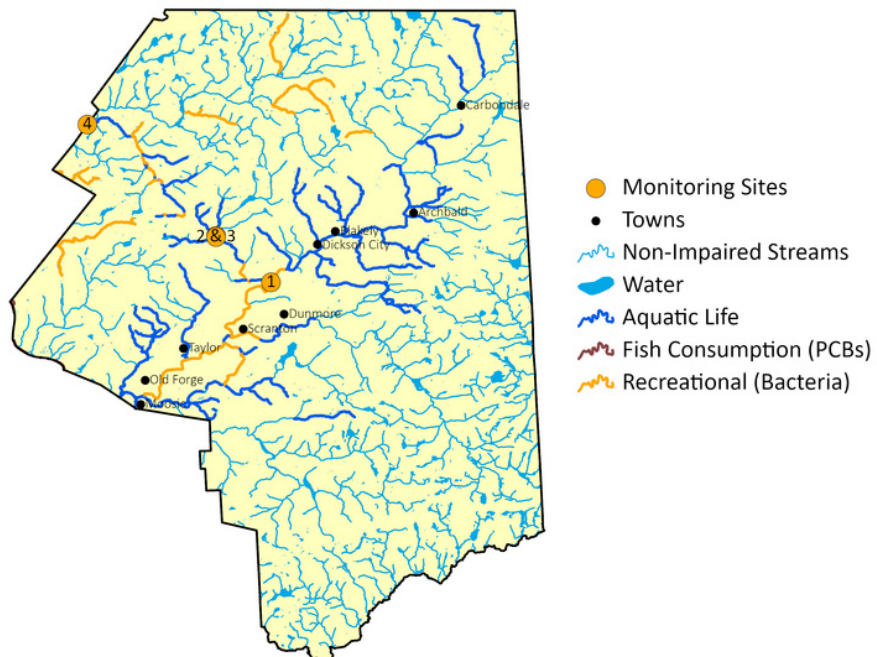


Alliance for Aquatic Resource Monitoring
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Data sources: ALLARM, PA DEP, PA DOT, USDA/NRCS, USGS
Map created: February 2024



0 2.5 5 10 Miles

Impaired Streams Lackawanna Stream Team



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



0 2.5 5 10 Miles