



Continuous Instream Monitoring in the Susquehanna River Basin

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Background

- Parameters monitored: pH, temperature, specific conductance, dissolved oxygen, and turbidity
- Data recorded at 15-minute intervals
- Data are transmitted to a public website at 2-4 hours intervals
- Long-term sites with 24/7 data collection



Background

- Initiated in 2010
 - Northern PA and southern NY
 - Lower basin sites installed: 2015-2019
- Purpose:
 - Monitor impacts from unconventional natural gas extraction
 - Expanded to determine baseline conditions in unmonitored or under-monitored streams
- 78 sites have been monitored
- 68 active sites



CONTINUOUS INSTREAM MONITORING STATIONS AND WATERSHEDS IN THE SUSQUEHANNA RIVER BASIN, 2022

MONITORED WATERSHED

Station Installed

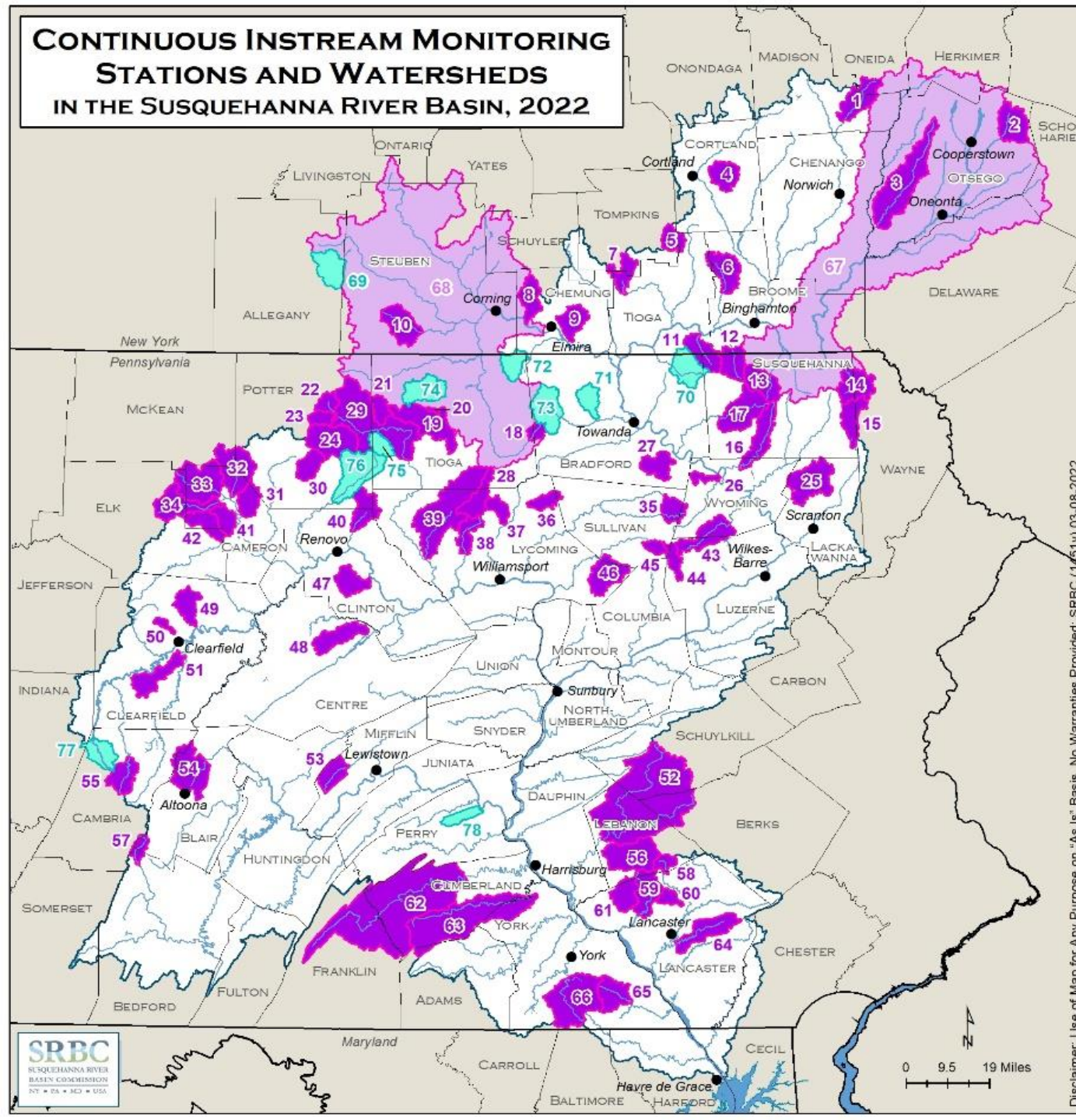
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|--|--------------------------------|
| 1. Sangerfield River | 34. West Creek |
| 2. Cherry Valley Creek | 35. Loyalsock Creek |
| 3. Butternut Creek | 36. Pleasant Stream |
| 4. Trout Brook | 37. Grays Run |
| 5. West Branch Owego Creek | 38. Larrys Creek |
| 6. Nanticoke Creek | 39. Little Pine Creek |
| 7. Catatunk Creek | 40. Young Womans Creek |
| 8. Sing Sing Creek | 41. Sterling Run |
| 9. Baldwin Creek | 42. Hicks Run |
| 10. Tuscarora Creek | 43. Bowman Creek |
| 11. Apalachin Creek | 44. Kitchen Creek |
| 12. Choconut Creek | 45. East Branch Fishing Creek |
| 13. Snake Creek | 46. Little Muncy Creek |
| 14. Starrucca Creek | 47. Baker Run |
| 15. Lackawanna River | 48. Marsh Creek |
| 16. Meshoppen Creek | 49. Trout Run |
| 17. East Branch Wyalusing Creek | 50. Moose Run |
| 18. Tioga River | 51. Little Clearfield Creek |
| 19. Marsh Creek | 52. Swatara Creek |
| 20. Baldwin Run | 53. Kishacoquillas Creek |
| 21. Long Run | 54. Little Juniata River |
| 22. Upper Pine Creek | 55. Chest Creek |
| 23. Ninemile Creek | 56. Quittapahilla Creek |
| 24. West Branch Pine Creek | 57. Bobs Creek |
| 25. South Branch Tunkhannock Creek | 58. Hammer Creek |
| 26. Little Mehoopany Creek | 59. Chiques Creek |
| 27. Sugar Run | 60. Litz Run |
| 28. Blockhouse Creek | 61. Little Chiques Creek |
| 29. Pine Creek | 62. Conodoguinet Creek |
| 30. East Fork First Fork Sinnemahoning Creek | 63. Yellow Breeches Creek |
| 31. Hunts Run | 64. Mill Creek |
| 32. Portage Creek | 65. North Branch Muddy Creek |
| 33. Driftwood Branch | 66. South Branch Codorus Creek |

Station Installed on Large River

- | | |
|-----------------------|-------------------|
| 67. Susquehanna River | 68. Chemung River |
|-----------------------|-------------------|

Historical Station

- | | |
|-----------------------|-----------------------------------|
| 69. Canacadea Creek | 74. Crooked Creek |
| 70. Wappasening Creek | 75. Elk Run |
| 71. Tomjack Creek | 76. Kettle Creek |
| 72. Hammond Creek | 77. West Branch Susquehanna River |
| 73. Sugar Creek | 78. Little Buffalo Creek |



Disclaimer: Use of Map for Any Purpose on "As Is" Basis. No Warranties Provided; SRBC (1/5/11) 03-08-2022

Additional Sampling

- Nutrients, metals, cations/anions – collected quarterly/annually
- Discharge measurements
- Macroinvertebrates – collected at all sites; most have 4+ samples
- Fish – survey conducted at each site



Data Usage

- Downstream water suppliers – treatment process, intake shutdown
- Protection of natural areas/resources
 - Natural gas extraction
 - Pipelines
 - Construction
- Impacts from road salt
- Water quality trends over time
- Climate change



CIM Story Map

[CIM Story Map](#)



For additional questions or data,
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