

**Table 2. Data Collection Sites and Their Drainage Areas**

<b>USGS ID Number</b>	<b>Original Sites (Group A)</b>	<b>Subbasin</b>	<b>Short Name</b>	<b>Drainage Area (Sq Mi)</b>
01531500	Susquehanna River at Towanda, Pa.	Middle Susquehanna	Towanda	7,797
01540500	Susquehanna River at Danville, Pa.	Middle Susquehanna	Danville	11,220
01553500	West Branch Susquehanna River at Lewisburg, Pa.	W Branch Susquehanna	Lewisburg	6,847
01567000	Juniata River at Newport, Pa.	Juniata	Newport	3,354
01576000	Susquehanna River at Marietta, Pa.	Lower Susquehanna	Marietta	25,990
01576754	Conestoga River at Conestoga, Pa.	Lower Susquehanna	Conestoga	470
<b>Enhanced Sites (Group B)</b>				
01502500	Unadilla River at Rockdale, N.Y.	Upper Susquehanna	Rockdale	520
01503000	Susquehanna River at Conklin, N.Y.	Upper Susquehanna	Conklin	2,232
01515000	Susquehanna River at Smithboro, N.Y.	Upper Susquehanna	Smithboro	4,631
01529500	Cohocton River at Campbell, N.Y.	Chemung	Campbell	470
01531000	Chemung River at Chemung, N.Y.	Chemung	Chemung	2,506
01536500	Susquehanna River near Wilkes-Barre, Pa.	Middle Susquehanna	Wilkes-Barre	9,960
01542500	West Branch Susquehanna River near Karthaus, Pa.	W Branch Susquehanna	Karthaus	1,462
01548085	Bald Eagle Creek near Castanea, Pa.	W Branch Susquehanna	Castanea	420
01549760	West Branch Susquehanna River near Jersey Shore, Pa.	W Branch Susquehanna	Jersey Shore	5,225
01555000	Penns Creek at Penns Creek, Pa.	Lower Susquehanna	Penns Creek	301
01562000	Raystown Branch Juniata River at Saxton, Pa.	Juniata	Saxton	756
01568000	Shermans Creek near Dromgold, Pa.	Lower Susquehanna	Dromgold	200
01570000	Conodoguinet Creek near Hogestown, Pa.	Lower Susquehanna	Hogestown	470
01573560	Swatara Creek near Hershey, Pa.	Lower Susquehanna	Hershey	483
01574000	West Conewago Creek near Manchester, Pa.	Lower Susquehanna	Manchester	510
01576787	Pequea Creek near Martic Forge, Pa.	Lower Susquehanna	Pequea	155
01578475	Octoraro Creek at Richardsmere, Md.	Lower Susquehanna	Richardsmere	177

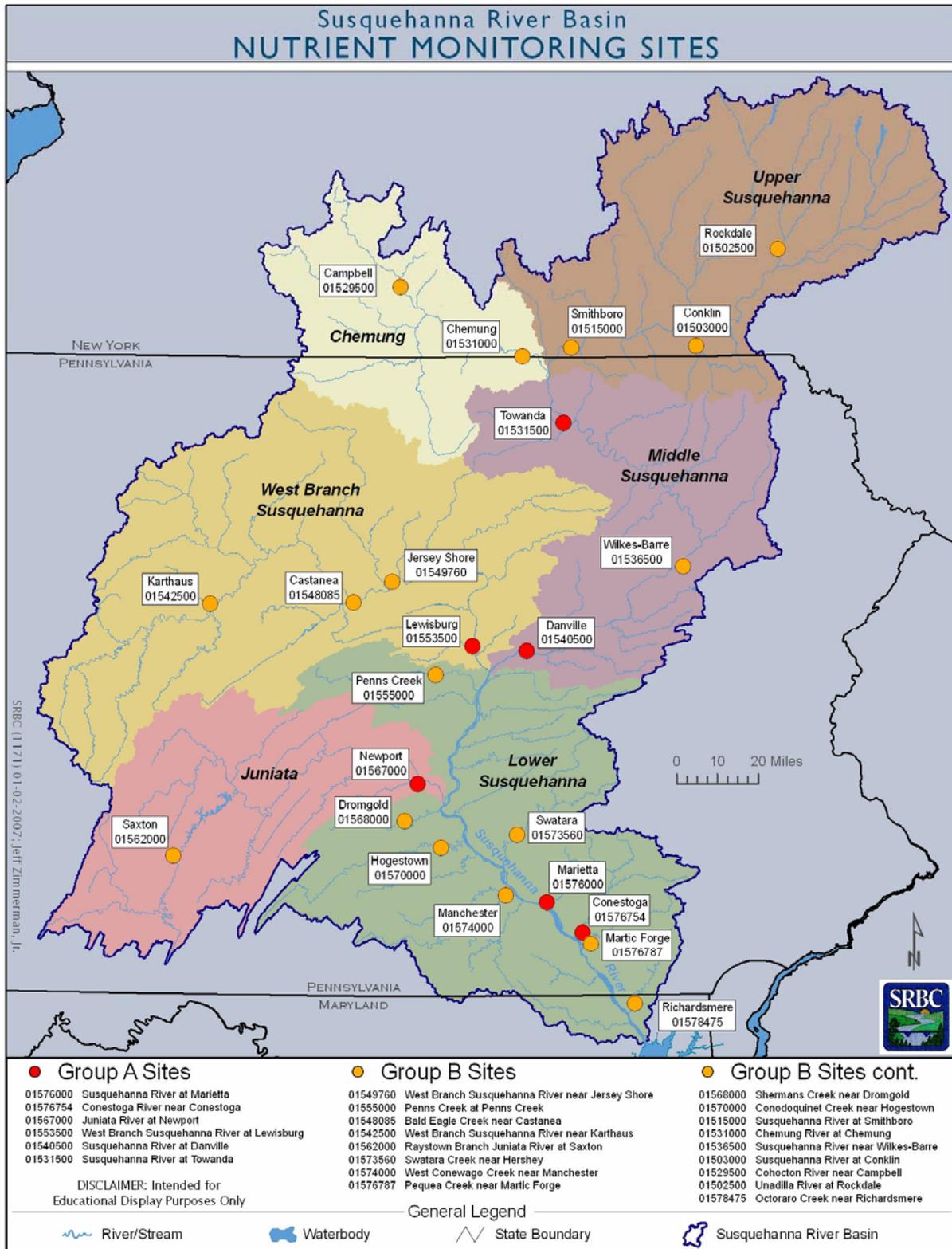
**SAMPLE COLLECTION AND ANALYSIS**

Samples were collected to measure nutrient and SS concentrations during various flows in 2009. For Group A sites, two samples were collected per month: one near the twelfth of the month (fixed date sample) and one during monthly base flow conditions. Additionally, at least four high flow events were sampled, targeting one per season. When possible, a second high flow event was sampled after spring planting in the basin. During high flow sampling events, samples were collected daily during the rise and fall of the hydrograph. The goal was to gather a minimum of three samples on the rise and three samples on the fall, with one sample as close to peak flow as possible.

For Group B sites, fixed date monthly samples were collected during the middle of each month during 2009. Additionally, two storm samples were collected per quarter at each site. All samples were collected by hand with USGS depth integrating samplers. At each site

between three and 10 depth integrated verticals were collected across the water column and then composited to obtain a representative sample of the entire waterbody.

Whole water samples were collected and analyzed for nitrogen and phosphorus species, TOC, total suspended solids (TSS), and SS. For Group B sites, SS samples were only collected during storm events. Additionally, filtered samples were collected to analyze for dissolved nitrogen (DN) and DP species. All Pennsylvania samples were delivered to the PADEP Laboratory in Harrisburg. New York samples were sent to Columbia Analytical Services in Rochester, N.Y. SS samples for Group A sites were completed at SRBC, while samples for Group B sites were analyzed at the USGS sediment laboratory in Louisville, Kentucky. Additionally, one of each of the two storm samples per storm was submitted to the USGS sediment laboratory for analysis of sand/fine content. The parameters and laboratory methods used are listed in Table 3.



**Figure 2. Locations of Sampling Sites Within the Susquehanna River Basin**