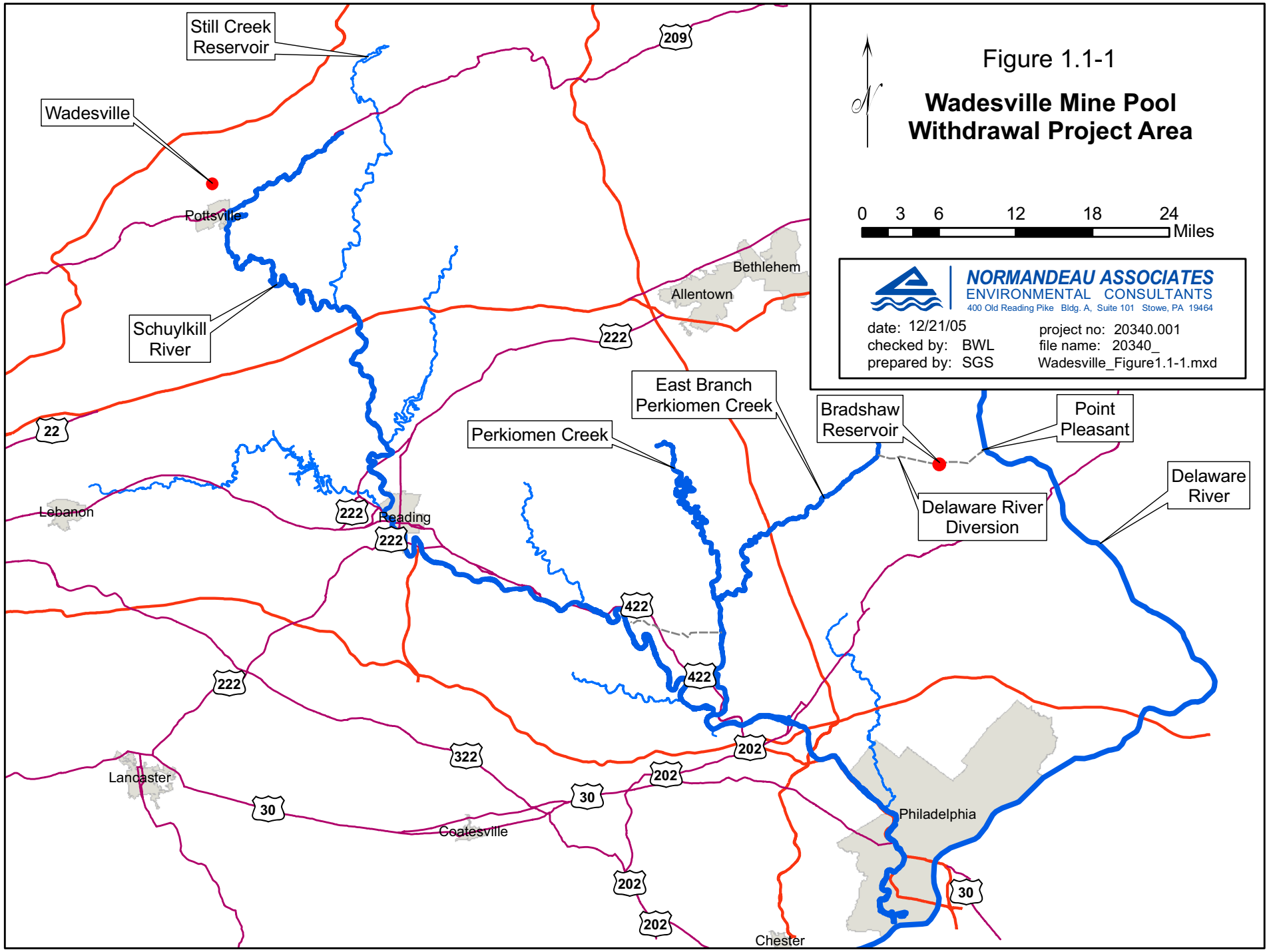


Figure 1.1-1

Wadesville Mine Pool Withdrawal Project Area

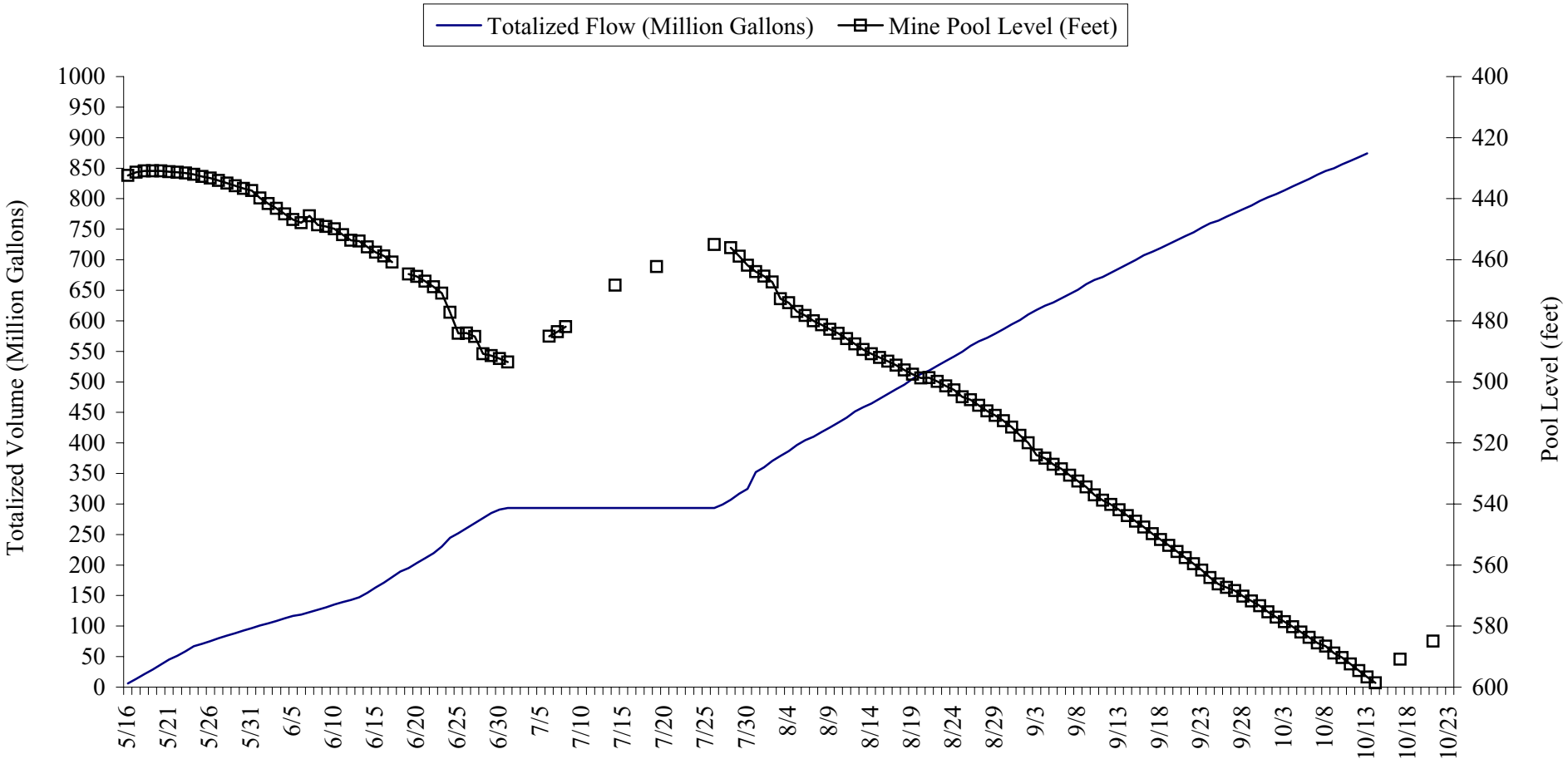


Figure 4.1-1. Totalized daily volume of water pumped from the Wadesville Pool and pool water level, May-October 2005

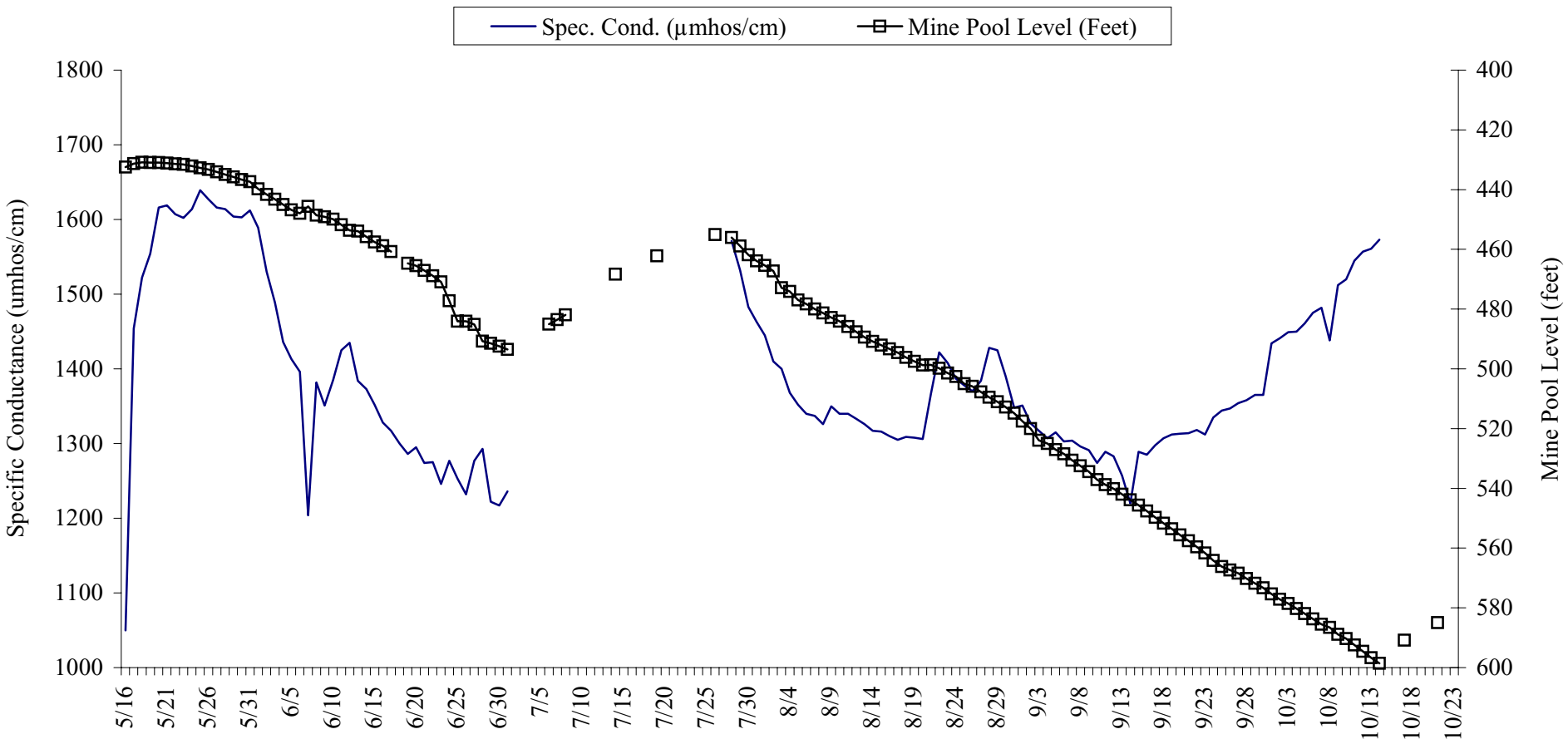


Figure 4.1-2. Specific conductance measured in water pumped from the Wadesville Pool and mine pool water level, May-October 2005[1].

[1] July 2 through July 26 release suspended, no data taken

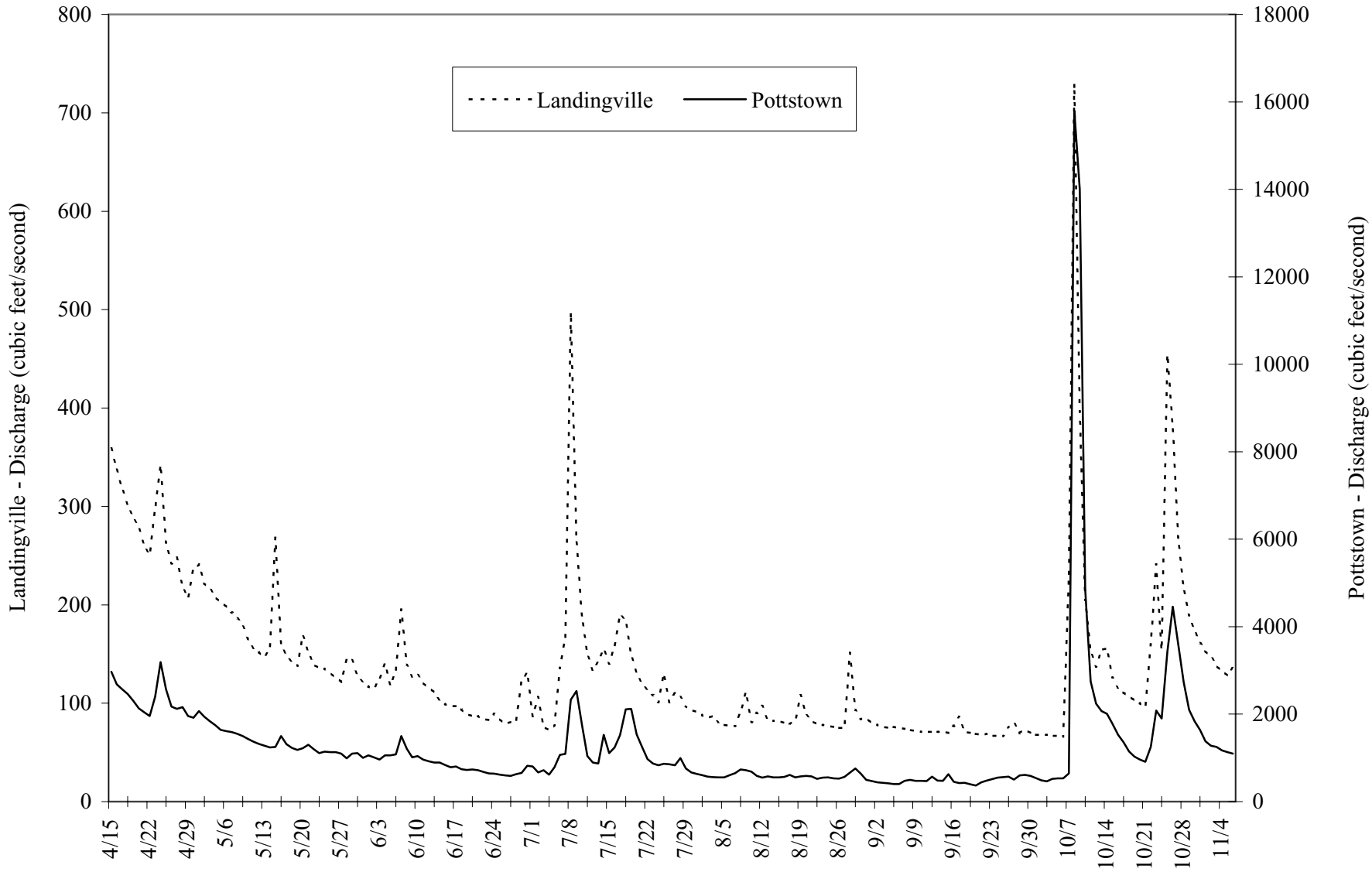
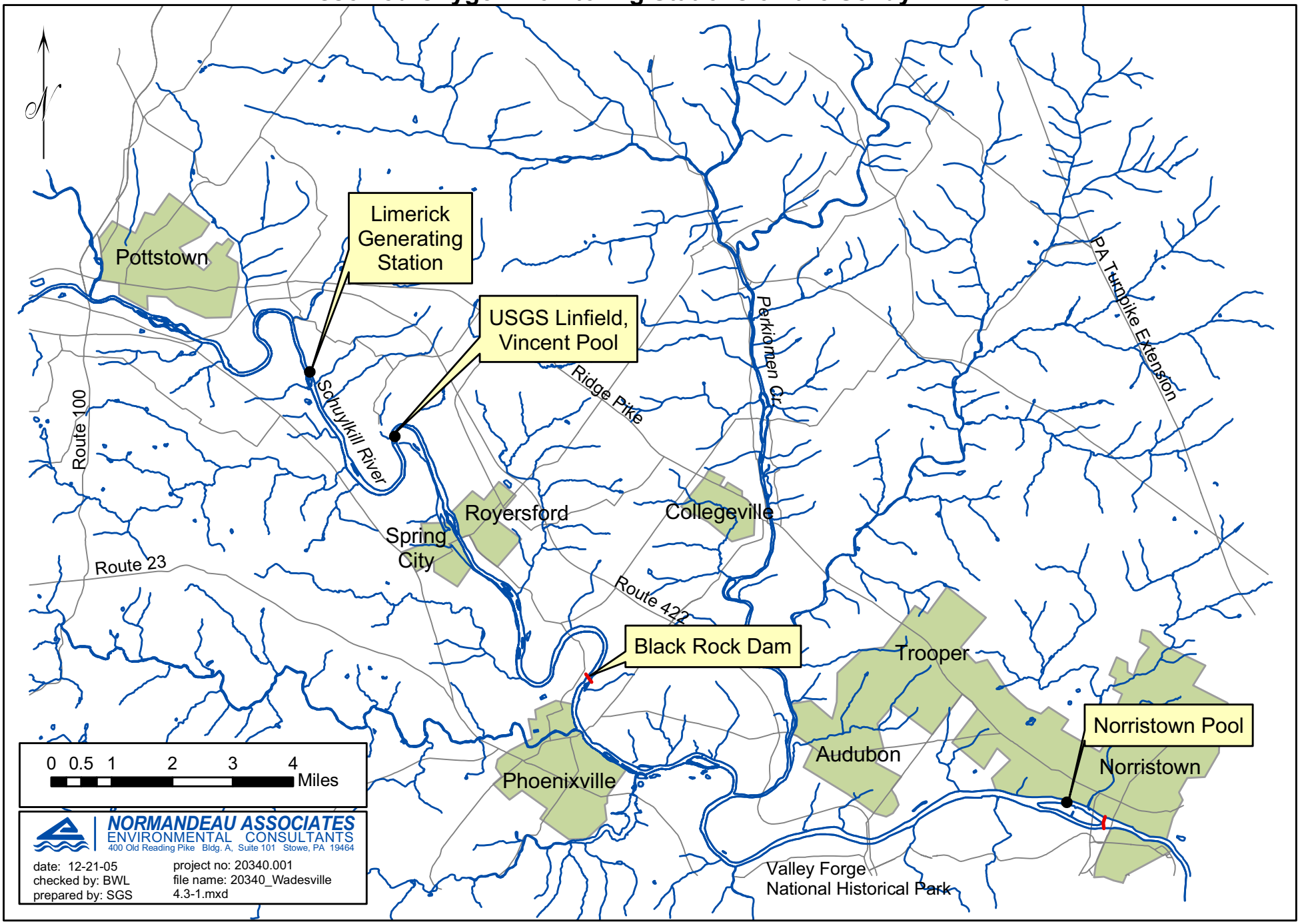


Figure 4.2-1. Daily mean discharge measured in the Schuylkill River at Landingville and Pottstown, April-November 2005.

Figure 4.3-1.

Dissolved Oxygen Monitoring Stations on the Schuylkill River.



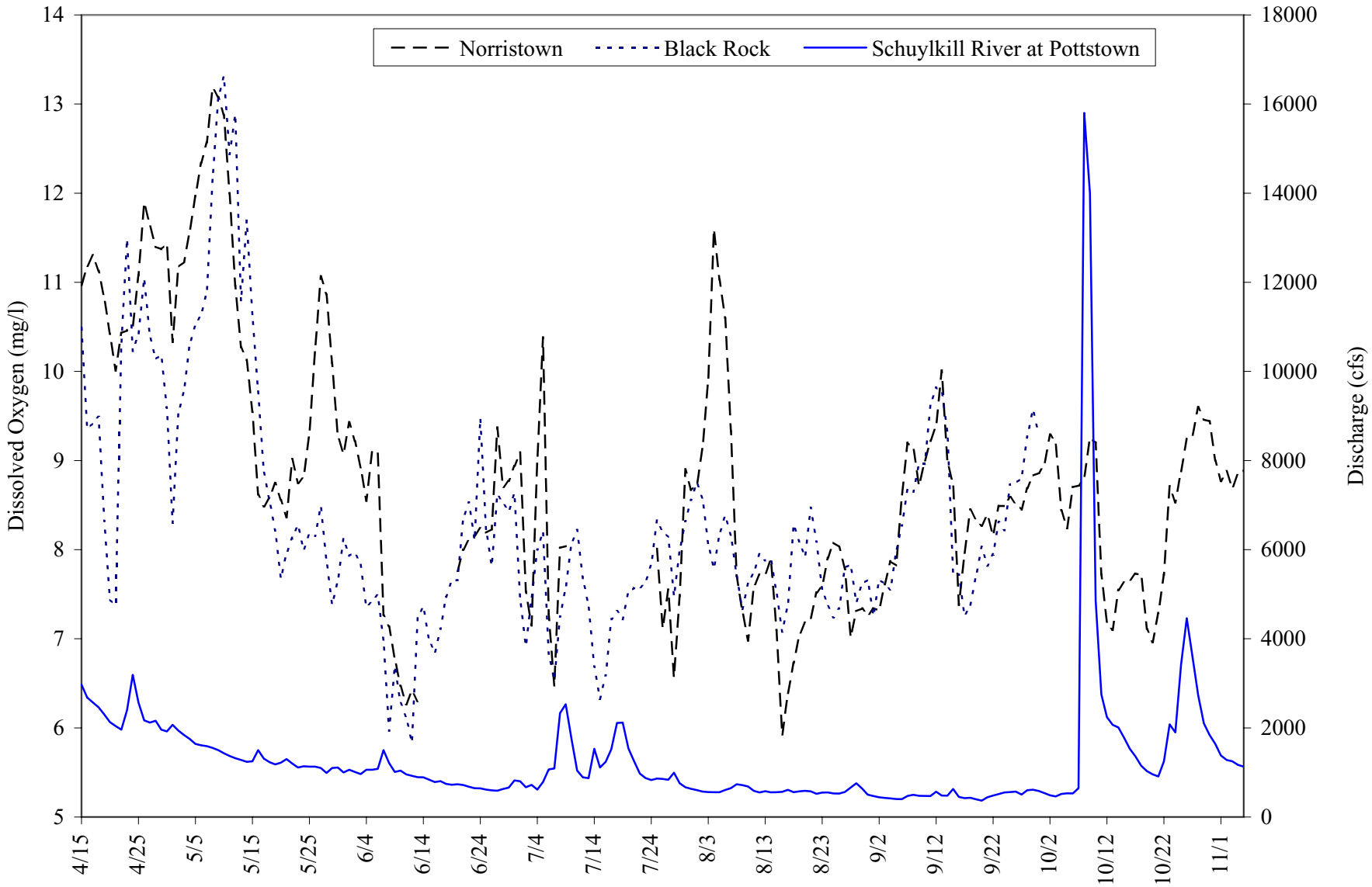


Figure 4.3-2. Mean daily dissolved oxygen measured in the Schuylkill River at Black Rock and Norristown stations and mean daily discharge measured at Pottstown, April-November 2005.

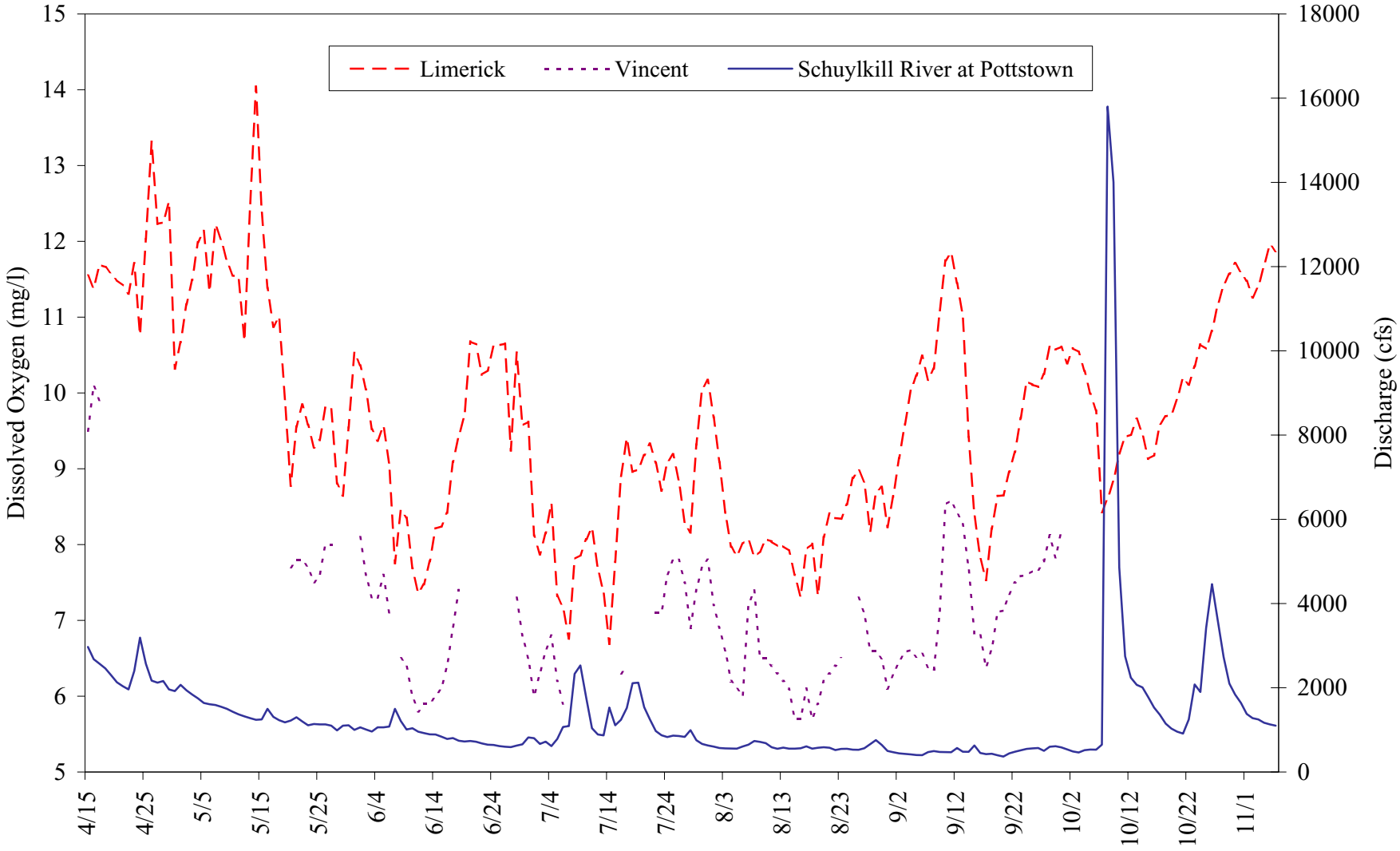


Figure 4.3-3. Mean daily dissolved oxygen measured at Limerick and Vincent stations in the Schuylkill River and mean daily discharge measured at Pottstown, April-November 2005.

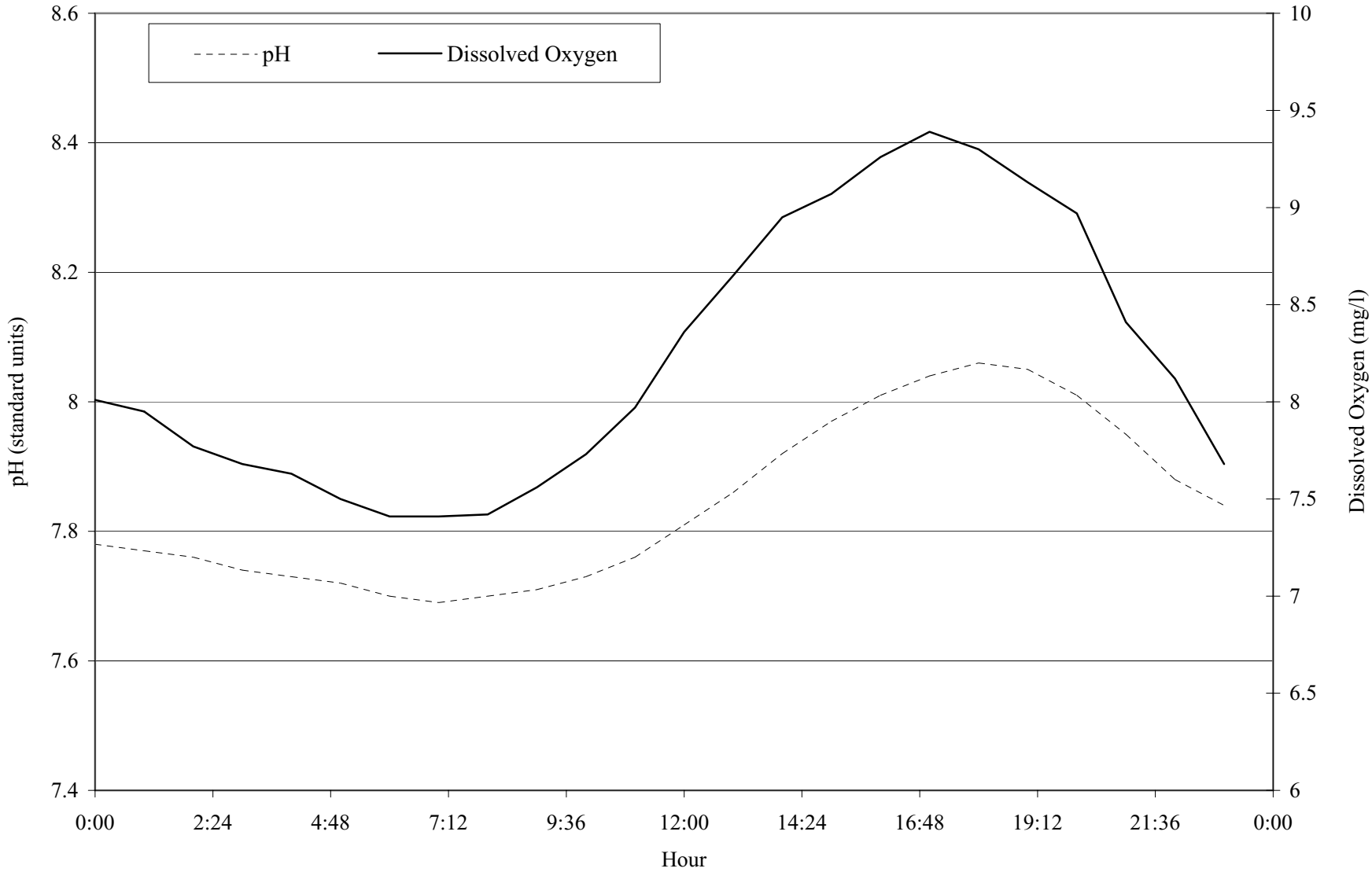
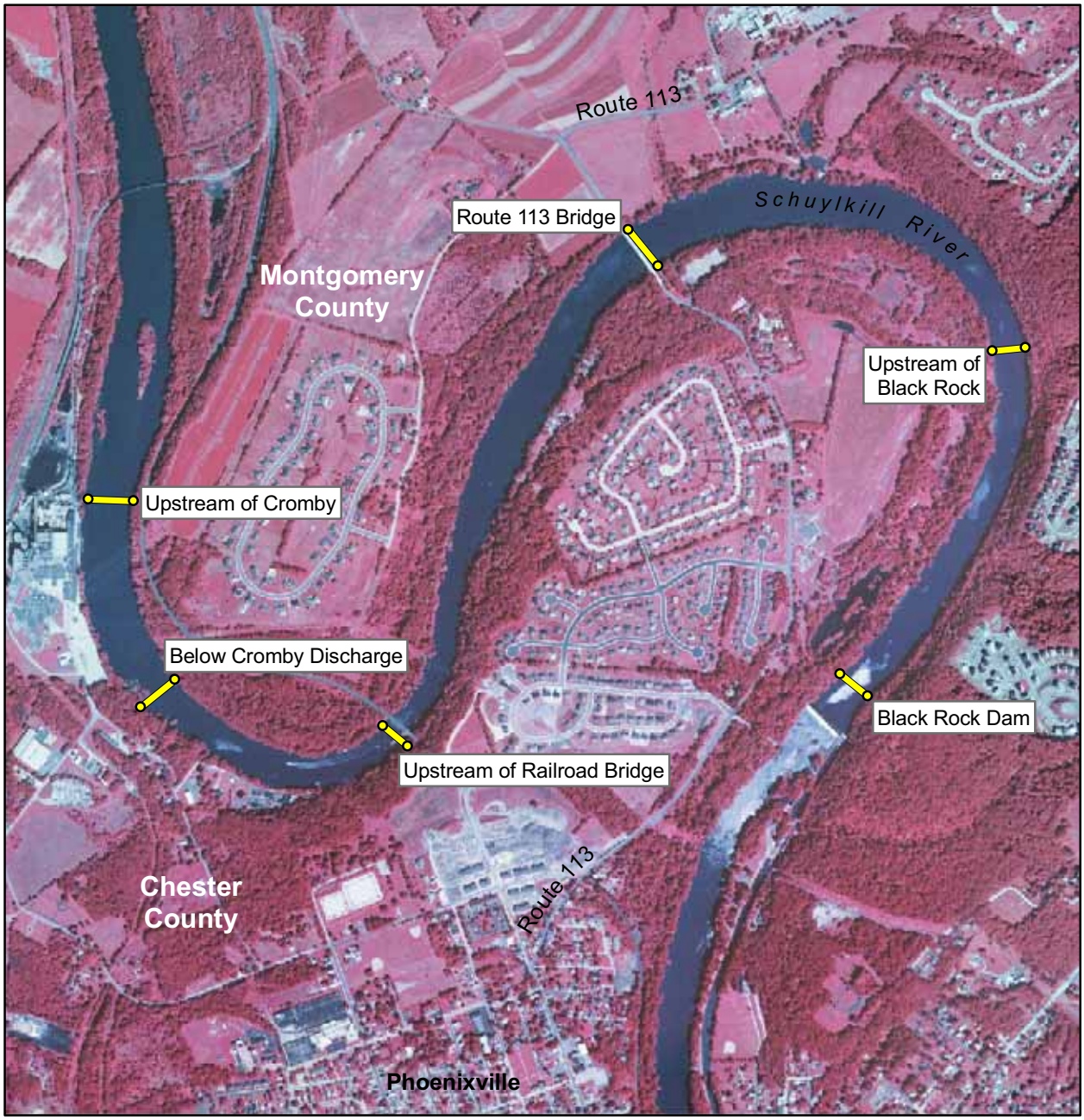


Figure 4.3-4. Example of diel fluctuation in pH and dissolved oxygen measured in the Schuylkill River at the Limerick intake on July 11, 2005.

Figure 4.3-5. Location of boat survey dissolved oxygen transects within Black Rock pool.



Source: NAIP mosaic of Chester County, PA 2004 USDA-FSA Aerial Photography Field Office

Legend

- GPS location (corresponding to coordinates in Table 4.3-4)
- Transect

0 375 750 1,500 2,250 3,000 Feet

N

NORMANDEAU ASSOCIATES
ENVIRONMENTAL CONSULTANTS
400 Old Reading Pike Bldg. A, Suite 101 Stowe, PA 19464

date: 11/30/05
checked by: BJS
prepared by: SGS

project no: 20340.001
file name: BlackRock_transects.mxd

Figure 4.3-6. Location of boat survey dissolved oxygen transects within Norristown pool.

Source: NAIP mosaic of Chester County, PA 2004 USDA-FSA Aerial Photography Field Office

Legend

- GPS location (corresponding to coordinates in Table 4.3-5)
- Transect

0 375 750 1,500 2,250 3,000

Feet

N

NORMANDEAU ASSOCIATES
ENVIRONMENTAL CONSULTANTS
400 Old Reading Pike Bldg. A, Suite 101 Stowe, PA 19464

date: 11/30/05
checked by: BJS
prepared by: SGS

project no: 20340.001
file name: Norristown_transects.mxd

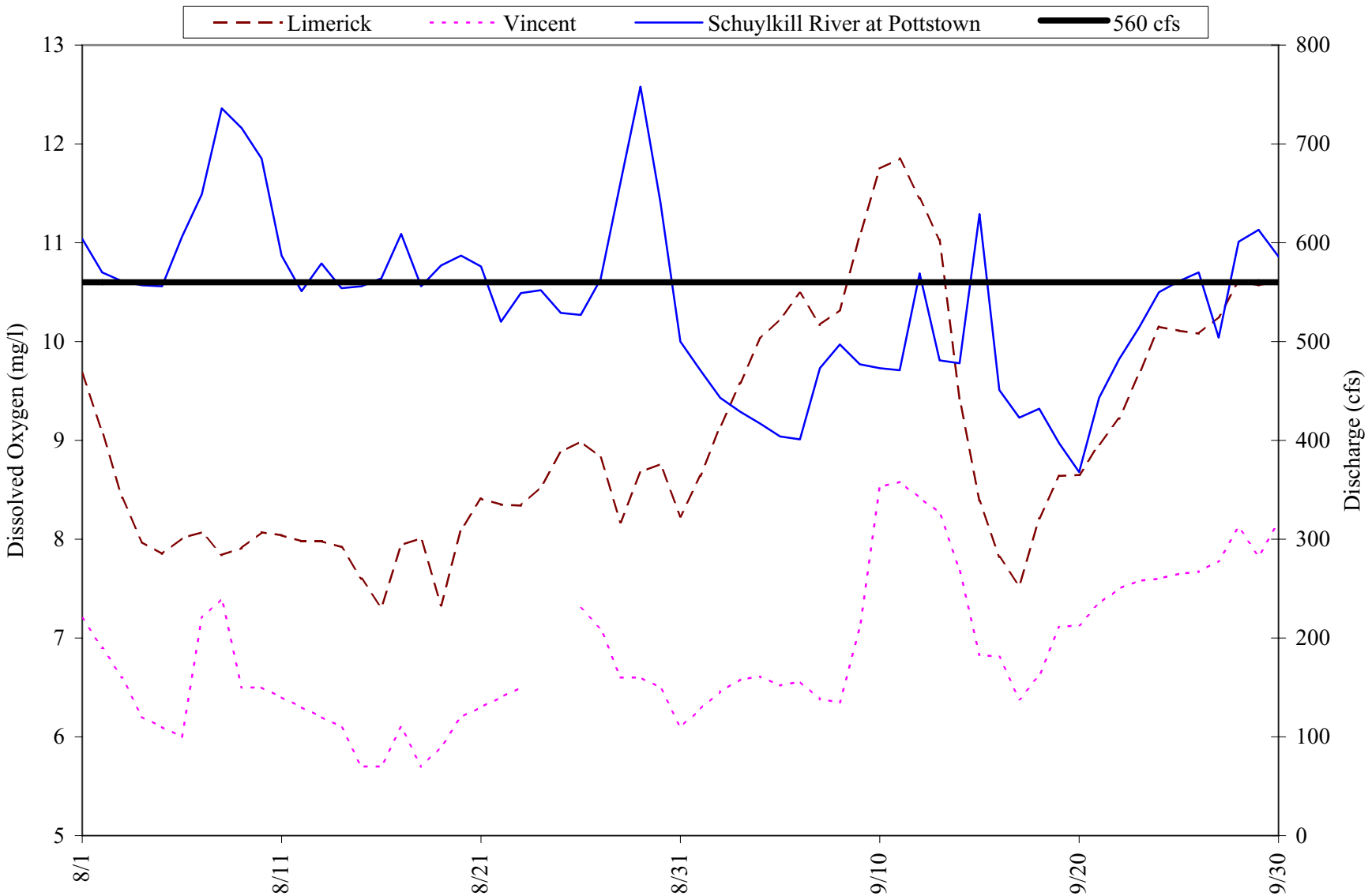


Figure 4.3-7. Mean daily dissolved oxygen in the Schuylkill River at Limerick and Vincent stations and mean daily discharge at Pottstown, August-September 2005.

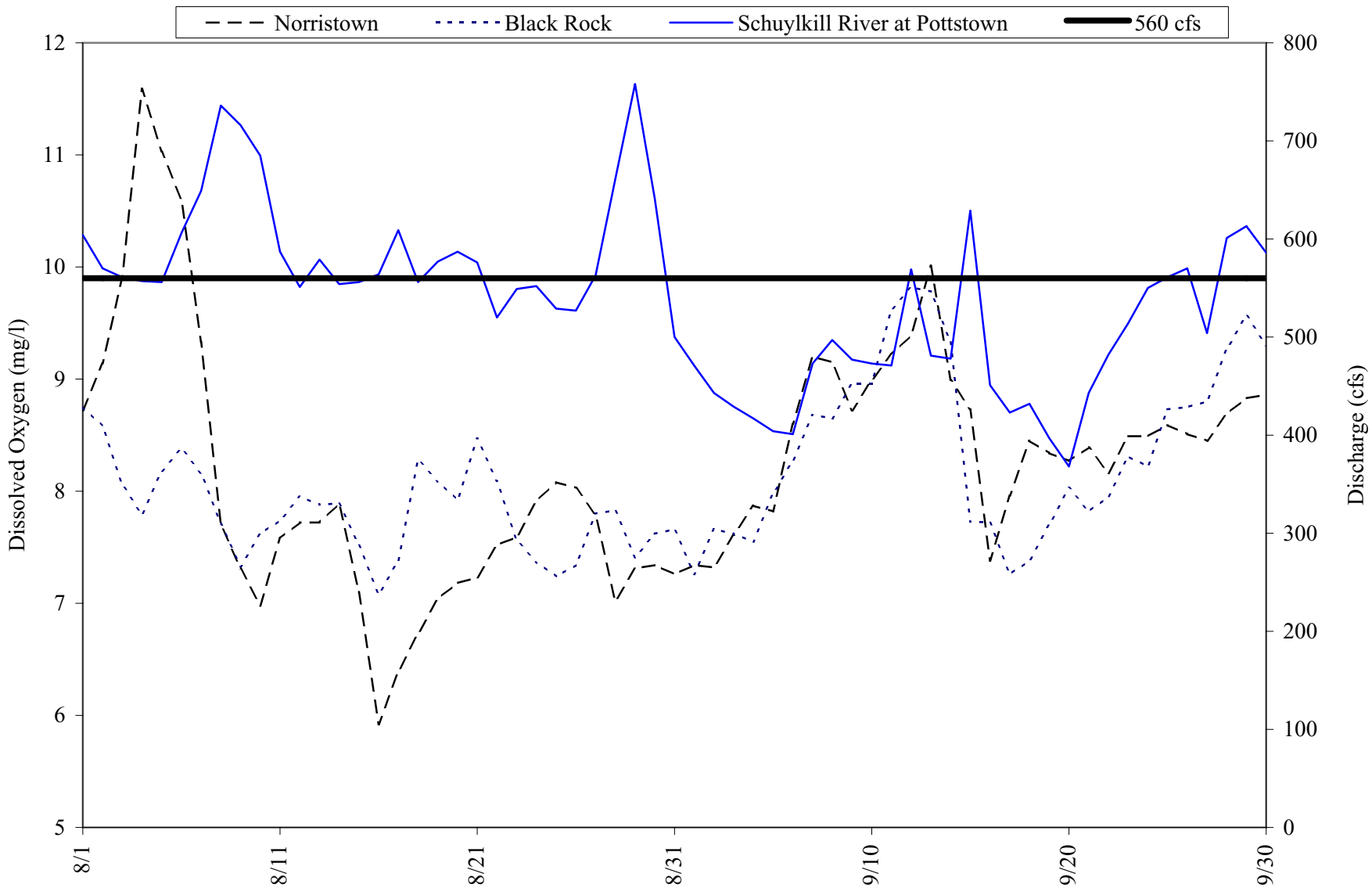


Figure 4.3-8. Mean daily dissolved oxygen in the Schuylkill River at Black Rock and Norristown stations and mean daily discharge at Pottstown, August-September 2005.

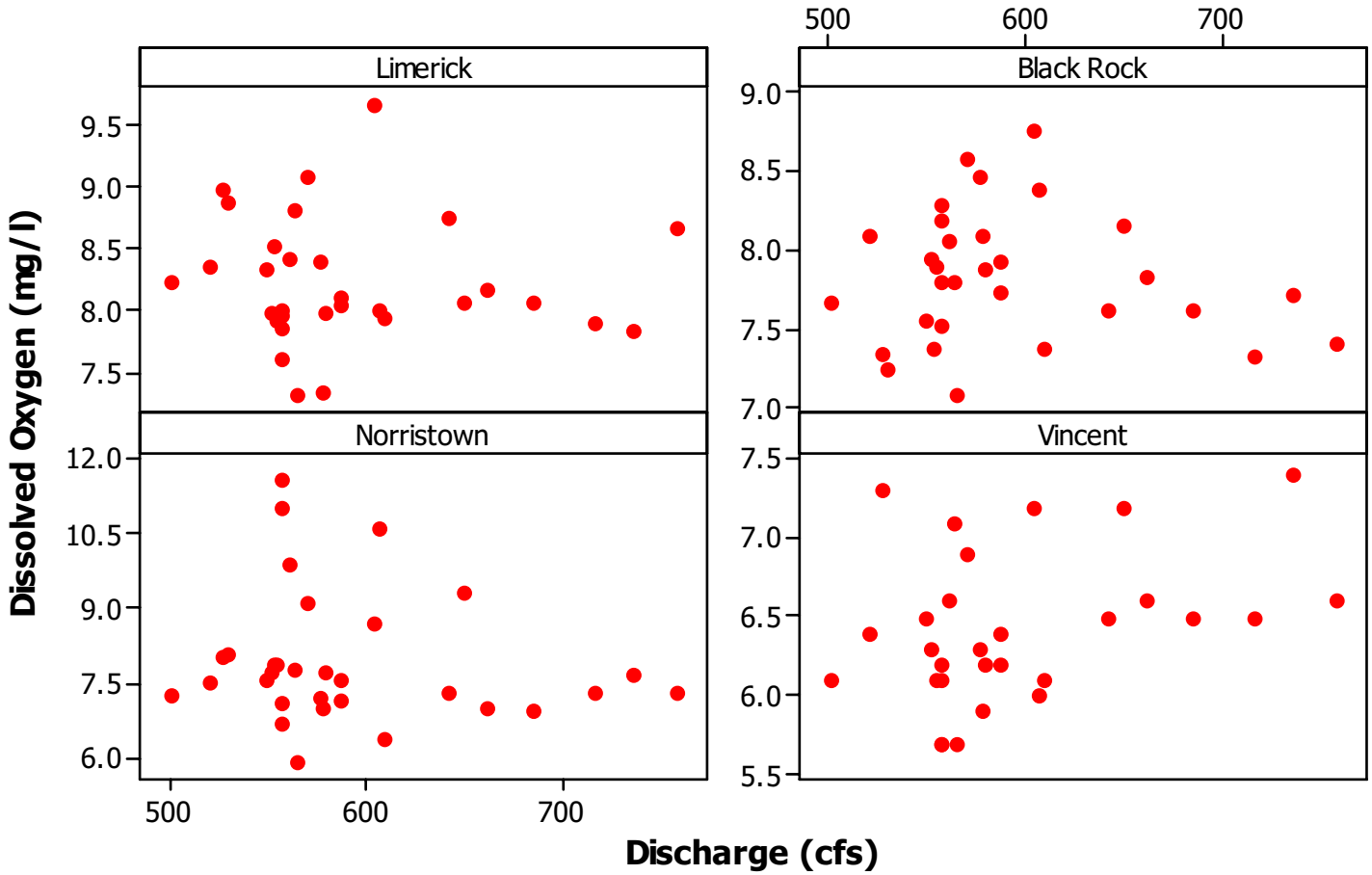


Figure 4.3-9. Relation of discharge to mean daily dissolved oxygen measured at Limerick Intake, Black Rock Pool, Norristown Pool, and Vincent Dam for August 2005. Discharge was less than 800 cfs for the entire month of August.

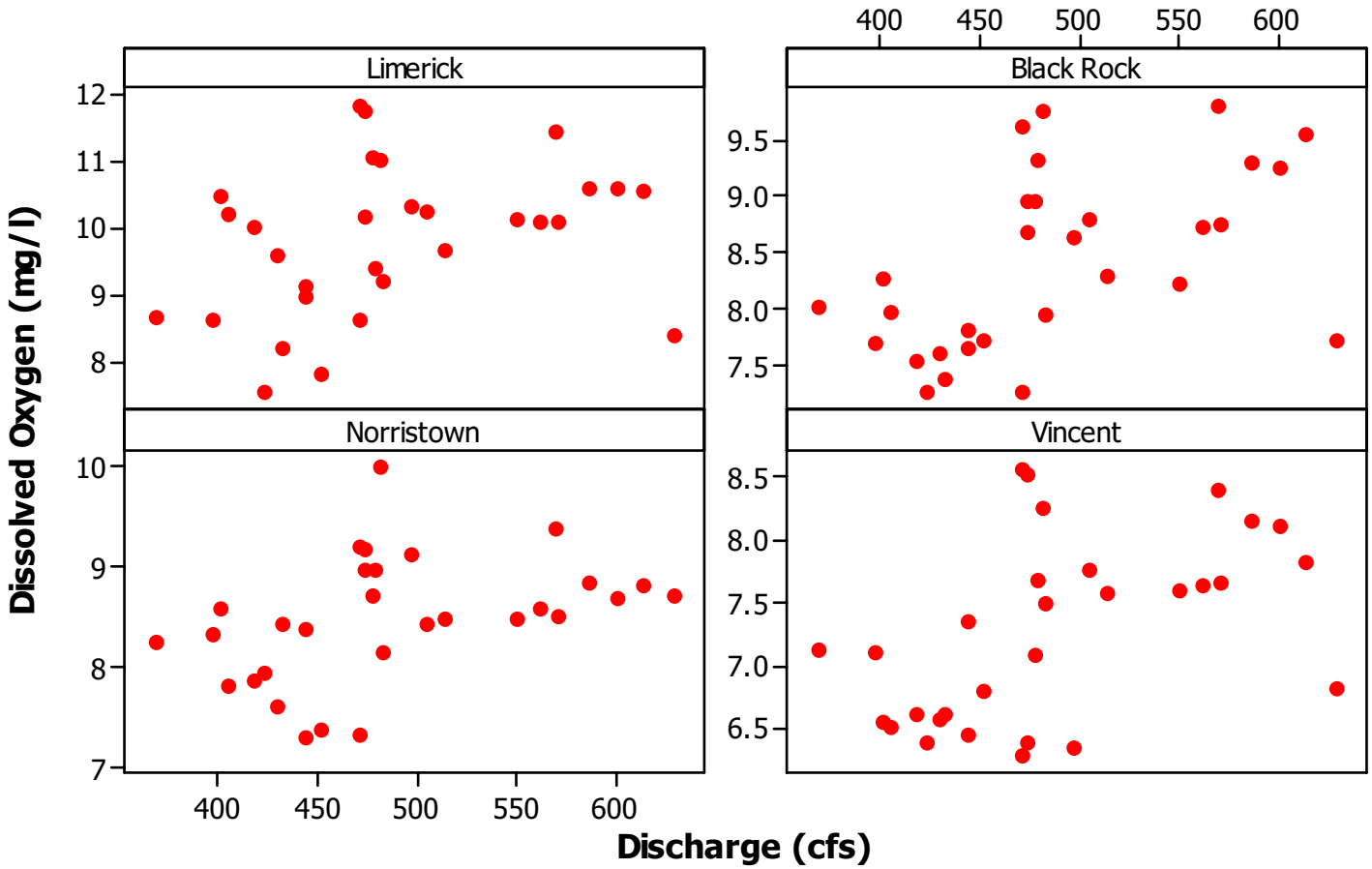


Figure 4.3-10. Relation of discharge to mean daily dissolved oxygen measured at Limerick Intake, Black Rock Pool, Norristown Pool, and Vincent Dam for September 2005. Discharge was less than 800 cfs for the entire month of September.

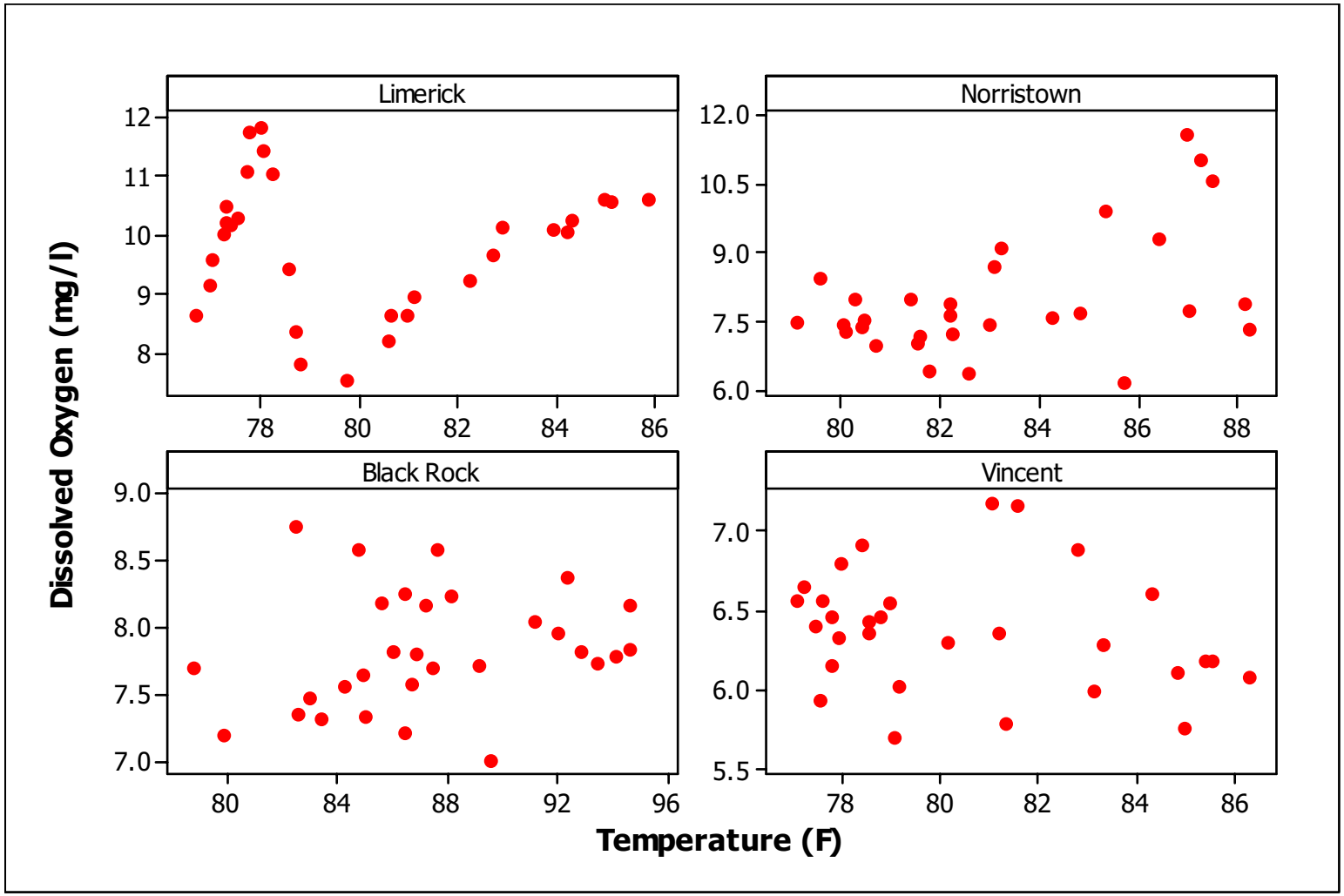


Fig. 4.3-11. Relation of mean daily temperature to mean daily dissolved oxygen at Limerick Intake, Black Rock Pool, Norristown Pool, and Vincent Dam for August 2005.

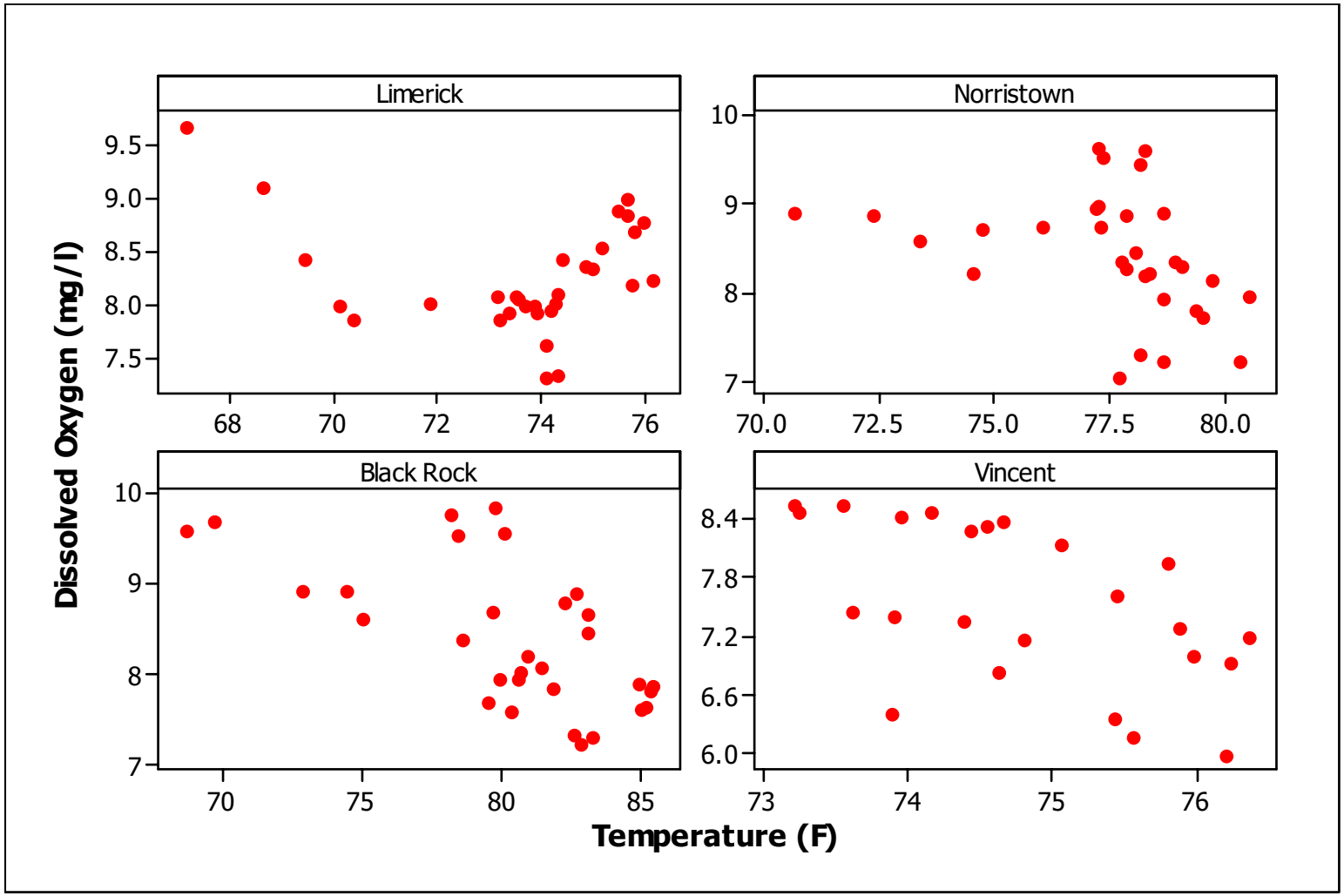


Figure 4.3-12. Relation of mean daily temperature to mean daily dissolved oxygen measured at Limerick Intake, Black Rock Pool, Norristown Pool, and Vincent Dam for September 2005.

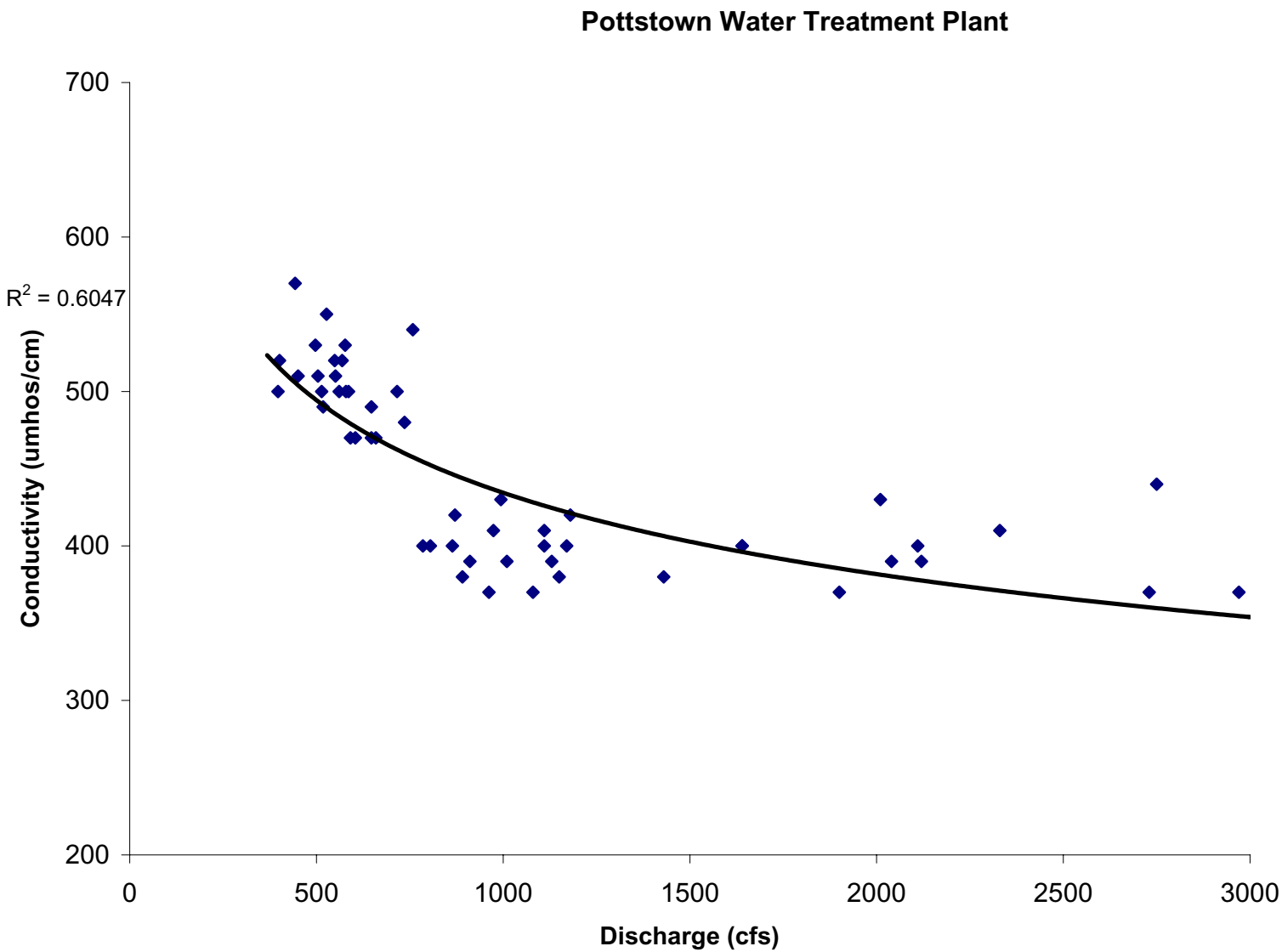


Figure 4.4-1. Relation of intake water conductivity measured at the Pottstown Water Treatment Plant to discharge of the Schuylkill River at Pottstown, April-November 2005.

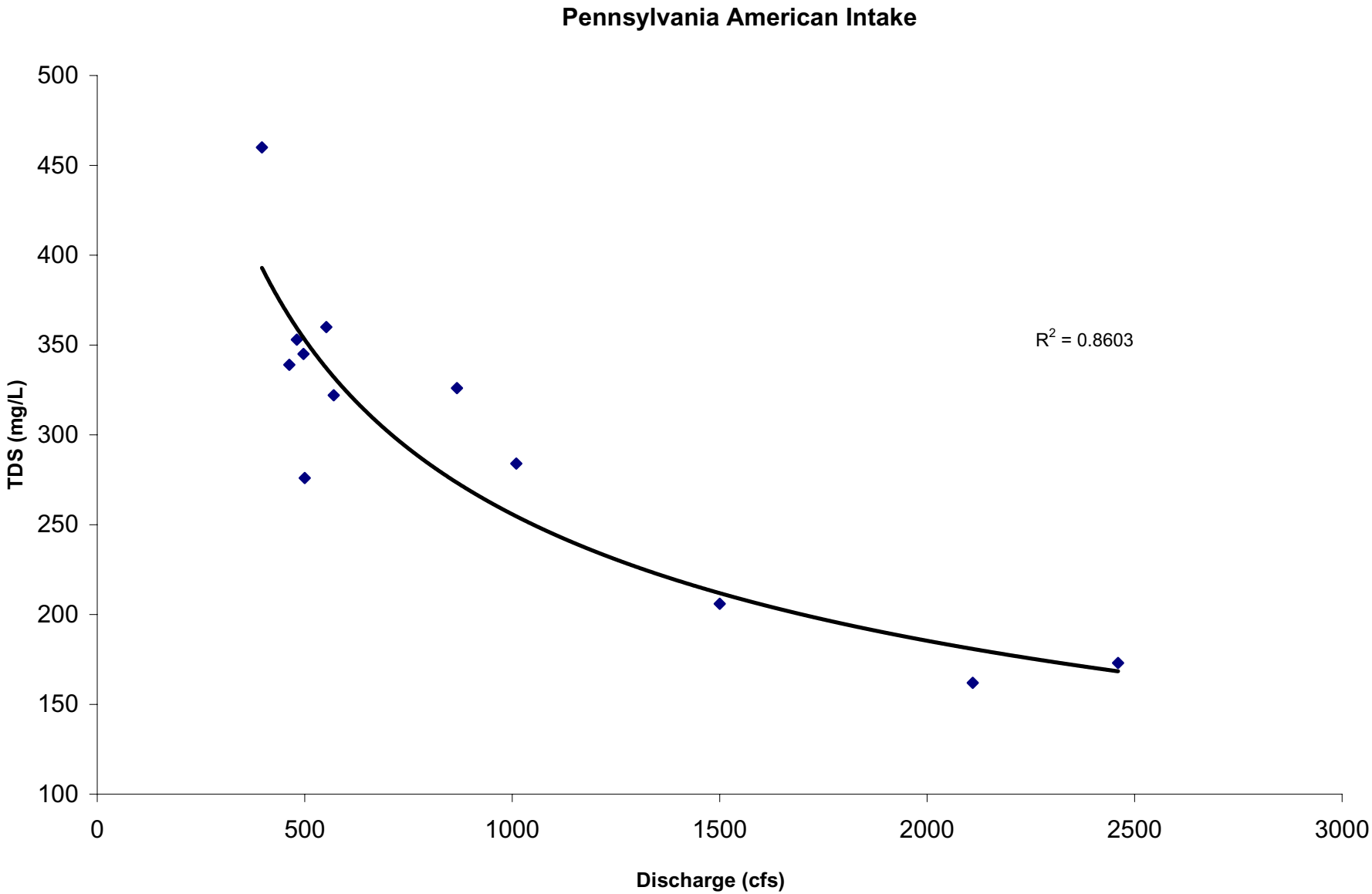
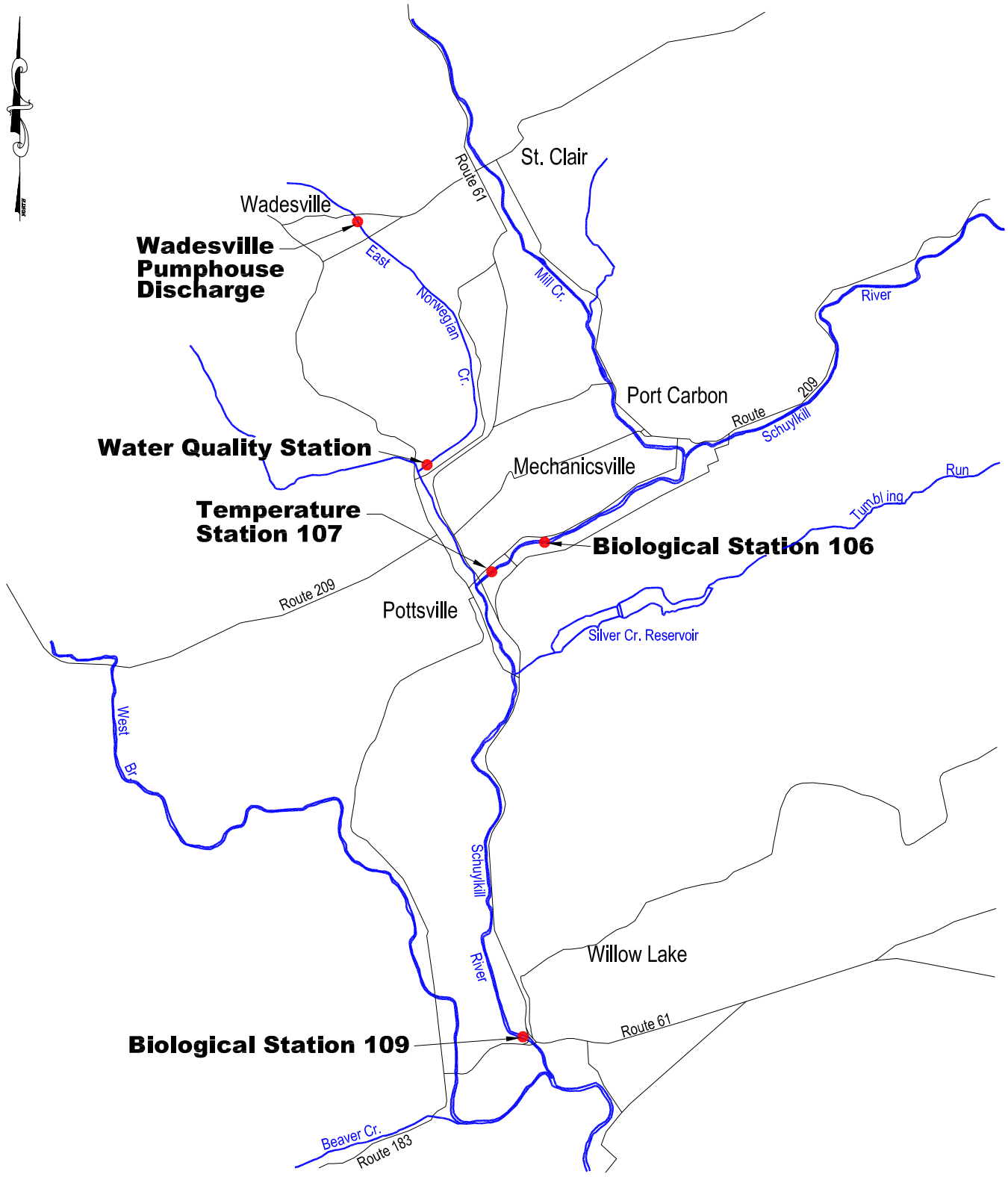


Figure 4.4-2. Relation of intake water total dissolved solids (TDS) measured at the Pennsylvania American Water Intake to discharge of the Schuylkill River at Pottstown, April-October 2005.

Figure 4.5-1.

Location of biological and water quality sampling stations upstream and downstream of the Wadesville Mine Pool discharge.



NORMANDEAU ASSOCIATES ENVIRONMENTAL CONSULTANTS 400 Old Reading Pike, Bldg. A, Suite 101 Stowe, PA 19464	Source: Basemap digitized from USGS Pottsville, PA Quad	DRAWN BY: SGS	DATE: 12-21-05	FIGURE 4.5-1
		CHECKED BY: PLH	DETAIL NO.: 20340003	
		JOB NO.: 20340.001	SCALE: 1" = 5000'	

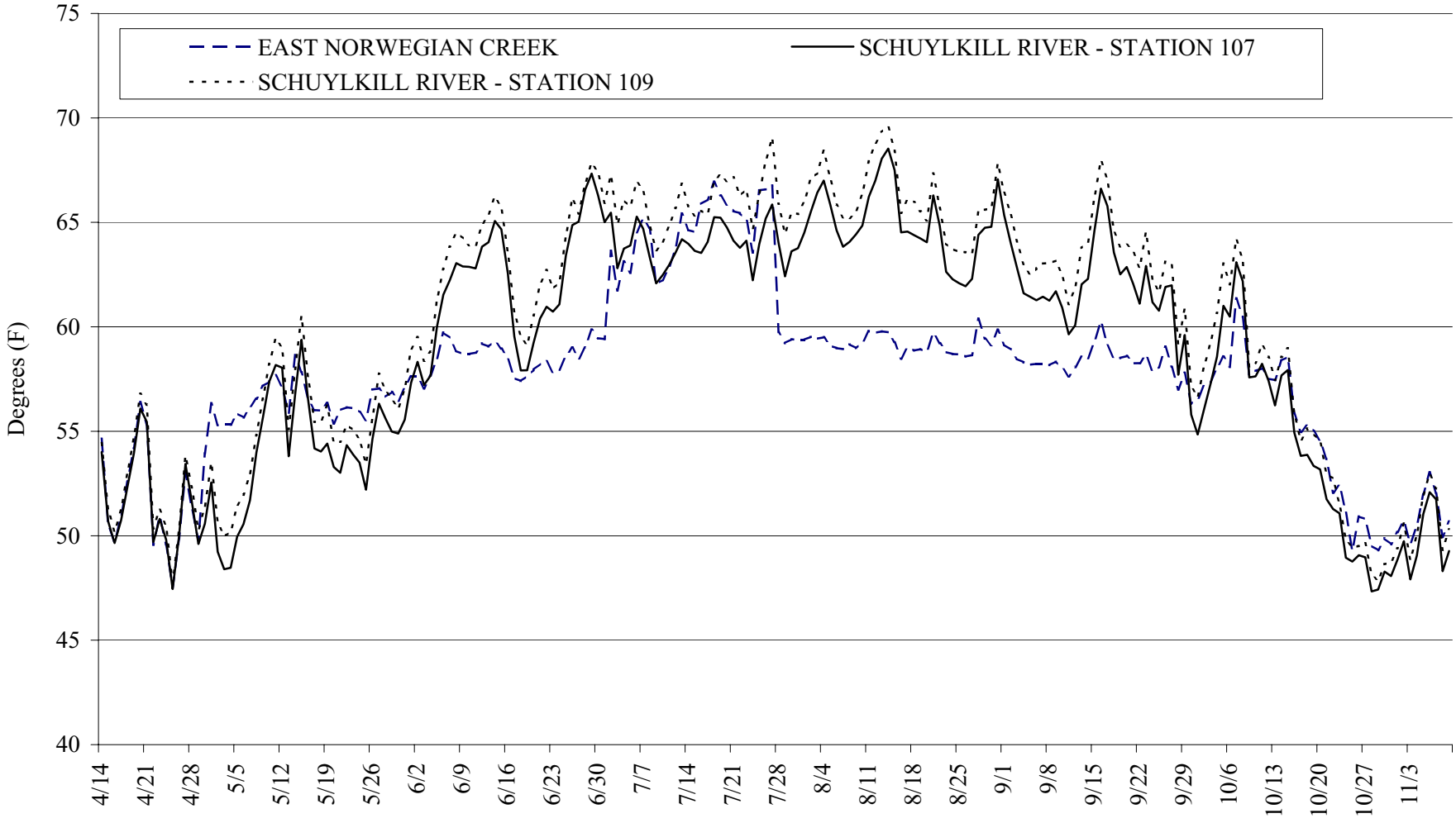


Figure 4.5-2. Relation of daily mean water temperature measured in East Norwegian Creek and at Stations 107 and 109 in the Schuylkill River, April-November 2005.

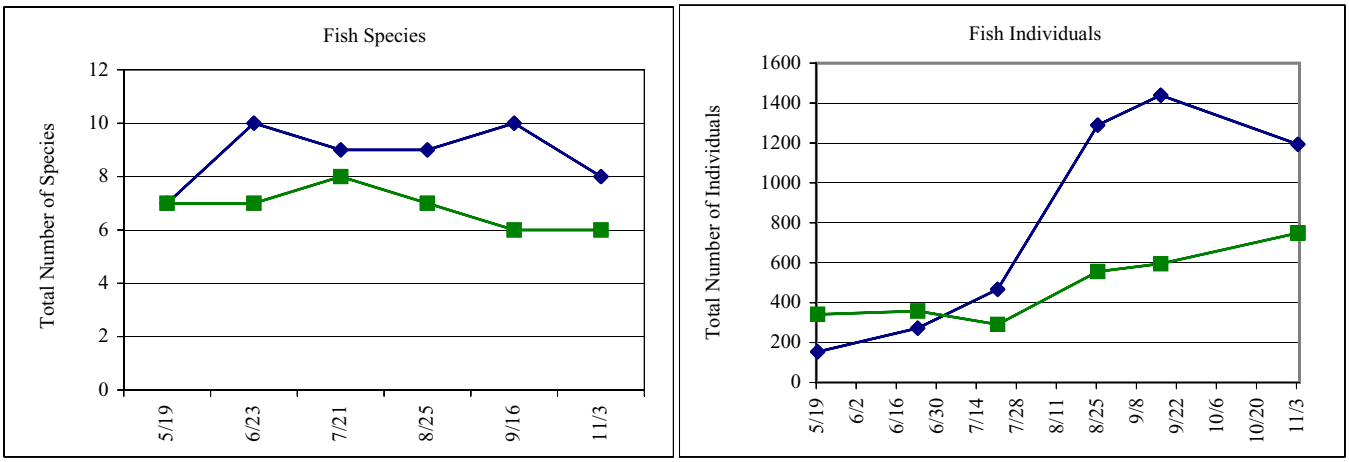


Figure 4.6-1. Selected fish data obtained at two stations in the Schuylkill River, May-November 2005.

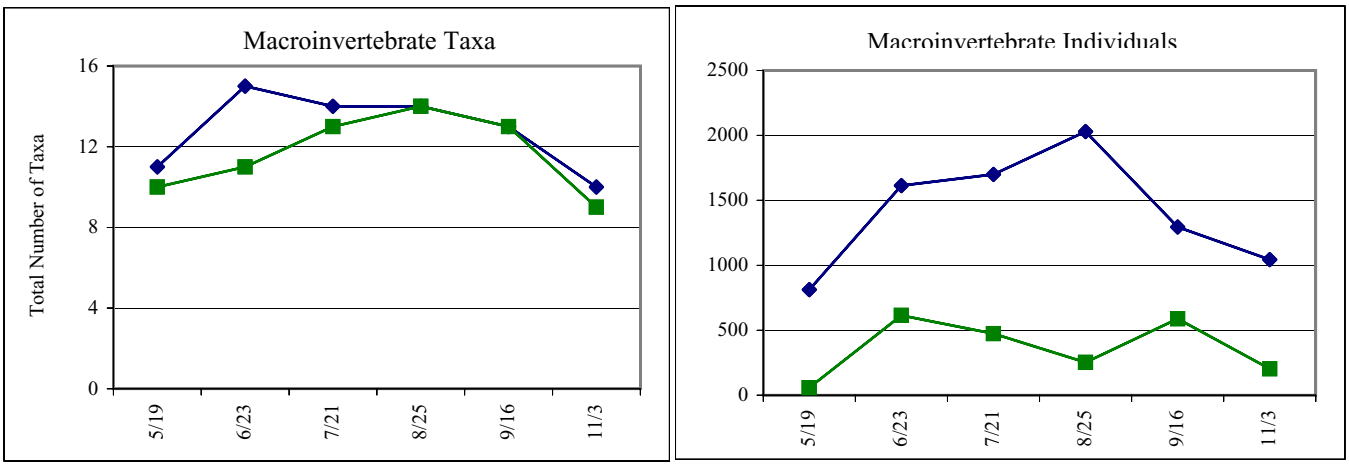


Figure 4.6-2. Selected macroinvertebrate data obtained at two stations in the Schuylkill River, May-November 2005.

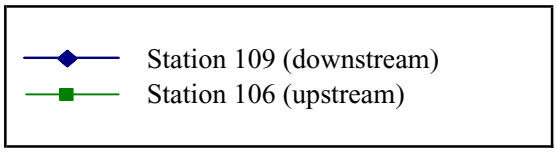
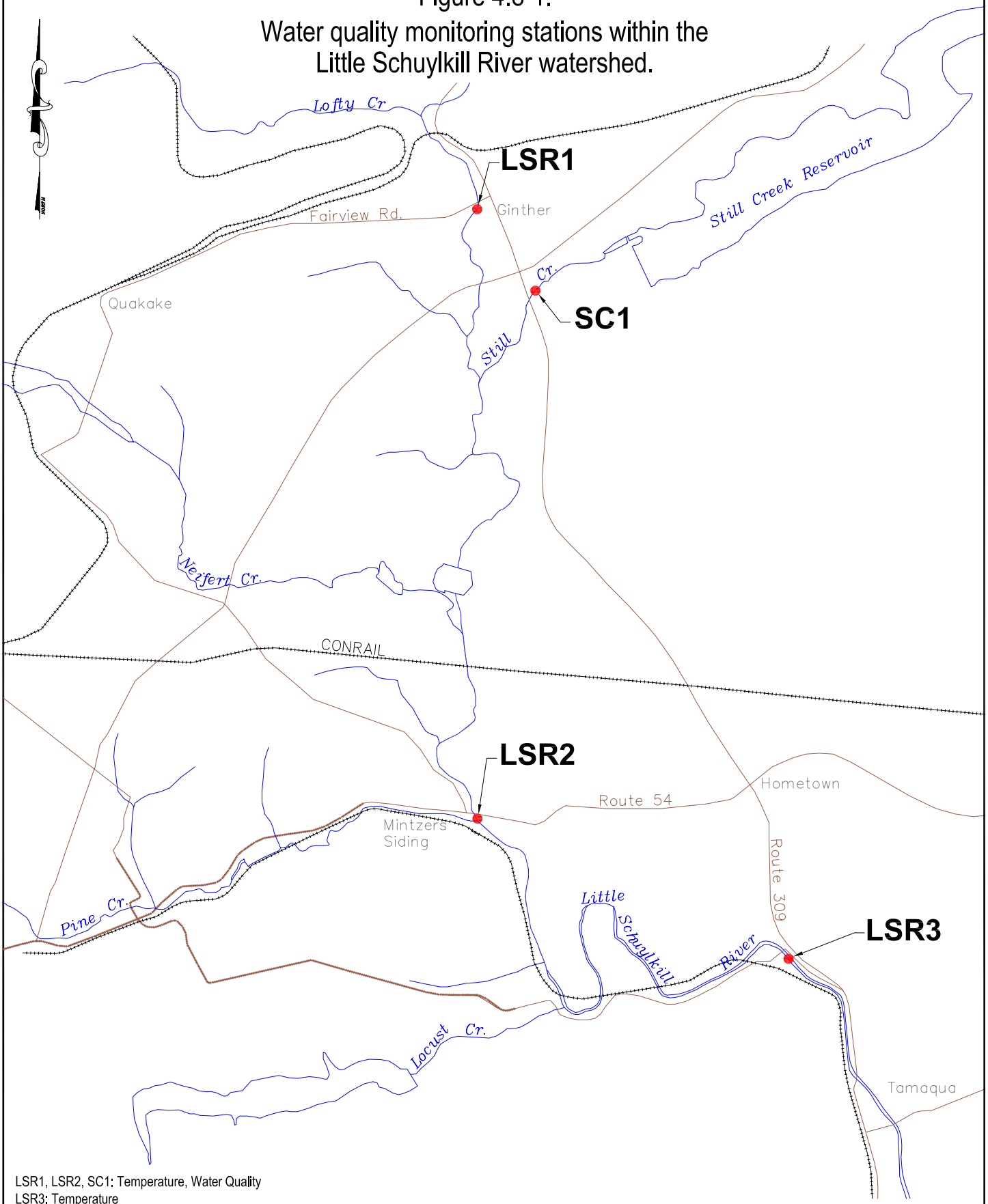


Figure 4.8-1.
Water quality monitoring stations within the
Little Schuylkill River watershed.



LSR1, LSR2, SC1: Temperature, Water Quality
LSR3: Temperature

NORMANDEAU ASSOCIATES ENVIRONMENTAL CONSULTANTS 400 Old Reading Pike, Bldg. A, Suite 101 Stowe, PA 19464	Source: Basemap digitized from USGS Delano, PA and Tamaqua, PA Quads	DRAWN BY: SGS	DATE: 12-08-05	FIGURE 4.8-1
		CHECKED BY: BWL	DETAIL NO.: 20340004	
		JOB NO.: 20340.001	SCALE: 1"=3000'	

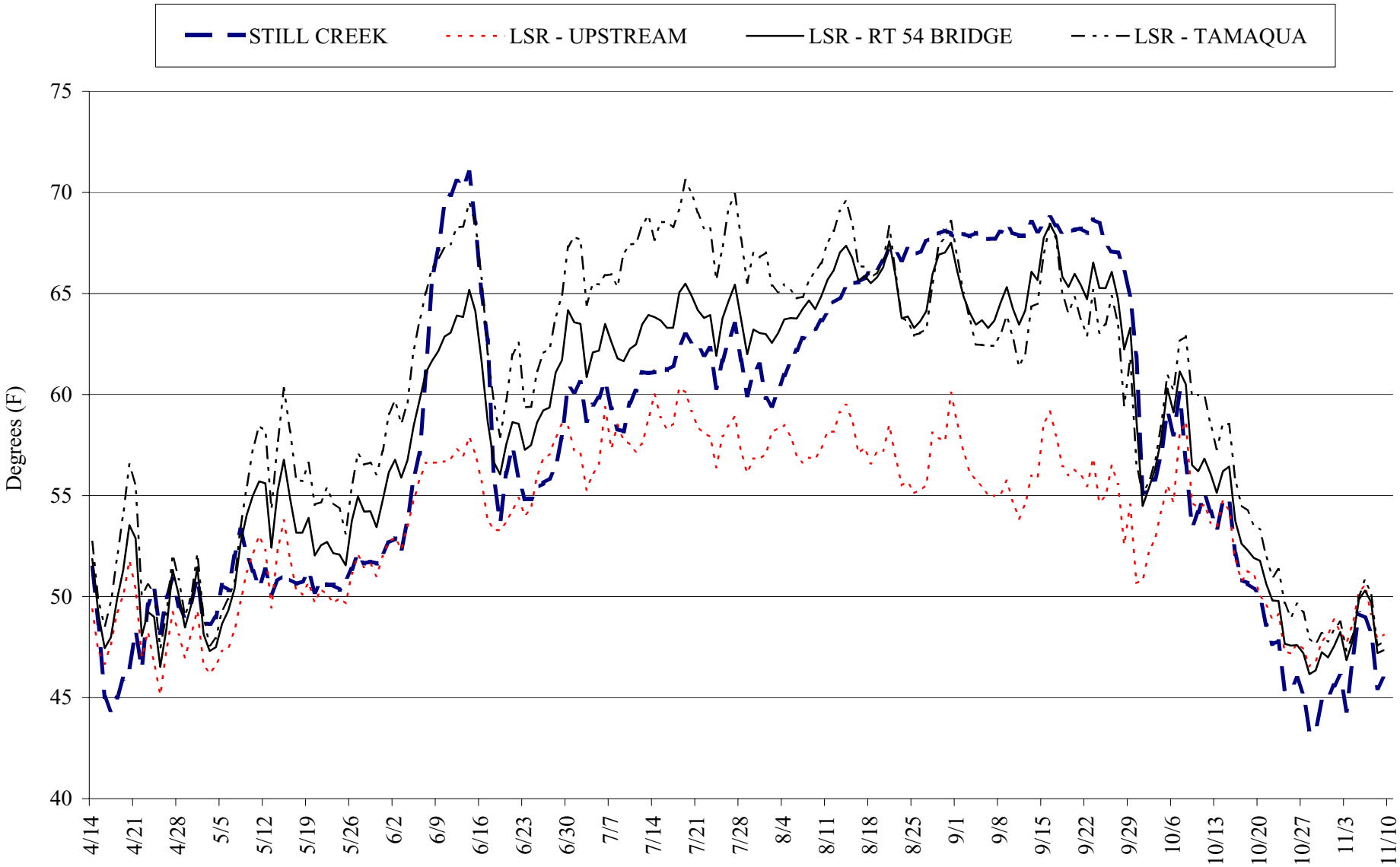
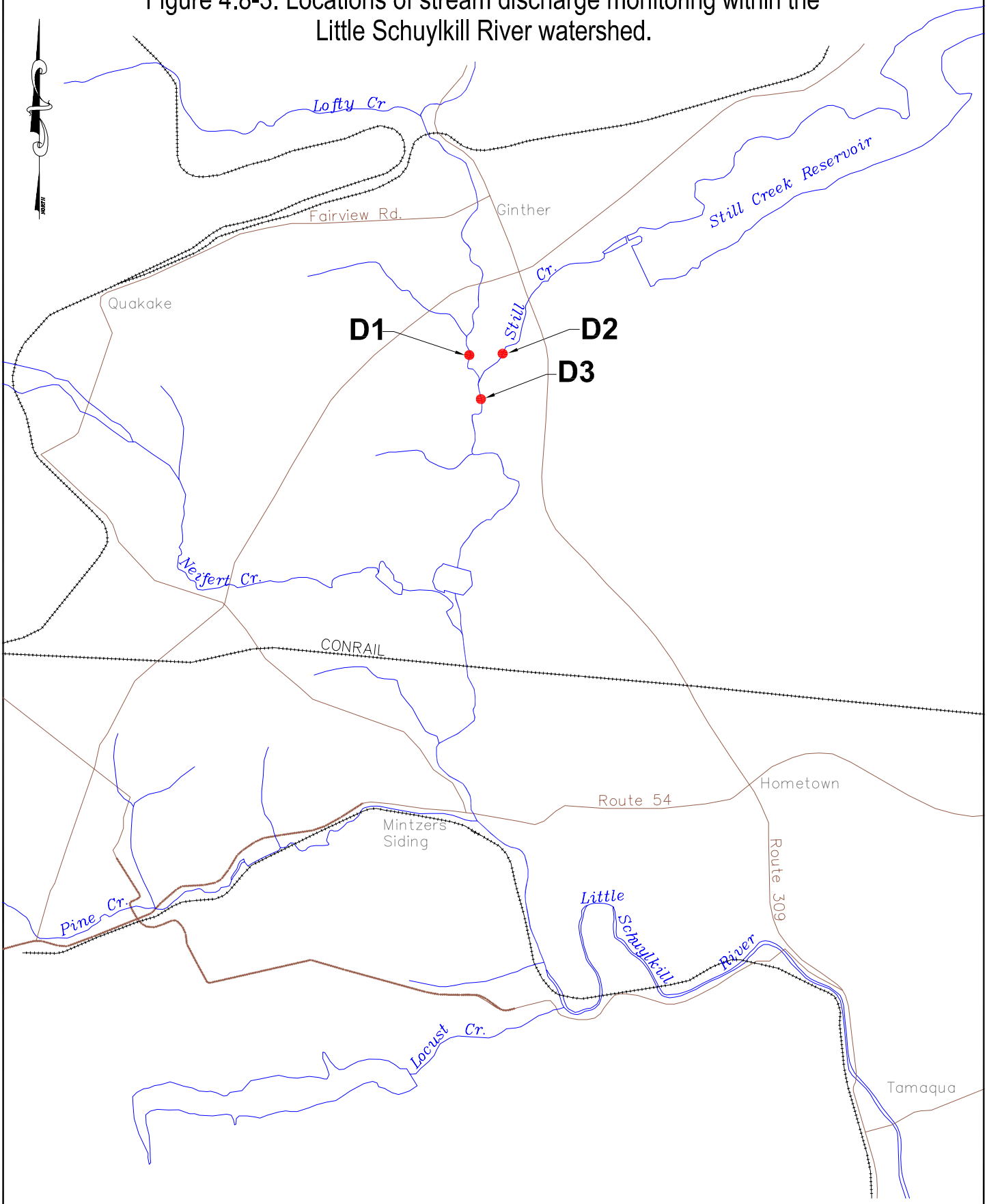


Figure 4.8-2. Mean daily water temperature measured in Still Creek, the Little Schuylkill River (LSR) upstream of Still Creek, LSR downstream of Still Creek, and LSR near Tamaqua, April-November 2005.

Figure 4.8-3. Locations of stream discharge monitoring within the Little Schuylkill River watershed.



NORMANDEAU ASSOCIATES ENVIRONMENTAL CONSULTANTS 400 Old Reading Pike, Bldg. A, Suite 101 Stowe, PA 19464	Source: Basemap digitized from USGS Delano, PA and Tamaqua, PA Quads	DRAWN BY: SGS	DATE: 11-28-05	FIGURE
		CHECKED BY: BWL	DETAIL NO.: 20340005	4.8-3
		JOB NO.: 20340.001	SCALE: 1"=3000'	

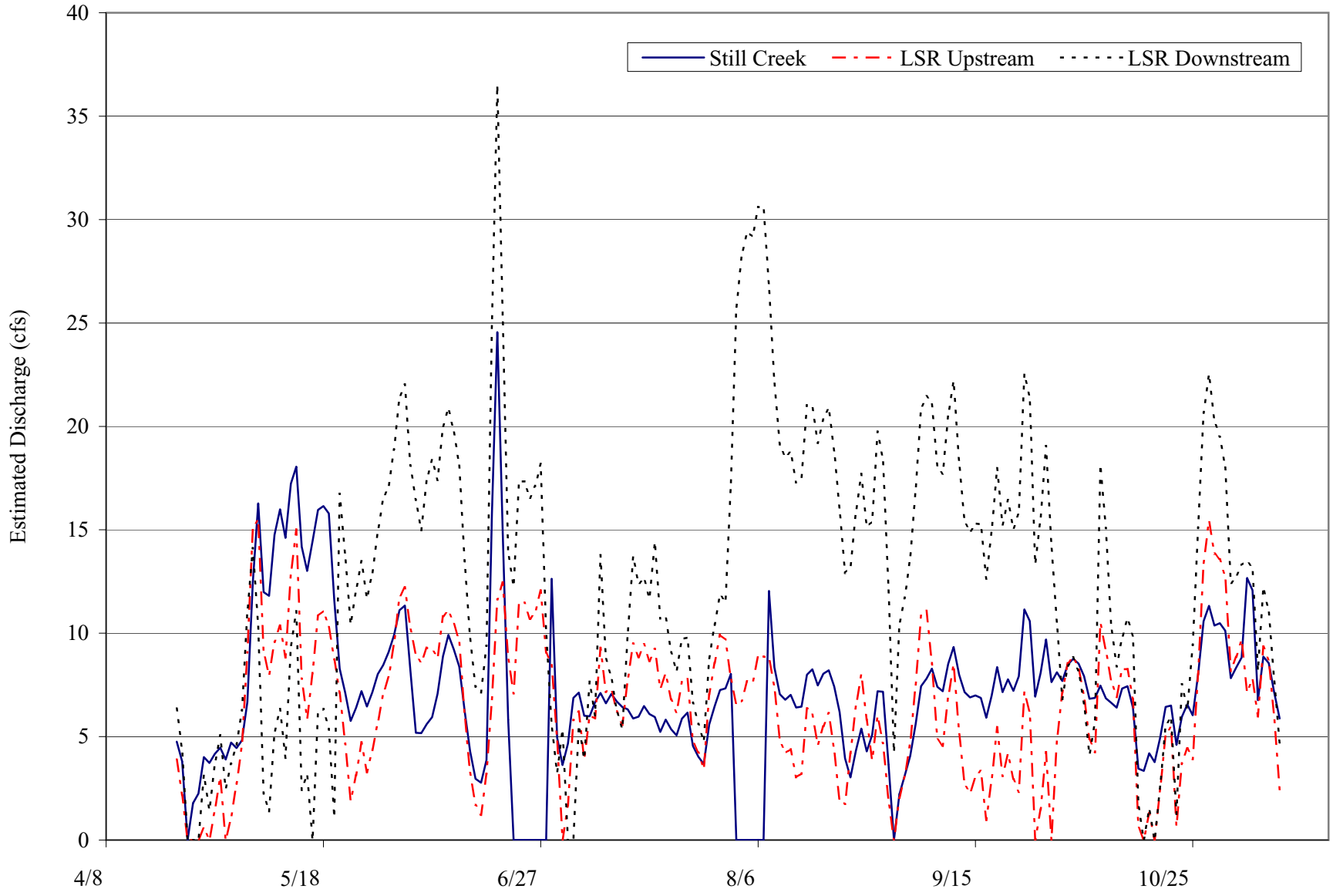
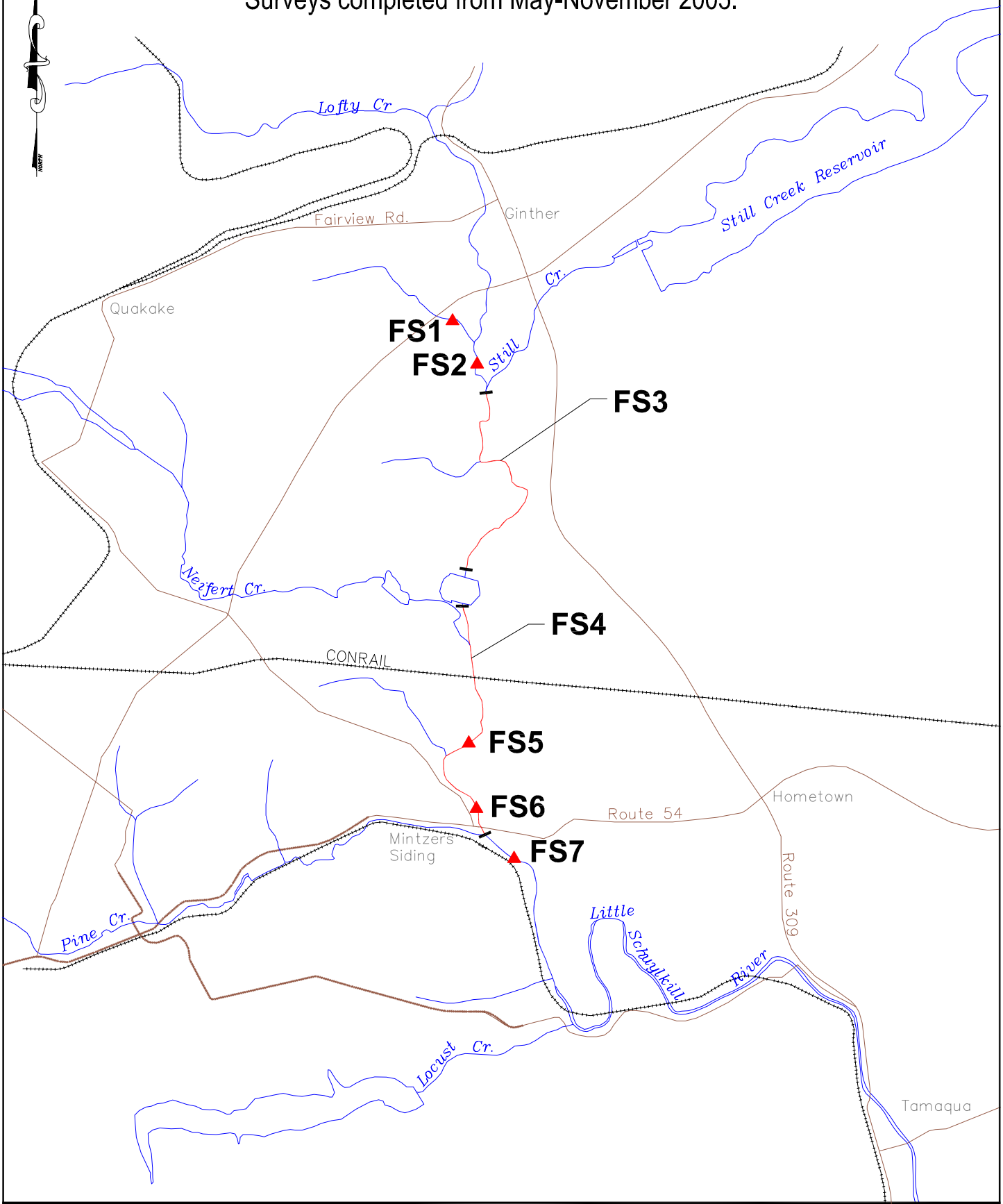


Figure 4.8-4. Estimated daily discharge of Still Creek and Little Schuylkill River upstream and downstream of Still Creek, April-November 2005.

Figure 4.9-1. Location of fish sampling stations in the Little Schuylkill River. Surveys completed from May-November 2005.



NORMANDEAU ASSOCIATES ENVIRONMENTAL CONSULTANTS 400 Old Reading Pike, Bldg. A, Suite 101 Stowe, PA 19464	Source: Basemap digitized from USGS Delano, PA and Tamaqua, PA Quads	DRAWN BY: SGS	DATE: 11-23-05	FIGURE
		CHECKED BY: BWL	DETAIL NO.: 20340002	4.9-1
		JOB NO.: 20340.001	SCALE: 1"=3000'	

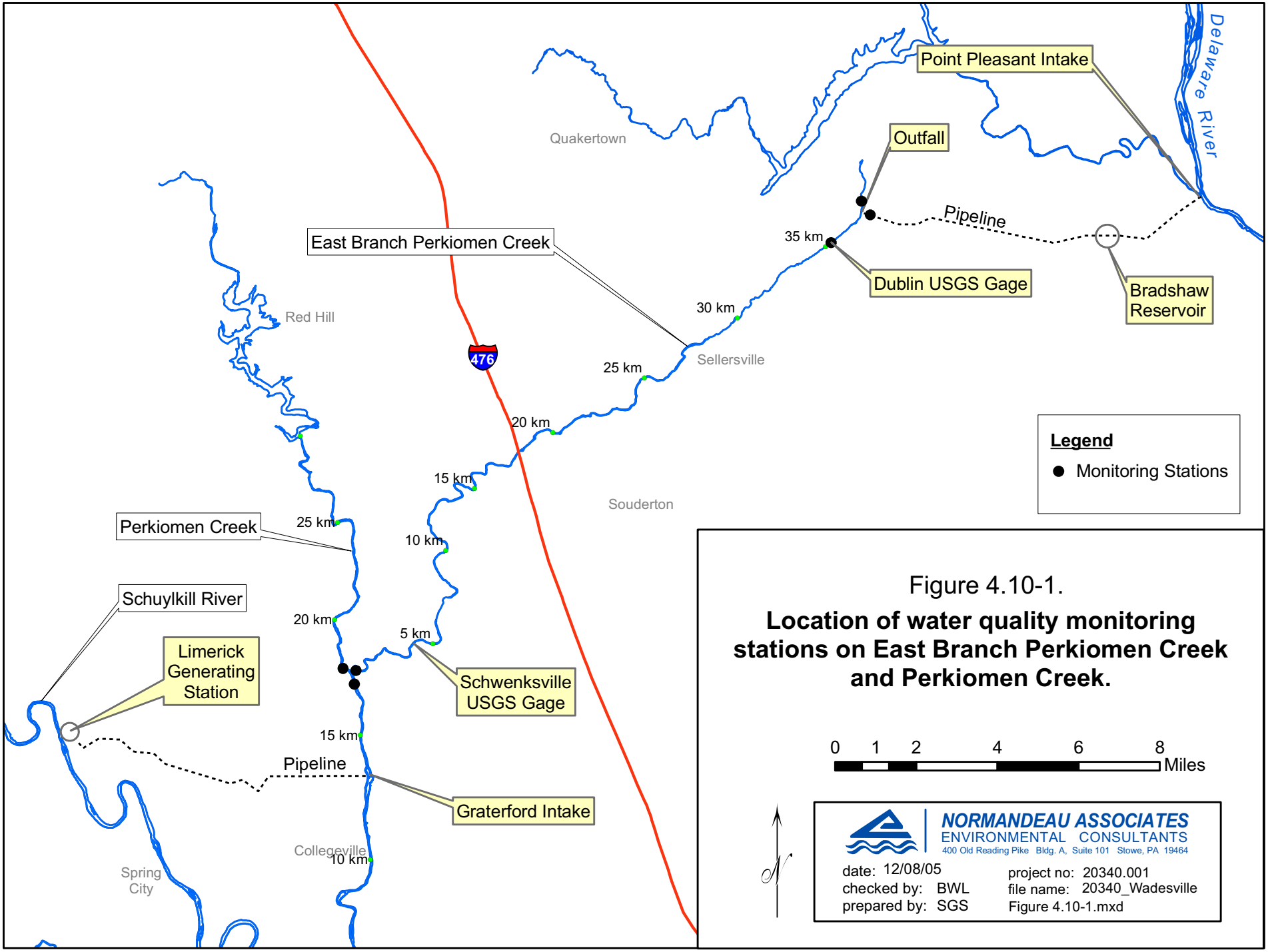


Figure 4.10-1.

Location of water quality monitoring stations on East Branch Perkiomen Creek and Perkiomen Creek.

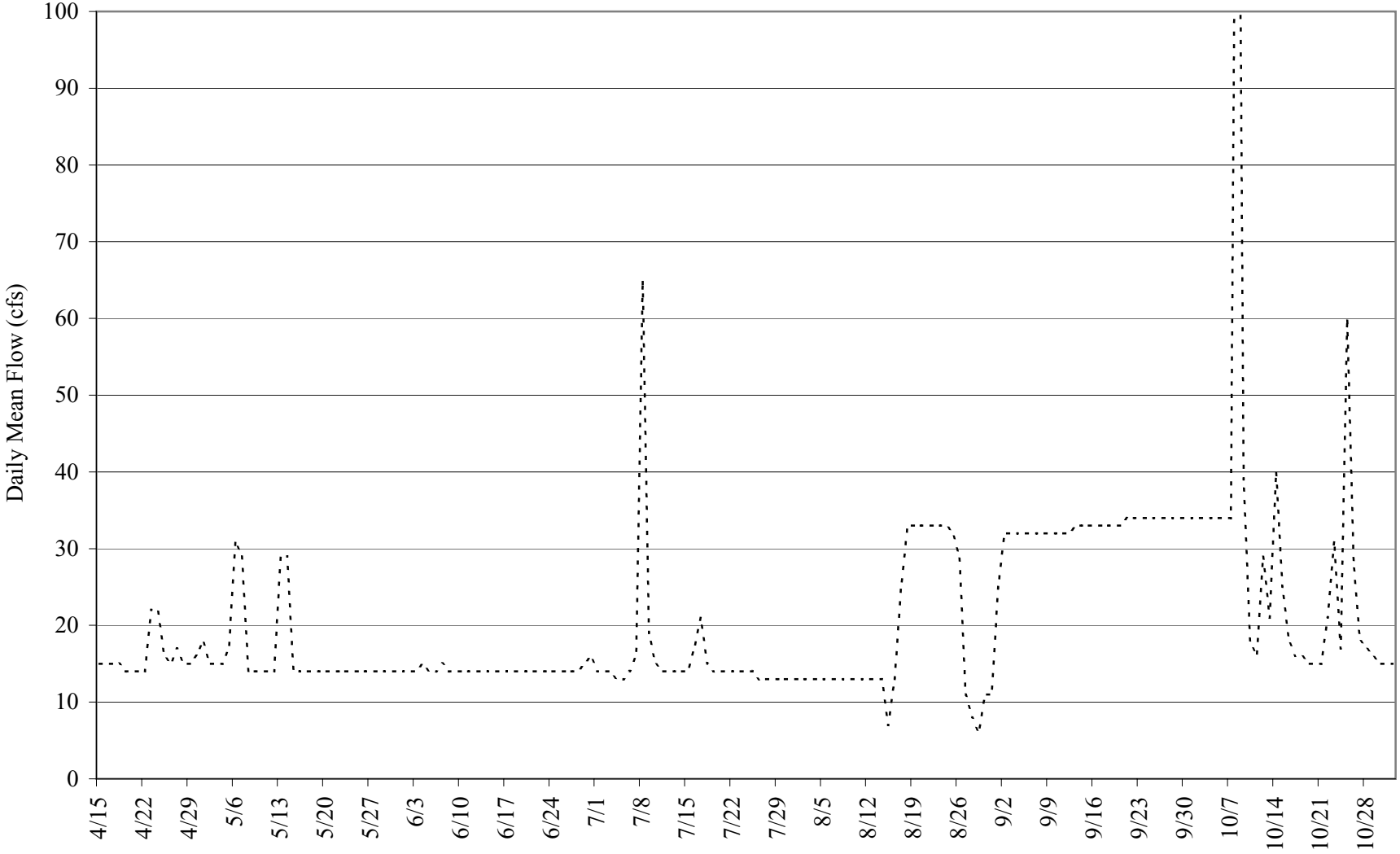


Figure 4.10-2. Flow rate of the East Branch Perkiomen Creek at the Dublin USGS gage, April-October 2005.
(In late August water diversion was curtailed due to ash spill at Martins Creek.)