APPENDIX R-V-2

RETTEW
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TO: Ronald B. Madison, PE

FROM: Michael P. Callahan, CPSS

DATE: May 9, 2013

PROJECT NAME: West Penn and Walker Townships, Act 537 Sewage Facility Plan Update **PROJECT NO.:** 0348608005

SUBJECT: Septic System Replacement Feasibility

The following memorandum provides follow up information regarding a Feasibility Study for Community On-Lot Sewage Disposal Systems (COLDS) dated June 6, 2011 for the West Penn and Walker Townships Act 537 Plan Update. Specifically, it provides general soil information for potential drainfield areas that were previously not studied because they would not provide enough drainfield area based on flow volumes provided at the time. However, during the course of the revised plan update, it has been determined that the previous sewage flows used in the feasibility study were considerably larger than they needed to be based on more current "Needs Assessment" information. Therefore, some smaller parcels within each village may provide enough area to service these reduced sewage flows.

The table below lists the soil series present at each of the potential sites and provides a rating from the web soil survey for disposal by elevated sand mound, subsurface drip irrigation, and spray irrigation. As you may recall, these three system types were discussed in the initial feasibility study. The ratings are based on the the soil series map and general information regarding the typical characteristics of the mapped soil series. This is not meant to indicate actual suitability, and actual onsite soils may or may not be suitable for sewage disposal regardless of the rating of the soil series mapped.

Based on these ratings, current flow numbers provided, and available land area, each of the five (5) Village areas have the potential for the design flows to be serviced by a COLDS. As mentioned, actual soil and percolation testing would need to be conducted, and other factors such as distance to drinking wells, setbacks, etc. would need to be explored before final suitability could be determined.

The Sewage Disposal Needs Identification Report dated October 19, 2012 with Adendum dated March 30, 2013 provided the basis for the following anticipated design flows for each Village:

Village	Gallons per Day (gpd)
South Tamaqua	400 to 4,800
Clamtown	400 to 1,600
Reynolds	400 to 2,400
Andreas	400 to 2,400
Snyders	400 to 800

			Rating for Sewage Disposal		
Village	**Soil Series**	**Map Unit ID**	**Elevated Sand Mound**	**Drip Irrigation**	**Spray Irrigation**
Clamtown	Kedron	KeB	Moderately Limited	Moderately Limited	Slightly Limited
	Atkins	At	Very Limited	Very Limited	Very Limited
Reynolds	Kedron	KeB	Moderately Limited	Moderately Limited	Slightly Limited
	Calvin	CaC	Moderately Limited	Slightly Limited	Slightly Limited
	Calvin	CaD	Very Limited	Moderately Limited	Moderately Limited
South Tamaqua	Basher	Ba	Very Limited	Very Limited	Very Limited
	Meckesville	MeB	Slightly Limited	Slightly Limited	Slightly Limited
Snyders	Watson	WaB	Moderately Limited	Moderately Limited	Slightly Limited
	Alvira	AgA	Very Limited	Very Limited	Moderately Limited
	Allenwood	AeB	Slightly Limited	Slightly Limited	Slightly Limited
	Berks	BeC	Moderately Limited	Slightly Limited	Slightly Limited
	Berks	BeB	Slightly Limited	Slightly Limited	Slightly Limited
	Hartleton	HaC	Moderately Limited	Slightly Limited	Slightly Limited
Andreas	Atkins	At	Very Limited	Very Limited	Very Limited
	Hartleton	HaB	Slightly Limited	Slightly Limited	Slightly Limited
	Watson	WaB	Moderately Limited	Moderately Limited	Slightly Limited

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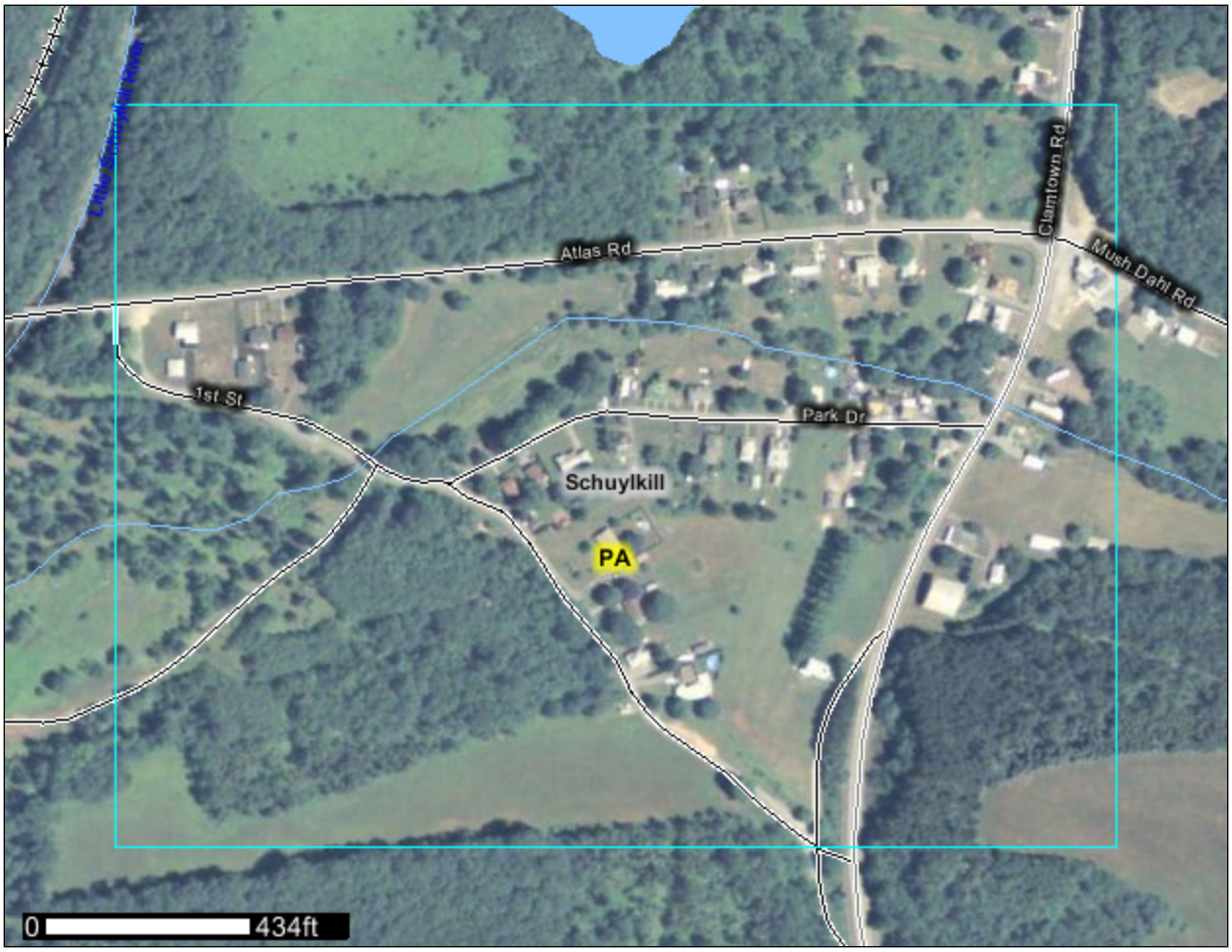
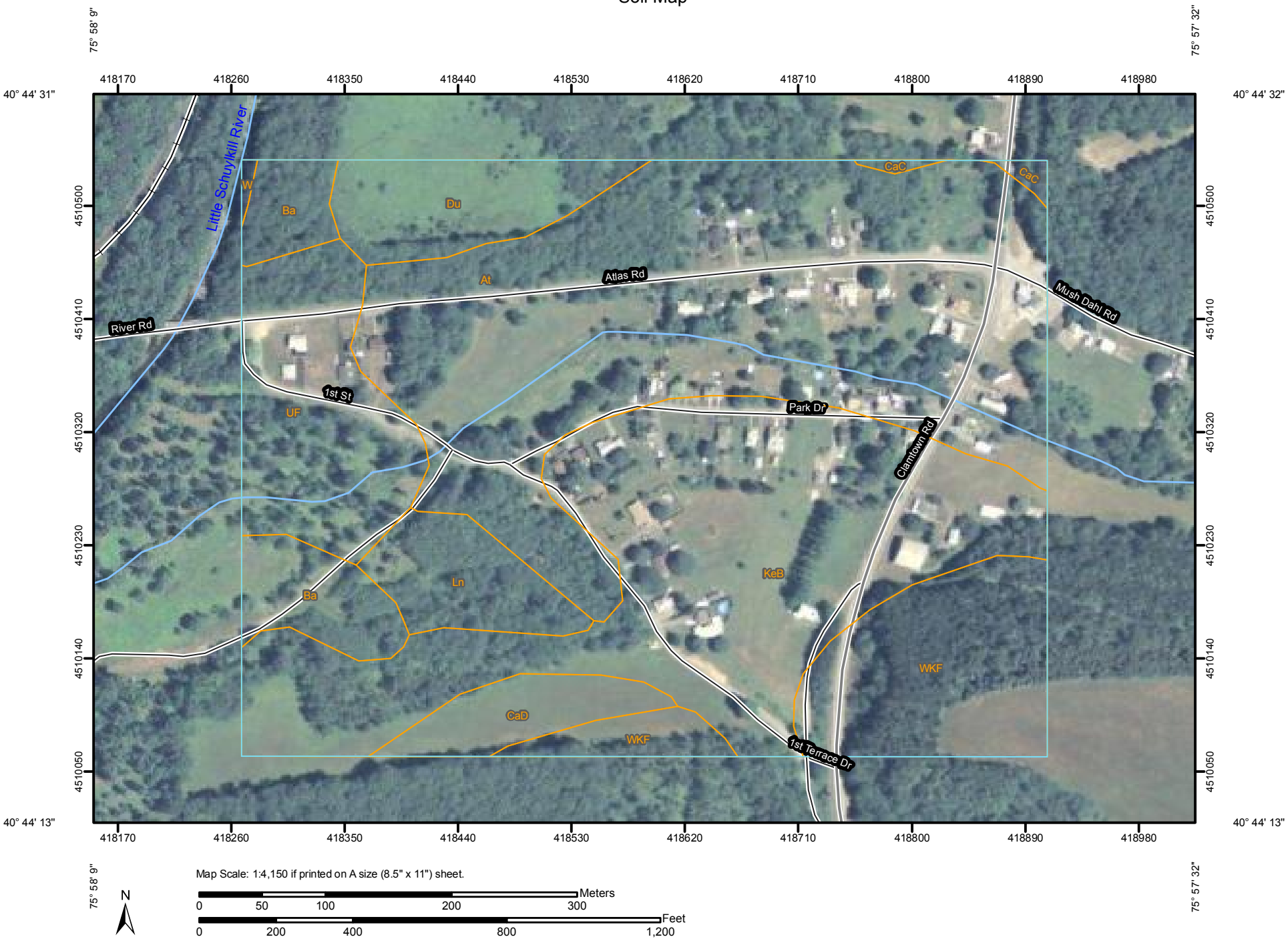
Custom Soil Resource Report for Schuylkill County, Pennsylvania

Clamtown



May 9, 2013

Custom Soil Resource Report
Soil Map



Map Scale: 1:4,150 if printed on A size (8.5" x 11") sheet.

Meters: 0, 50, 100, 200, 300

Feet: 0, 200, 400, 800, 1,200

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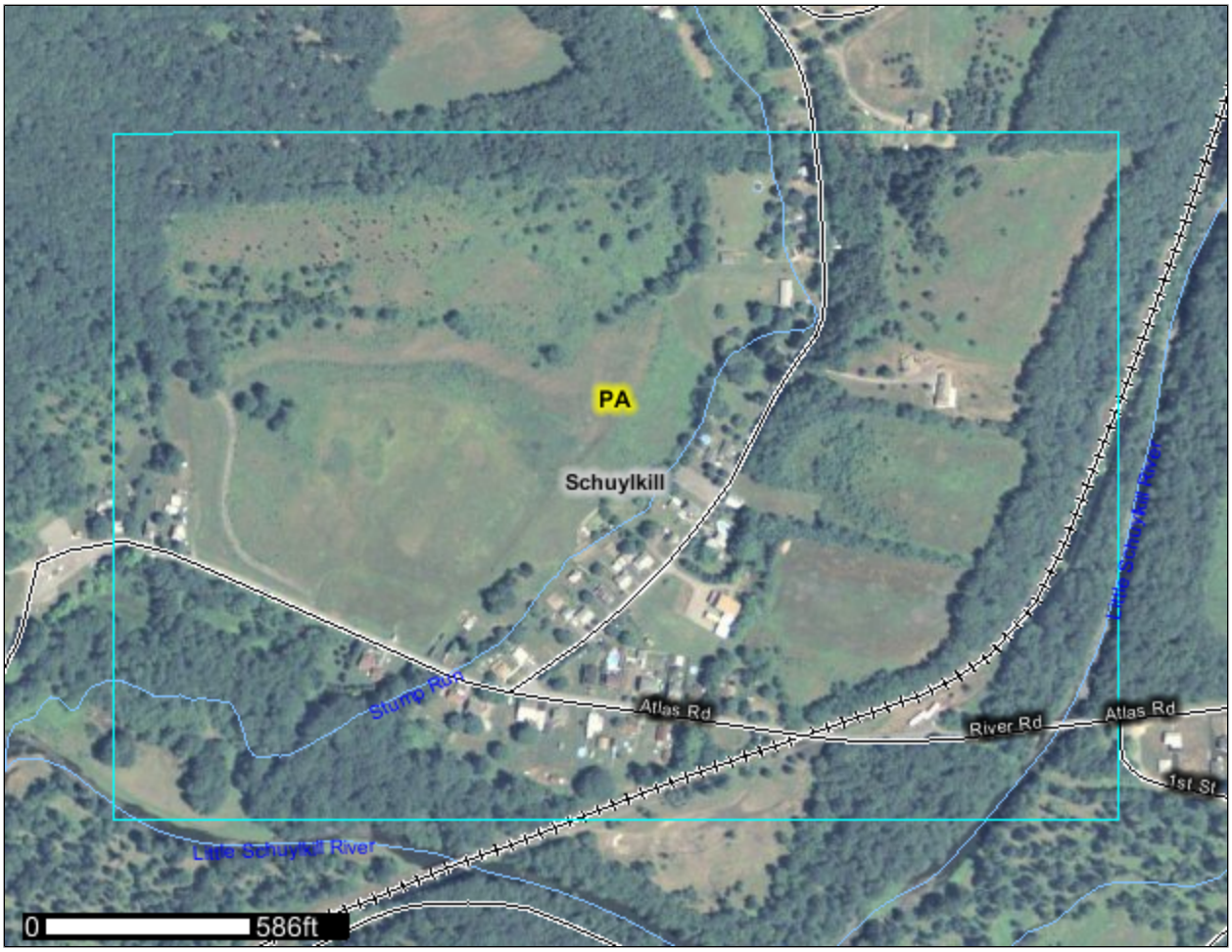
Reynolds



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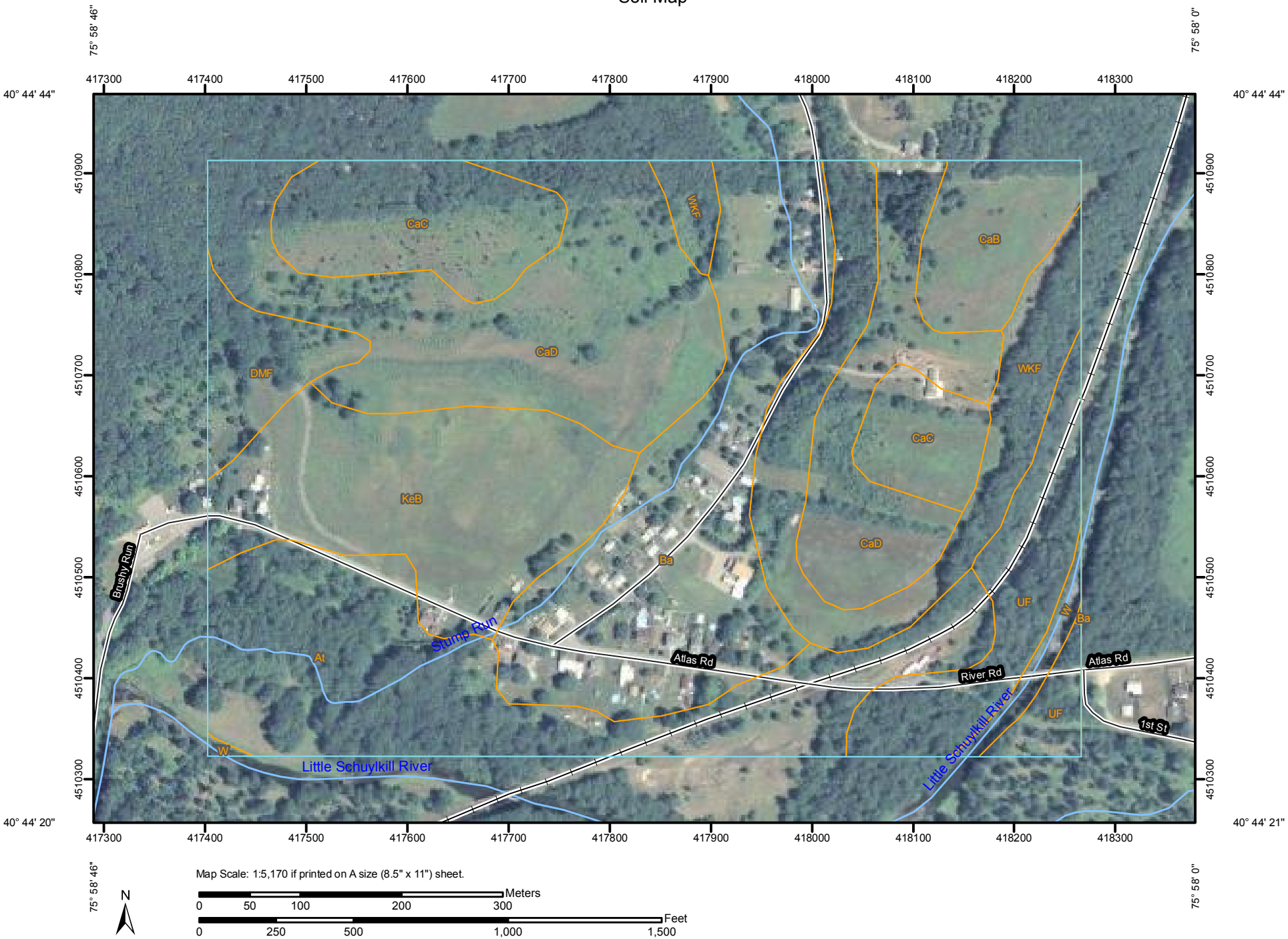
Custom Soil Resource Report
Soil Map



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South Tamaqua

May 9, 2013

Custom Soil Resource Report
Soil Map

Map Scale: 1:3,110 if printed on A size (8.5" x 11") sheet.

N

Meters
0 25 50 100 150

Feet
0 100 200 400 600

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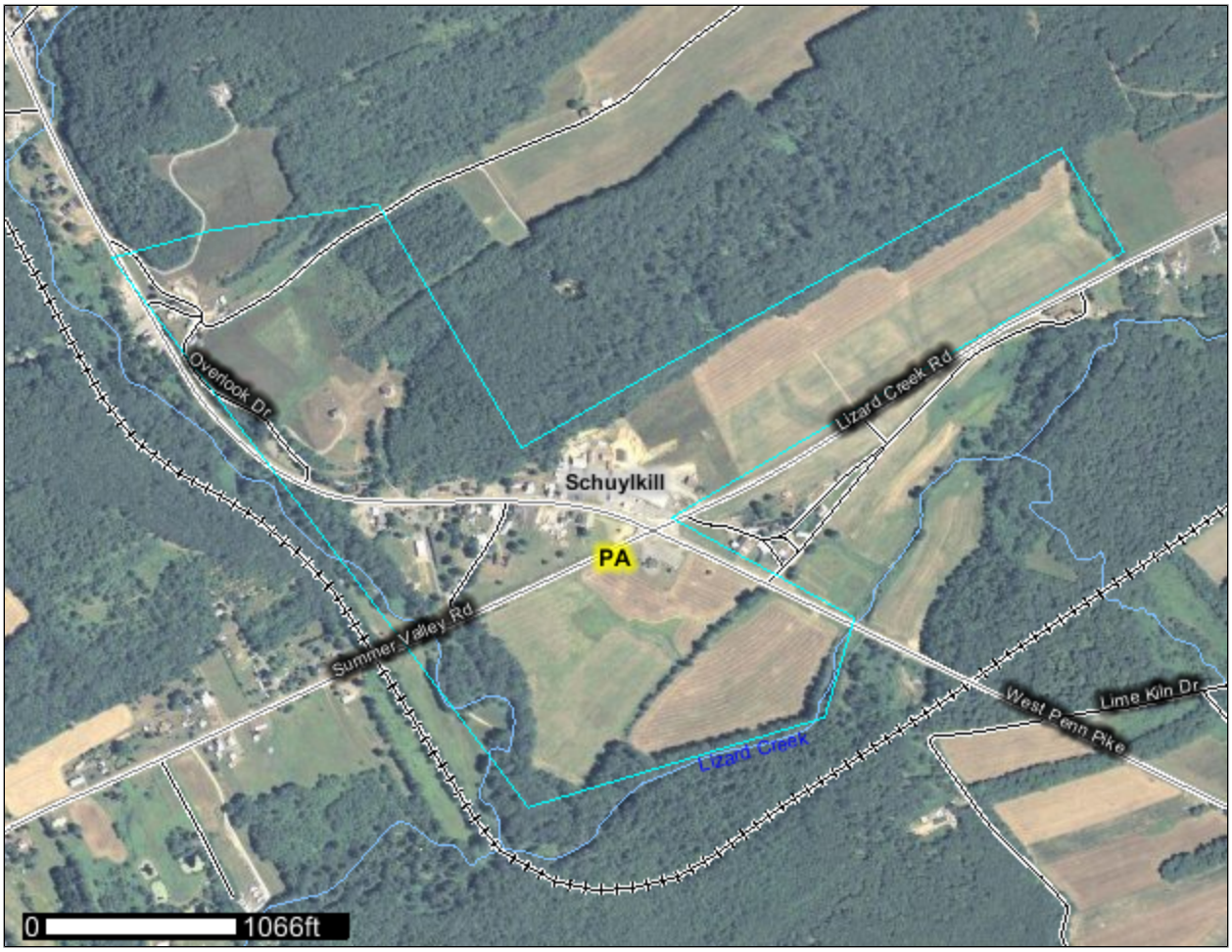
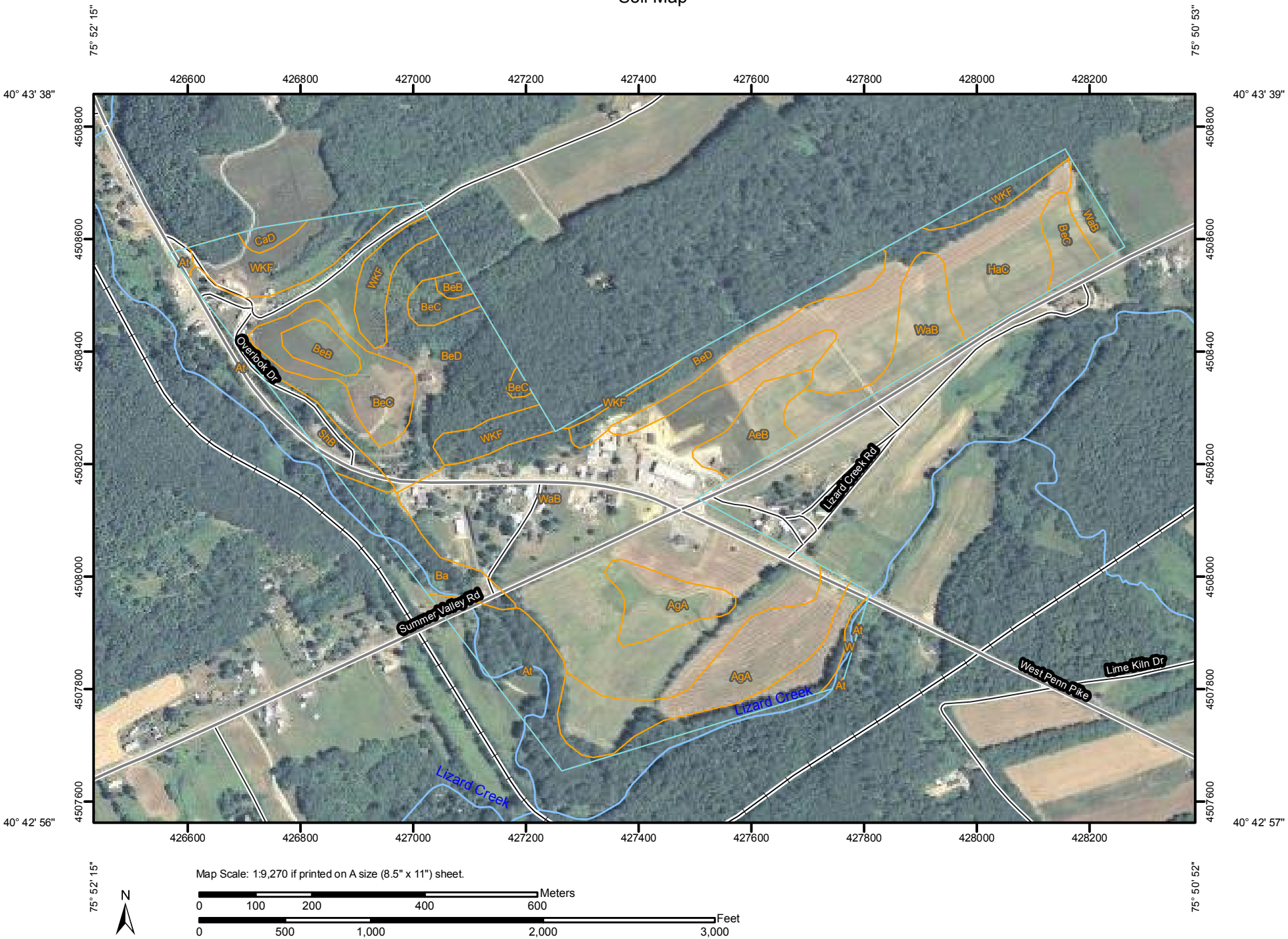
Snyders



May 9, 2013

Custom Soil Resource Report
Soil Map



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N

Meters: 0, 100, 200, 400, 600

Feet: 0, 500, 1,000, 2,000, 3,000

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Custom Soil Resource Report for Schuylkill County, Pennsylvania

Andreas

May 9, 2013

Custom Soil Resource Report
Soil Map