










Drought Monitoring Criteria and Little Lehigh Creek Watershed Monitoring

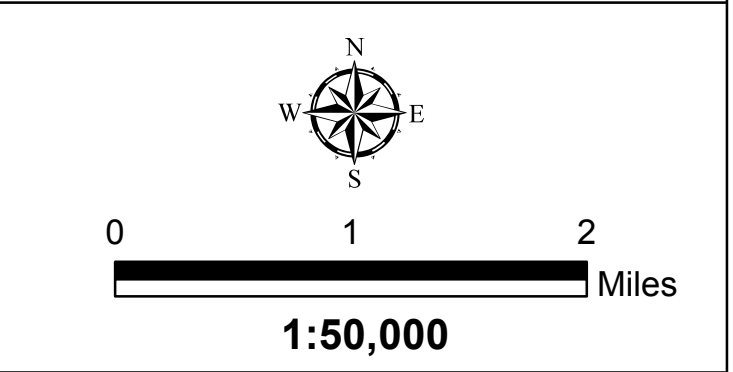
Al Guiseppe, PG

Director, Water Resources

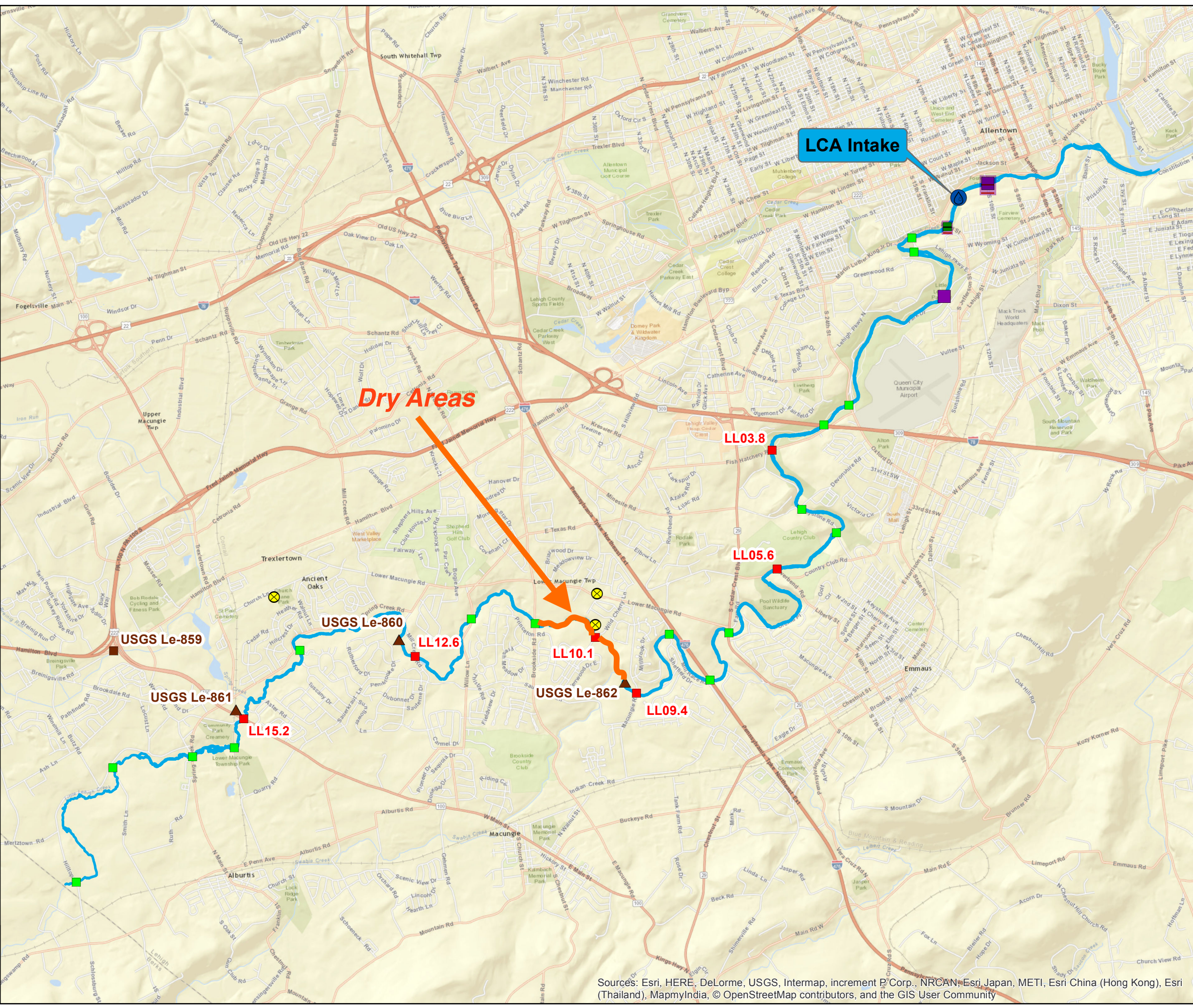


FIGURE 3
STREAM MONITORING POINTS
Little Lehigh Creek
Watershed Monitoring Plan
Lehigh County Authority
PWSID# 3390073
Lehigh County, PA

-  Inactive USGS Observation Well
-  USGS Stream Gage
-  LCA Monitoring Well
-  Proposed Monitoring Stations
-  Active USGS Observation Well
-  Bridges
-  Stream of Investigation



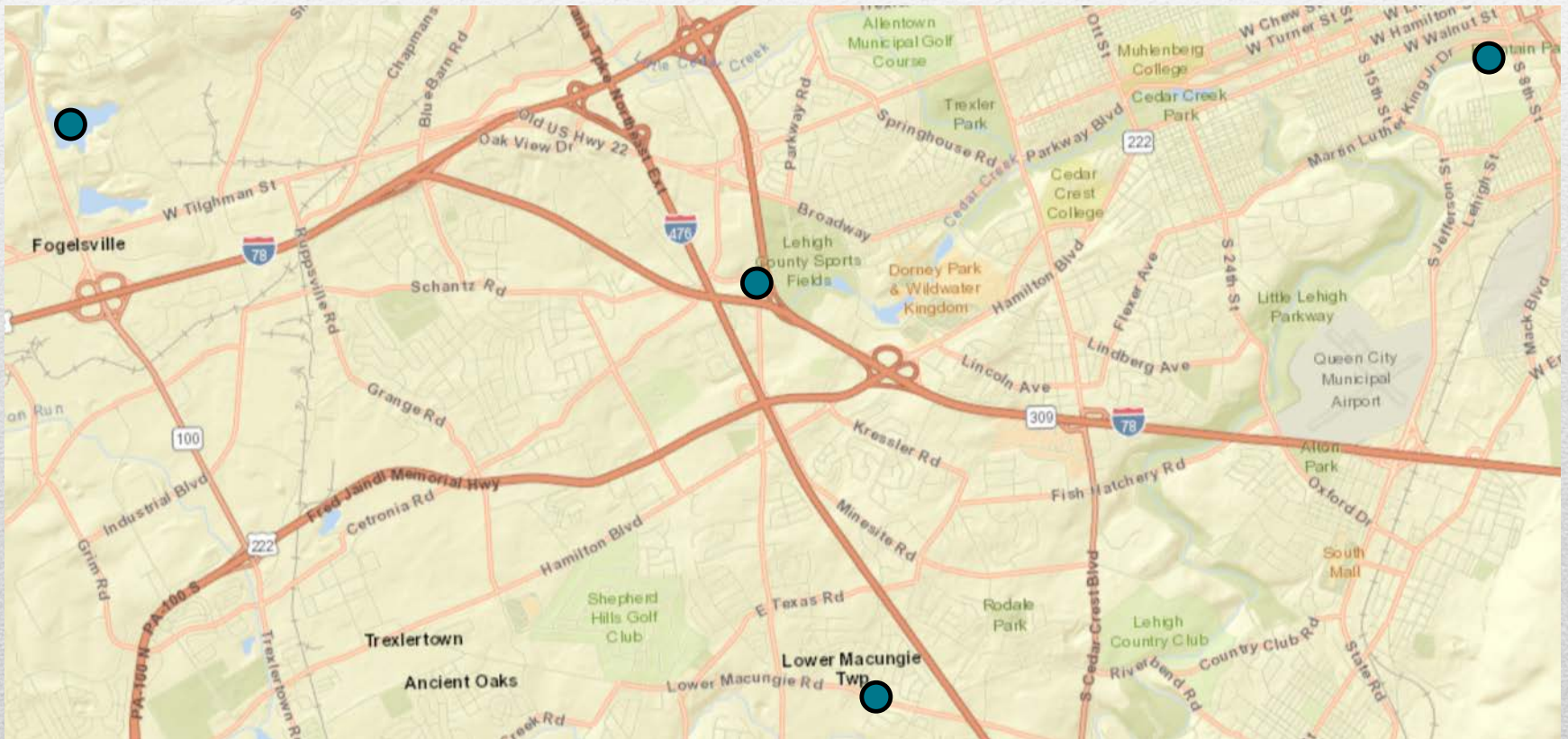
Data source: SSM
Monitoring points, SSM, 2017
Stream Gage, USGS, 2017
Streams, NHD (USGS), 2016
Bridges, SSM, 2016



Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Drought Monitoring Stations

- Little Lehigh Creek intake pass-by flow
- Upper Macungie Park Quarry
- Lower Macungie Road Monitoring Well
- Schantz Spring (future)



Additional Continuous Monitoring

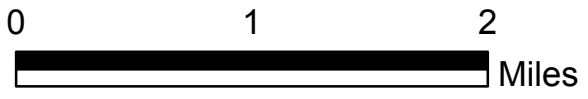
- Establish 6 additional stream gaging stations on the main stem of the Little Lehigh Creek
- Monitor 3 additional groundwater wells

Label	Bridge	Stream Mile (upstream from LCA intake)	Drainage Area (sq mi)	Historic Site
LL03.8	Fish Hatchery Rd	3.8	80.3	
LL05.6	Riverbend Rd	5.6	75.8	
LL09.4	Macungie Rd	9.4	65.9	Station #4514.6 (USGS, 1972)
LL10.1	Wild Cherry Ln	10.1	53.3	
LL12.6	Mill Creek Rd	12.6	48.9	Station #01451420 (former USGS station)
LL15.2	Route 100	15.2	21.3	Station #4513.8 (USGS, 1972)

Label	Well Address
Le-860	1905 Pembroke Drive
Le-861	1965 Route 100
Le-862	4958 Macungie Road

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1:50,000

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Monitoring points, SSM, 2017
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Stream Gaging



PHOTOGRAPHIC LOG

Client Name: Lehigh County Authority		Site Location: Little Lehigh Creek	SSM File: 103426.0013
Site Name: LL03.8 Fish Hatchery			
Photo No. 1	Date: 1/19/17		
Photographer: A. Pysher			
Direction Photo Taken: Northeast			
			

Site Name: LL05.6 Riverbend			
Photo No. 2	Date: 1/19/17		
Photographer: A. Pysher			
Direction Photo Taken: West			
			

PHOTOGRAPHIC LOG

Client Name:

Lehigh County Authority

Site Location:

Little Lehigh Creek

SSM File:

103426.0013

Site Name:

LL09.4 Macungie

Photo No.

3

Date:

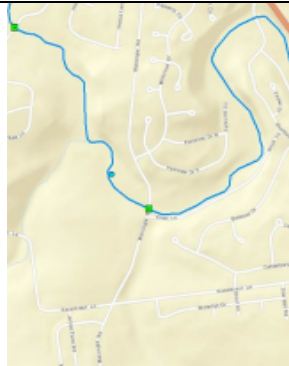
1/19/17

Photographer:

A. Pysher

Direction Photo**Taken:**

South

**Site Name:**

LL10.1 Wild Cherry

Photo No.

4

Date:

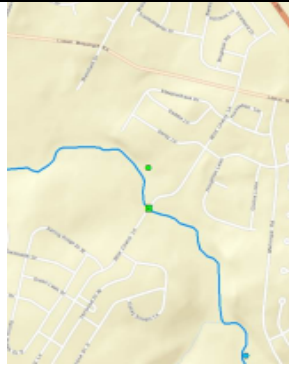
1/19/17

Photographer:

A. Pysher

Direction Photo**Taken:**

East



PHOTOGRAPHIC LOG

Client Name: Lehigh County Authority		Site Location: Little Lehigh Creek	SSM File: 103426.0013
Site Name: LL12.6 Mill Creek			
Photo No. 5	Date: 1/19/17		
Photographer: A. Pysher			
Direction Photo Taken: Southeast			
Description:			
			

Site Name: LL15.2 Route 100			
Photo No. 6	Date: 1/19/17		
Photographer: A. Pysher			
Direction Photo Taken: North			
Description:			
			