GLRI Urban Stormwater Monitoring

A USGS geonarrative

REFERENCES CITED:

U.S. Environmental Protection Agency, 2017, Green Infrastructure: U.S. Environmental Protection Agency, accessed August 12, 2017, at https://www.epa.gov/green-infrastructure

Niagara Street Now, 2016, Design & Green Infrastructure Update: Niagara Street Now, presentation given at a December 13, 2016 meeting, accessed August 12, 2017 at http://niagarastreetnow.org/resources/

Pina, Yvette, 2017, Great Lakes Shoreline Cities Green Infrastructure Grants, U.S. Environmental Protection Agency, accessed August 12, 2017 at http://usgs.maps.arcgis.com/home/item.html?id=1fd88ab5119240cea789e305fd97adec

DATA SOURCES:

Map of three case studies:

Case study location points:

Digitized by hand based on approximated visual center of each case study's spatial extent on Aug. 7, 2017. Does not represent the true centroid.

Basemap web service:

Esri, 2017, World Topographic Map: Esri map service, accessed May 31, 2017, at https://www.arcgis.com/home/item.html?id=30e5fe3149c34df1ba922e6f5bbf808f

Niagara Street (Buffalo, NY) case study:

USGS storm-sewer and weather monitoring sites:

U.S. Geological Survey, [n.d.], National Water Information System (NWIS), accessed August 5, 2017, at http://waterdata.usgs.gov/nwis

Storm-sewer manholes and mains:

Unpublished 2002 storm sewer and manhole data owned by Buffalo Sewer Authority, provided by Charles Penasack, ARCADIS, via email on March 2, 2016.

USGS stormwater monitoring area of Niagara Street:

Digitized by hand based on information provided by USGS case-study lead Brett Hayhurst, personal comm., on Feb. 28, 2017.

Niagara Street redevelopment:

Digitized by hand based on maps and information provided on Niagara Street Now, accessed August 12, 2017, at http://niagarastreetnow.org/

Basemap web service:

Esri, 2017, World Topographic Map: Esri map service, accessed May 31, 2017, at https://www.arcgis.com/home/item.html?id=30e5fe3149c34df1ba922e6f5bbf808f

RecoveryPark (Detroit, MI) case study:

USGS groundwater-well and weather monitoring sites:

U.S. Geological Survey, [n.d.], National Water Information System (NWIS), accessed August 5, 2017, at http://waterdata.usgs.gov/nwis

Sewer-flow sites, GLRI Urban Stormwater Monitoring area, and RecoveryPark Phase 1 development:

Digitized by hand based on static map illustrations provided by USGS case-study lead Ralph Haefner, personal comm., on Feb. 28, 2017. Locations are not exact.

Basemap web service:

Esri, 2017, World Topographic Map: Esri map service, accessed May 31, 2017, at https://www.arcgis.com/home/item.html?id=30e5fe3149c34df1ba922e6f5bbf808f