

# MS4 Permit Support Services

**Contact:**

Michael LaSala  
CPMSM, CSI

Senior MS4/NPDES  
Program Analyst



**Water Resource Engineering | Design | Environmental | Construction | MS4 Permit Administration**

LandStudies, Inc. implements an approach that balances the client's needs and abilities with regulations. The process allows a municipality to its understanding of responsibilities of an issued **Municipal Separate Storm Sewer System (MS4) Permit**. Our team of Engineers, Landscape Architects, Scientists, Construction Managers and Pennsylvania's only Certified MS4 Specialist provides a complete set of tools to address all components of an MS4 Permit and Stormwater Management Program (SWMP) for a municipality.

## SWMP Audit

- An introductory audit of the municipality's SWMP to determine the progress toward meeting regulatory responsibilities outlined in the MS4 Permit as well as the program's measurable goals.
- Helps a permitted municipality prepare for a state or federal audit and/or inspection, while providing cost effective program management recommendations to meet regulations.

## SWMP - Program Management

- Aids in developing, implementing, managing and coordinating the SWMP and the components of the six (6) Minimum Control Measures (MCM) of an issued Phase II MS4 Permit.
- Assists municipalities with meeting permit and regulatory requirements while maintaining a realistic and reasonable budget.
- Determines a municipality's priorities so it does not waste money and resources on unnecessary activities.

## Good Housekeeping (MCM 6) Compliance

- An on-site review and mock inspection of a municipality's operational facilities (garages) and documentation to identify accomplishments and deficiencies.
- Conducted based on US Environmental Protection Agency (EPA) inspection guidelines for both site conditions and administrative requirements.
- Additional services available to manage and implement the required Operations and Management (O&M) Plan for permit compliance.

315 North Street

Lititz, PA 17543

717-627-4440

[landstudies.com](http://landstudies.com)

**Land**  
Studies

# MS4 Permit Support Services

**Contact:**

Michael LaSala  
CPMSM, CSI

Senior MS4/NPDES  
Program Analyst

## Watershed Action Plan

### Watershed Based Quantification

- An in-depth quantitative and qualitative analysis of a small watershed with multiple municipalities.
- Prioritizes nutrient and sediment reduction Best Management Practices (BMPs) implementation, while outlining a set of realistic reductions that can be achieved.
- Provides the base for a long-term Watershed Management and/or Monitoring Plan to ensure that the municipality meets the intent of the Clean Water Act.

### Total Maximum Daily Load (TMDL)

#### Plans / Chesapeake Bay Pollutant Reduction Plans (CBPRP) / Pollution Reduction Plans (PRP) / Impaired Waters Plans

- Helps a municipality develop and implement plans that may be required by an issued MS4 Permit.
- Produces plans and assists with monitoring for nutrients, sediment/siltation, pathogens and other impairments (metals, organic enrichment, etc.).
- LandStudies recently helped Lititz Run achieve its TMDL and has submitted the first CBPRP in Pennsylvania. Lititz Run is one of twelve EPA showcase watersheds in the nation.

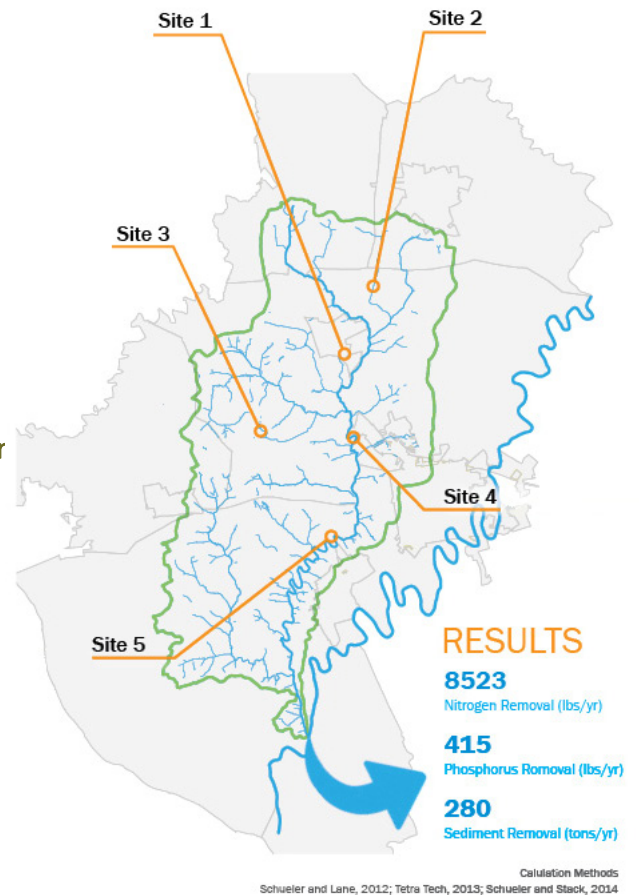
### Monitoring / Outfall Screening

- Conducts outfall screening/sampling and reconnaissance reports as required by MCM #3 of an issued MS4 Permit to determine true concerns of a municipality.
- Cost-effective ambient and event monitoring plan to help a municipality demonstrate compliance with a developed SWMP.
- Additional services include comprehensive outfall and MS4 mapping.
- Maps can be used as an effective tool for maintenance and infrastructure planning.

### Design / Build / Maintenance

- LandStudies has been designing and constructing stormwater BMPs and Green Infrastructure (GI) for over 25 years to improve water quality and achieve reductions in nutrients, sediment, and other identified pollutants, as may be required by a municipal SWMP or MS4 Permit.
- Additional services include maintenance and monitoring activities to ensure success and provide documented data for MS4 Permits.
- Championed the first recognized regional approach to stormwater management utilizing Floodplain Restoration (PA Stormwater BMP Manual 6.7.4).

Watershed Based Quantification of Water Quality Benefits  
Little Conestoga Watershed



315 North Street

Lititz, PA 17543

717-627-4440

landstudies.com

**Land**  
studies