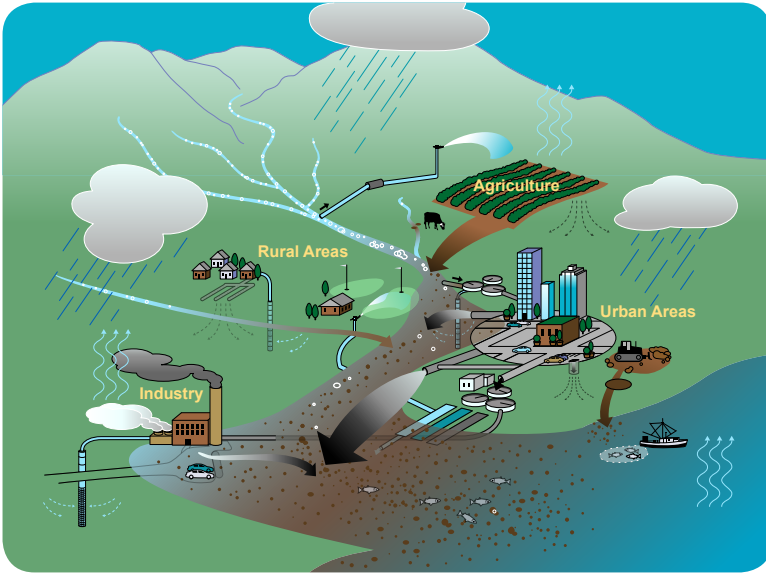


Nitrite and Nitrate in Stormwater



Aquip Accelerates the Nitrogen Cycle

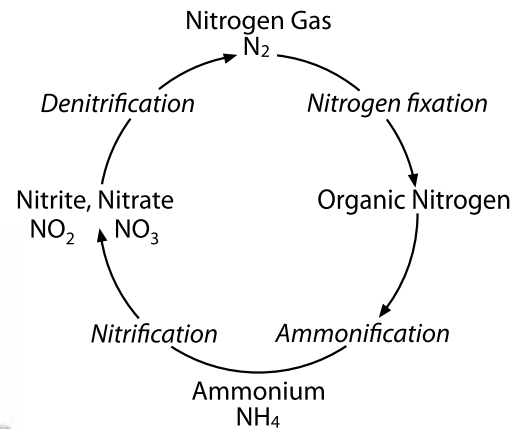
Nitrogen is a common element in all natural materials and in many inorganic industrial chemicals. It exists in different forms including organic nitrogen (e.g. decaying plants and animals, and food products), urea, ammonia, nitrite, nitrate, and nitrogen gas. (Our atmosphere contains 80% nitrogen.) Nitrogen changes forms continually in the environment following the nitrogen cycle. In biological systems such as forests, stormwater media filters, and waterways, nitrites and nitrates are continually produced by micro-organisms as organic nitrogen is broken down as a part of the nitrogen cycle.

Aquip Contributes No Nitrogen

Aquip contains no nitrogen sources and does not generate nitrogen in the treatment process. Aquip does behave like any other natural system and helps accelerate the breakdown of organic nitrogen and ammonia to nitrite/nitrate and...

Aquip Removes Nitrogen!

... Aquip has the unique ability to further break down some of the nitrite/nitrate to nitrogen gas which is vented to the atmosphere to complete the nitrogen cycle.



Industry and Nitrogen

Some industry sectors are required to analyze their stormwater to determine if nitrogen sources are impacting the stormwater quality. Examples of some industrial processes that liberate nitrogen and may release this to stormwater:

- Food production, processing and packaging
- Solid waste facilities and transfer stations
- Rubber and plastics production and recycling
- Galvanizing
- Agriculture, compost and fertilizer amendments

Prove it to Yourself

How do I demonstrate that my stormwater filter is removing nitrogen from the stormwater?

Analyze the Aquip inlet AND outlet stormwater for nitrite/nitrate and Total Kjeldahl Nitrogen (TKN), add the values together, and compare the influent and effluent totals.

• Total Nitrogen = TKN* + Nitrite/Nitrate Nitrogen

*TKN = organic nitrogen + ammonia nitrogen

For more information contact us at [800.680.3543](tel:800.680.3543) or info@stormwaterx.com