

# Understanding Nitrogen Loss

ONLY ABOUT  
**50%** of applied nitrogen is absorbed by plants. Why?

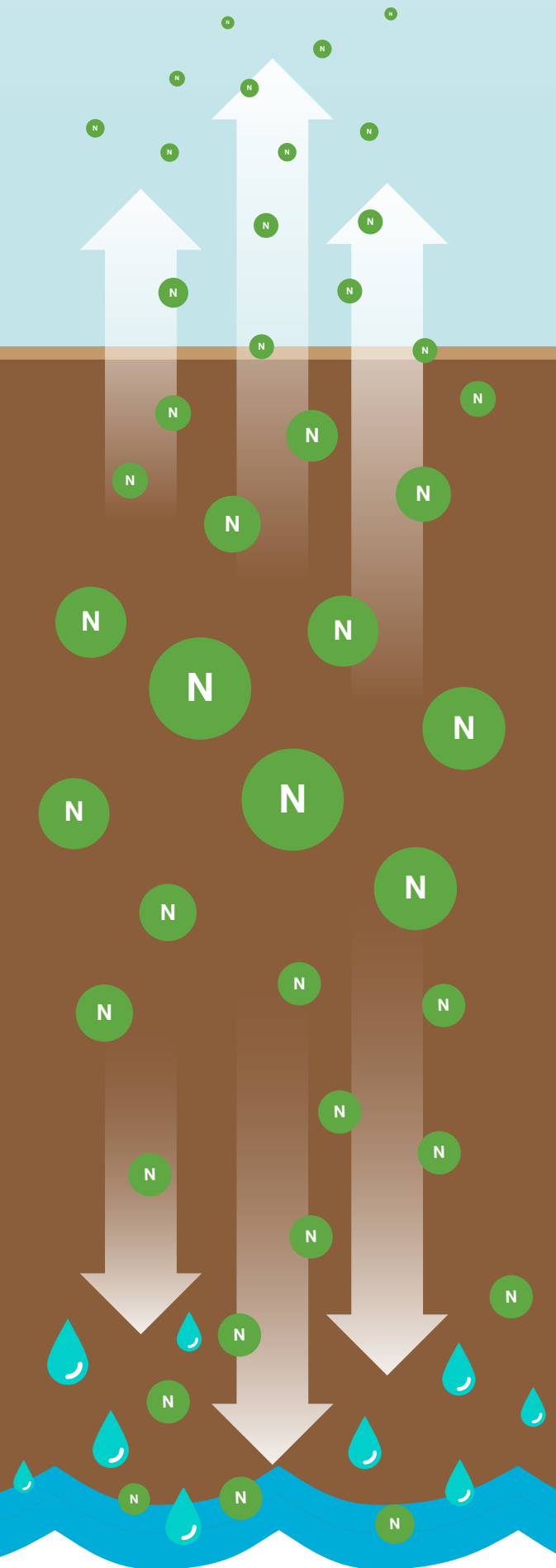
When fertilizer is transformed in the soil in various ways, several forms of nitrogen such as ammonia, nitrous oxide, nitrogen gas, and/or nitrate are lost to the air or groundwater. **Here's how nitrogen escapes.**

## INTO THE AIR

<b>80%</b>	Up to 80% of applied urea-N can be lost as ammonia ( $\text{NH}_3$ ) to the air.
<b>3%</b>	During nitrification and denitrification, up to 3% of applied nitrogen can be lost as nitrous oxide ( $\text{N}_2\text{O}$ ).
<b>20%</b>	During nitrification, up to 20% of applied nitrogen can be lost as nitrogen gas ( $\text{N}_2$ ).

## INTO THE WATER

<b>25%</b>	Up to 25% of applied fertilizer-N can leach into the water as nitrate ( $\text{NO}_3$ ).
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### Blocking the paths to nitrogen loss

Nitrogen use efficiency technologies help stop nitrogen's escape, keeping it in the soil where it is available to plants when they need it.

**The result:** Greater yield potential – and a better way for growers to protect their fertilizer investment.