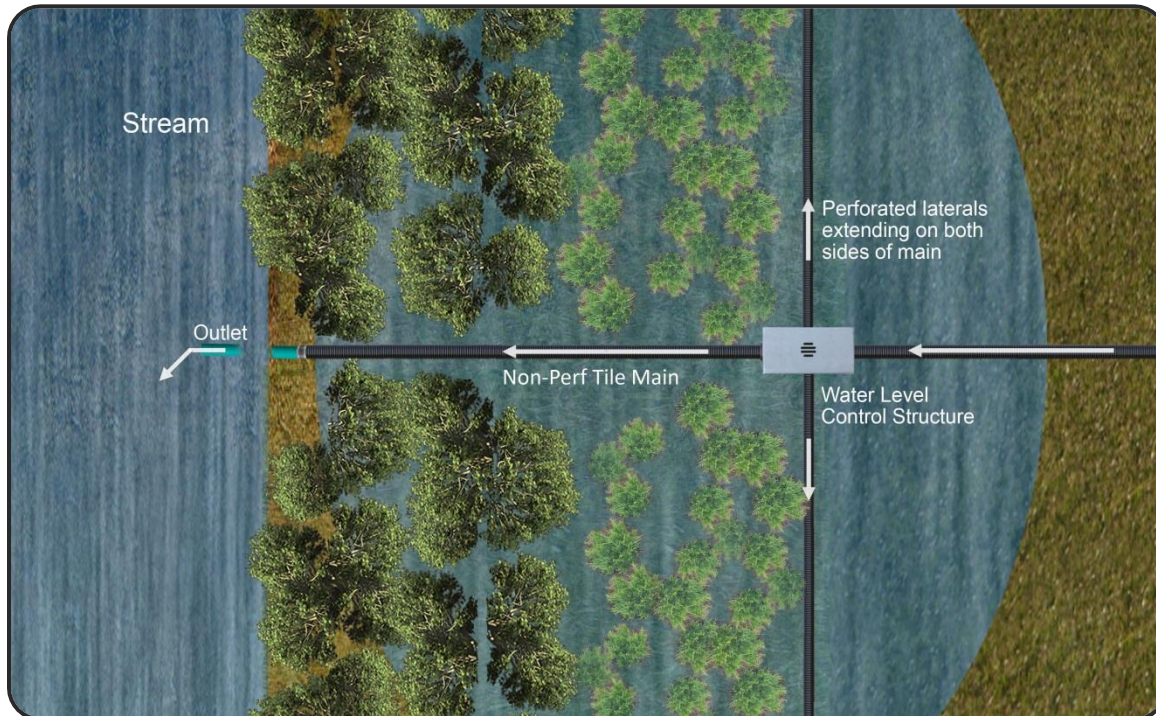
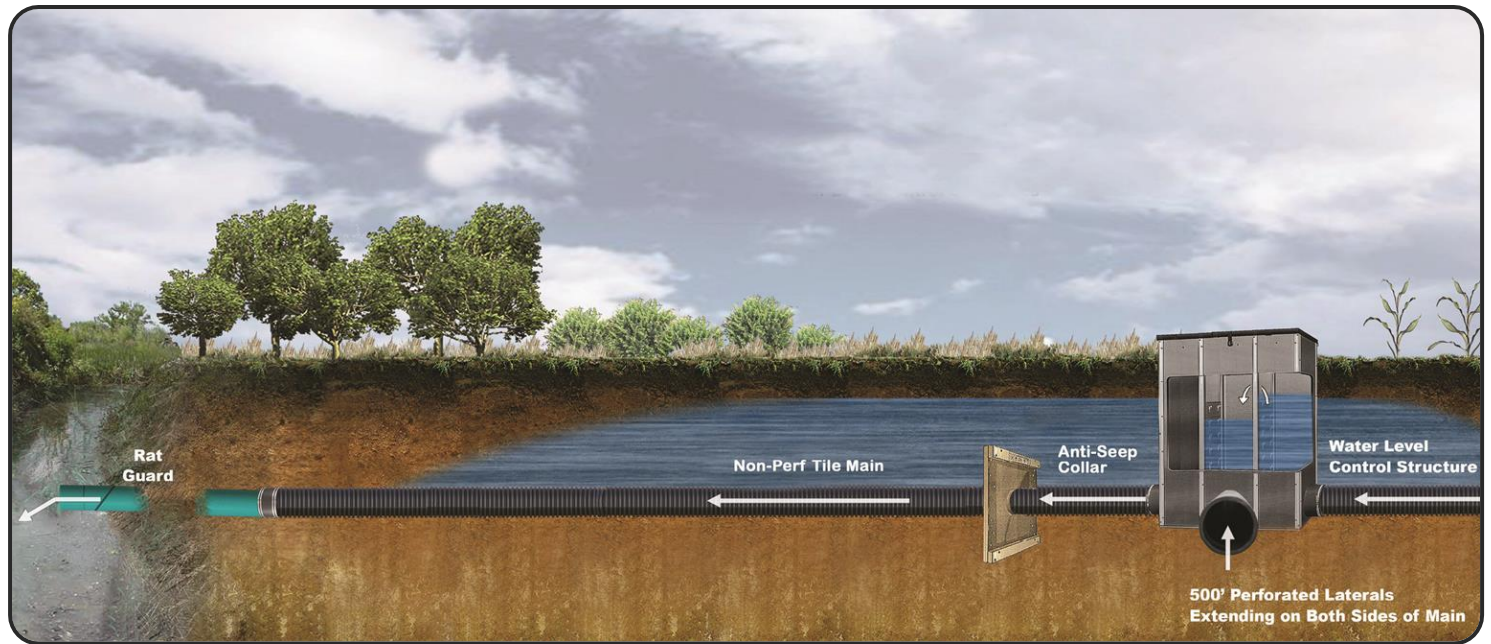


Saturated Buffer

Side View



Aerial View

Images courtesy of:
Agri Drain
CORPORATION

ESE
Ecosystem Services Exchange
Valuing Conservation

Saturated Buffers: A new approach to water quality

How do they work?

- A tile outlet is intercepted and a tile line is installed under the buffer
- A control structure is used to raise the water table and force the water up the distribution line
- Nutrients in the water are removed naturally as the water moves underneath the buffer on its way to the creek
- If buffer is “full” the tile water will bypass the system

Will a saturated buffer fit on my farm?

Important site requirements

- An established buffer (grass, trees, etc.)
- A tile outlet to intercept
- Somewhere for the water to go (creek, wetland)

Other factors to consider

- Soil conditions (avoid sand and gravel)
- Buffer length and topography
- Field topography
- Ditch Depth

What results can I expect?

- Almost all of the nitrate is removed from the tile water before it enters the creek
- Annual nitrate load reductions over 60% have been reported

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