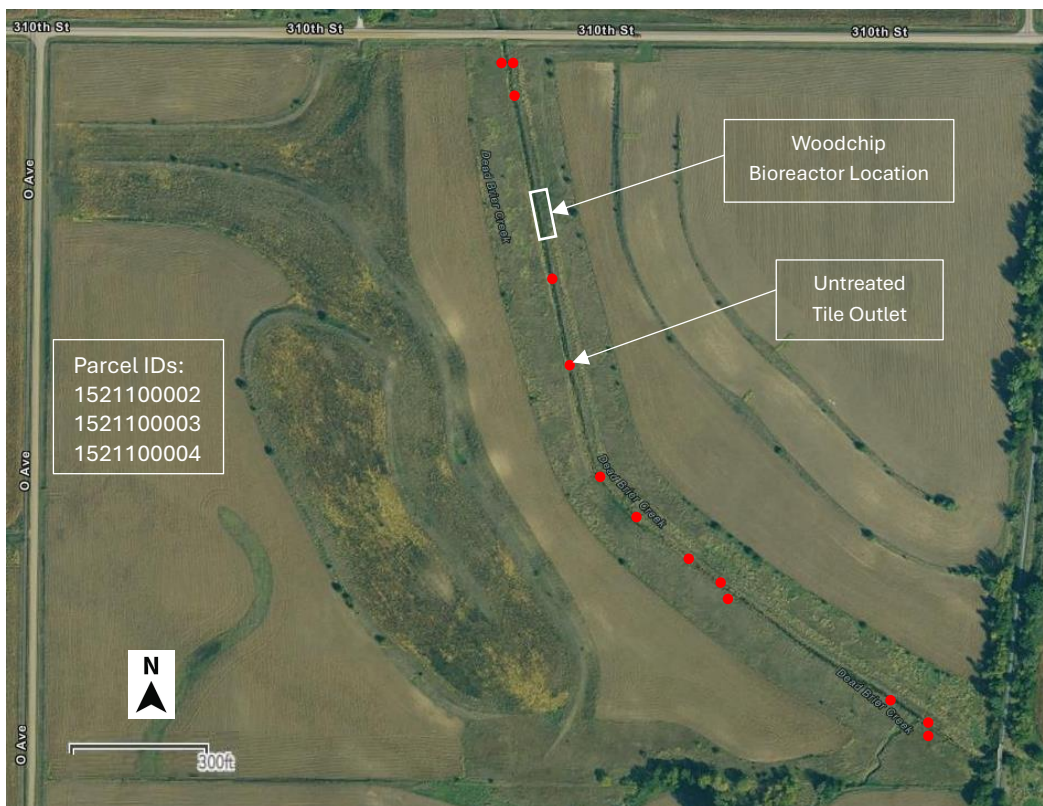




Opportunities in Conservation

The Iowa Soybean Association (ISA) is dedicated to supporting Iowa farmers. In our commitment to advancing land stewardship across the state, we partner with landowners who are dedicated to driving innovation and sustainability in Iowa agricultural landscape. Implementing conservation, **at no cost to the landowner**, is part of ISA's commitment to support Iowa landowners.

Chris Henning has been an excellent partner in our conservation efforts. She was one of the first people to have a woodchip bioreactor in Iowa while also allowing years of data to be collected for research. ISA has been monitoring her bioreactor for many years and had plans to install a saturated buffer in Spring 2025 which would treat almost every untreated tile outlet in the land parcel pictured below.



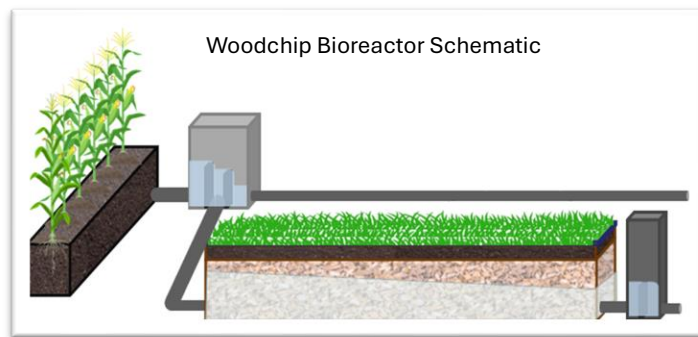
We see great potential for this site to support successful conservation practices and would love to collaborate with you, as the new owner, to continue this important conservation work. With funding already secured, **the installation can be done at no cost to you**, and we will guide you through the process to ensure it aligns with your land stewardship and management goals. Additionally, we would love to continue monitoring the bioreactor to further our research and understanding in water conservation.

If you would like to discuss more, you can contact Alex Buseman at 515-313-5491 or abuseman@iasoybeans.com. Please refer to the following page for descriptions of the conservation practices we previously referred to.



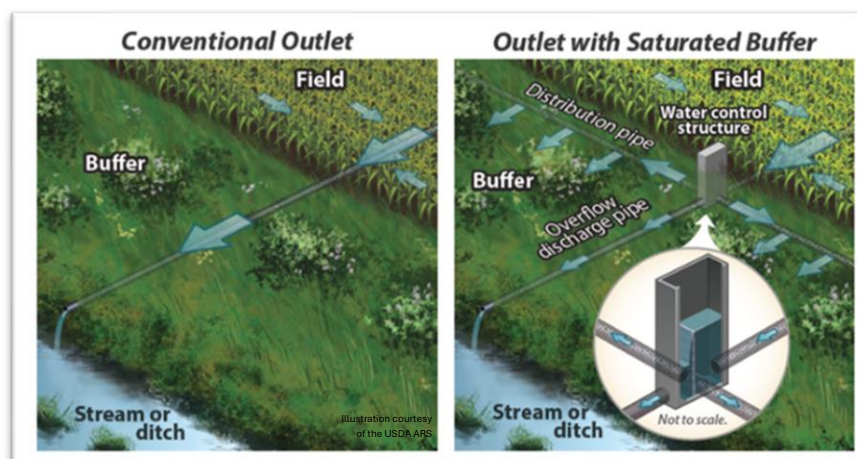
Woodchip Bioreactors

Woodchip bioreactors are underground woodchip-filled chambers designed to intercept tile water and remove nitrate. Denitrifying microbes naturally establish inside the bioreactor chamber and utilize the woodchips to metabolize nitrate. On average, bioreactors remove 43% of nitrate in tile water without the need for additional management. They are easily incorporated into existing tile systems and take little, if any, land out of production. They can also improve wildlife habitat if a pollinator mix is planted on top of the chamber. The lifespan of a bioreactor is expected to be around 10 years as the woodchips degrade. The bioreactor on your land was installed in 2010, necessitating the need for performance monitoring. Iowa Soybean would like to continue monitoring this bioreactor with your permission.



Saturated Buffers

Saturated buffers divert tile water through perforated tile lines that run parallel to an adjacent stream. Installed at the edge of a crop field, tile water is naturally treated by soil microbes and vegetation to remove 50% of the nitrate as the water filters its way to the stream. The vegetative strip also supports soil structure and reduces erosion which maintains land profitability. Saturated buffers can take some land out of production as they require a 30-foot-wide buffer, but there is already a wide buffer present in your field. They also provide habitat as they are suitable locations for pollinator habitats and provide food and shelter for other wildlife.



Both saturated buffers and woodchip bioreactors are designed as a “set it and forget it” practice. Meaning, it will not require any work on your behalf after they are installed. Additionally, these are designed to avoid risks such as backing up tile water, as the control structures allow for bypass flow during high flow events. With little risk and great potential, these practices can make a huge difference in downstream nitrate loading.