BUFFER SOLUTIONS
FOR PORK PRODUCTION

Using the simple science of
trees, shrubs and grasses.
What are conservation buffers?
A buffer is a living filter made up of almost any combination of mostly native trees, shrubs, and grasses. As such, buffers are natural, living systems and a flexible, common-sense, cost-effective conservation practice that any pork producer can use. Possibilities include: planting trees and shrubs around pork production facilities; planting grasses around lagoons; or planting trees, shrubs, and grasses in any combination along streams and creeks near land where manure is applied.

What benefits do buffers offer me as a pork producer?
Pork producers can expect buffers to provide a number of benefits—both to producers and their neighbors. When combined with other conservation practices, buffers help protect surface and ground water quality, improve air flow and air quality, and enhance the visual appearance of production facilities.

- **Improved water quality**—Improvements in quality can be expected when buffers are used to trap and filter run off from fields where manure is applied.
- **Nutrients** are used by plants and micro-organisms in the buffer, providing an additional site for manure utilization.
- **The trees, shrubs and grasses of a buffer** can be a source of vegetative material for organic mats on storage lagoons or pits, or bulking material for compost in integrated manure management systems to improve soil structure and organic matter content.

**FACT:** buffers reduce dust and noise

**FACT:** buffers disperse and reduce the impact of odors on neighbors

**FACT:** buffers trap and use nutrients that escape manure management systems

**FACT:** reducing wind improves working conditions for people and lessens livestock stress

**FACT:** the summer shade and wind shelter provided by buffers can reduce cooling and heating costs as much as 30%
Enhanced airflow and air quality—The trees, shrubs and grasses that make up a buffer can filter the air near livestock facilities, storage units, and manure application sites while the sheltering effect of the trees and shrubs in a buffer may help contain any odor. And tree and shrub buffers planted near production facilities and pastures provide shade during the summer and protect livestock from cold winter winds and snow.

- Good neighbor relations through facility enhancement—When pork producers plant trees, shrubs, and grasses, it suggests to their neighbors and the community that something positive is happening on sites associated with pork production.
- Evergreen trees provide seasonal interest because of their color and texture, flowering trees enhance the appearance of facilities and may mask odors when in bloom.
- Buffers can be designed to harmonize with the local landscape. And trees and shrubs planted in large groupings reduce the scale of buildings, making pork production more “family friendly.” Trees especially impart a sense of permanence—supporting the notion that pork producers are committed to protecting the environment where their families live and work.

FACT: buffers provide a visual screen, allowing facilities to blend into their environments, improving the aesthetics of the area

FACT: buffers provide wildlife habitat

Cost-Share Programs
There are several USDA programs available to help pork producers install conservation buffer systems. Contact your local USDA service center for cost-share information. Two of the most popular are:

Continuous CRP Sign-Up
The continuous Conservation Reserve Program (CRP) sign-up makes economic sense because it provides annual rental payments over 10 to 15 year periods for the installation and maintenance of conservation buffers. Cost-sharing is also available for installation.

Environmental Quality Incentives Program (EQIP)
EQIP is a USDA conservation cost-share program designed to encourage and support natural resource conservation practices. The program provides technical assistance, cost-share and incentives, with half of the resources dedicated to livestock-related concerns.

To get started on a buffer project
Buffers are a flexible system and can be designed to fit every pork producer’s specific needs and opportunities—and their relatively low cost complements every size or type of farm. As with all living systems, diligent maintenance is required, but typically is limited to watering and weed control during the first phases of establishment. Because some shrub and tree mortality can be expected at every site, replacement planting may be necessary. As a natural, living system, buffers will be in place for the entire lifetime of most facilities.