

Why 4R Nutrient Stewardship Certification?

A Responsible Approach to Row Crop Agriculture

The 4Rs approach provides a framework to achieve cropping system goals by applying the right source of fertilizer at the right rate, at the right time, in the right place.

Fertilizer is an essential component to healthy crop production. The nutrients in fertilizer, including nitrogen and phosphorus, are the building blocks for continuous plant growth. The 4Rs philosophy—a science-based approach to apply the right source of fertilizer at the right rate and right time in the right place—recognizes the vital role of nutrients to crop health.

Developed by the International Plant Nutrition Institute, The Canadian Fertilizer Institute and The Fertilizer Institute, the 4R approach is a proven framework of plant nutrition, tailored to local conditions and resources, that leads to increased crop yields, increased profits, enhanced environmental protection, and improved sustainability. The 4R approach is most effective when combined with other agronomic and conservation practices, such as no-till farming and cover crops.

A Win-Win for Farmers and the Environment

When fertilizer application is poorly managed, farmers' profits can decrease and nutrient runoff can increase, with potentially devastating consequences for our waterways and the communities that rely on them. In 2014, for instance, more than 400,000 people in Ohio went without water when a nutrient-fueled algal bloom erupted in Lake Erie and contaminated drinking water supplies. Unfortunately, this isn't an isolated case. Each year, nutrients from sewage treatment plants, farms and other sources are washed into the Mississippi River Basin, which threatens drinking water supplies and contributes to the annual Gulf of Mexico dead zone, a massive area of water depleted of oxygen that chokes off marine life.

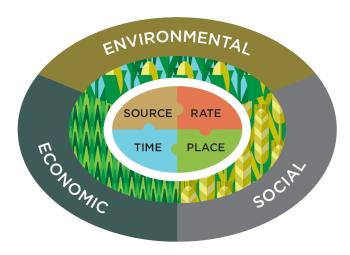
"It is important to make sure that the nutrients applied for crop production are staying in the field for crop uptake. This certification is a tribute to the practices of our employees and customers working together to do things the right way."

Mark Sunderman President & CEO, Legacy Farmers

"Being a 4R certified retailer means we are striving to be good stewards of the land while protecting our customers' investments by planning the correct nutrient source at the right rate, time and place."

> — Jerry Weaver Branch Manager, Heritage Cooperative





The 4Rs is a science-based approach to nutrient stewardship that offers enhanced environmental protection, increased production and profitability potential, and improved sustainability.

Two years before the 2014 Lake Erie incident, a diverse group of stakeholders in the area from the business, government, academia, and NGO sectors came together to develop a set of standards that would form the foundation for 4R Nutrient Stewardship Certification Program, which launched in March 2014. The voluntary program encourages nutrient service providers and other certified professionals to adopt the 4R philosophy of nutrient management.

Thirty-seven nutrient service providers in the Lake Erie Basin, who influence more than 2 million acres of farmland, have earned certification under the 4R Nutrient Stewardship Certification Program. Administered by the Ohio AgriBusiness Association, the country's first certification program of its kind has been so well received that it has expanded throughout the state of Ohio. The program has become a model for other states and regions where farmers are increasingly challenged to balance rising input costs, increasing demand for higher yields, and the ever-present responsibility to be good stewards of North America's lands and waters.

The 4Rs Are Good Business

Farmers are increasingly reliant on the advice and guidance of nutrient service providers and crop advisors. They purchase nutrients from agricultural retailers, hire crop advisers for nutrient recommendations, and often hire applicators to spread the nutrients. Each provider interacts with hundreds of farmers and has the ability to influence the management of thousands of acres. As a trusted member of the farming operation, nutrient service providers have a tremendous duty to advocate for the proven practices that will yield the greatest long-term benefits to both their customers and the environment. The 4Rs approach is just good business.

Adopting the 4R approach will:

- Increase grower profits by optimizing fertilizer efficiency
- Achieve higher crop yields
- Preserve natural ecosystems by growing more on less land
- Support nation-wide efforts to reduce nutrient runoff
- Demonstrate to the public and government officials that the fertilizer industry can successfully manage nutrients without imposed regulations
- Help safeguard drinking water supplies

By becoming a certified 4R Nutrient Stewardship service provider, you are making a promise to your customers, neighbors and community that you will work to safeguard our natural resources for the long-term sustainability of crop production and for the well-being of generations to come.

"We believe the 4R Nutrient Stewardship
Certification Program validates and authenticates
the recommendations our Certified Crop Advisers
and other sales staff make with our growers.
Further, it supports our efforts in the whole area
of environmental stewardship while still working
with our customers to achieve maximum
economic yields with minimum environmental
impact."

– Daryl GatesPresident & CEO,Morral Companies

"Tyler's recognizes the importance of the 4R Nutrient Stewardship Program for all facets of agriculture; to sustain our valuable farmland into the future and reduce the nutrient runoff from commercial fertilizers into lakes and waterbodies creating environmental issues. We find it imperative to adapt these fundamentals and educate our growers and industry partners to protect and maintain our environment into tomorrow"

— Nick Franks General Manager, Tyler Grain & Fertilizer Co.

"Grower or retailer, we all play a role in ensuring that the products we use and the manner in which we use them creates the greatest possibility for success with the least amount of environmental impact. As a 4R Certified retailer, we don't sell products, but a way of doing business."

— Blake Rossel Owner Diversified Agri-Services, Inc.

For more information, contact:

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Or visit **4Rcertified.org**