### **Opportunity for CCAs to earn nutrient management certification**

# Crop advisers responding to water quality concerns

# BY Jennifer Gallus

Growing concern about agriculture's role in water quality is sparking demand for crop advisers who have in-depth knowledge of nutrient management.

The International Certified Crop Adviser Program has responded by developing a new, voluntary training and certification program for crop consultants. The 4R Nutrient Management Specialty Certification — or 4R NMS — equips crop advisers with specialized skills to help farmers manage nutrients sustainably and protect our water resources.

Of course, all certified crop advisers, or CCAs, must be knowledgeable in the basics of nutrient management, says Luther Smith, director of professional development for the American Society of Agronomy, which oversees the CCA program.

The new 4R specialty allows CCAs to deepen their knowledge and be recognized for their additional expertise, he says. It also lets farmers identify consultants who are well-qualified to advise them on fertilizer and water quality issues.

The 4R NMS certification was developed last year by the American Society of Agronomy in cooperation with university and USDA-NRCS soil scientists and nutrient management specialists. It builds on the nutrient, soil and water components of the International CCA certification. Only certified crop advisers are eligible to take the qualifying exam.

Consultants who earn the 4R NMS have advanced knowledge of:
•nutrient management planning;
•nitrogen, phosphorus, and potassium;
•secondary macronutrients and micronutrients;
•manure management;
•state and national nutrient management regulations and water quality goals.

#### **Benefiting farmers, environment**

The 4R approach to nutrient stewardship is an internationally-recognized best management practice, Smith says. The goal is to use the right fertilizer source, at the right rate, at the right time, with the right placement, in each field.

This integrated approach — backed by robust scientific research — offers economic, social and environmental benefits. It's strongly supported by industry, the USDA-NRCS and the EPA, and has been fast-tracked for inclusion in Minnesota's nutrient management planning Technical Service Provider standards.

If you are a crop consultant who helps farmers with fertility decisions, consider becoming a 4R nutrient management specialist. The training and rigorous exam will allow you to strengthen your skills, demonstrate your knowledge, and draw awareness to your expertise.

"The additional specialty of the 4R NMS emphasizes your desire to go above and beyond what is expected," Smith says. It adds to your credibility, and assures your clients that you have the knowledge to help them manage nutrients profitably and sustainably. You may even lower your professional liability insurance premiums.

Farmers who work with a 4R nutrient management specialist can count on getting sound, unbiased advice based on the best available science. In turn, better nutrient management can boost your farm's bottom line — never more important than during these times of low commodity prices.

The 4R NMS program also benefits Minnesota as a whole, by helping farmers reduce nutrient losses to surface and groundwater while producing food for the world's growing population.

# How to become 4R certified

Minnesota is one of 11 states that offer the 4R NMS certification. The next exam will be held on **February 3, 2017 at Ridgewater College in Willmar**. To register for the Minnesota 4R NMS test, go to the MN-CCA website [http://mcpr-cca.org/cca/http]. Registration runs through Dec. 9, 2016.

The American Society of Agronomy provides detailed performance objectives, webinars, and study guides to help CCAs prepare for the exam. Materials are available on the ICCA website [https://www.certifiedcropadviser.org/].

With increasing environmental scrutiny of agriculture, it is more important than ever to have professionals who are well-rounded in nutrient management and its potential environmental and water quality impacts.

Gallus is a soil scientist at the Minnesota Department of Agriculture and chair of the MN-CCA Board of Directors. Find information and links to Minnesota certified crop advisers at <u>http://www.mcpr-cca.org</u>

#### Key points

•There's growing demand for CCAs with specialized nutrient management expertise.

•The new 4R Nutrient Management Specialist certification is aimed at improving nutrient use and water quality.

•Minnesota CCAs are eligible to take the 4R nutrient specialist exam on Feb. 3. Register by Dec. 9.

### How a nutrient specialist can help you

A MN-CCA 4R nutrient management specialist will work with you to improve nutrient use and lower water pollution risk on your farm. Your consultant can help you:

•Evaluate your N and P management systems using water quality risk assessment tools.

•Create a customized 4Rs nutrient management plan to fit the unique environmental and management features of your farm.

•Identify management changes that might require adjustments to your nutrient management plan.

•Determine the right N, P, and K application rates based on soil tests, crop selection, soil and weather conditions, environmental considerations, economic factors, and nutrient credits.

•Plan the right timing of fertilizer applications based on crop uptake patterns, soil conditions, nutrient source and form, and cover crops.

•Identify the right fertilizer placement in each field based on soil, weather, cropping systems, tillage practices, application timing, fertilizer form, equipment and labor, and potential loss factors.

•Determine the right sources of N, P and K for each field based on soil and climate conditions, crop selection, growth stage, cropping systems, environmental concerns, and soil or tissue tests.

•Determine the annual available N and P excreted in manure by a herd and calculate the land base required to use the nutrients.