



## The 4Rs and Other BMPs to Improve N Use Efficiency

Colusa Farm Show, 1303 10<sup>th</sup> St (Hwy 20), Colusa, CA 95932 February 6, 2020; 11AM – 12PM 1 Continuing Education Unit Approved

**Speaker: Stephanie Tillman**, Soil & Agricultural Scientist with Land IQ, holds an M.S. in Soil Science from the University of Saskatchewan, in addition to her Certified Professional Soil Scientist, Certified Professional Agronomist and Certified Crop Adviser certifications. Ms. Tillman has worked as a soil and agricultural specialist in California and other Western States since 2001. Her experience includes water quality and quantity evaluation for crops, technical and regulatory support for beneficial agricultural reuse of industrial and municipal wastes and by-products, sodic soil reclamation, soil and crop fertility recommendations, field experiment design, grower communications and regulatory support.

11:00AM – 11:05AM Welcome and reminder about the Irrigated Lands Regulator Program

**Reporting Requirements** 

11:05AM – 12PM The 4Rs and other BMPs to Improve N Use Efficiency

The first portion of the presentation will focus on cultural best management practices that directly or indirectly improve N uptake and efficiency in common crops in Colusa and Glenn Counties. These BMPs may include practices that promote deep rooting, varietal selection, nutrient interactions, tillage, and cover cropping.

The second portion of the presentation will focus on the 4R Nutrient Stewardship concept (right source, rate, time, and place for fertilizer application). Adhering to the 4Rs promotes the beneficial economic, social and environmental outcomes desired by all stakeholders to plant ecosystems and waterways. The 4Rs is a concept developed through a long history of cooperation between the fertilizer industry and the scientific community. Since at least 1988, application of the right nutrient source or product at the right rate, right time and in the right place has been closely associated with agricultural sustainability.