



# Reducing Nutrients in Water: What's in it for Colorado Ag Producers?

**Colorado agricultural producers can influence what happens next with state regulation of nutrients and water quality.**

## BACKGROUND

In Colorado and across the United States, agriculture is being identified as one source of nutrient pollution. Nutrients such as nitrogen and phosphorus run off farmlands and accumulate in surface waterways, causing water quality issues. Most agricultural nutrient pollution is considered “nonpoint source,” or difficult to trace to a particular origin.

## NUTRIENTS

Nitrogen (N) and phosphorus (P) are two major essential elements required for crop growth. When lacking in soils, nutrients may be supplemented with fertilizers.

Excess nitrogen and phosphorus that runs off farmland and enters surface water and groundwater can cause:

- algal blooms
- reduced dissolved oxygen content
- harm to aquatic plants and animals
- impaired drinking water supplies



## REGULATION 85

Starting in 2012, Regulation 85 began more stringent regulation of “point source” nutrient dischargers, such as wastewater treatment plants. Nonpoint sources, including most of agriculture, are discussed in the regulation, but mandatory requirements are currently not implemented. Instead, nonpoint sources are encouraged to adopt best management practices that can help reduce nutrient pollution in surface waterways.

### VOLUNTARY ACTION NOW MAY PREVENT FUTURE REGULATION

Regulation 85 sets a 2022 deadline for evaluation of a voluntary approach for reducing nutrient pollution.

Nonpoint sources, including agriculture, and their contributions to nutrient levels will be assessed.

Additional regulations may be considered, depending on the success of voluntary efforts.

## WHAT ARE BEST MANAGEMENT PRACTICES?

Best management practices (BMPs) can include improvements in the management of fertilizer, irrigation, manure handling, and soil erosion. BMPs improve water quality and have agronomic and economic benefits. Examples include:

- Optimizing fertilizer usage through rate, placement, timing and source
- Reducing runoff through improved irrigation systems and scheduling
- Minimizing erosion through conservation tillage
- Installing buffer strips near waterways



## WHAT'S THE BENEFIT TO AGRICULTURE?

Widespread adoption of best management practices:

- allows landowners to make the most of their soil and water resources without government intervention
- increases the efficiency of fertilizer and water application
- maintains or improves the land's productivity by reducing runoff and erosion
- reduces nutrient pollution to avoid the need for future regulation



## WHAT CAN PRODUCERS DO?

Many agricultural producers already utilize BMPs that reduce agricultural nonpoint source pollution. In addition, producers are encouraged to take an active role by:

- continuing to adopt best management practices
- participating in projects to monitor and collect water quality data
- attending Water Quality Control Division meetings
- encouraging fellow producers to become involved and stay engaged

## POINT AND NONPOINT SOURCES

A point source is a single, easily identifiable source of pollution. Examples include:

- pipe or drain
- industrial discharge
- wastewater treatment plant

A nonpoint source is diffuse and more difficult to pinpoint. Examples include:

- most agriculture
- forestland
- some urban stormwater areas

## WHAT HELP IS AVAILABLE FOR PRODUCERS TO ADOPT BMPS?

The Natural Resources Conservation Service (NRCS) offers technical and financial assistance. Contact a local NRCS office or visit [nrcs.usda.gov](http://nrcs.usda.gov).

Colorado State University Extension offers numerous publications and factsheets on best management practices for Colorado agriculture. Contact your local county extension office or visit [ColoradoAgNutrients.org](http://ColoradoAgNutrients.org).

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COLORADO  
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