

Agricultural best management practices: enrollment, implementation and requirements

By Kelly Morgan, Gary England and Callie Walker

Agricultural best management practices (BMPs) are practical, cost-effective actions that agricultural producers can take to reduce the amount of fertilizers, water and pesticides entering our water resources. They are individual or combined practices determined through research, field testing and expert review to be the most effective and practicable means for improving water quality, taking into account economic and technological considerations.

The Florida Legislature gave the Florida Department of Agriculture and Consumer Services (FDACS) the authority and direction to develop and adopt BMPs addressing both water quality and conservation. FDACS works cooperatively with agricultural producers and industry groups, the University of Florida Institute of Food and Agricultural Sciences (UF-IFAS), the Florida Department of Environmental Protection (FDEP), the water management districts, and other interested parties to develop and implement BMP programs that are economically and technically feasible. BMPs are designed to benefit water quality and water conservation while maintaining or even enhancing agricultural production. The BMPs are outlined in commodity-specific manuals, which can be found on FDACS's Office of Agricultural Water Policy website (<http://www.freshfromflorida.com/Divisions-Offices/Agricultural-Water-Policy/Enroll-in-BMPs/BMP-Rules-Manuals-and-Other-Documents>).

Florida law provides that producers who implement and maintain FDACS BMPs receive a presumption of compliance with state water quality standards. Implementing BMPs benefits both the farmer and the environment, and demonstrates agriculture's commitment to water resource protection. Agricultural producers can enroll in FDACS BMP programs by submitting a Notice of Intent (NOI) to implement BMPs, which is included in the adopted BMP manuals. Enrolling in the program involves FDACS field staff working with the producer to fill out the NOI, including a site visit that allows for the field staff and producer to select the appropriate BMPs for that particular operation and site.

Two key categories of agricultural BMPs are nutrient and irrigation

management. Nutrient management addresses the type, amount, timing and placement of fertilizer. Irrigation management involves the maintenance, scheduling and overall efficiency of irrigation systems. BMPs include both management and structural practices, such as efficient use of fertilizer, conversion to more efficient irrigation systems, erosion control, setbacks from waterbodies, stormwater ponds and culvert/riser installations, among others.

Agricultural water quality and quantity BMPs are an integral part of water resource protection. The Florida Legislature has recognized this in various statutes, including the Florida Watershed Restoration Act (403.067, F.S.), under which FDEP establishes total maximum daily loads (TMDLs), which are water quality targets for impaired waters. Many of the TMDLs are for waterbodies with excess nitrogen and phosphorus. Florida law authorizes FDEP to adopt Basin Management Action Plans (BMAPs) to achieve these TMDLs. In areas with FDEP-adopted BMAPs that include agriculture, producers must implement BMPs or conduct water quality monitoring. Otherwise, these sources may be subject to enforcement by FDEP or the applicable water management district.

FDACS field staff along with UF-IFAS Extension work directly with farmers and agricultural representatives to assist them in understanding and implementing BMPs by providing educational workshops, field days and other opportunities for farmers to learn about and share

information on BMPs. Additionally, FDACS has a BMP Implementation Assurance program to follow up with producers and help ensure that BMPs are being implemented properly. Implementation Assurance program site visits are conducted periodically, and include review of fertilizer application, irrigation and pesticide use records, as well as structural and management BMPs addressing nutrient and irrigation management.

The most common deficiency found in BMP implementation has been in record keeping, which continues to be a challenge for some producers. These records do not need to be very complicated, but need to include all soil and tissue sampling records; the date, location, acreage covered; type and formulation of fertilizer and how it was applied; and irrigation and maintenance records. Growers can devise their own record-keeping system, or use the example formats contained in the FDACS BMP manuals. FDACS and UF-IFAS Extension staff are available to explain record-keeping requirements and help growers develop a system that works for them, whether on paper or on their computers.

Call (850) 617-1727 or e-mail AgBmpHelp@FreshFromFlorida.com for assistance with BMP enrollment or implementation.

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