

C-139 Basin Annual Report-Certification of BMP Implementation

Due February 1, 20

| Permit No | | Permittee/Landowner | | Lessee |
|--|---|---|--|--|
| Complete One Bmp Implementation Report For Each Crop Grown. Check "√" the applicable boxes in column 1. Sign the certification statement below. | | | | |
| Indicate Crop/Land Use For This Report | | | | <input type="checkbox"/> Check here if there is a change to your permitted BMP Plan |
| List The Farms/Permit Basin IDs For Which This Report Applies | | | | |
| Nutrient Control Best Management Practices (BMPs) | | | | |
| Points | "√" | Nutrient Control Practice | Nutrient Control Practice Description | BMP Implementation Documentation |
| 2 ½ | | Nutrient application control | Uniform and controlled boundary application of nutrients with a minimum 4' setback from canals with no overlapping application for each application method (e.g. banding at the root zone or side-dressing, pneumatic controlled-edge application such as AIRMAX); fertilization through low volume irrigation system applied at root zone (fertigation); controlled placement by fertilization under plastic near root. | Documentation demonstrating required BMP implementation shall be maintained on site for District review, as applicable. Examples of documentation are: |
| 2 ½ | | Nutrient spill prevention | Formal spill prevention protocols (storage, handling, transfer, education/instruction). Pasture – Also includes restricted placement of stored feed and housekeeping to prevent spillage near storage and transfer areas (feed and molasses). | <ul style="list-style-type: none"> Fertilizer application work orders Training protocols/ company guidelines Attendance sheets for training Maps indicating crop types/locations Maps indicating fertilizer application rates and areas |
| 2 ½ | | Manage successive vegetable planting to minimize P | Avoid successive planting of vegetables or other crops having high phosphorus (P) needs to avoid P build up in soils. Includes successive planting with no successive P application. | <ul style="list-style-type: none"> Fertilizer delivery receipts Soil test results Plant tissue analysis results Crop specific fertilizer recommendations |
| 2 ½ | | Recommended nutrient application based on plant tissue analysis | Avoid excess application of P by determining plant nutrient requirements for adjustments during next growing season (crop specific). | <i>Field Verification</i> , when applicable, can include observation of: <ul style="list-style-type: none"> Fertilizer banding equipment Fertilizer loading areas No on-site fertilizer storage |
| 2 ½ | Pastures with Bahia grass – Plant tissue analysis along with soil test is required to make nutrient application recommendation. | | | |
| 5 | Citrus – Results are applied to the current season P requirements | | | |
| 5 | | Recommended nutrient application based on soil testing | Avoid excess nutrient application by determining P requirements of soil and follow standard recommendation for application rates (crop specific), or recommendations based on the analysis of optimum economic crop response to added P specific to the soil and crop. The disposal or application of waste water residual (biosolids), animal manure, or other materials containing phosphorus shall not exceed the P requirements of the crop. | |
| 5 | | Split nutrient application | More efficient plant uptake of P by applying small portions of total recommended P at various times during the growing season. Not to exceed total recommendation based on soil test. | |
| 5 | | Slow release P fertilizer | Avoid flushing excess P from soil by using specially treated fertilizer that releases P to the plant over time. | |
| 5 | | Reduce P fertilization | Reduce the P application rate by 30% below standard recommendations based on soil tests and development of site-specific (reduced) recommendations or application methods. Provide basis for reduction credit. | |
| 20 | | No nutrients imported via direct land application | No application of P, in any form, to the soil for amendments or plant nutrients. (Pastures can claim this BMP and still apply fertilizer if done at maintenance or less than optimum production levels no more frequently than once every 6 years. Not applicable to new plantings.) | |
| 15 | | No nutrients imported indirectly through cattle feed | No P import to the basin through cattle feed (Pastures where no nutrients are imported via direct land application can claim this BMP if the only feed additives are mineral supplements or molasses.) | |
| 5-25 | | Nutrient Management Plan | A plan to manage the amount, source, placement, form, and timing of nutrient application to optimize yields and minimize the movement of phosphorus nutrients to surface and ground waters that ultimately discharge off-site. A site management plan and budget for tracking phosphorus shall be developed. | |

*Indicates a BMP required for direct land application of phosphorus

I certify that the indicated BMPs have been implemented in accordance with the permit requirements and that the appropriate staff have been instructed on the BMPs and the conditions of the permit. Farm records showing specific details of the implementation of each BMP as described herein will be provided during the on-site inspection.

Print or Type Name and Title of Signatory

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| Water Management Practices Best Management Practices (BMPs) | | | | |
| Points | "√" | Water Management Practice | Water Management Practice Description | BMP Implementation Documentation |
| 5 10 | | ½ inch water detention 1 inch water detention | Delayed discharge (based on measuring daily rain events using a rain gage) | Documentation demonstrating required BMP implementation shall be maintained on site for District review, as applicable. Examples of documentation are: <ul style="list-style-type: none"> • Pump logs/staff gage readings • Pump calibration records • Rain gage readings • Work orders for reservoir construction • Permits for reservoir construction • Photographs • Maps <i>Field Verification</i> , when applicable, can include observation of: <ul style="list-style-type: none"> • Visual inspection of rain gages • Visual inspection of pump stations • Visual inspection of holding reservoirs • Observation of flooded fallow fields • Internal booster pumps • Internal culverts for rerouting of water |
| 5 | | Improvements to water management system infrastructure to further increase water quality treatment | Recirculation of water internal to the drainage of the farm to improve water quality prior to off-site discharge (particularly discharge from rice and vegetables), includes: fallow field flood water with no direct discharge (instead allow to "drain" via evapotranspiration, seepage, use as irrigation water) | |
| 5 | | Low volume irrigation | Use of low volume irrigation methods, e.g., drip irrigation, microjet irrigation. | |
| 10 | | Approved and operational surface water reservoir (certified) ¹ | Properly permitted, constructed and maintained storage system meeting specified ERP Basis of Review criteria (version in effect at the time of permitting or in effect at the time of permit modification for modified systems): System meets Section 5.2.1 Water Quality Criteria – Volumetric Requirements | |
| 10 | | | System meets Section 6.2 Water Quantity Criteria – Discharge Rates | |
| 15 | | | System meets Section 6.3 Water Quantity Criteria – Design Storm | |
| 15 | | Temporary holding pond | Temporary agricultural activities (as described in Chapter 40E-400 F.A.C.) with a properly constructed and permitted temporary holding pond | |
| 15 | | Overland sheet flow over the entire property | No drainage improvements made to a land area so that it drains through overland sheet flow, or drainage improvements such as ditches have been removed to restore overland sheet flow drainage to the land area. | |
| 15 | | No point discharge of surface water | Voluntarily disabling of off-site discharge structures or other permanent means to prevent point discharge from a land area. | |
| 10 | | Tailwater recovery system | A planned irrigation system in which facilities have been installed and the system is operated to collect, store, and transport irrigation tailwater and/or rainfall runoff that would have been discharge off-site without the system. | |
| 10 | | Precision irrigation scheduling | Combination of low volume irrigation and soil-moisture measuring equipment, specialized irrigation decision tools (e.g. computer software), and/or remote sensing tools to ascertain real-time crop needs to maximize irrigation system performance and to develop precise irrigation scheduling (time, location and amount). | |
| 15 | | No direct discharge | Overland sheet flow over entire property, no direct discharge | |
| 5 | | Water Resources for Pasture | Combination of water conservation and management practices considering the requirements of the primary forage grasses and supplemental cattle watering. Managing surface water to hold water onsite, as much as possible including use of wetlands to hold water onsite (minimum of ¼-inch detention), or providing retention in canals, ditches and soils via pump or controlled gravity structures. | |

¹ Surface water reservoir certification refers to a construction completion certification by a Florida licensed Professional Engineer as required in Chapter 40E-4, F.A.C., using Form 0881A for projects permitted after October 3, 1995, and Form 0881B for projects permitted prior to October 3, 1995, or the current certification requirements of Chapter 40E-4, F.A.C.

I certify that the indicated BMPs have been implemented in accordance with the permit requirements and that the appropriate staff have been instructed on the BMPs and the conditions of the permit. Farm records showing specific details of the implementation of each BMP as described herein will be provided during the on-site inspection.

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| Particulate Matter And Sediment Control Best Management Practices (BMPs) | | | | |
| Points | "√" | Check at least the Minimum Number of Required Particulate Matter and Sediment Controls | | BMP Implementation Documentation |
| 2 ½ points for any 2 5 points for any 4 10 points for any 6 15 points for any 8 | | Erosion control by leveling fields | | Documentation demonstrating required BMP implementation shall be maintained on site for District review, as applicable. Examples of documentation are: <ul style="list-style-type: none"> • Work orders • Maps • Material delivery tickets • Laser leveling work orders • Sump Maintenance records • Dredging/Canal cleaning records • Culvert installation work orders • Photographs • As-built records • Aquatic weed spraying records • Grass mowing work orders <i>Field Verification</i> , when applicable, can include observation of: <ul style="list-style-type: none"> • Vegetation growth in fields/on berms • Cover crops • Fallow fields • Dredged material stockpiles • Culverts with risers at connections • Canal widening indicating sump areas • Floating debris barriers |
| | | Reduce soil erosion using grassed swales and field ditch connections to laterals | | |
| | | Minimize sediment transport with slow velocity in main canal near discharge structure | | |
| | | Minimize sediment transport into canals by constructing ditch bank berms | | |
| | | Minimize sediment build-up by implementing a canal cleaning program | | |
| | | Reduce sediments transported offsite by maintaining field ditch drainage sumps | | |
| | | Minimize sediment transport with slow field ditch drainage near discharge pumps/structure | | |
| | | Reduce sediments transported offsite by maintaining a sump/trap upstream of drainage structure | | |
| | | Reduce sediment transport through the use of grassed waterways | | |
| | | Reduce sediment transport through the use of filter strips or riparian conservation buffers adjacent to waterways. No P is applied to these areas. | | |
| | | Reduce sediments transported offsite by raising culvert bottoms above all ditch bottoms to minimize sediment transport | | |
| | | Reduce sediments transported offsite by stabilizing soil through infrastructure improvements at canal/ditch intersections (e.g. flexible plastic pipe, polymer treatment) | | |
| | | Maintain sustainable forage growth on pasture to reduce erosion/range seedings | | |
| | | Reduce soil erosion with constructed ditch bank stabilization | | |
| | | Reduce soil erosion with cover crops (not fertilized) | | |
| | Maintain vegetative cover in upland areas to reduce soil erosion | | | |
| | Reduce soil erosion with vegetation on ditch banks | | | |
| | Minimize P from plants by aquatic weed control (P source) at main discharge locations | | | |
| | Reduce debris and aquatic plants (P source) leaving the site by using barriers at discharge locations | | | |

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| Pasture Management Best Management Practices (BMPs) | | | | |
| Points | "√" | Pasture Management Practice Description | BMP Implementation Documentation | |
| 2 ½ | | Restricted placement of stored feed, feeders, mineral, and molasses stations to reduce concentrated areas near drainage ditches, when applicable | <p>Documentation demonstrating required BMP implementation shall be maintained on site for District review, as applicable.</p> <p>Examples of documentation are:</p> <ul style="list-style-type: none"> • Fencing installation work orders • Maps indicating location of feeders, cowpens, watering holes, shade structures, etc. • Cattle counts • Feed/supplement manufacturer's content labels • Rotation schedules • Photographs <p>Field Verification, when applicable, can include observation of:</p> <ul style="list-style-type: none"> • Visual inspection of fencing • Visual inspection of adjacent canals • Visual inspection of the location of feeders, cowpens, watering holes, shade structures, etc. • Visual inspection of discharge structures | |
| 2 ½ | | Provide restricted placement of cowpens to reduce concentrated areas near drainage ditches | | |
| 2 ½ | | Provide shade structures to prevent cattle in waterways | | |
| 2 ½ | | Alternative cattle water sources: restricted placement of water to reduce concentrated areas near drainage ditches | | |
| 5 | | Low cattle density (1 head/2 acres, non-irrigated pasture) by providing comprehensive prescribed grazing | | |
| 10 | | Restrict cattle from waterways through fencing of canals in a manner that protects water quality | | |

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