SOUTH FLORIDA WATER MANAGEMENT DISTRICT

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 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).	Fertilizer application work orders						
2 1⁄2		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.	 Maps indicating crop types/locations Maps indicating fertilizer application rates and 						
2 1⁄2			Avoid excess application of P by determining plant nutrient requirements for adjustments during next growing season (crop specific).	Fertilizer delivery receipts Soil test results						
2 1⁄2	Recommended nutrient application based on plant tissue analysis	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	Field Verification, when applicable, can include observation of: Fertilizer banding equipment Fertilizer banding equipment						
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 phosphorous

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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Page 1 of 4 12/05/2012 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. Check here if there is a change to your permitted BMP Plan Indicate Crop/Land Use For This Report List The Farms/Permit Basin IDs For Which This Report Applies Water Management Practices Best Management Practices (BMPs) "√" Points Water Management Practice Water Management Practice Description **BMP** Implementation Documentation Documentation demonstrating required BMP 1/2 inch water detention 5 Delayed discharge (based on measuring daily rain events using a rain gage) implementation shall be maintained on site for 10 1 inch water detention District review, as applicable. Improvements to water Recirculation of water internal to the drainage of the farm to improve water quality prior to off-site discharge management system infrastructure Examples of documentation are: 5 (particularly discharge from rice and vegetables), includes: fallow field flood water with no direct discharge to further increase water quality Pump logs/staff gage readings (instead allow to "drain" via evapotranspiration, seepage, use as irrigation water) treatment Pump calibration records 5 Low volume irrigation Use of low volume irrigation methods, e.g., drip irrigation, microjet irrigation. Rain gage readings Properly permitted, constructed and maintained storage system meeting specified ERP Basis of Review criteria. Work orders for reservoir construction The surface water reservoir certification refers to a construction completion certification by a Florida licensed . Permits for reservoir construction Approved and operational surface 35 Professional Engineer as required in Chapter 40E-4. F.A.C., using Form 0881A for projects permitted after water reservoir (certified) • Photographs October 3, 1995, and form 0881B for projects permitted prior to October 3, 1995, or the current certification Maps requirements of Chapter 40E-4, F.A.C. Field Verification, when applicable, can include Approved and operational surface Properly permitted and maintained storage system meeting specified ERP Basis of Review criteria. Annual dike 15 observation of: water reservoir (not certified) inspection report as well as operation and field logs may be required. Visual inspection of rain gages Temporary agricultural activities (as described in Chapter 40E-400 F.A.C.) with a properly constructed and 15 Temporary holding pond Visual inspection of pump stations • permitted temporary holding pond Visual inspection of holding reservoirs Overland sheet flow over the entire No drainage improvements made to a land area so that it drains through overland sheet flow, or drainage 15 Observation of flooded fallow fields • improvements such as ditches have been removed to restore overland sheet flow drainage to the land area. property Internal booster pumps ٠ No point discharge of surface Voluntarily disabling of off-site discharge structures or other permanent means to prevent point discharge from a 15 · Internal culverts for rerouting of water land area. water A planned irrigation system in which facilities have been installed and the system is operated to collect, store, 10 Tailwater recovery system and transport irrigation tailwater and/or rainfall runoff that would have been discharge off-site without the system. Combination of low volume irrigation and soil-moisture measuring equipment, specialized irrigation decision 10 tools (e.g. computer software), and/or remote sensing tools to ascertain real-time crop needs to maximize Precision irrigation scheduling irrigation system performance and to develop precise irrigation scheduling (time, location and amount). 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 5 Water Resources for Pasture 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.

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Print or Type Name and Title of Signatory

Permittee/Landowner/Lessee Signature

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List The Fa	List The Farms/Permit Basin IDs For Which This Report Applies								
		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						
		Erosion control by leveling fields	Documentation demonstrating required BMP implementation shall be maintained on site for						
2 1/2		Reduce soil erosion using grassed swales and field ditch connections to laterals	District review, as applicable. Examples of documentation are:						
		Minimize sediment transport with slow velocity in main canal near discharge structure	Work orders						
		Minimize sediment transport into canals by constructing ditch bank berms or constructed ditch bank stabilization	Maps Material delivery tickets						
2 ½ points		Minimize sediment build-up by implementing a canal cleaning program	Laser leveling work orders						
for any 2		Reduce sediments transported offsite by maintaining field ditch drainage sumps	Sump Maintenance records Dredging/Canal cleaning records						
5		Minimize sediment transport with slow field ditch drainage near discharge pumps/structure	Culvert installation work orders Photographs						
points		Reduce sediments transported offsite by maintaining a sump/trap upstream of drainage structure	As-built records						
for any 4		Reduce sediment transport through the use of grassed waterways	Aquatic weed spraying records Grass mowing work orders						
10 points		Reduce sediment transport through the use of filter strips or riparian conservation buffers adjacent to waterways. No P is applied to these areas.	Field Verification, when applicable, can include observation of:						
for any 6		Reduce sediments transported offsite by raising culvert bottoms above all ditch bottoms to minimize sediment transport	Vegetation growth in fields/on berms						
o 15 points for any 8		Reduce sediments transported offsite by stabilizing soil through infrastructure improvements at canal/ditch intersections (e.g. flexible plasti polymer treatment)	Cover crops Fallow fields Dredged material stockpiles						
		Maintain sustainable forage growth on pasture to reduce erosion/range seedings or maintain vegetative cover in upland areas to reduce soil eros	Culturate with risers at connections						
		Reduce soil erosion with cover crops (no P is applied to these areas)	Floating debris barriers						
		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							
		The approved and operational surface water management reservoirs (certified) provides 5 BMP equivalent points towards the particulate mat sediment control practices category, based upon maintenance and operation of the reservoir and of a sediment canal cleaning and floating vegetation barrier or equivalent at the canals connecting the reservoir discharge and the off-site discharge locations.							

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	Pasture Management Best Management Practices (BMPs)									
Points	"√"		Pasture Management Practice Description		BMP Implementation Documentation					
2 1⁄2		Restricted placement of stored feed,	eeders, mineral, and molasses stations to reduce concentrated ar	eas near drainage ditches, when applicable	Documentation demonstrating required BMP implementation shall be maintained on site for District review, as applicable.					
2 1⁄2		Provide restricted placement of cowp	ens to reduce concentrated areas near drainage ditches		 Examples of documentation are: Fencing installation work orders Maps indicating location of feeders, cowpens 					
2 1⁄2		Provide shade structures to prevent c	attle in waterways		 watering holes, shade structures, etc. Cattle counts Feed/supplement manufacturer's conte labels 					
2 1⁄2		Alternative cattle water sources: restr	cted placement of water to reduce concentrated areas near draina	age ditches	 Rotation schedules Photographs Field Verification, when applicable, can include 					
5		Low cattle density (1 head/2 acres, no	n-irrigated pasture) by providing comprehensive prescribed grazi	ng	observation of: Visual inspection of fencing Visual inspection of adjacent canals Visual inspection of adjacent canals					
10		Restrict cattle from waterways throug	n fencing of canals in a manner that protects water quality		 Visual inspection of the location of feeders, cowpens, watering holes, shade structures, etc. Visual inspection of discharge structures 					

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