W. Ray Scott
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Favorable Circumstances

• Motivational driver
• Differential pollutant reduction costs
• Level of pollutant reduction needed “just right”
• Supportive policy environment
Basin Management Action Plans (BMAPS)
Lake Okeechobee
Phosphorus TMDL

• 140 metric tons per year (five-year moving average) including atmospheric load of 35 metric tons per year

• Measured annual loads for the last five years range from 177 to 450 metric tons

• Five-year moving averages for the period range from 352 to 436 metric tons
Lake Okeechobee BMAP

- Existing Load – 448.3 metric tons
- Necessary Reduction – 343.3 metric tons
- Total Reductions – 145.81 to 148.13 metric tons
- Total Reductions remaining – 195.17 to 197.49 metric tons
Lake Okeechobee BMP Enrollment
BMPs and BMAPs
2000 Lake Okeechobee Protection Act

It is the intent of the Legislature that the coordinating agencies encourage and support the development of creative public-private partnerships and programs, including opportunities for pollutant trading and credits, to facilitate or further the restoration of Lake Okeechobee, consistent with s. 403.067. (2)
FDACS Agricultural BMP Program

• Agricultural BMPs are practical, cost-effective actions that agricultural producers can take to reduce the amount of pesticides, fertilizers, animal wastes, and other pollutants entering our waters, and to increase water use efficiency.

• BMPs are designed to improve water quality and increase irrigation efficiency while maintaining agricultural productivity.
FDACS Agricultural BMP Program

• “Best management practice” means a practice or combination of practices determined by the coordinating agencies, based on research, field-testing, and expert review, to be the most effective and practicable on-location means, including economic and technological considerations, for improving water quality in agricultural and urban discharges. Best management practices for agricultural discharges shall reflect a balance between water quality improvements and agricultural productivity. (Ch. 373.4595(2)(a), F.S.)
BMP “baseline”

• The baseline for an agricultural nonpoint source is the entity’s annual load allocation or applicable categorical load allocation, if specified in the BMAP or RAP, or the nutrient load expected following the entity’s implementation of applicable Department of Agriculture and Consumer Services (DACS) adopted BMPs pursuant to Section 403.067, F.S.
BMP “baseline”

• For a concentrated animal feeding operation, the baseline is defined by the entity’s comprehensive nutrient management plan, or its allocation under the BMAP or RAP, whichever is more stringent.
West Waterhole Marsh
Water Management Alternative

• Established in 2007 as part of the Florida Ranchlands Environmental Services Project (FRESP)
• Pumps water from the C-40 Canal into the marsh, ultimately flowing back into the C-40
• Retains approximately 90% of the phosphorus load
West Waterhole Marsh
Water Management Alternative

• Load retained is flow dependent:
  – 2010 8.6 metric tons
  – 2011 1.5 metric tons
  – 2012 7.8 metric tons
  – 2013 6.4 metric tons
  – 2014 10.3 metric tons
West Waterhole Marsh
Water Management Alternative

• Service-based contract, does not require a specific load reduction
• Annual payments, including operations and maintenance total approximately $500,000.
Questions for Agricultural Participation

• Baseline – BMPs are site-specific
• Accountability – Verification of load reduction (model estimates or monitoring results)
• Cost-shared BMPs – Eligible for credit generation?
• Incentives for participation – Is it worth the effort?
OFFICE OF AGRICULTURAL WATER POLICY

Questions?

W. Ray Scott
Ray.Scott@FreshFromFlorida.com