Watershed Phosphorus Source Control Projects



Location:	-		
Subwatershed:	Lower Kissimmee		
Basin:	-		
Purpose:	Reduce phosphorus exports to Lake Okeechobee in the four priority basins (S-65D, S-65E, S-154, and S-191).		
Project Operation Start:	Programs started in 2001 and all projects were completed on or before 2011		
Considerations/Update:	 State funding was provided under the Lake Okeechobee Watershed Phosphorus Control Programs for construction of total phosphorus (TP) reduction projects located mainly in the four priority basins identified in the Lake Okeechobee Watershed Construction Project – Phase I. Average annual TP load reduction from all implemented and completed projects was estimated to be 26 metric tons (WY2010). 		

Project Category	Project Name	2011 LOWPP Update Estimated Annual TP Load Reduction (mt) ¹	2011 SFER TP Load Reduction (mt)
Phosphorus Source Control Grant Program ²	Smith Okeechobee Farms Lofton Ranch	0.59 0.04	NA
Dairy Best Available Technology ³	Davie Dairy 1 and 2	0.10	NA
Former Dairy Remediation ⁴	Lamb Island	2.34	2.33

NA: Not available

¹ It was reported that these projects will provide an average annual TP load reduction of 26 mt.

²This program funded early implementation of projects that have the potential for reducing P exports to Lake Okeechobee from the watershed. The program originally consisted of 13 projects that began in 2001 and varied in size and complexity.

³ Projects consisted of (a) capturing stormwater runoff (especially from all the high nutrient pasture areas), (b) reusing the runoff onsite in current operations if possible, and (c) if off-site discharge was necessary, chemically treating the stormwater with alum prior to its release. This project operated and monitored from 2004 through 2008. After, the project was converted to an Hybrid Wetland Treatment Technology (HWTT) and is still operational.

⁴ This remediation project of former dairies was initiated to reduce stormwater TP load from this property by implementing remedial alternatives identified in Agricultural Nutrient Management Assessments (AGNMA). The remedial practices consisted of runoff retention from old High-Intensive Areas (HIAs), amendment of high-phosphorus soils, and reduction of stormwater flow off-site via minor impoundments. Water quality monitoring for TP concentration reductions during flow events was conducted for one year following construction completion. Regional drought conditions during the implementation of remediation practice of some of these projects influence the TP load reduction calculated during the monitoring period.