

**Wandendale Regional Wastewater Treatment and Disposal Facility
Phosphorus Offset Determination
July 2009**

Current Conditions ¹

TP Applied All Fields, lb/yr	TP Applied outside of Coastal Zone, lb/yr	TP Applied in Coastal Zone, lb/yr
7,679	990	6,689

Proposed Conditions within Coastal Zone

TP Produced by 3 MGD WWTP, lb/yr ²	TP Applied by Disposal outside of Coastal Zone, lb/yr	TP Applied by Disposal within Coastal Zone, lb/yr	TP Credit for Farm Field Removal, lb/yr	TP Credit from Buffers, lb/yr ³	Net TP Increase to Coastal Zone, lb/yr ⁴	Offset Amount, lb/yr
4,566	136	4,430	981	37	3,413	4,437

Septic Elimination

Offset Amount, lb/yr	Offset Amount, lb/day	Number Septic Eliminated ⁵
4,437	12	6,753

Notes:

1. Amount nutrient used taken from Deerfield Farm, Inc./Crop & Nutrient Report for Wandendale Farm
2. Calculation assumes TP concentration of 0.5 mg/l in WWTP effluent
3. Buffer reduction amounts derived from DNREC Nutrient Loading Assessment Protocol Worksheet (Version July 15, 2007)
4. Calculated by subtracting the 2 TP credits from TP applied by disposal.
5. Calculation from Appendix E of the April 2007 Inland Bays Pollution Control Strategy