Door Creek Watershed Management Action Plan

2021 Progress Update

Significant progress has been made toward the phosphorus reduction goals in the Door Creek Watershed Plan developed in 2016. Actions through 2021 have prevented an estimated 2,345 pounds of phosphorus from reaching Lake Kegonsa, which is 60% of the reduction goal. Additional nutrient management planning and legacy sediment removal are planned next steps.

Nutrient Management

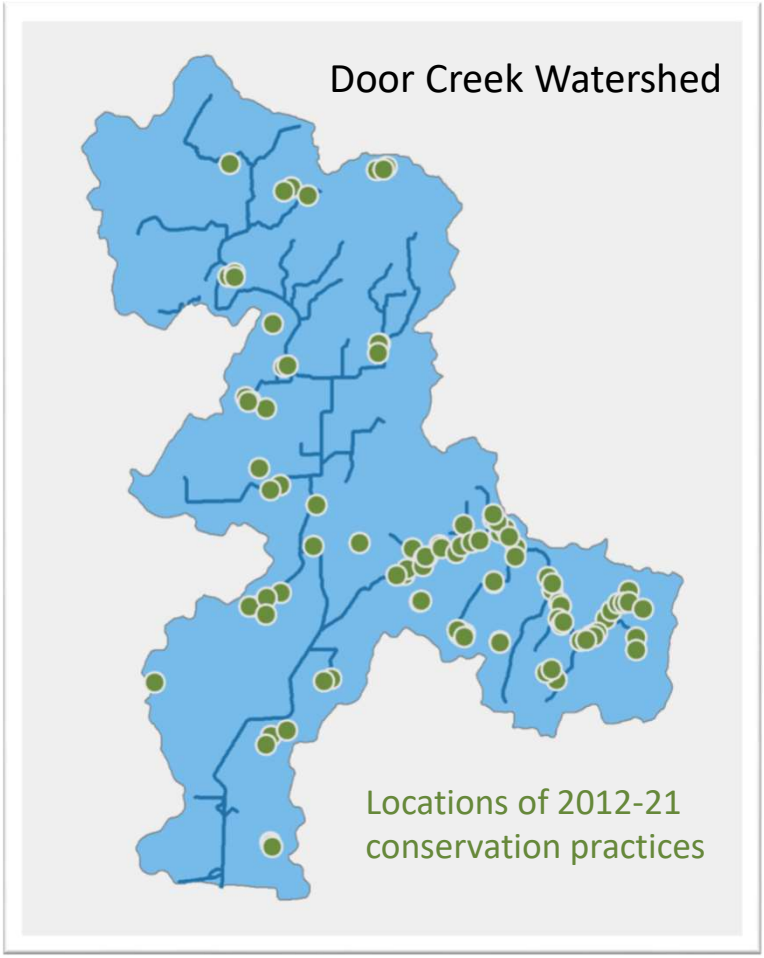
Twenty-two farms have nutrient management plans covering 30% of the cropland in the Door Creek watershed.

	Door Creek	Yahara Lakes
Soil Phosphorus (ppm)	39	60
Phosphorus Index	1.6	2.7

Action	*Unit of Measure*	*Planned Amount*	*Implemented Amount*	*Total Phosphorus Reduced (lbs)*
Management				
Conservation/Nutrient Management Plan Development/Review	number	90	*	0
Conservation/Nutrient Management Plan Implementation/Verification	number	45	22	*
Transition to No-till (County-owned Land)	acres	230	*	*
Conservation Cover	acres		58	174
Prescribed Grazing	acres		25	74
Forage and Biomass Planting	acres		34	101
Structural				
Diversion	feet	3,950	4,000	32
Terrace	feet	1,800	558	19
Grassed Waterway	acres	23.8	32	2,220
Barnyard System	number	5	1	30
Vegetated Treatment Area	acres		0.2	110
Underground Outlet	feet		250	20
Stream Crossing	number		2	15
Heavy Use Area Protection	acres		0.1	26
Lined Waterway or Outlet	feet		249	263
Sediment Basin	number		1	202
Innovative				
Legacy Sediment Removal	feet	3,000		
Harvestable Buffers	feet	50,375	50,170	1,406
Total Phosphorus Reduction				**4,692

*Information is currently unavailable.

**The estimated total phosphorus reduction of all inventoried actions (4,692 lbs) represents the amount leaving the sites of the actions. Some of this phosphorus is subsequently deposited in areas such as floodplains and topographic depressions before it reaches the watershed outlet. Based on intensive monitoring of other streams in the Yahara watershed, approximately 50% of the phosphorus movement measured at the field level reaches the watershed outlet. This delivered amount (4,692 × 50% = 2,345 lbs) is compared to the 3,960 lbs reduction goal for Door Creek to assess progress.



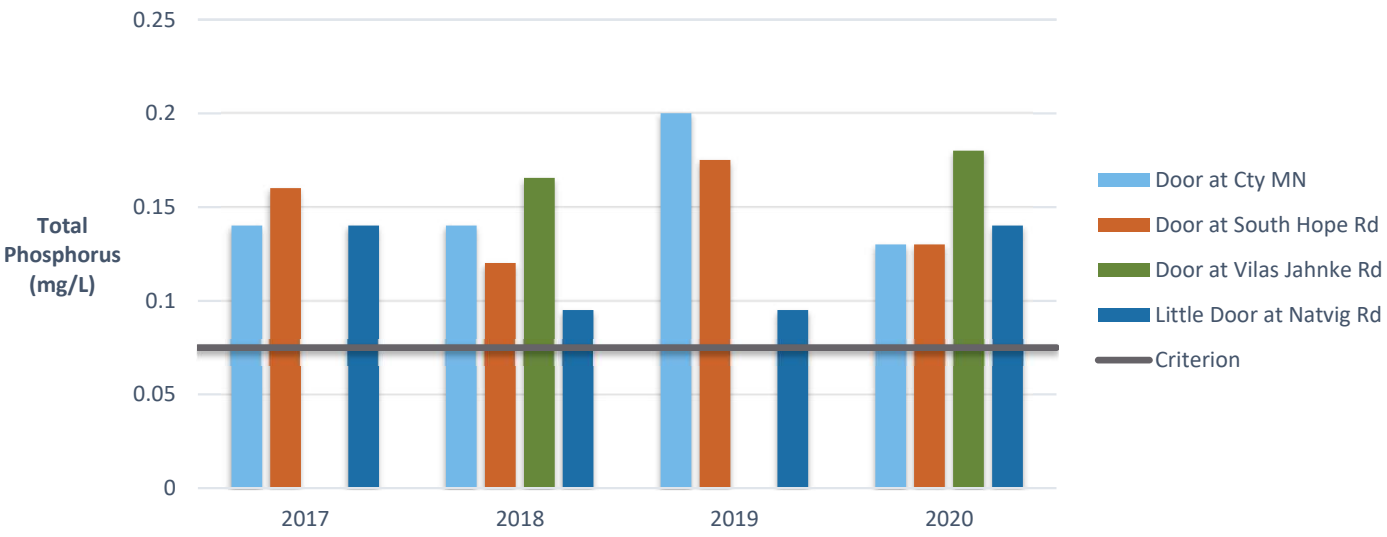
Harvestable Buffers

Dane County offers rental payments to landowners who establish buffers of perennial grasses between crop land and streams. Almost 10 miles of buffers have already been established on Little Door Creek.

Find details about this program and others at: https://lwrd.countyofdane.com/what-we-do/agriculture/agricultural-conservation-programs

Photo by Scott Hennelly

Water Quality Monitoring

Total phosphorus (TP) concentrations were sampled monthly at four sites from May to October of 2017-20. Samples were collected by volunteers with the Rock River Coalition and funded by Madison Metropolitan Sewerage District.

Median TP was consistently above the criterion (target value) at all sites and there was no evidence of a trend, either up or down. Phosphorus stored in channel sediments is likely to be masking any change in inputs from the watershed over this short time period.