

GREENHOUSE GROWERS WORK TO MANAGE WATER:

Spring 2017

Greenhouse Grower Reaches Goal of 100% Water Recycling

Driving through Harrow, Ontario, you don't see many greenhouse operations, but Wridgeview Greenhouses stands out for other reasons as well. The Wright family has owned this 25-acre farm for over a century. Through the rows of blooming fruit trees and outdoor crops, you can see the six-acre greenhouse operation. A few years ago the Wright family decided to diversify their farming operation and build their greenhouse. Until about eight years ago, they grew their plants on the ground, but now have a raised trough system to help recycle their water.



How the Wrights recycle and reuse their water is where things get interesting. Like most greenhouse growers, Rodney Wright collects his excess nutrient water and recirculates it back to the greenhouse plants. For a while they were discarding their leach water, until they realized they were throwing away valuable nutrients; nutrients they had paid for. Instead of wasting greenhouse nutrients and paying extra for feeding his field crops, he figured he might as well use one to help the other – using the nutrient water that couldn't be used indoors on his outdoor crops.

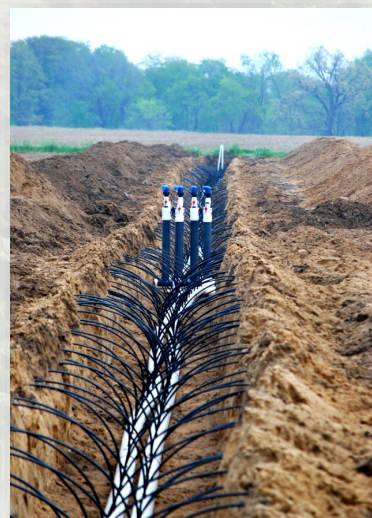


Photo: OFVG



Water Smart
Farming Project



FARM & FOOD
Care
ONTARIO

“It cost us money to add the nutrients to the greenhouse water and it cost us money to add nutrients to our horticultural crops. Why wouldn’t we take that greenhouse water and feed it to our field crops? It’s a win-win situation that benefits the environment.”

In addition to the existing greenhouse recirculation system, Rodney installed a tank capable of storing all the excess water from the winter/spring months so they can use it in the summer outdoor growing season. In the field he put in drip tape irrigation lines between the rows of plants about 12 inches below the surface. These drip lines deliver the treated nutrient water directly to the root zone just like they would in a traditional greenhouse recirculation system.



A rye cover crop is planted after the horticulture crops are harvested and the drip lines feed the crops, including the rye, until late fall. The lines are also carefully monitored and leaks addressed quickly. This way they can minimize any potential loss of nutrients. They also feed the outdoor plants just what they need so excess nutrients are not at risk of entering the ground water. Wridgeview Greenhouse has a Nutrient Management Plan that allows them to apply their Greenhouse Nutrient Feed water (GNF) to his field crops.

Rodney embraced the challenge of balancing the needs of his outdoor crops with the nutrients available in the spent greenhouse irrigation water. It was all part of making the system work. Not only did

he make things better for himself, but he helped to ensure that the water and environment stay healthy for generations to come.

Farm & Food Care Ontario’s Water Smart program is designed to help growers better understand how and where they use water. By having better information, growers are often able to reduce their water use, cut costs and generally find lower cost treatment systems. For more information visit www.FarmFoodCareON.org



Photos: Farm & Food Care



Water Smart
Farming Project



FARM & FOOD
Care
ONTARIO

100 Stone Road West, Suite 202, Guelph, ON, N1G 5L3

Phone: (519) 837-1326 Fax: (519) 837-3209 www.farmfoodcare.org