CHANGES IN LAND USE IN THE WINTER RIVER WATERSHED

Research shows that water quality and aquatic ecosystem health rely on maintaining a balance of land uses in the watershed, particularly a stable and healthy forest cover. WRTBWA works to protect the watershed through extensive field work, educational initiatives, and collaboration with landowners.

The table below, using data provided by CLE, provides an interesting summary of changes in land use in watersheds that form part of the WRTBWA's area of operations over the period from 2000 to 2010. Two major changes are evident: a reduction in forested land and agricultural land and an increase in developed land. However, forest cover of 46% and agricultural use representing 34% of total land use, these key indicators don't cause serious concern.

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	2000 to 2010 CHANGE (area)						
_	Black		Deroche	Kelly's		Winter	
	River	Dalvay	Pond	Point	Pipers	River	Total
Agriculture	-20.01	-16.88	41.56	-10.12	18.93	-110.78	-97.30
Forest	-2.03	-23.39	-23.39	-0.67	-54.13	-40.24	-143.85
Developed	0.35	23.54	5.87	10.72	15.37	91.43	147.29
Wetlands	22.36	-17.06	137.16	0.00	19.55	57.15	219.17
TOTAL	0.67	-33.80	161.21	-0.06	-0.27	-2.43	125.32



However, WRTBWA and residents of the watershed are asking questions about recent land use changes, including hedgerow removal, land clearing, more potato production, and the construction of irrigation ponds. Much of this activity is by a large potato producer that has acquired extensive land holdings in the watershed.

Vanco Farms Ltd., with headquarters in Mount Albion, PEI, specializes in growing specialty potatoes, organic potatoes, and tulips. The company operates plants here as well as in California and Florida. An extract from its website reads as follows:

"Over the years the potato industry has developed in many ways. To be sustainable, the size of farms has increased. While some traditions give way, others live on. Our family has purchased smaller farms over the years and we have continued many of the practices that were core to these farms, such as rotating crops from year to year. These farms often continue to carry the name of the family that originally farmed it. On our farm you will hear field names like the MacRae farm, the Ford farm, the Doyle farm, the Lund farm and many more. We strive to improve soil quality and look at each property to make changes to reduce negative impacts on the environment. Our families earn our living off of and live by our farmland. We share the concerns of our neighbours and work with government and local watershed groups to preserve our farmland for generations to follow."

Vanco now owns 947 acres, or 383 hectares, in the Winter River watershed, equal to 12.7% of agricultural land in the watershed or, put another way, 2.6% of our entire management area of 14,729 ha.

WRTBWA is concerned with Vanco Farms' land-clearing east of the Union Road and construction of a drainage ditch leading into the Brackley Branch of the Winter River. As these photos show clearly, runoff from land-clearing and the poorly-engineered ditch resulted in extensive siltation.

We consulted with provincial government officials to determine whether the company had obtained a permit prior to digging the drainage ditch and were told that they did not need one. An official visited the site



and concluded that, while the project did not break any laws, it should have been engineered to avoid the severe stream siltation that occurred. No surprise there! We spoke to Vanco Farms officials about the project, letting them know that residents are concerned, that we'd be watching to ensure that laws are followed.

Vanco Farms is also building an irrigation pond in former shale pit on a nearby property. Their intention seems to be to capture runoff from adjacent fields and supplement it by water from low-capacity wells to irrigate nearby potato fields. While operating within current laws, WRTBWA has concerns, including the destruction of several thousand trees planted by Charlottetown school children over the years, under the supervision of our staff and volunteers.

Our purpose in presenting this account is not to criticize one landowner, but to inform residents on land use issues. Conversations with Vanco Farms officials indicated they're willing to cooperate and communicate with WRTBWA. We're encouraged by this but will remain vigilant.