Seeking solutions for winery wastewater

How to properly treat and dispose of wastewater is an issue for any production facility. This includes Ontario’s wineries, which face some added challenges: many of their operations are small and the bulk of their wastewater is produced during harvest season.

With the help of an investment from the Canadian Agricultural Adaptation Program (CAAP), the Wine Council of Ontario (WCO) has launched a project to help find solutions that will meet its members’ environmental and economic needs.

“Many of our wineries vary in size and age of facilities. Some are in converted buildings or are in rural areas without municipal sewer hook ups,” says Regina Foisey, WCO’s Marketing Project Manager. “There’s a real need for options, but we need something that can fit wineries of all sizes, from 2,000 to over 100,000 cases per year.”

Winery waste generally includes wash water from the winemaking process, as well as leftover grape skins and stems. Proper treatment and disposal can be costly for wineries and there are very strict regulations that must be followed.

Phase one of the project is focused on analyzing challenges and needs across Ontario’s key wine regions – Niagara, Lake Erie North Shore and Prince Edward County – as well as emerging areas like the South Coast, Georgian Hills and Vaughan, and sharing that information with members so they are aware of what the standards and requirements are. This will be followed by identifying various practical solutions that can be implemented by wineries and sharing those results across the wine industry as part of continuous improvement.

“Awareness and knowledge transfer of our outcomes will be key. There are likely two to three different solutions that will be economically feasible for wineries,” explains Foisey. “At the end of this project, we want to be able to have something that will let wineries make a choice that works for them, a good decision based on the space they have, their growth plans and the long-term economic benefit for their business.”

“The project will help support sustainable winemaking in Ontario through its positive environmental impacts as well as economical savings for farmers,” she adds. “We’ll be able to tell them clearly what the regulations are, how they can track their waste water and what options they have for dealing with it.”

The project will wrap up this fall and results will be shared through the Wine Council’s newsletter as well as through the final report which will be broadly distributed. WCO is also planning to hold workshops and information sessions for wineries to share and discuss the research findings.

“As an industry organization, it is extremely helpful for us to be able to offer this to our industry and we’re only able to do it because we have access to funding through CAAP,” says Foisey. “If we had to fund the entire cost ourselves, it wouldn’t be as comprehensive and broad-reaching even though we see a definite need for this work.”

Investment in this project is provided by Agriculture and Agri-Food Canada through the Canadian Agricultural Adaptation Program. In Ontario, CAAP is delivered by the Agricultural Adaptation Council.