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# GROWING NEWS 2015

CULTIVATING MORE WAYS TO PROFIT IN AGRICULTURE AND FOOD

## Bidding to protect the land

Conservation auctions pay farmers to make *positive environmental changes* to their land

Donald Smith from Meleb, Manitoba now has fencing to keep his cattle out of the wet areas on his land thanks to an innovative new program in Manitoba that is reducing runoff, improving manure management, protecting water quality and more.

Smith is one of many landowners who has benefited from a conservation auction. In a typical auction, the person who places the highest bid on an item wins that item for the price of their bid. In a conservation auction, it's the project that is important and the prize is improved land, water and air quality for everyone.

"Without fencing the cattle out, they would be into the water supply and eventually their manure would end up in the lake," says Smith.

He points out that if enough people would take steps to keep cattle out of wet areas on their land, it would make a big difference in water quality.

To date four of Manitoba's conservation districts have held or are holding conservation auctions with support from *Growing Forward* and *Growing Forward 2*. Smith took part in East Interlake Conservation District's auction to help cover the cost of his fencing.

"I think the conservation auction was a great idea," he says.  
"It's definitely worth the process. I'd do it again in a heartbeat."

### How conservation auctions work

Jodi Goerzen, district manager at Seine-Rat River Conservation District (SRRCD) explained the idea for conservation auctions came out of New Zealand where declines in fish populations in 1986 prompted governments to put out a program to buy back fishing quotas that they would leave unfilled. The program helped to reduce the pressure on the fish population, while protecting the livelihood of those who depended on fishing for their income.

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It's definitely worth the process. I'd do it again in a heartbeat."

"In Manitoba, the concept of a conservation auction is that landowners tell us what their ecological goods and services are worth to them," says Goerzen. "Then we work with them to both protect the land and the landowners' livelihoods. In our district, we're targeting water retention in the headwaters in the Rat, Seine and Roseau watersheds."

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Donald Smith keeps cattle out of wet areas with fencing in Meleb

# Bidding to protect the land (continued from pg.1)

When a conservation district announces it is holding a conversation auction, landowners are invited to submit expressions of interest to modify their land use. Later, they may place bids for how much they'd like to be paid to sign an agreement to use their land in more environmentally beneficial ways, or to sell it to the district.

For instance, a farmer could bid to have a conservation district help fence off a riparian area to improve water quality. Or, a farmer could sign a contract promising to provide certain ecological goods and services for a number of years. Ecological goods and services are the environmental benefits resulting from physical, chemical and biological functions of healthy ecosystems. They can include market goods produced from ecosystems—such as food or fresh water—the benefits from ecosystem processes—such as pollination or water purification—and non-material benefits—such as recreation.

Compost spreading at Urban Prairie in Selkirk



Photos provided by the East Interlake Conservation District.



Staff from EICD and Prairie Flora plant the vegetation at Urban Prairie in Selkirk

systems. She points out that if there had been a 20 per cent reduction of water on the Red River during the 1997 flood, Grand Forks and Fargo wouldn't have flooded.

"Another benefit of conservation auctions is how local they are," says Goerzen. "It's kind of like going next door. Because we're composed of local watershed residents, if people want information, they just need to sit down with one of their neighbours who is involved with the conservation district."

## East Interlake Conservation District leading by example

East Interlake Conservation District (EICD) was the first conservation district in Manitoba to run a conservation auction, which took place in late 2012 and 2013. Manager Armand Belanger says the results have been spectacular.

"In some cases we worked with landowners by partnering with Nature Conservancy of Canada and other agencies to improve their land management practices," he says. "We converted some land into a wildlife habitat sanctuary. We repaired cattle fencing, completed water storage projects and initiated a nutrient cycling program with composting and manure storage. One water storage project helped contain a significant amount of nutrients from draining off a property into the surrounding watershed."

He's especially excited about a project in Selkirk.

"On one property, we converted manure into compost and spread it over a three-acre field next to the new Gaynor Family Library to fertilize a native grass area. The results are beautiful. They showcase how we can link rural projects to urban ones," says Belanger.

The native grass area—called Urban Prairie—is designed to slow the flow of runoff from the building, lands and parking lots to a wet prairie environment. The design captures sediment, nutrients and pollutants before they can enter the storm water management system and eventually the district's waterways.

It will feature an interpretive trail and outdoor classroom where people can learn and enjoy the beauty of the rare and endangered Prairie Grassland Ecosystem.

## Improving their land to improve the environment

Scott Duguid, is one landowner who participated in a conservation auction through EICD. Duguid owns a grain and cattle farm near Arnes, Manitoba and bid through the auction to have a compost turner visit the area so he and other farmers could experiment with a new form of manure management.

"There were no flies and less smell. Now our corrals dry out during the summer and we've eliminated runoff from our yard when it rains. If farmers don't take care of the land they're jeopardizing their own livelihood."

"Before the manure turner came to our area, we spread the manure on our land in its raw form but it was causing issues with our crop," he says.

The compost turner allowed farmers in the area to windrow their manure and have it turned approximately once a month during the summer. By the fall, the manure had composted into a potting soil like material that was much easier to work with.

"It was much easier to use and spread when composted and we got much better results," says Duguid. "It's about the same price to use the compost turner as to haul the manure out in its raw form, but when it's composted the crop grows much better."

Duguid also appreciated that the conservation auction process was local.

"There were enough local farmers on the conservation district board that they understood the benefit of bringing the compost turner to our area," he says.

David Yablonski was another farmer in the area who benefited from the compost turner visiting the district. Yablonski owns a cattle farm near Fraserwood, Manitoba with his family.

"Before this, we were trying to turn the compost ourselves," he says. "We'd pile it in the spring and carry it out in the fall. We had to turn it when we put it on the hay field, but the hay didn't grow well through it."

Another benefit of the new method of composting his manure, according to Yablonski, was it allowed him to clean out his corrals in the spring so the manure wasn't sitting in his yard all summer.

"There were no flies and less smell," he says. "Now our corrals dry out during the summer and we've eliminated runoff from our yard when it rains. If farmers don't take care of the land they're jeopardizing their own livelihood."

Yablonski is also working on a second project to divert the water that runs off his yard so that it drains south to his land instead of east into the lake. Also supported through the conservation auction, the project will improve water quality in the lake and allow the runoff to evaporate naturally on his field.

## Gaining momentum

Belanger says he's impressed by how landowners are responding to the auctions.

"They're beginning to see, understand and share what conservation auctions can accomplish," he says. "We've

"On one property, we converted manure into compost and spread it over a three-acre field next to the new Gaynor Family Library to fertilize a native grass area. The results are beautiful. They showcase how we can link rural projects to urban ones."

The district then reviews the bids and chooses those that best meet their budget, resources and conservation priorities. The agreements are signed and the conservation district pays the landowners with funds from *Growing Forward 2's* Growing Assurance—Ecological Goods and Services (EG&S) program.

"We've been floored by the expressions of interest we've received through our conservation auction," says Goerzen. "They have been really thoughtful and ideally located. Though we don't have the funds to complete all the projects this year, we've identified new partners who we would love to work with in the future."

Goerzen says the SRRCD's goal is to improve water quality and decrease the overland flooding that overloads its river

jumped from receiving three or four partner project applications in the Willow Creek Watershed to a whopping 19 partner project applications in the *Growing Forward* conservation auction trial.”

The four conservation districts that have completed or are completing a conservation auction are Turtle Mountain, Assiniboine Hills, Seine-Rat River and East Interlake.



Compost turning machine

### Bringing partners together

Manitoba Agriculture, Food and Rural Development (MAFRD) policy analyst Tony Szumigalski says each conservation auction can trigger “an endless variety of projects of all sizes” and often involves major partnerships with agencies such as Manitoba Habitat Heritage Corporation, Nature Conservancy of Canada and Ducks Unlimited. The Lake Winnipeg Basin Stewardship Fund is also contributing to the conservation auction initiative.

MAFRD tested the conservation auction concept in a series of workshops and auction simulations in 2010 with funding from *Growing Forward* that brought together more than 100 participants, including producers, government employees, members of non-government organizations, students and professors.

Based on their success, a conservation auction pilot project was launched by the EICD for the Willow Creek sub-watershed area in 2012. The auction’s goal was to improve drinking water quality, surface water quality and quantity, wildlife and fish habitat, and soil and shoreline maintenance. Many of these projects have since gone on to a second phase under *Growing Forward 2*.

“Everybody wins,” says Szumigalski. “The landowner asks the price they think is fair, and until their bid is actually selected, they’re under no obligation. The conservation districts and agencies are able to cost-effectively improve our watersheds. MAFRD—along with our partners in Manitoba Conservation and Water Stewardship—sets it all in motion and is there to help every step of the way.” ■

# Manure management good for farms and the environment



Brandt’s manure spreader is mounted on a GPS-equipped truck that evenly spreads the manure in a 40-foot swath



Brandt’s 12,000 square-foot concrete pad for storing and composting chicken manure

Improving the way we manage manure in Manitoba, directly affects the health of our water and land. More farmers are committing to storing manure in ways that benefit both their bottom line as well as the environment.

Bernie Brandt, owner of Tiny Creek Farms near Steinbach, Manitoba is one of those farmers. With funds from *Growing Forward*, Bernie Brandt built a 12,000 square-foot concrete pad for storing and composting chicken manure.

“We’re already seeing a return on our investment in several ways,” he says.

“We have always seen manure as an asset, not as a liability,” says Brandt.

Built half a mile from his chicken barns, Brandt’s pad has eliminated winter manure spreading and the need to stockpile chicken manure in his fields. It has kept nutrients from over-saturating the soil and leaching into waterways. Easily accessible via new all-weather roads, the pad has significantly improved the efficiency of his farming operations and freed up valuable acres for farming.

### Change for the better

“We have always seen manure as an asset, not as a liability,” says Brandt. “We soil test our fields every year to help us decide, together with an agronomist, which fields can best use the nutrients in the manure. The manure composts well due to the straw content. Composted manure is a more concentrated nutrient that can be more readily used by the crops. It has 70 per cent of the volume and is therefore more efficient to haul over long distances.”

The composted manure also provides longer-term value because of the soil’s increased water-holding capacity and extended nutrient release.

“It’s improved our soil quality and helped us reduce our inputs while maximizing our yields,” says Brandt.

“As scientists recommend new ideas and practices, I believe that committing to these ideas can only lead to change for the better.”

Brandt also uses an innovative manure spreader. Similar to a conventional spreader, his is mounted on a GPS-equipped truck that evenly spreads the manure in a 40-foot swath.

### Funding available for manure management

Brandt says he hopes more and more producers will discover what beneficial management practices relating to manure have to offer.

“As scientists recommend new ideas and practices, I believe that committing to these ideas can only lead to change for the better,” he says.

Farmers who are interested in improving the way they manage manure should investigate the funding available through *Growing Forward 2*’s Growing Assurance – Environment program. The goal of the program is to make farming operations more environmentally sustainable, productive and profitable. One way it does this is by funding Beneficial Management Practices.

Clay Sawka, a nutrient management specialist at MAFRD, explains: “The increased manure storage capacity Beneficial Management Practices have helped eliminate winter spreading from many operations by supporting the construction of structures to store manure. This has reduced the potential for phosphorus running off the land into our water and contributing to the algal blooms in our lakes during spring snowmelt.”

The program has already funded 16 new manure storage structures and nine repairs since the initiative began in April 2013.

### Bottom-line benefits

MAFRD also offers a Manure Management Financial Assistance Program to help small pig operations build additional manure storage capacity, and help all size pig farms repair manure storage structures, and install manure treatment systems to meet the soil test phosphorus thresholds. ■