

DRAFT

Conserving farmland in the urban fringe

Summary

- **Optimizing urban expansion to conserve farmland is a strategic goal of the Mayor and Council of the Township of Centre Wellington (TCW).**
- **Despite a retreat from recently expanded urban boundaries in Wellington County, differences in the value of land as future development versus its value as farmland continue to disfavor farmland conservation, particularly on urban fringes.**
- **Revolving farmland conservation, aka Buy-Save-Sell (BSS), programs provide a market-based counterincentive to development by acknowledging the economic value of the ecosystem services (also called ecological goods and services, or EGS) generated on both arable and non-arable portions of farms.**
- **Foundations dedicated to the conservation of biodiversity represent a potential market for farm-generated EGS, the value of which would ‘float’ according to the willingness-to-pay the difference between the agricultural value of land as a farm and its value to developers.**
- **An organization and/or municipality would match, or exceed, developers’ offers to farmers who have decided to sell their property; place a conservation easement on it to retain it as functional farmland in perpetuity with its ecological assets intact; sell (or rent) the land back to the farming community at (now reduced) market value as farmland; and recover the difference in cost from a conservation foundation.**
- **By keeping farmland working with tailored, flexible conservation easements, BSS programs directly address concerns that land market interventions necessarily drive up land costs or otherwise restrict uses of farmland.**
- **Future steps include creation of a working group, and/or engaging one or more TCW Advisory Committees, to approach potential conservation organizations/foundations, municipal governments and other partners/expertise as necessary to explore and work toward implementation of a pilot BSS program for TCW.**

Purpose

Generally, to conserve working farms on the urban fringe of the Township of Centre Wellington (TCW) and elsewhere in the County of Wellington (CW).

Specifically, to advance a market tool to monetize the ecological goods and services, also often provided by working farms, to provide landowners with a financially attractive alternative to development, in effect, as payment for those services.

Goal

Together with other mechanisms to intensify/densify (re)development within urban boundaries, to conserve farmland on the urban fringes of TCW and other CW communities.

Background

Conserving farmland by restricting urban expansion is among the strategic initiatives of the current Mayor and Council of TCW. To their advantage, Harris-era amalgamation of urban and rural municipalities today positions local decision-makers to coordinate with County and provincial planning authorities with respect to environmental sustainability, including food security¹, for community as a whole.

The greater value of farmland on the urban fringe has always provided an incentive for its conversion to developed land. For many farmers², the value of land has long been factored into plans for retirement; farmers can rightly expect offers for it from developers for more than its value as agricultural land alone. Without a counterincentive to development, the difference in the value of land as future development versus its agricultural value alone will continue to disfavor farmland conservation.

¹ Although the Ontario government retreated from controversial land use approaches (*e.g.*, land swaps, lot severances and urban boundary expansions), a long-standing market disincentive to conserve farmland in the face of development pressure persists on urban fringes. In that sense, apart from demonstrating the vulnerability of disappearing farmland to stroke-of-the-pen policy changes, the exercise proved to be an expensive red herring.

² This situation applies to other landowners, but access to land by the farming community, in particular, is required if functional farmland for the purpose of sustainable food security is to be conserved.

Ecosystem services, or ecological goods and services (EGS)³, such as those generated by working farmland, have demonstrated economic value⁴. However, in part because EGS are global public goods produced on private land, it has proved difficult to develop a market mechanism to price EGS at the scale of individual farms⁵.

Further, while farmers benefit also from the EGS produced by the natural assets on their private land, they are typically expected to alone bear the opportunity costs of conserving them. One mechanism – a willingness-to-pay (WTP) by the greater public for EGS produced on farmers' private lands – helps to resolve these challenges by providing a market for willing buyers of EGS as a counterincentive to development.

In Canada, several nongovernment organizations (NGOs) advocate and/or offer programs to conserve wildlife, including at-risk species and broader biodiversity, on private agricultural land^{6,7}. The emphasis by many organizations is principally on conservation of biodiversity/wildlife/at-risk species with agriculture as a co-benefit (Appendix). However, BSS programs with a particular focus on farmland conservation in particular are more familiar, having been around longer, in the United States than in Canada.

Example of a Buy-Save-Sell (Revolving Land Conservation) Program

For the purpose of demonstration of how one BSS program in Canada works, consider Ducks Unlimited Canada's (DUC) *Revolving Land Conservation Program* (<https://www.ducks.ca/resources/landowners/revolving-land-conservation-program/>). Within a rural-rural (cropland vs grazing land) context, rather than urban-rural (development vs farmland) context, DUC is similarly challenged to conserve agricultural land with its ecological

³ Much agricultural land in southern Ontario is a mix of arable and non-arable portions, the latter, in fact, often retaining reservoirs of native biodiversity; in some cases, more native plant species occur outside than in protected areas (McCune . JL *et al.* 2017. *Landscape Ecology* 32: 871-882 <https://link.springer.com/article/10.1007/s10980-017-0491-1>). Surrounding TCW, in particular, are also significant wetlands and woodlands that provide wildlife habitat (including that for crop pollinators), source water protection and climate mitigation, all examples of ecosystem services.

⁴ *e.g.*, Costanza, R *et al.* 1997. The value of the world's ecosystem services and natural capital. *Nature* 387: 253-260 (<https://www.nature.com/articles/387253a0>); Costanza, R *et al.* 2017. Twenty years of ecosystem services: how far have we come and how far do we need to go? *Ecosystem Services* 28:1-16.

⁵ See the webinar produced by the Canadian Agri-Food Policy Institute at [Pricing the Unpriceable: Externalities and Canadian Agricultural Policy \(youtube.com\)](https://www.youtube.com/watch?v=...); Plantinga AJ *et al.* 2024. How to pay for ecosystem services. *Frontiers in Ecology and the Environment* 22(1): e2680, doi: [10.1002/fee.2680](https://doi.org/10.1002/fee.2680).

⁶ *e.g.*, Canadian Agri-Food Policy Institute 2023. A Framework and Assessment of Conservation Strategies for Species-at-Risk and Biodiversity on Canadian Agricultural Landscapes. Ottawa, ON. 50pg.

⁷ See webinars produced by the Ontario Farmland Trust at [Farmland Conservation: Land Access Programs, Supporting the Next Generation \(Jan 16, 2024 Webinar\) \(youtube.com\)](https://www.youtube.com/watch?v=...), and [Ontario Conservation: Innovative Approaches for Land Trusts & Municipalities \(Dec 14, 2023 Webinar\) \(youtube.com\)](https://www.youtube.com/watch?v=...).

values intact in the face of significant economic disincentives⁸. Many wetland and grassland-dependent species can readily coexist with cattle ranching but, analogous to the situation on the urban fringe, the steep difference in the value of pastureland versus cropland drives wetland drainage and grassland conversion to cropland. In response, DUC buys qualifying cropland at fair market prices, restores grasslands and wetlands important for breeding ducks, places conservation easements on it, and puts it back on the market as grazing land, now priced less than as it was as cropland (or rents it out until such time as it is sold).

While DUC recognizes that wetlands and grasslands provide multiple EGS, it is, in effect, an agency acting for willing buyers of one EGS in particular: a harvestable surplus of migratory ducks produced on private land of farmers who would otherwise bear the opportunity costs of “growing free ducks for export” to the US hunting public.

The price of the EGS⁹ from particular properties is set by DUC’s willingness-to-pay to obtain and convert them from cropland to grassland and wetlands, *i.e.*, the difference between its greater value for grain and its lesser value for cattle (with a conservation easement on it) that they sell. This difference has averaged about 30%, but allows ranchers access to land for which they would otherwise be unable to compete. In this sense, the value of the EGS “floats” as determined by local conditions.

DUC is compensated for the 30% difference in the land value with funds that flow from the US under provisions of the North American Wetlands Conservation Act (NAWCA). Analogous to NAWCA’s role in funding DUC’s BSS program, may be one or more Canadian or US conservation-focused foundations (*e.g.*, Rufford, <https://www.rufford.org/>; Pew, <https://www.pewtrusts.org/en/>; Weston, <https://westonfoundation.ca/>, and others) with particular emphasis on sustaining resilient social-ecological systems.

Future Steps

- engage a farmland-focused NGO to formally explore, develop, and champion a BSS program tailored to conservation of farmland generally in southern Ontario
- explore means and revenue streams to formally scope and select among conservation foundations to solicit funding for a pilot BSS program for TCW and elsewhere in WC

Advantages:

- restrict urban sprawl with its attendant environmental costs and risks to food security

⁸ Differences in the value of land in crops versus pasture also play out in Ontario with similar challenges for Ontario cattle farmers (*e.g.*, <https://m.farms.com/news/fed-up-ontario-farmer-seeks-move-to-prairies-205843.aspx>), but this proposal concerns competition between urban development and farmland generally.

⁹ “Ducks and More”, as the motto goes.

- conserve arable and nonarable farmland with agricultural and ecological benefits
- provide landowners with a financially attractive alternative to development
- incentivize conservation of current natural assets in anticipation of future economic return
- favour ‘carrots’ over ‘clubs’; leave ‘heavy-handed’ regulatory intervention as a last resort

Challenges:

- program delivery agent(s)/champion(s) –
 - willing buyers/foundations of EGS – who and where are they?
 - willing sellers; landowner awareness – who and where are they?
 - NGOs with principal interests/focus on agricultural values with ecological co-benefits (OFA, OFT, others?) to interface/facilitate willing buyers and sellers
 - municipal/NGO partnership of some sort, to best assure planning coordination, given that the impetus arises in urban planning and local farmland conservation?
- how – focused pilot project/program to monitor efficacy
- where – Wellington County, particularly Township of Center Wellington; all else equal, small urban centres in largely rural landscapes, on a per unit urban area basis, have more perimeter in at-risk farmland on urban fringes than larger urban centres
- potential objections –
 - government/NGOs should not intervene in the land markets; may drive up land prices; potentially better to (dis)incentivize farmland conversion to other uses through tax mechanisms
 - “fair market value” will need to be clearly defined, as the value of nearby farms with and without development offers in place will be different
 - ‘easements’ are a perceived threat to ‘freedom to farm’ and individual choice on private land

Acknowledgements

Thanks to individuals in the following organizations, friends, farming neighbours and Councilor Wilton for insights and advice on one or more drafts.

Agri-Food Systems, Alternative Land Use Services, Anthesis Group North America, Bonnefield Financial, Canadian Agri-Food Policy Institute, Canadian Wildlife Federation, Centre for Land Conservation, County of Wellington, Ducks Unlimited Canada, Environment Funders Canada, Ontario Farm Trust, Nature United, Save Our Water Elora, Wellington Federation of Agriculture

Appendix: Conservation programs that simultaneously conserve agricultural and ecological land values

A wide range of values influence landowners' decisions whether to participate in conservation programs. There exists a range of programs to match exhibiting different degrees of farmers' flexibility to maintain options for alternate uses. Some approaches/mechanisms emphasize conservation of ecological values on private farmland with agricultural values as a co-benefit, such as Ducks Unlimited Canada's (DUC) *Revolving Land Conservation Program* (<https://www.ducks.ca/resources/landowners/revolving-land-conservation-program/>). Other programs emphasize farmland conservation with ecological values as co-benefits. They include

1. outright payment to offset farmers' opportunity costs of conserving ecological goods and services (EGSs) (<https://ofa.on.ca/issues/environmental-ecological-goods-services/>);
2. the landowner-led Alternative Land Use Services program (ALUS; <https://alus.ca/>) adopted by many landowners in Norfolk County and growing provincially;
3. conservation agreements (a form of 'easements lite') of varying lengths of time (<https://www.natureconservancy.ca/en/what-we-do/resource-centre/conservation-101/land-use.html>; <https://salts.land/>); and
4. land trusts such as the Ontario Farmland Trust (<https://ontariofarmlandtrust.ca/what-we-do/farmland-protection/farmland-easement-agreements/>).

Tom Nudds

Emeritus Professor, Department of Integrative Biology, University of Guelph

6276 5th Line, RR 2, Centre Wellington ON

Website: <https://www.uoguelph.ca/ib/nudds>

Email: tnudds@uoguelph.ca

Mobile: 226 971-9155