


CONTENTS | SOMMAIRE

- 4 A word from the President
Le mot du Président
- 6 CIP News / Echos de l'ICU
- 8 From the Senior Editor
Le mot de la redacteur principal
- 14 The Business of Land Use Planning
By Jeff Greene
- 19 Some Measures of Sustainability of Urban Neighbourhoods: a Case Study in Hamilton, Ontario
by Don McLean and Bob K.oral
- 22 Exploring Linkages between Community Planning and Natural Hazard Mitigation in Ontario
by John Newton
- 25 Does It Pay to Maintain New Urbanist Infrastructure? A Fiscal Comparison of Alternative Community Forms
by Kent Munro
- 29 A New Solution for Stormwater Management
by Geoff Gilliard
- 32 Immigration: the Missing Issue in the Smart Growth Deliberations
by Grant Moore
- 36 The Rural-Urban Connection: Growing Together in Greater Vancouver
by Barry E. Smith and Susan Haid
- 40 Congestion Charging Helps London Get a Move On
by Marni Cappe
- 43 Trees versus Power Lines: Priorities and Implications in Nova Scotia
by Ston Kochanoff
- 46 The Learning Curve
- 47 Book Review
- 49 Urban Design
Our Built Heritage - From Liability to Asset
by Atex Taranu



 This publication is printed on Recycled paper
Cette publication est imprimée sur papier recycle.



THE RURAL-URBAN CONNECTION: *Growing Together in Greater Vancouver*

by Barry E. Smith and Susan Haid

Summary

Canada has faced a problem of sprawling metropolitan growth and associated losses of farmland and natural habitat for decades. British Columbia recognized this predicament in the 1970s and established the Agricultural Land Reserve. While established to preserve agricultural land, the Reserve has acted as a de facto urban growth boundary. It has become the cornerstone of a comprehensive planning approach as embodied in the Livable Region Strategic Plan of the Greater Vancouver Regional District. The Plan has helped guide the accommodation of an additional million people in the Region over the past 30 years while maintaining productive farmland, important green space and habitat. Over the last 15 years, the Greater Vancouver Regional District realized a \$400 million increase in its total gross farm receipts, and the area of the ALR has remained relatively constant. This approach offers a model of how metropolitan areas can provide for growth and maintain farmland and significant habitat while enhancing overall livability.

Sommaire

Depuis des decennies, le Canada est confronte au probleme de l'etalement des villes et aux pertes concourantes de terres agricoles et d'habitats naturels. La Colombie-Britannique a reconnu cette malencontreuse situation dans les annees 1970 et a cree une reserve de, terres agricoles (RTA). Etablie dans l'intention de proteger ie patrimoine agricole, la reserve s'est trouvee, dans les faits, a limiter l'etalement des villes. Elle est devenue la pierre angulaire d'une methode de planification d'ensemble qui s'est concretisee par l'adoption du plan strategique de la region habitable du district metropolitain de Vancouver. Ce plan a oriente l'implantation d'un million de personnes de plus dans la region au cours des 30 dernieres annees tout en preservant des terres agricoles productives ainsi que des espaces verts et des habitats importants. Depuis 15 ans, le district metropolitain de Vancouver est parvenu a augmenter de 400 millions de dollars les revenus bruts des fermes sans changer de facon consequente la superficie de la RTA. L'approche qu'il a adoptee constitue donc un modele de la facon dont les zones urbaines peuvent s'y prendre pour composer avec la croissance tout en preservant les terres agricoles et les habitats cles et en rehaussant l'habitabilite d'ensemble.



Vegetables being harvested in the Burnaby Big Bend area of the Greater Vancouver Regional District

For several decades suburban development in Canada has pushed the boundaries of metropolitan areas outward and converted large areas of farmland and natural areas into an often-sprawling mix of urban residential, industrial and commercial uses along with their supporting energy, transportation and related infrastructure.

The negative consequences of this growth pattern not only affects the agri-food industry, farming and the natural environment, but also affect the livability of the resulting settlement patterns and adjacent urbanized areas. Tens of thousands of hectares of prime farmland and natural habitat have been lost in metropolitan regions such as the Greater Toronto Area' and the Calgary-Edmonton corridor,² with the process continuing

largely unabated. Beyond the immediate loss of land, the realization is emerging that metropolitan regions influence land use patterns up to 100 kilometres beyond their formal boundaries.^{3,4} Recent studies^{2,5} confirm that low-density suburban sprawl has expanded significantly in Canada since the 1990s.

Accelerated expansion of Canadian urban areas has been influenced by locational and housing preferences, resulting in more land per urban dwelling with declining average densities going from 1,030 persons per km² in 1971 to 796 per km² in 1996.¹ The negative consequences of this land consumptive form of urban growth are significant not only to the viability of the agri-food industry and ecological integrity of the natural environment,⁷ but also to the quality of life of residents. British Columbia responded to these intense development pressures with strong mechanisms aimed at growth management and the preservation of agricultural land and natural assets through an integrated policy approach founded on a long history of regional planning.

British Columbia's Agricultural Land Reserve —A De Facto Urban Growth Boundary

The largely mountain and valley terrain of British Columbia has resulted in keen historic competition for a limited developable land base. Rapid post-World War II growth in the province witnessed extensive suburbanization. The annual loss of an estimated 6,000 hectares of prime agricultural land in the late 1960s and early 1970s began setting off public and political alarm bells. In areas like the Lower Mainland, the clearly visible loss of high quality farmland and natural habitat was running counter to the dominant public concern that was encapsulated in the 1966 Lower Mainland official regional plan that was based upon a vision of "Cities in a Sea of Green."⁸ In 1973, with the passage of the Land Commission Act, a Commission was appointed to oversee the preservation of agricultural land and designate the province-wide Agricultural Land Reserve (ALR). After a consultative process, and based largely on biophysical attributes, about five percent of the province's land base was found suitable for designation in the ALR.

The Province's agricultural land preservation program was placed into the land use planning mix to help balance the forces of urbanization that were particularly apparent in the high growth areas of the province. A provincially inspired zone, within which agriculture is the use of priority, provided clarity and strength as a land use tool. With three exceptions, the Land Commission Act was subject to no other provincial legislation (the exceptions are the Interpretation Act, the Environment and Land Use Act and the Waste Management Act).

While the Commission's duties over the years have been altered to provide a sharper focus on its agricultural land preservation mandate, the original legislation saw a need to take a more comprehensive approach. Originally, the Commission was also charged with managing "greenbelt land" in and around urban areas; "land bank land" for urban and industrial purposes; and "park land reserves". While these responsibilities were eventually removed (1978) from the mandate, they served to foreshadow the importance of functional integration and a regional perspective that formed the hallmarks of the emerging regional growth strategy in the Greater Vancouver Regional District (GVRD). With the protection of the foodland resource has come a number of consequential benefits. Besides the more obvious contributions to the health and economy of the Region, agricultural lands may provide many ecological functions (e.g., habitat, soil protection and water infiltration) and define a "sense of place" for many communities across the province. Moreover, the agricultural land preservation program has had a positive influence on urban growth patterns in the province over the last 30 years.

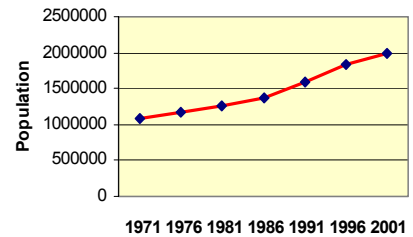
Building upon the ALR— The Green Zone and the Livable Region Strategic Plan

The ALR provided a strong foundation for the development of the Green Zone, a cornerstone of the Livable Region Strategic Plan, approved by the GVRD Board with the support of its member municipalities in 1996. The Plan is the region's official growth strategy and is, in essence, a contract among member

GVRD'S Farmland Has Been Gradually Stabilized in the Face of Steady Population Increases

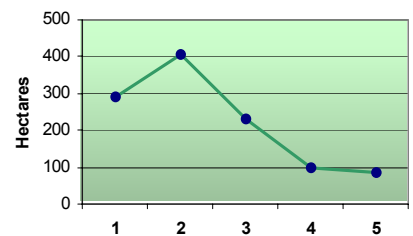
The GVRD has realized a population increase of over 900,000 from 1971 to 2001.

Population Growth - Greater Vancouver (1971 - 2001)



Within the GVRD there are currently about 64,700 ha. in the ALR. During the 26-year period between 1974 and 200, the ALR has seen a total net loss of about 5,680 ha.

Average Annual Net Loss of Land from the ALR in Five Year Intervals



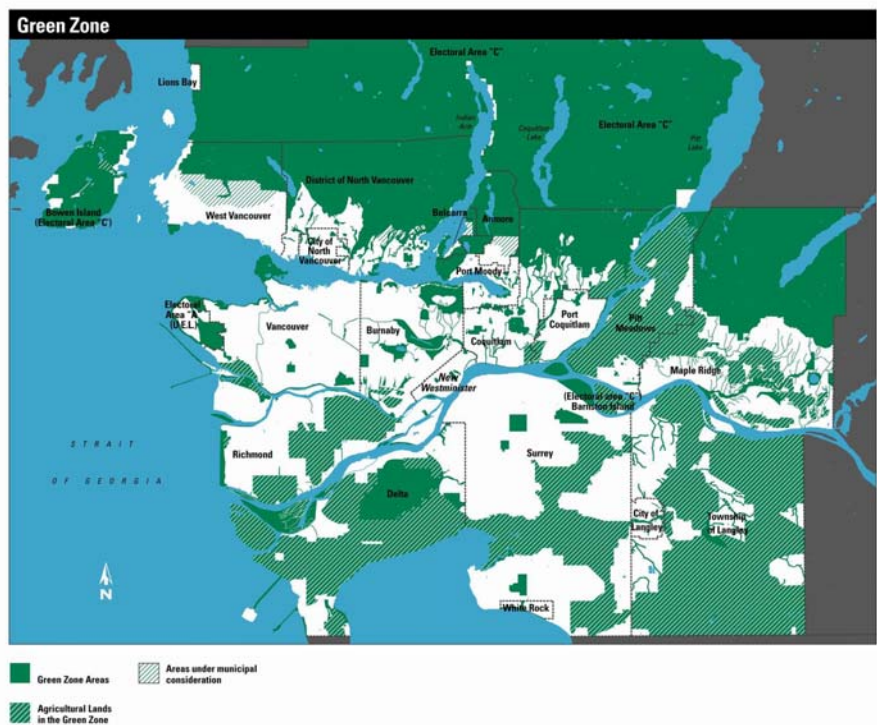
The annual average net loss of land in the GVRD's ALR has been gradually dropping. From a high of 405 ha. per year on average between 1979 - 1983 to a low of 85 ha. during the 1994-1998 period.

municipalities to achieve region-wide objectives. The Green Zone comprises about 205,520 hectares or two thirds of the region's area and delineates lands protected from intensive urban development. Four types of regionally significant lands make up the Green Zone: community health lands (drinking watersheds, flood plains) ecologically important areas (wetlands, forests), renewable resource lands (agriculture, forestry areas) and outdoor recreation and scenic lands. Together, a reservoir of ecological capital for the region has been established upon which food production and wildlife habitat; recreational, aesthetic and ecological services; and health and other benefits are derived.

Recognizing the need to protect what is most important first, the establishment of the Green Zone was the first piece in preparing the Livable Region Strategic Plan. It defined the framework for the plan and supported the Plan's other key policies of building complete communities, achieving a compact metropolitan region and increasing transportation choice.

Integration of agricultural lands within the network of "green" lands is a unique, but effective, "Smart Growth" tool for land conservation and growth management. The region's ALR, less a small portion, comprises about 26 percent of the Green Zone. Municipalities have designated their Green Zone lands, and substantial changes trigger a plan revision that ultimately requires the approval of the GVRD Board of Directors. Since the Livable Region Strategic Plan was adopted in 1996, the area of the ALR in the region has decreased only marginally (0.3 percent).

Integrating the "brownier" working agricultural lands (which are largely private) with "green" lands (most of which are public) in this framework also highlights sometimes-competing values. An implementation agreement between the GVRD and Provincial Agricultural Land Commission recognizes these values and strives for a sustainable balance. The agreement specifies how both organizations are jointly committed to preserving the ALR, enhancing agriculture in Greater Vancouver and achieving the goals of the Livable Region Strategy. For ALR lands within the Green Zone, ensuring that farming remains a viable business undertaking is an essential implementation action. Similarly, protection of conservation features, wildlife corridors and provision of parks and outdoor recreation opportunities are recognized as



Agricultural lands make up one quarter of the Green Zone, lands for no urban development within the GVRD Livable Region Strategic Plan

important activities taking place in the Green Zone, including ALR lands.

The ALR and GVRD's Green Zones have acted as springboards for a series of supporting initiatives. The development by the province of the "Strengthening Farming Program" in the mid-1990s fosters partnerships between local governments, the farm community and the province. In turn, this has assisted the appointment of local "agricultural advisory committees" and completion of agricultural land use inventories, geographic information systems initiatives, agricultural area plans, and "edge planning" to help lessen farm/non-farm conflicts. A Farmland and Wildlife Trust has been created and is addressing farm and

wildlife issues in a spirit of cooperation and mutual benefit for both interests. A new federal/provincial environmental farm planning initiative is also being launched by the British Columbia Agriculture Council. As well, the GVRD has an agricultural advisory committee that advises the Board on agricultural matters.

Municipalities play a critical role in the sustainability of agriculture and function as the primary "gatekeepers" of the ALR. Applications to remove land from the ALR, subdivide lands or carry out a non-farm use are first received by municipalities. Aspects concerning rural-urban interfaces, compatibility of adjacent land uses, and infrastructure including drainage, water supply and road systems are under municipal purview. Many municipalities with significant agricultural areas in the region have developed supportive agricultural policies and plans as expressed within their official community plans and agricultural area plans.

Collectively, all of these tools provide "on-the-ground" connectedness between municipal planning processes, regional policy directions and provincial objectives focused on the Region's rural, agricultural and natural areas.

The ALR, GVRD's Regional Growth Strategy and the actions of Member municipalities have contributed to maintaining the vitality of GVRD's farm sector while realizing continued population growth

	1986	2001
- No. of Farms	2,963	2,854
- Ha. in Farm Use	37,922	39,735
- Annual Gross Farm Receipts	\$273,639,794	\$698,053,467
- Farm Wages Paid	\$30,830,926	\$144,422,564

★ Source: Statistics Canada, Census of Agriculture

Ultimately, the philosophy of responsible regional growth management in the GVRD has embraced the agri-food and environmental interests within the planning mainstream in a largely harmonizing rather than confrontational manner. As a result, agriculture and habitat issues are no longer planning afterthoughts. Policy development has moved beyond the question of land use preservation.

But challenges do remain. Ensuring an appropriate urban/rural "fit" for the long term is still being addressed. Balancing habitat conservation and the economics of farming continues to be an issue. Concerns related to greenhouse operations located in areas of wildlife significance, particularly the Pacific Flyway, and on prime agricultural soils are under consideration. Regulatory requirements on agricultural lands are numerous, variable and somewhat uncoordinated throughout the region, which can be a disincentive to farming. Issues relating to air quality include decreased crop productivity owing to poor air quality and contributions of air contaminants from some agricultural operations. Further attention is also needed to the establishment of local markets, the processing of agricultural products, and the realization of synergies with other activities. Doing so will serve to enhance local economies, improve efficiencies and advance the goal of sustainable agriculture in the region.

Managing growth in a manner that bridges economic prosperity, community well-being and environmental integrity is a challenge that is currently front and centre in GVRD's Sustainable Region Initiative. As challenges are met, an important difference in the GVRD approach is the recognition that the "green essentials" of the Region are not only protected but make crucial, complementary and integrated contributions to evolving regional strategies and municipal community plan policies. ■

References and Notes

1. GTA Federations of Agriculture Project Management Committee. Greater Toronto Area - agricultural economic impact study. 1999;p.iv.
2. Alberta Agriculture, Food and Rural Development. Loss and fragmentation of farmland. April 2002.
3. Houston P. The importance of agriculture in planning for the metropolitan urban-rural fringe - interim views from a research program. University of Melbourne. November 1993.
4. Rambeau S, Todd K. Census Metropolitan Area and Census Agglomeration Influenced Zones (MIZ) with Census Data. Statistics Canada. January 2000.
5. United Nations Environment Programme. North America's Environment. Nairobi: UN; 2002: p. 167-169.
6. City of Richmond. Agricultural Viability Strategy Report. May 2003. See: <http://www.city.richmond.bc.ca/planning/agriculture/agricultureindex.htm>
7. Pirn L, Ormoy j.A Smart Future for Ontario — how to protect nature and curb urban sprawl in your community. Federation of Ontario Naturalists, October 2002. See: <http://www.ontarionature.org/enviroandcons/issues/sprawl.html>
8. Lower Mainland Regional Planning Board. Chance and Challenge: A concept and plan for the development of the Lower Mainland Region. New Westminster (BC); December 1963: p.6.

Barry Smith is a planner with the 8C Ministry of Agriculture, Food and Fisheries and previously worked for the BC Provincial Agricultural Land Commission. He is currently involved in the coordination of the Strengthening Farming Program of the Ministry — a program designed to work with local governments and the farm industry to resolve land use conflicts and support planning for agriculture. He can be reached at: Barry.Smith@gems4.gov.bc.co

Susan Haid is a Senior Environmental Planner with the Greater Vancouver Regional District, Policy and Planning Department. She works on planning and implementation of the Green Zone, the 'green lands' in the region's official growth strategy, the Livable Region Strategic Plan. This involves measures to protect agricultural lands and enhance agricultural viability as well as strategies and tools to sustain the region's ecological viability. Susan can be reached at: susan.haid@gvrd.bc.ca