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Conservation of Natural Heritage

ECONOMIC INSTRUMENTS FOR CONSERVATION:

AGRICULTURE

Prepared for

National Round Table on the Environment and the Economy

by

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Introduction

As part of its Millennium Program, the National Round Table on the Environment and the Economy (NRTEE) established the Task Force on the Conservation of Natural Heritage. The end result of the Task Force's work is to produce a NRTEE State of the Debate report with targeted recommendations in the spring of 2003 (an interim report is expected in the fall of 2002) for governments and decision-makers across Canada. The NRTEE may use some recommendations as the basis for its Greening of the Budget 2003 submission.

The Task Force members represent a variety of perspectives but have developed a collective focus summarised by the following statement:

> Canada has a unique global opportunity for nature conservation. To fulfill this opportunity, we need a new vision for conservation that begins with a system of protected areas and takes us further – a vision that will seek to achieve connectivity across whole landscapes and seascapes, and support the critical stewardship role people and communities have as part of these places. *Making the transition to this new approach requires a broad suite of instruments that encourage stewardship.* It also requires us to be adaptive, based on both our experiences over time and new information as it becomes available.

A smaller working group of the Task Force has been charged with examining innovative financing mechanisms, including both *what* needs to be funded (targets) and *how* they can be funded in the future. In an early March 2002 workshop, the working group identified three principal areas for examining innovative economic instruments: protected areas and ecological integrity, agriculture, and resource industries active primarily on public lands. This background paper identifies an initial variety of mechanisms to deal with agriculture; the other two areas are addressed in companion papers. Included are measures involving expenditures, revenue neutral or positive measures, as well as sources of funding external to government. Variations on, deletions and additions to this list may occur as the Task Force's work progresses.

Agriculture and Conservation

Agriculture is a business that, both for individual farmers and for the industry, must produce a profit to remain viable. But agriculture is also a way of life, lending its character to communities and culture and nurturing a deep commitment by many farmers to sustain the land they love. These lands, primarily in private hands, are farmed and ranched in diverse ways and are subject to many competing pressures.

From a conservation of natural heritage point of view, private lands in agriculture can offer two general opportunities: provision of wildlife and habitat and generation of ecological services to sustain nature in other areas. Conservation can also offer agriculture potential benefits: financial and other recognition of the public benefits provided, enhanced marketing to consumers, higher productivity through enhanced environmental quality, efficiencies, and options to address marginal lands and practices, among others. Given this interface, there are many opportunities to create a synergy between agriculture and the conservation of natural heritage.

In the establishment of some of the proposed national arrangements, there will be the need to outline the coordination and organizational capacities required to effectively implement them. In many cases, it will require development of a national framework, provincial or territorial agreements, partnerships with national, regional and local organizations, multiple sources of funds, matching grants and both financial and program leverage, ecological measurements, local and regional target and priority setting, integration

across sectors, and grassroots applications for eligible projects. Successful stewardship programs across Canada have demonstrated that such programs also need to: be long-term and adaptive, build capacities and relationships, foster cooperation, provide common sense benefits to landowners, involve education/training and planning components, and be ecosystem-based. Some items proposed in this paper will require further development in order to meet such criteria.

The remainder of this paper will briefly describe an array of economic instruments which could support and encourage such sustainable agriculture. Applications will vary across the country and among sectors within the agriculture industry. The securement aspects will link to measures identified in the Protected Areas and Integrity Lands paper, while financial advisory and bond rating services elaborated in the Resource Industries paper could be applied within the agricultural context. In some cases, the proposed measures assume appropriate organizational arrangements, the identification of important features, landscape connectivity and sensitivities, the ability to establish objective ecological measurements, and the requirement for an environmental farm plan to integrate various components.

Economic Instruments

1. Conservation Cover Incentive Program

Ducks Unlimited Canada is proposing a national Conservation Cover Incentive Program of long-term agreements (preferably permanent conservation easements) to bring sensitive areas under permanent vegetation. Entered voluntarily by farmers and ranchers, such agreements would entitle them to annual or one-time payments in exchange (or donation tax credits) for converting cultivated marginal and riparian lands into permanent vegetative cover, unavailable for agriculture. An "Environmental Benefits Index" would assess various factors to identify priority locations. The proposed Program would target 2.3 million hectares, cost some $103 million per year, and produce economic benefits of $196 million annually. Such payments would assist on-farm and community economic stability, foster diversification, and help finance better agriculture practices and technology, among other economic benefits. It would also qualify as a Green-box initiative under the World Trade Organization and could contribute to environmental branding of products produced elsewhere on the farm. As demonstrated in the U.S., such a program would also reduce soil erosion, water quality and greenhouse gas concerns while improving wildlife habitat and rural aesthetics. This program would need to integrate with other programs to identify important core, connectivity and habitat areas, along with lands sensitive to degradation, in order to maximize the benefits to natural heritage features and functions.

2. Payments and Tax Benefits for Conservation Plans and Practices

This program would integrate and develop a number of incentives to encourage sustainable management of identified priority agricultural lands. It would focus on elaborated environmental farm plans, already well regarded in the agricultural community, as the window through which a variety of incentives would flow. Plans would need to address a variety of considerations, including identifying and implementing practices for biodiversity, soil and water conservation. Such plans would accommodate integrated regional conservation priorities, rather than simply be site-focussed and owner/tenant-identified, as many are now. They would also identify production efficiencies and demonstrate production due diligence. Plans would be uncomplicated and could possibly involve a certification process, as occurs in the U.S., in order to foster environmental branding in international and domestic markets.

The financial instruments associated with the program could include the following:

- payments or tax credits for training, preparation and certification of plans;
- qualification for farmland assessment values and property tax reductions;
- accelerated capital cost allowance claims on conservation equipment, such as flushing bars,

fencing, watering and manure management facilities, and the like;

- cost-sharing for capital improvements and equipment related in the plan to the conservation objectives;
- priority qualification or premium benefits for agricultural support, credit and insurance programs;
- premium environmental certification;
- technical assistance; and
- other extension and support services.

Funding and tax priority would be given to applications in identified priority areas, with high environmental benefits, and with high leveraging of other resources. The latter criterion would help leverage additional private investments by farmers towards improving their operations. The program would be elaborated in cooperation between federal, provincial and local agencies and organizations.

3. Limit the Federal Tax Deduction for Clearing or Levelling Land

Section 30 of the *Income Tax Act* permits the deduction of expenses for "clearing land, levelling land or installing a land drainage system for the purposes of the [farming] business". Such an incentive permits the loss of important native cover and the drainage of wetlands, among other effects. While this might be appropriate in some circumstances, it acts as a disincentive to conservation. Where such practices should occur, and thus such a deduction be available, could be determined through the development and certification of an environmental farm plan. Such a plan could then accommodate regional conservation priorities and recognize the ecological services provided by such areas on the farm. An alternative is to only permit such a claim for expenses where a declaration has been made that it has not had a significant effect on the conservation of natural features (or those priority features identified regionally).

4. Recognition for Regional Ecological Services

A variety of programs could be implemented that tied future government and private funding to improvements in measurable ecological services. Such services could be measured through, for example, percent natural cover, percent watercourse length in natural cover, representation of natural features within protected areas, water quality and quantity improvements, trace chemicals, air quality indices, increases in the presence of particular habitat or species, or even clear demonstrations of a change in attitudes towards stewardship. These or other factors could be assessed on sub-watershed, municipal or other catchment basis where there is a clear relationship between the practices of its residents and these factors. Current efforts to develop a National Agri-Environmental Health Analysis and Reporting Program (NAHARP), or an adaptation, may be appropriate to such a program. Peer review and local participation in measurements may build confidence and interest in this approach, and government and private auditors could become involved as well. Financing could include: government infrastructure grants, matched foundation grants, proportions allocated locally from national foundation funds, private bond ratings, and the like.

A more elaborated scheme could include a pooled system of credits and debits for ecological services and access to government financial supports. Such a system would require simple administration but could allow local watersheds or communities to trade up or downstream. It would promote the leveraging of private contributions and actions and could be used as the basis for local and national reporting and comparisons.

5. Ecological Services Recognized in Farm Mortgage Payments

Many farmers experience a large debt burden and substantial financing costs, putting many at risk of

losing their farms and forcing them to operate in excess of sustainable limits. To provide financing for farm purposes, there are a number of provincial and federal farm credit programs in Canada which. These include the federal Farm Credit Canada corporation with some $2 billion in annual debt issuance. A program could be designed with these credit organizations to simply analyze the measurable ecological services provided on a farm, or within a small farm area, and provide the farmer(s) with the option of getting financial credit for operations which produce improved environmental performance. Such environmental credit would be proportional to environmental enhancements, up to a specified proportion of the mortgage payments. Environmental enhancement could be measured in relation to capital improvements, permanent commitments to conservation practices (e.g. a conservation easement along a watercourse), or measurable ecological service improvements reasonably connected to the farm itself. Credit applications could also include a review to determine whether farms or ranches are in priority areas or proposed practices would damage wildlife habitat. An ecological services credit program may affect the self-financing nature of credit corporations in the short term, but may pay off in increased viability and reduced foreclosures in the future. Some of the loss in direct revenue could be recovered through applying some of the measures described in the Mortgage Securement mechanisms, which follow.

6. Securement through Farm Loan Payments and Default Sales

Loan payments and the sale of lands for a default on mortgages provide opportunities to secure natural heritage benefits and, in some cases, can provide agricultural producers with debt relief. Loans could be offered at reduced interest rates to those landowners who would sell ecologically important portions of their property. As in the U.S., farmers could elect to enter a conservation easement or transfer "non-productive" natural portions of their lands in replacement for loan payments, or possibly long-term insurance, of equivalent value. This provides financial options and would especially give farmers in financial difficulty the option to keep their farms rather than go into default. Such a program would protect key natural features and ensure agreed, sustainable land uses and practices on the lands. Some of these natural lands, subject to a conservation easement, could be sold at a premium for compatible recreational purposes.

Where public or private financial institutions must foreclose on private loans within identified priority natural areas, conservation agencies and organizations could be notified of the pending sale and given the right to match the highest bid. This would allow priority lands to be acquired for conservation purposes without additional economic impact on the lending institution or the owner. Where such lands are in areas experiencing uncontrolled development pressures, an easement to maintain the land in agriculture could also be considered, thereby maintaining its availability for agriculture and a critical mass of agricultural support services, and avoiding costly urban services.

7. Establish an Ecological Agriculture Fund

An Ecological Agriculture Fund could be established to assist Canadian farmers in making the transition to more ecologically-friendly agriculture, such as using integrated pest management and growing organically. This would support the federal-provincial-territorial agriculture Ministers' key direction to enhance environmental aspects of the industry. In each of ten years, the Fund would receive a substantial, multi-million dollar annual contribution from the federal and provincial governments, farmers and farm organizations. The Fund would be used to: provide specialized extension services, training and research; offset opportunity costs for farmers making the transition; and support marketing efforts. A variation on this approach would be to provide tax credits to farmers using ecologically-sound practices but this not have the same profile and generate the same momentum as a consolidated Fund.

8. Enhance Private Technical Expertise for Sustainability and Safety

As a complement to or component of the Ecological Agriculture Fund, seed grants and tax credits could be offered to private companies which provide technical expertise and support for non-traditional, sustainable and safe practices. Much of this expertise has been offloaded from governments, is sourced in other countries, is unavailable in parts of Canada, or may be disappearing as older experts retire. Such

support would enable new businesses to develop, market and share this expertise, thus contributing towards the Agriculture and Agri-Food Canada's key directions of more environmentally-sound and safe agriculture.

9. Relate Programs and Data to Ecological Planning and Land Classification

Based on enduring soils and vegetation characteristics, scientists have classified Canada into a hierarchical system of Ecological Land Classification (ELC). Increasingly, conservation programs are using these units and landscape planning at various scales to classify, compile data, map and target efforts. The extent to which this is developed with, translated to or applied by the agricultural community and programs will vary, but needs to be assessed. Where possible, agriculture and conservation programs and related research and data should be correlated with ELC, landscape planning and Geographical Information Systems (GIS) in order that synergies, efficiencies and integration can be achieved. To foster this approach, expenditures could be made for program development and integration, training, field work, GIS hardware and software, among others. Efficiencies between agriculture and natural heritage conservation programs may also be achieved, particularly over the longer term, where administrators may cross-reference or pre-qualify programs and farmers may obtain a clearer, integrated direction and streamlined access to support.

10. Reform Liability Laws to Foster Ecotourism on Farms

Some provinces have revised their occupiers' liability laws to reduce the standard of care expected of landowners when persons enter their lands for recreational purposes. By fostering such reforms in other provinces, farmers and other rural landowners may be more willing to allow hunters, fishers, birdwatchers, and trail users onto their properties. This will eliminate one barrier to ecotourism incomes and thus provide revenues and support for maintenance of farm biodiversity.

11. Tax/Licence Pesticides and Direct Revenues into BMP and Water Protection

The federal and other governments are examining new means to reduce the use of pesticides. New federal taxes on pesticides or municipal fees for pesticide use could create a dedicated fund from which to support best management practices (BMP) and safety on the farm and possibly the protection of water. Additional sources for such a fund could include taxes or fees associated with fertilizer or other chemical uses, including those for household applications. Water quality and quantity could be protected through well-head and watercourse protection, vegetation plantings, securement of sensitive hydrological areas, and other remedial measures.

12. Cross-Compliance Between Government Support and Conservation

A variety of government support programs, "safety nets" and payments could be made conditional upon maintaining specified natural heritage features. Where such features were destroyed, or severely degraded, the landowner would no longer be eligible for the program or payment. Such an approach is applied in the U.S. for wetlands and is being considered by some governments in Canada. However, cross-compliance must be carefully designed to avoid natural feature conversions and other negative reactions.