Payment for Ecological Services (PES) Programs

A number of common misconceptions surround Payment for Ecological Service (PES) Programs. This document tries to clarify some of these frequently asked questions while using tangible examples from existing programs.

1. **What are Payment for Ecological Services (PES) Programs?** PES programs offer payments to farmers or landowners in exchange for managing their land to provide some sort of ecological service, often called a fee for service. They are a system that incentivizes the provision of environmental services through conditional payments to voluntary providers. These programs promote the conservation of natural resources in the market place, they are often interchangeably called Payment for Environmental, Ecosystem or Ecological Services.

   Some examples of ecological services being delivered on private lands include expanded riparian buffer zones that provide critical wildlife habitat and improve water quality, creating, restoring or maintaining wetlands, which improve water quality and can protect communities against spring flooding and offset the impact of droughts, managing native prairie to enhance critical habitat for species at risk and establishing pollinator hedgerows to provide habitat for pollinator's.

2. **Is there only one PES model?** Globally there are many PES programs and delivery models. In Canada and elsewhere they continue to adapt over time to improve the delivery of environmental outcomes within a framework of fundamental principles (incentive-based, community delivered, etc.).

3. **Is rigorous scientific monitoring done?** Rigorous scientific monitoring is a requirement of any successful PES program. There has been a significant investment by the PES community into evaluations of PES pilots as well as substantial investment in database development. As an example, all Alternative Land Use Services (ALUS) projects are monitored by ALUS staff as well as independently audited (eg in Alberta ALUS contracts Cows and Fish to monitor riparian health).

   Many programs have spent a significant amount of resources developing monitoring methods that are used today that provide scientifically robust measurements in a cost effective and efficient manner.

4. **Can funding for PES programs can be sustainably attained from a multitude of sources?** PES Programs are designed to be able to aggregate funds from a multitude of public and private sources, including conservation offsets, mitigation, private foundations, traditional conservation funds and individuals. This approach diversifies the funding base and can enable the securement of long term funding from public and private sources, conservation offsets, mitigation funding, private foundations, and local conservation funds.

   For example, funding and support for the ALUS program has been attained from sources such as the W. Garfield Weston Foundation, Delta Waterfowl, The Calgary Foundation, a number of municipalities and counties and others. The Ecosystem Services Initiative (ESI) that began in

British Columbia originally attained funding from the local municipal tax base, but has since expanded and now attains funding support from a variety of public and private sources, including foundations and granting programs such as the Columbia Basin Trust, the Real Estate Foundation of BC, the Alberta Land Institute and the Government of British Colombia.

Government support is not limited to long term funding. Government support for PES programs may include official endorsement, start up funding support, development of policies that facilitate industry offsets/mitigation, and local participation.

5. **If the term of the agreements isn't perpetual doesn't that mean that they aren't effective?** PES are flexible in the agreement term (how many years the land owner will get paid to provide a specific service), this can be for a number of different reasons such as perpetual commitments may be unpalatable to land owners who want to ensure they do not agree to something now that may have long-term negative economic impacts or future funding is pending for the project. There is limited interest from the agriculture community for perpetual securement. For the majority of active farmers and ranchers the PES model is much more attractive as it allows control of land use to remain in their hands.

   The term of agreement can be set to balance the environmental, landowner and the funding organization goals. For example the ALUS program typically has a five to ten year agreement with extension pending available funding while the ESI offers any length of agreement. It has been found that this is the best approach to optimize long term, significant uptake of conservation programming and achieving environmental goals.

6. **Are PES programs targeted?** A major focus of PES program development has been to effectively integrate with local communities and landowners to achieve environmental objectives. The delivery models that have emerged through this approach provide the capacity to deliver programs with specific objectives such as wetland conservation, water storage and management, carbon sequestration, species at risk, pollinator strips, all under the umbrella of "ecological goods and services".

   There is currently a number of Saskatchewan Species at Risk Pilots (SK SAR Pilot) being undertaken, targeted at grassland birds. This PES pilot is focused on achieving specific habitat targets for Sage Grouse and Sprague's Pipet.

   Similar examples comes out of the United States where landowners are paid a fee for service to protect Species at Risk Habitat. Safe Harbour Agreements that suspend the regulatory provisions of the Endangered Species Act in favour of incentives enable such programming.

7. **Do PES programs take land out of production that contribute to Canada's economy?** Land does not have to be taken out of production to participate in PES programs. In some cases setting land aside may be the chosen approach however others such as the SK SAR Pilots may choose to set habitat targets that actually utilize cattle grazing to achieve the desired habitat outcome. Other programs may modify land use eg. delayed haying to reduce impact on bird nesting season, have the land used in a different capacity, eg. changing cropland over to native

grassland to be used for cattle production or they may reward maintaining or re-establishing healthy riparian areas that are part of the working landscape.

It is not the purpose of PES programs to set-aside land; rather the goal is to find new environmental markets on the working landscape using a variety of approaches.

8. **Do PES programs artificially inflate land values?** Since PES programs recognize the production of ecological services, they may enhance the value of lands that were previously undervalued. For example an acre of native grassland historically sells at a lower price than an acre of farmland where canola can be grown since the acre of canola has more potential to generate cash flow than the acre of native grassland in the marketplace. However, the grassland provides many public goods such as habitat for species at risk, carbon sequestration and water filtration, the PES program helps to recognize the value of these public goods. PES programs help correct marketplace failures.

9. **How are the value of payments decided upon?** There are many different scientifically supported valuation approaches that can be utilized to determine the payment amount, such as market analysis, reverse auctions and other bidding processes. The programs in Canada to date are funded by philanthropic dollars so the program sets a price. If there were a market where there were willing sellers and willing buyers the market would set the price. Ultimately the amount of available funding and negotiations with landowners will determine the payment levels.

10. **Can PES be an affordable approach for positive Environmental outcomes supported by Government?** A number of nations around the world, such as Australia, the United States and many European countries effectively utilize PES programs to achieve positive environmental outcomes. Canada is one of the few developed nations in the world that does not have a robust, national PES program. Canada is in an excellent position to utilize the PES program lessons from other countries to achieve our environmental goals. Programs are built on a private-public partnership model so government is only one of the supporters or funders. Furthermore PES programs are scalable, and can deliver more benefits as funds become available. Working landscape constituents and environmental organizations support PES programs as they help to create win-win scenarios on the environmental and business front.

11. **Can PES programs reward existing services?** It makes sound environmental and economic sense to support the maintenance of current ecological assets alongside restoration and enhancements. Restoration has much higher costs; full ecological function once lost is arguably unattainable ecologically and economically speaking. Thus it is important to recognize the value of the landscapes people have kept in healthy ecological condition to avoid future loss as well as reward those who restore lost environmental services to land where it has been lost.

12. **Are local projects able to contribute to national objectives?** Canada has a diverse landscape that provides ecological services. Different land use practices affect the provision of ecological services differently in different regions. PES programs promote a discussion between the community and funders on how to effectively deliver desired outcomes at a local level. Local

advisory committees are utilized to optimize program output. Programs can tie into a larger regional or national initiative while being locally driven.

13. **Are PES programs trade distorting?** PES programs fall into the 'green box' in regards to Canada's international trade obligations. Similar programs are undertaken by many of Canada's trading partners to achieve environmental goals.

14. **Are PES programs a handout to landowners?** PES programs are a fee for service arrangement that pays for public goods that are otherwise under-delivered or not delivered. PES programs can help to mitigate compounding landscape problems such as flooding, loss of habitat and increased water filtration requirements, etc. This can lead to tangible economic benefits to stakeholders through cost avoidance. For example, New York State avoided building a $6 billion dollar water treatment plant with $250million/year upkeep costs by paying (for a fraction of the cost) for the delivery of ecological services from the land upstream.