

Ecological Services Initiative Conference

Making it Work

Going from Pilot to Long-Term Program



March 10, 2016
Langley Events Centre
Langley, B.C.

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"The denying of reality has been an issue, from Galileo to Columbus to modern times. Reality always triumphs eventually, but there are very real costs to it occurring later versus sooner".

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Executive Summary

The Ecological Services Initiative (ESI) Conference was held in Langley on March 10, 2016. The theme of the meeting was “*Making it Work – Going from Pilot to Long-Term Program*”. The conference involved farmers, funders, government agencies, universities, local government, and environmental and stewardship agencies. In some ways, it built on the success of the three previous forums on agriculture and the environment that were held between 2012 and 2014.

The ESI is a group of experts researching and developing the long term ESI program by implementing the action steps in the framework in a five-year pilot. The long-term program will contract farmers to take extra-ordinary action to produce clean water, abundant wildlife, and a healthy environment on thriving farms. The five-year pilot’s first year was marked with this conference as a part of the process to identify procedures and infrastructure that could be adopted for a successful long-term, sustainable ESI program.

The Conference had three specific goals to achieve.

1. To learn what ecosystem services are and why they are globally important; and to learn more about the ESI and payments for ecosystem services (PES) programs
2. To provide an update on the ESI and progress on the action steps that were laid out in the framework agreed upon at the last Forum.
3. To obtain direction on possible program improvements and to strengthen the involvement of participants.

The conference resulted in positive feedback on speakers, breakout group analysis, and on the ESI update. Participants supported the set of action steps provided in the framework, but more importantly, participants saw a role for themselves in moving the ESI forward. At the end of the conference participants all agreed upon the following outcomes:

1. We are trying to affect cultural shift in agriculture and society as a whole to understand and value ecosystems.
2. Communications, including branding, will be crucial for success. It needs to resonate with farmers, funders, general public, and government.
3. Rigor in monitoring is essential, but it must be done in a way not to put an extra burden on farmers.
4. Provide a fee for service for farmers taking *extra-ordinary action*; not routine farm management practices.
5. The need for long-term diverse funding to be secured had universal support.
6. The BC Agriculture Council is seen to be the best fit as the long-term administrator for this initiative.

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1.0 BACKGROUND

Three Forums on “agriculture and the environment” have been held over the past four years to strengthen communication and cooperation, while developing a process to build partnerships and collaboration. The first forum was held in Richmond on October 31, 2012. 80 participants representing a diversity of interest groups including agriculture, environmental groups, and government agencies discussed key environmental issues and how to work together cooperatively to address these issues agricultural and environmental issues. Participants were positive about the 2012 forum and most indicated a willingness to attend a second forum, but challenged organizers to structure the event to get beyond generalities and make specific recommendations on future projects and policies.

A Forum Round Table was held in Richmond on May 28, 2013. At the end of the Forum Round Table, everyone agreed that they would like to continue the dialogue process, continue to strengthen the relationships (or build the partnerships), and to work together to identify the next steps in developing projects to work on together.

The Fraser Valley Watersheds Coalition hosted forum Three on February 20, 2014. This Forum looked at regional issues within the Fraser Valley. The discussion focused on aspects of ecological goods and services (EG&S). The goal was to develop on-the-ground action items and projects. At the end of the meeting, participants all agreed upon using an Ecosystem Services Initiative framework to move projects forward. See Appendix One for the framework.

The Ecological Services Initiative Conference is a continuation of the Forum process; a meeting between farmers, non-government agencies that work with the environment, and government agencies. While the Conference had its roots in previous Forum environmental meetings and references were made to previous Forums; the focus of this Conference was to identify outcomes to move the ecological services initiative forward. Many of the participants attended some of the previous Forum meetings. A list of Conference attendees can be found in Appendix Two.

In 2014, the Ecological Services Initiative embarked on five-year pilot. The pilot was launched in three regions of BC; the Lower Mainland, the Okanagan, and the Kootenays. Each region was further divided into two sub-regions. The plan was that every sub-region would have 10 farms participating in the pilot, totalling 60 farms overall. An integral aspect of the pilot is to identify processes and infrastructure by 2018 that can be adopted for a successful long-term, sustainable ESI programs. This is the first year of the five-year pilot project that ends in 2020, so it's timely to hold a conference where the dialogue focused on identifying processes and infrastructure that can be adopted for a successful long-term, sustainable ESI program.

The Conference was made possible through the generous sponsorship of many agencies. See Appendix Three for a complete list of sponsors.

2.0 OVERVIEW OF THE PROCESS

The Conference had three specific goals to achieve:

1. To learn more about ESI and payments for ecosystem services (PES) programs.
2. To provide an update on the ESI and progress on the action steps that were laid out in the framework agreed upon at the last Forum.
3. To obtain direction on possible program improvements and to strengthen the involvement of participants.

The Conference had two main components; presentations and breakout groups that were tasked with answering set questions to develop actionable outcomes. The presentations addressed the goals of the first two objectives to provide information from BC and from around the world on existing ecosystem services and to improve conference participants' ESI knowledge base. The Conference used examples of payments for ecological services programs from around the world to highlight the crucial elements for success for BC initiatives and how to move The Ecological Service Initiative forward.

As part of the third objective and to develop agreed upon outcomes, three questions were asked of the three breakout groups' participants. Their answers were a crucial part of the third objective to receive feedback on current progress and future direction. The answers could potentially help improve and adapt the ecosystem services program to better meet the initiative's needs. In addition, the answers could be used in the formal review of the pilot program. The three questions were asked to identify:

- A. Whether to proceed with the Ecological Services Initiative;
- B. How could such a long term program be funded; and
- C. What, when and who should be a part of the process of converting the pilot project into a long-term, sustainably funded Ecological Services Initiative.

After a day of dialog, participants all agreed that it was important to proceed with ecological services initiatives and agreed upon six different outcomes. The Conference made significant progress in achieving its desired outcomes.

The complete Conference Agenda can be found in Appendix Four.

3.0 PRESENTATIONS

The conference had many excellent presentations during the first half of the meeting. They presented many concepts, discussed key issues, and introduced ways to move from pilot to program. Recording and providing extensive details on all the presentations is not the intent of this report; instead this report presents key concepts from each presentation that links to the conference outcomes.

3.1 Ecosystems Services 101 - Dr. Glenn Brown, Royal Roads University

Dr. Brown started the conference with a presentation to introduce the concept of ecosystem services. His presentation set the stage for the rest of the day and introduced three concepts that were the foundation of the conference.



The three main ecosystem services concepts are:

1. What ecosystem services are;
2. Why we need to work with ecosystem services; and
3. Linking ecosystem services to payment for ecosystem services (PES) and other incentives.

Ecosystem services produce the benefits that people (society) get from nature. Within agriculture it's a much bigger umbrella that includes many concepts beyond just crops. It is helpful to see ecosystem services as one step in a four step sequence. First is the whole natural environment. Second is that subset or fraction of the natural world that is useful to people. These are the ecosystem services. Third are the benefits that the ecosystem services provide. Fourth is the variety of kinds of worth or value that people assign to those benefits.

The concept of ecosystem services raises awareness of the benefits people receive from the natural environment; especially benefits that are more abstract and more long term. For example, water filtration provided by a field. However, human activities are causing the natural

environment (ecosystem) to deteriorate and along with it causing the deterioration of the benefits it provides to people and society.

Knowing that ecosystem services produce the benefits received by people, and that they are being deteriorated by human activities, then the next step is to develop different tools to identify and measure the worth of various kinds of ecosystem services, the benefits they provide, and to develop protection plans. An ecosystem provides many services to many people, so protection may involve an overarching protector or champion. Protection might include payments for ecosystem services, incentives or regulations. The benefits would be linked to payments to farmers and landowners that would be funnelled back into the ecosystem to fund protection or enhancement.

A major tool to protect ecosystem services is providing an incentive to those who control the environment or the land which provides the services. The best known is a cash payment, often called a payment for ecosystem services or PES. When a group, such as agricultural producers, are trying to set up a PES program they often need to work with all of the steps in the chain. There is likely to be an agreement to protect either the environment as a whole or some specific ecosystem services. To calculate the payments, someone must identify the specific benefits received by beneficiaries and calculate the different kinds of worth and then a financial equivalent, which is the PES. The PES agreement with landowners will often involve monitoring of results, which might focus on the whole environment, some specific services or the benefits provided.

3.2 What the United Nations is doing about the economics of ecosystems and biodiversity

Two video presentations from the United Nations put the concept of ecosystem services in the global context. One of the UN's ecosystem services programs is called TEEB - the economics of ecosystems and biodiversity. The first video was the welcome to a TEEB meeting by the UNEP's executive director and the second video provided more details on TEEB and on some TEEB projects.

3.2.1 Achim Steiner, the Executive Director of the United Nations' Environment Program

The presentation looked at how long term environmental sustainability interfaces with the agriculture sector and the economy at the global scale. Agriculture and the use of environmental resources are being forced into a direction that is not sustainable or beneficial to the farming sector. We need to look at broader context of the agricultural economy through the economics of ecosystems and biodiversity framework. We can't reduce everything to a question of economics and pricing; an equation that has taken out the invisible value of nature. Ecological sustainability needs to be taken into account.

For the long term success of the economy and the well-being of society, we need to rediscover the link between healthy environmental systems and the way economies develop in the future. Agriculture is central to our economies and also holds great potential to be part of the solution. Agriculture is an important factor in resource consumption. We cannot keep doing the same in the future. We need to reinvent the economics of agriculture and the agricultural economy to achieve more sustainable development pathways and a more environmentally sustainable future for our economies. Jobs and food security depends on this and even the ability of people to live in many parts of the world.

Current farming practices may not stand the test of environmental sustainability and compatibility over time. We need to balance ability to produce food and provide ecological services for our societies and economies. How do we bring agriculture and the environment more closely into a shared analysis of challenges and a shared view of opportunities and policy options? TEEB is one method to look at the issue. Farmers need to be recognized as managers of ecological assets. Agriculture and farmers are important strategic allies in ecosystems and biodiversity; they must continue to produce food and provide ecological services. Society needs to value and offer economic returns for the services farmers provide.

The video can be found at: <http://www.teebweb.org/agriculture-and-food/expert-workshop/>

3.2.2 Dr. Salman Hussain

TEEB – the economics of ecosystems and biodiversity is an instrument to capture ecosystem values. It is the cost of policy inaction if ecosystems and biodiversity aren't valued. The analysis and processes are similar to climate change, but more elements are included in TEEB and it is a more complex process. It looks at what different parts of society could do to capture the value of ecosystems.

Their current project, Phase Three, has three components:

1. **Natural capital accounting** - It is macro environmental accounting that looks at factors such as the state of land use and the biophysical processes that benefits economy. It is biodiversity accounting; a complex system of processes and a critical one.
2. **Agriculture and food assessment – sector specific eco-agri-food system complexes**
This is designed to provide a comprehensive economic evaluation of eco-agri- food system complexes. Agriculture has its visible outputs such as crops, animals, agri-tourism that all have values. Agricultural inputs such as Irrigation, fertilizer, labour, and machinery are all visible factors and are documented. The assessment includes elements such as health, pollution, and greenhouse gases that are often invisible and disservices such as habitat encroachment, soil erosion, and species reduction. All are included in the accounting and analysis system.

One project in Senegal looked at conventional versus SRI (system of rice intensification) production yields versus water consumption. Results showed that society would save \$11 million in water consumption and rice yield would increase by \$17 million. This was an important study because it's estimated that rice uses 80 million hectares of irrigated lowland and 40 % of the world's irrigation water and 30% of the fresh water.

3. **Country studies-** He provided examples of TEEB in use. In Tanzania a project called "big results now" through ecosystems services is looking at how to increase agricultural yields and economic stability through TEEB. In Ecuador two studies are being done to change the production matrix. They picked Ecuador because of their concept of "good living" is incorporated within their constitution. Individuals within their social and cultural communities pursue collective development with respect for diversity and harmonious coexistence with nature.

The video can be found at:

<https://drive.google.com/open?id=0B9AcbUml9f5TODJ3RnJQQidIRHM>

3.3 Ecosystem Services on Dairy Farms - Monica Pearson, Fraser Valley Watersheds Coalition

This presentation brought ecosystems services concepts from a global level back down to a regional level with the case studies of two Fraser Valley dairy farms. The presentation showed how ecosystems services concepts could be applied to working dairy farms. They identified the ecological services that the farms and the environment provided to humans. The two studies clearly showed both the visible and invisible outputs of the farms - the crops and environmental benefits.



There were main three areas within each case study:

1. **Identify** - The land uses, services, and beneficiaries using TEEB principles working with local farmers
2. **Value** - Using a questionnaire, they assessed what goods and services were on each farm and what services the farmers provided on both the landscape and the personal and societal level. They used a process similar to an environmental farm plan. Relative values of EG&S for each land use was assigned to understand which land uses provided more or less EG&S.
3. **Communicate** - The results were overlaid on a map of the farm to provide a pictorial overview of each farm's land uses and associated ecosystem services. The map showed economic contributions and where the farms strengthened the environment and ecosystems on the farms.

The project concluded with the following major observations:

1. Both ecological services and dis-services to farmers occurred on the farm. For example, services are aesthetic landscapes. While an example of dis-services would be ponding water on agricultural fields that damage crops and soil structure, but can benefit waterfowl and species at risk. Species at risk may require set-backs and changes in cropping strategies. In addition, natural areas take lots of maintenance and management that all cost farmers' time and money. Dis-services are the services for which farmers should be compensated.

2. The cultural services provided by farms and farmers are often overlooked. Farms provide a sense of pride and community. Farms play a large role in producing healthy food and services, inspiration (the landscapes), and physical and mental fitness. This value is often at the very bottom of the list, but farms are an important part of community. These cultural services provide strong emotional incentives for farmers to maintain ecological services.
3. If incentives are developed for ecological services on farmland, the evaluation process should integrate with the environmental farm plan program.

3.4 Lessons learned from Payment for Ecosystem Services in Costa Rica - Ina Porras, International Institute for Environment & Development

This video presentation showed why and how one country developed and implemented payment for ecosystems services. A concept that was discussed by the first speaker.

In the late 1970s, Costa Rica had the fastest deforestation rate in Latin America. Now 52% of the country is forest covered; they've re-greened the landscape through a series of regulations, incentives, extension and education. There were six elements in their payments for ecosystems services:

1. Prohibition 1995 forestry law – forbid the cutting down of any standing natural forests.
2. Introduced rules to set up a program for ecosystem payment and rent capture.
3. Creation of an ecosystem fund to collect revenues from multiple sources to provide financial sustainability.
4. National program manager to manage and monitor the program and to introduce studies on land use to evaluate change.
5. Local facilitators to provide technical capacity.
6. Cash payment back to land owners.

They learned several key lessons over the years:

1. It is adaptable.
2. It is manageable, but it still needs to be evaluated now that it is mature. Are there ways to be more cost effective?
3. A variety of financing mechanisms are needed.



4. It needs a clearer social component - who owns land, who has access, who is getting payments? Key issues for the future.
5. Higher competition requires a wider approach to conservation. New, more valuable crops such as pineapples results in more competition for environment and presents new challenges.
6. In a generation there has been a huge change in mentality, all due to education. Payment by itself is not enough; it must go hand-in-hand with other program aspects.

The video can be seen at:

<https://www.dropbox.com/sh/c45I2qc16lv8ptw/AAAAdXEPMQcAny2HJ8mtfyJM2a?dl=0>

3.5 Making it work: Payment for Ecosystem Services - Dr. Nancy Olewiler, Simon Fraser University

After Ina's presentation on how Costa Rica pays its farmers for ecosystem services, this next presentation reiterated the importance of including the environment in the economy and provided some Canadian examples and suggestions for future policy direction around paying for ecosystem services.



We've established that the economy is actually a subset of the environment; ecosystems services flows actually bind the environment and human well-being. We need to protect the quality and quantity for future generations. The protection will require integration of programs and policies to protect or restore ecosystems services. As shown in the Costa Rico model; multiple, cost effective policies will be needed.

The first challenge will be to recognise that ecosystems services are scarce; the next will be to develop payment methods and systems. Care needs to be taken to ensure that any type of payment system aligns with ecosystems services characteristics, is incremental, and does not distort the marketplace. In the past we've used legislation and regulations to protect the environment; this approach focuses on incentive-based policies. Ecosystem services can count under 'green infrastructure' programs.

Canada already has some ecosystems services pricing policies in place; however, these programs are small and not enough. They're voluntary; those involved are already committed

to concepts. Programs are uncoordinated and multiple programs exist across provinces and regions. Cost sharing is unclear, there's a lack of local funding powers and voter support. There are also basic program design flaws like too few buyers and sellers, too complex rules and regulations, mismatches between the type of policy used and the type of ecosystems service. Significantly, governments don't seem to want to pay for ecosystems services on private lands despite public benefits.

The challenge is how to take the next step to make the programs sustainable and across multiple regions in the long term. Programs have a higher chance of success when:

- there are specific, clear ecosystems services targets;
- monitoring and enforcement is feasible and effective;
- they're sustained over time;
- they're adaptable to changing conditions;
- they provide proof that benefits exceed the costs of running programs; and
- they have multiple sources of funding that encompass many ecosystems services attributes

Many of these points are similar to the key lessons learned in Costa Rica. Canada's challenge will be to get the design right through a series of pilots and experiments, obtain buy-in from affected communities, build trust and credibility, secure funds from multiple sources for incentives and programs over the long term, and government support through legislation, regulation and ecosystems services accounting. Throughout this process communication and engagement with the public, farmers and funders are essential. We need better visualization to show vividly the linkages between health and well-being and ecosystems services.

In the future, government's funding contribution is likely to be in data collection and mapping. Another type of ecosystem services funding is carbon offsets, such as setting land aside for grazing and paying farmers to keep it so. Forty percent of the carbon offsets in Alberta were purchased from agriculture. Other sources of funding can be easements, auctions, tax credits, and alternative land systems. One final comment: don't wait until it's too late to do something.

3.6 Show Me the Money: Why Investing in Payment for Ecosystem Services Matters - Dr. David Hendrickson, Real Estate Foundation of B.C.

Previous presentations focused on the importance and possible policy directions for ecosystem services. This presentation was from a funder's perspective and detailed the criteria they are looking for in potential ecosystem services projects.



The Foundation is looking for sustainable land use; the environment and agriculture are two key areas. A recent poll conducted on the general public about agriculture found that the number one issue was land, then food. The public cares about land and food and they trust farmers. This is what the Foundation believes in and therefore funds ecosystem services projects.

As a funder, these are the top five criteria of what they look for in potential projects:

1. **Secure a personal champion** - often hard to find. Must be able to speak in academic circles and be able to talk to farmers.
2. **Develop systemic solutions, not Band-Aids** – look at root issues rather than symptoms.
3. **Use integrated thinking** – don't be a silo in isolation; use a holistic approach; one that includes climate change, soil, land, drainage, pollination, wildlife. Ecosystem services are what connect everything together.
4. **Financial sustainability** – they can fund a program or project for a set number of years, but they are looking for sustainable models. Think of them as a catalyst of the sustainable dollars.
5. **Collaboration** – a series of steps within a project
 - a. *Information* – ensure sharing within a networks of funders
 - b. *Alignment* – ensure that the project has come together as a result of informal funding discussions and shared formal due diligence
 - c. *Coordination* – ensure that the project involves at least three or more funders that coordinate funding of complementary elements of a multi-part project
 - d. *Strategic collaboration* – they want to see project partners working together to develop and implement a joint funding strategy. It should include an informal or formal alignment of resources. There should be shared accountability and evaluation.
 - e. *Collective impact* – they are looking for collective impact strategies for systems change with shared objectives, common backbone and infrastructure support. The project should move from information sharing, alignment, coordination, strategic collaboration, to final outcomes that have an impact.

In summary they are looking for innovation and leadership, strong partners, long term financial sustainability and ways to scale up projects. The challenge will be to take pilot projects and scale them up to achieve permanent change; it's not easy, but can be done with a common vision. His final advice was that names matter. "Ecosystem services" doesn't mean a thing to the public which is a huge problem. ESI needs a strong name and a simple, powerful narrative story line.

3.7 Working it: An update on the Ecological Services Initiative - Dave Zehnder, Ecological Services Initiative

Dave's presentation brought the discussion about ecosystem services back to BC. He described what the ESI is, who is involved, and why it is needed. This talk included an update on progress on the workplan to develop the program adopted at Forum 3.



In general, there is a decline of ecosystem services and the ESI believes that the decline could be stopped and reversed. This could be done by contracting farmers to take extra ordinary action to conserve and enhance the ecosystem. This concept has worked well as demonstrated by the Costa Rica example where payments for ecosystem services have been in place for 20 years.

The Ecosystems Services Initiative is being developed in three phases:

- *Phase One – Project Initiation* involved a literature review and expert consultation to design the initial PES model and the establishment the first demonstration site. The results of Phase one showed that ecosystem services concept has strong potential and that model development required wider application and development.
- *Phase 2 - Model Development* scaled up the concept and tested it on a wide variety of sites around BC and Alberta. It also included some specific work using the tool to sustain species at risk. This process allowed the ESI to further develop a PES model that was ready to become a provincial program.
- *Phase 3 – Establish the long term program.* Forum Three reached an agreement and supported the Ecosystem Services Initiative Framework being the foundation of future ecosystems services projects. (See Appendix One for the framework from Forum Three.) The Framework formed the workplan for a five-year payment for ecosystem services pilot to establish the required infrastructure and demonstration sites and then to initiate the long-term program. This conference is part of the first year of the pilot.

The long term PES model recommends the BC Agriculture Council (BCAC) administer the ecosystem services initiative with pooled funding sources that would be an extension to the Environmental Farm Planning (EFP) program. The process would involve farmers completing EFPs and implemented beneficial management practices (BMPs) and then farmers would sign ecosystem services contracts to do some maintenance or some other environmental protection on an ongoing basis. If the site is maintained, then the farmer receives payment. All the results would be reported back to funders. Funding sources could include local conservation funds, mitigation, corporations, and government. The current focus is on water, biodiversity, and species at risk but this could be expanded in the future. Other speakers have shown that long term payments for ecosystem services programs are possible and effective. It's being done around the world and in other Canadian provinces.

3.8 Expert Review of the B.C. Ecological Services Initiative and Recommendations - Abra Brynne, BC Food Systems Network

Abra's presentation focused the recommendations from a panel of seven experts that reviewed the concept of ESI including several ESI documents such as the strategic plan, work plan, site selection criteria and an overview of the development of the economic process. Each reviewer was positive about the concept and provided recommendations. What was interesting about this presentation is that many of the reviewers' comments echoed comments and key findings from other speakers.

The key findings were:

- 1. To make the program attractive to funders**
 - a. Make a compelling case that this is an economically efficient way to preserve the landscape and lead to broad-scale value change amongst farmers with regards to their management practices.
 - b. Demonstrate ecological and economic benefits (current and potential).
 - c. Clearly demonstrate the link between incentive and benefit with focus on societal benefit.

- 2. Region, sub-region, and site selection**
 - a. Need to balance efficiency (ecological gains) and equality (of access) in order to be able to defend decisions
 - b. Feasibility of restoration could be part of the site selection decision-making tool
 - c. Patience is required since there is an inevitable challenge of balancing length of the program with the length of time that nature needs to manifest changes and secure results, particularly at the landscape level

3. Building farmer trust in the ecosystem services initiative

- a. Demonstrate this is not just another layer of bureaucracy
- b. Program growth will result in institutionalization where farmer trust will be maintained by:
 - i. Consistent, knowledgeable contact that truly listens
 - ii. Giving farmers agency in the program
 - iii. Acknowledging and integrating farmers expertise and knowledge of the land
- c. Convey other benefits of the program besides monetary compensation

4. Cultural Shift

- a. Establish knowledge and technical information transfer amongst participants
- b. Foster networks
- c. Develop great communications materials that are clear and disseminated through farmer organizations

5. Local Government

- a. Demonstrate clearly how it aligns with existing public and government priorities
- b. Make clear it is a cost-sharing program with the farmers
- c. Program has potential to shift social norms around sustainable practices and ease the tension between conservation and economic development

6. Summary

- a. Strong support for the program
- b. There is value in land stewardship
- c. Need for transparency and trust
- d. Good communication is essential

4.0 BREAKOUTS: MAKING IT WORK

After the presentations the Conference changed format and divided into three breakout groups: funders, stewardship, and farmers. Each group was asked to discuss three questions and report back to the main group. The three questions were:



1. Should we go ahead with ecological services?
2. How could such a program be funded?
3. What? When? Who? How can we scale-up ESI?

4.1 Group one report – Funders

1. *Should we go ahead with ecological services?*

➤ yes

2. *How could such a program be funded?*

They had several policy considerations; how to make connections stronger between rural versus urban dwellers; it should not function as a subsidy to farmers; communications and branding will be important. Possible funding sources:

- bottom up or top down
- through the carbon tax
- similar to the Heritage Acquisition Fund in Vancouver, but with a focus on EG&S
- existing funds from other programs – municipal engineering budgets - storm water sewage, new bridge
- parcel taxes, mill rates
- provincial/Private Partnerships
- ARDCorp (the program delivery arm of the BCAC) or others that might be more appropriate in case more than agriculture is involved in initiatives

3. *What? When? Who?*

- Scaling up
 - need a face for the program
 - need tangible outcomes
 - present it as a package rather than individual items. The issue is how to bundle into a package
 - public engagement and support critical

- services in ecological services with the emphasis to show that the program is providing something, not just taking something (money)
- accountability and transparency will be critical
- need to Involve a diversity of stakeholders
- Species at risk
 - need to go above what farmers are doing
 - conserve land where species are already present
 - tax relief or tax credit for land that is allocated for species at risk
 - natural capital accounting and tax credit

4.2 Group two report – Stewardship

1. Should we go ahead with ecological services?

- Yes, but need more rigour on how sites get selected. Do other groups get engaged? I.e. hobby farmers.

2. How could such a program be funded?

- regional funds such as the Abbotsford Agriculture Fund
- ABC policy fund – Agricultural Benefiting Contributing funding – provided by developers in Langley for land in agricultural land reserve (ALR) that is excluded for non-farm use
- carbon tax
- grants dollars to use as catalyst for pilots, not for long term
- utilities
- hobby farms
- matching beneficiaries
- habitat banking and offsets
- habitat rent – i.e. trans-mountain pipeline

3. What? When? Who?

- buy into conservation shares
- professional association that monitors farm groups, universities, seed funding
- linking to other issues – i.e. health
 - how can we scale up
 - tie into Environmental Farm Planning (EFP) – all components become mandatory
 - champions
 - bridging farmers & stewardship groups
 - commodity groups to increase communications
 - make it a good thing to do
 - target low hanging fruit by targeting early adopters

4.3 Group Three report – Farmers

1. Should we go ahead with ecological services?

- Generally yes, but need to demonstrate strong evidence of the benefits and avoid the pitfalls of failure; there can't be any on-farm management challenges; consumers need to be interested and influenced; and it needs to be visible, tangible, and accessible.

2. *How could such a program be funded?*

- don't call it a tax; call it an investment in the future
- demonstration/pilot must be done with local support
- green tax with local focus; funds should not go into general revenue
- consumers want this program; they are willing to pay
- all parcels pay a small tax for all environmental services
- add to other industries or sectors as branding; for example add one or two cents to the price of coffee as an environmental brand –pay five cents to save the Nooksack Dace
- terminology is important
- don't lose effectiveness through administration
- need to develop the sweet spot for funding formulas
- communications prior to any funding formulas being developed is key
- policy needs to contain a default option to opt out the tax, but make it onerous
- based on assessment value with mill rates; a progressive tax

3. *What? When? Who?*

- How can we scale up ESI?
 - requires regulatory buy-in with agencies – needed up front before we can proceed
 - we need a crisis – i.e. losing a large number of farmers
 - funds go through ARDCorp
 - require standards and criteria
 - look for other allies; health, NGOs
 - communications and marketing will be key
 - need representation in all regions and sectors
 - need to start with successful pilots
 - create a readiness of producers and public with advance communications
 - must not be government driven
 - there shouldn't be any repercussions with regards to enrollment
 - must be voluntary with opt out options
 - branding will be required
 - a local government could collect funds
 - don't green wash the program
- How do we describe the benefits the farmer receives other than dollars

5.0 SUMMARY OF OUTCOMES AGREED ON BY THE GROUP

The three breakout groups were brought back together and each group reported on its key discussion outcomes. After hearing from all three groups, participants reviewed all the outcomes to determine the ones with universal support and the ones that had potential to move the ecosystems system initiative forward.

After some discussion, participants all agreed upon six outcomes.

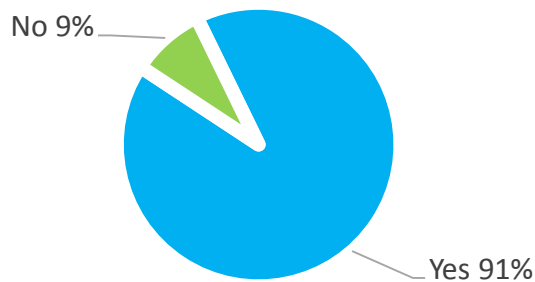


6.0 ADAPTIVE FEEDBACK- ASSESSING THE CONFERENCE AND ESI PROCESS

During the conference, participants had the opportunity to complete a survey and provide additional comments about the conference and ESI process. These are illustrated in this section.

ESI March 10 Conference Survey Results

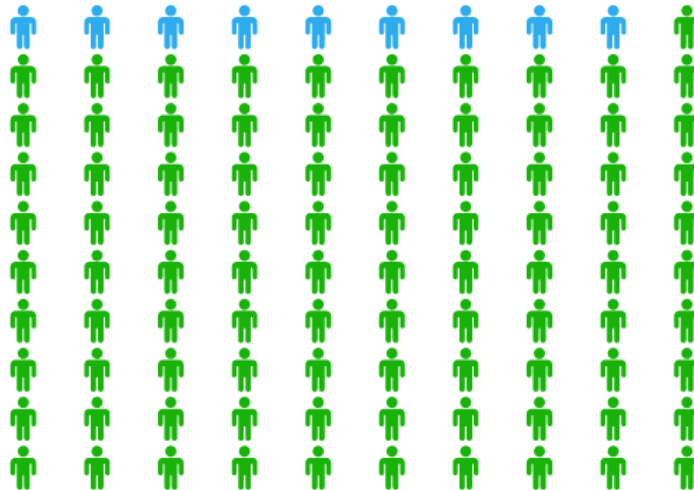
Have You Heard of ESI Before?



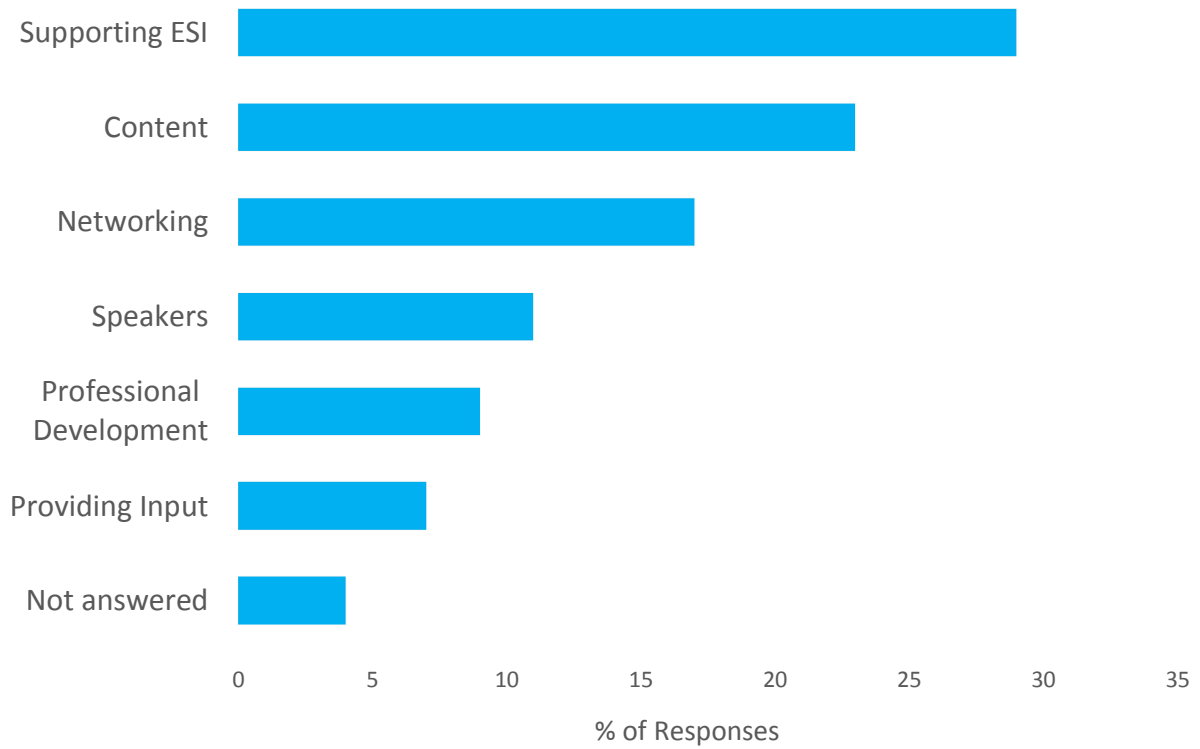
ESI March 10 Conference Survey Results

Have You Heard of ESI Before?

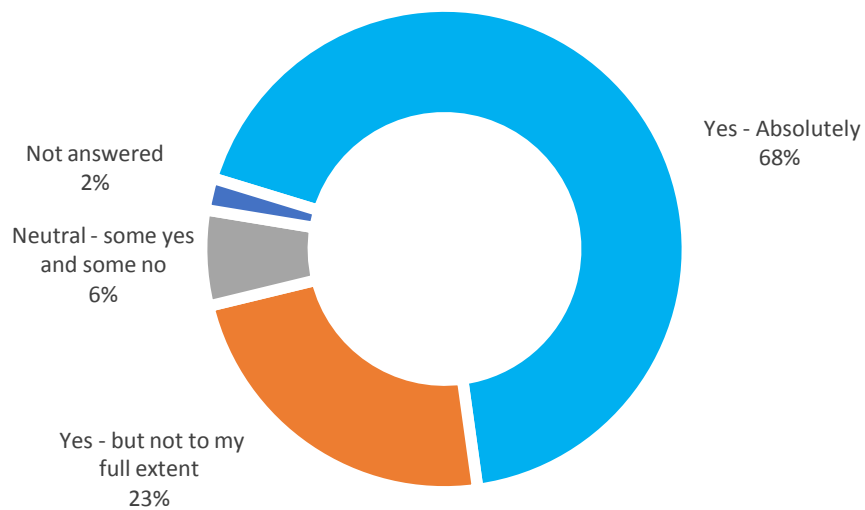
91% Yes



ESI March 10 Conference Survey Results Main reason(s) for attending this conference

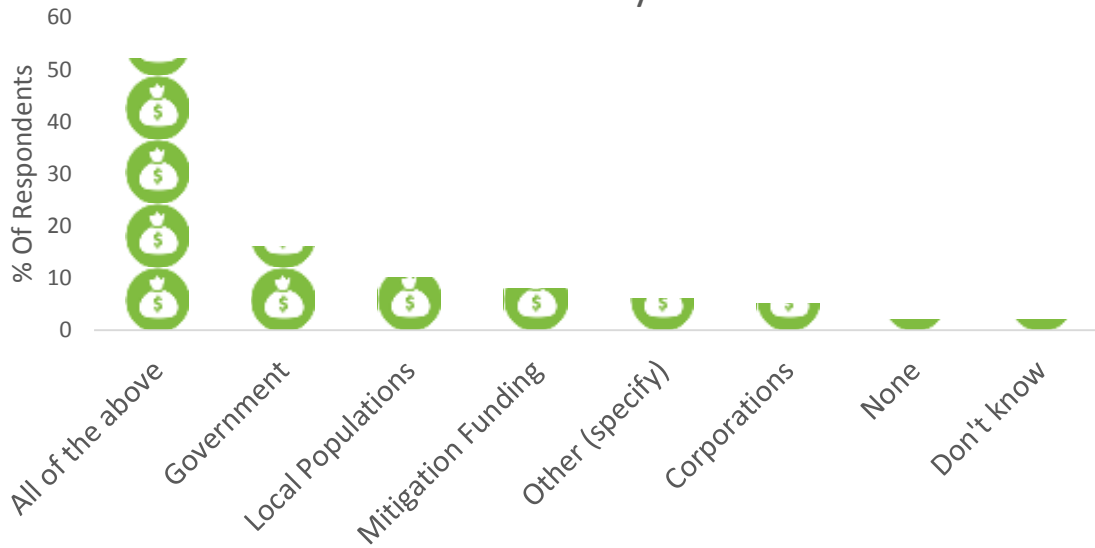


ESI March 10 Conference Survey Results Did the conference fulfill reason for attending?



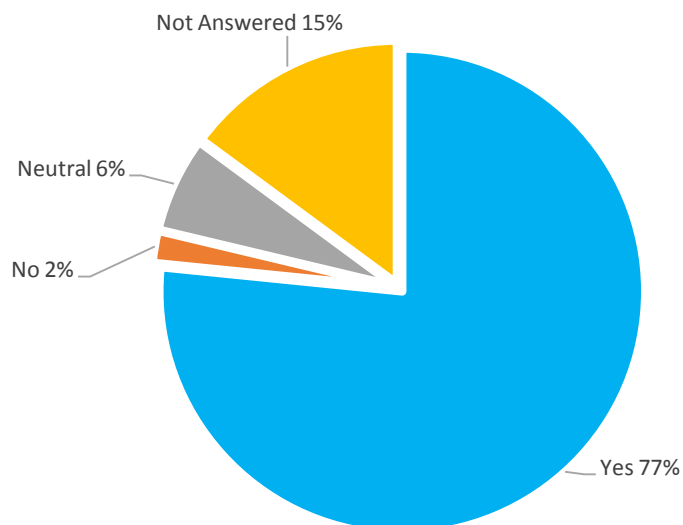
ESI March 10 Conference Survey Results

If a long term PES Program was in place it should be funded by?

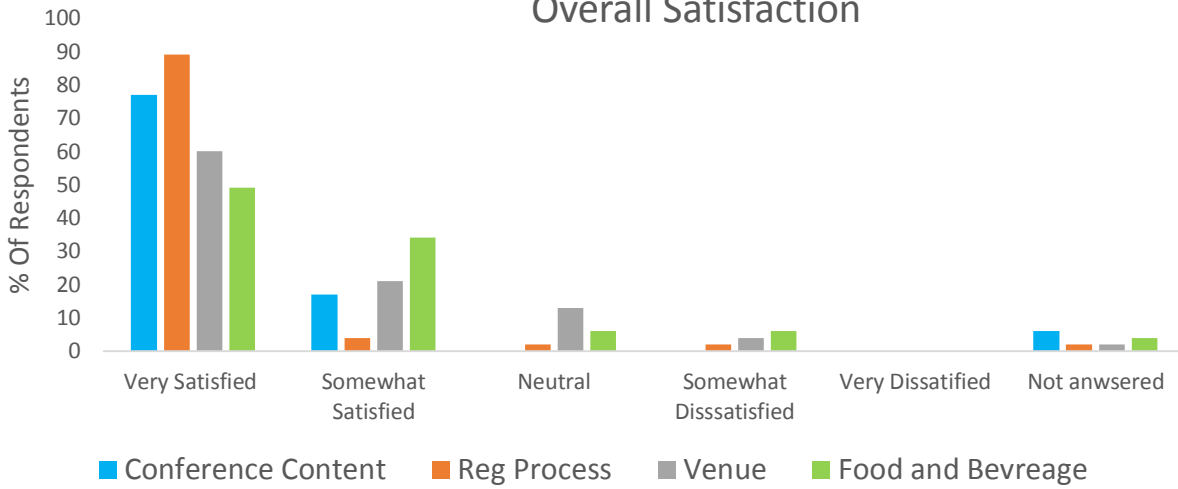


ESI March 10 Conference Survey Results

Did you find value in the breakout sessions?



ESI March 10 Conference Survey Results Overall Satisfaction



ESI March 10 Conference Survey Results
Do you see a role for yourself in this concept if it was available
in your region?



ESI March 10 Conference Survey Results
General Comments about the Conference Speakers



ESI March 10 Conference Survey Results

Did you find value in your breakout sessions?



7.0 APPENDICES

Appendix One. Ecosystem Services Initiative Framework as Agreed Upon at Forum Three.

1. Select target regions
2. Hold a preliminary key stakeholder session
3. Establish a full program structure
4. Determine regional ecosystem service priorities within targeted regions
5. Establish administration and a one stop shop approach
6. Establish initial funding pot
7. Establish ecosystem service goals
8. Sign up sites
9. Implement project
10. Monitor results
11. Report on results
12. Make improvements

Appendix Two. List of Attendees

Last Name	First Name	Affiliation
Azeez	Lina	Watershed Watch
Blair	Glen	Stewardship Centre of BC
Bomke	Art	Delta Farmland and Wildlife Trust
Brown	Glenn	Royal Roads University, Independent
Bryne	Abra	Reviewer of ESI- speaker
Chapman	Mollie	Institute for Resources, Environment and Sustainability
Christopher	Carol	The Society Promoting Environmental Conservation
Chu	Jason	Township of Langley
Connolly	Matt	District of Kent/Agassiz
Cox	Natashia	Fraser Valley Watersheds Coalition
Crockett	Brenda	Langley Sustainable Agriculture Foundation
Davis	David	Township of Langley
Duynstee	Theresa	Metro Vancouver
Embley	Erin	Metro Vancouver
Foy	Matt	Fraser Valley Watersheds Coalition
Geesing	Dieter	BC Ministry of Agriculture
Godwin	Stephen	City of Surrey
Gunn	Melisa	Langley Sustainable Agriculture Foundation
Harrison	Megan	Habitat Stewardship Program
Harrower	William	UBC
Hendrickson	David	Real Estate Foundation
Kearney	Sean	Sustainable Agricultural Landscapes
Knight	Timothy	Farmer in Langley, former AAC member
Koch	Christine	Ag One Consulting
Kohorst	Emily	Wells Business Solutions
Larsen	Kevin	Township of Langley
Lilley	Lance	Fraser Valley Regional District
McTavish	Bruce	BCAC/EFP
McTavish	Justin	
Melnychuck	Dave	Langley Sustainable Agriculture Foundation
Molnar	Michelle	David Suzuki Foundation
Moulins	Joe	videographer
Murray	Karen	BC Agriculture Council
Olewiler	Nancy	SFU -Keynote Speaker at Event
Paulson	Carol	Langley Sustainable Agriculture Foundation
Pearson	Mike	Independent/Pearson Ecological
Pearson	Monica	Fraser Valley Watersheds Coalition

Post	Duane	District of Kent/Agassiz
Prevost	Danielle	HSP -Environment Canada
Raymond	Mark	BC Ministry of Agriculture
Reinhart	Tom	Langley Sustainable Agriculture Foundation
Robbins	Mark	Abbotsford farmer; former BC Ministry of Agriculture
Rushworth	George	BC Ministry of Environment
Schwichtenberg	Detmar	Fraser Valley Watersheds Coalition
Schwichtenberg	Holger	BC Dairy Association
Shannon	Ava	Langley Environmental Partners Society
Shead	Rod	Township of Langley
St. Andrassy	Justin	Township of Langley
Sugiyama	Yoshi	Cedar Island Farms
Sutherland	Kim	BC Ministry of Agriculture
Tanaka	Andrea	Environment Canada
Terpsma	Christine	Delta Farmland and Wildlife Trust
Tillberg	Allan	Langley Sustainable Agriculture Foundation
Toth	Christine	Fraser Valley Watersheds Coalition / Fraser Basin Council
Trotter	Dave	Ministry of Agriculture
Ward	Patrick	Township of Langley
Wells	Katie	Ecological Services Initiative
Zehnder	Dave	Ecological Services Initiative
Zevit	Pamela	South Coast Conservation Program
Zimmerman	Kathleen	KAZ Consulting; former BC Ministry of Agriculture

Appendix Three. List of Sponsors

We gratefully acknowledge the support of our sponsors.

- ARDCorp – Agricultural Research & Development Corporation
- BC Agriculture Council
- Balance Ecological
- Columbia Basin Trust
- East Kootenay Conservation Fund
- Fraser Valley Watersheds Coalition
- Habitat Stewardship Program for Species at Risk (The Government of Canada)
- Investment Agriculture Foundation
- Langley Sustainable Agriculture Foundation
- Province of British Columbia, courtesy of Mary Polak, Langley MLA
- Real Estate Foundation of BC
- Regional District of East Kootenay, Local Conservation Fund
- Township of Langley
- Vancouver Foundation
- Windermere District Farmers' Institute

Appendix Four. Agenda

- 8:30 **Registration**
- 9:00 Chair, Carol Paulson, Langley Sustainable Agriculture Foundation
Welcome
- 9:10 Dr. Glenn Brown, Royal Roads University
Ecosystems Services 101
- 9:15 Achim Steiner and Dr. Salman Hussain, United Nations Environment Program
What the United Nations is doing about the economics of ecosystems and biodiversity
- 9:45 Monica Pearson, Fraser Valley Watersheds Coalition & Balance Ecological
Ecosystem Services on a Dairy Farm
- 10:00 Ina Porras, International Institute for Environment & Development
Lessons learned from Payment for Ecosystem Services in Costa Rica
- 10:20 Dr. Nancy Olewiler, Simon Fraser University
Making it work: Payment for Ecosystem Services
- 10:50 **Break**
- 11:05 Dr. David Hendrickson, Real Estate Foundation of B.C.
Show Me the Money: Why Investing in Payment for Ecosystem Services Matters
- 11:20 Dave Zehnder, Ecological Services Initiative
Working it: An update on the Ecological Services Initiative
- 11:40 **Panel**
- 12:00 Abra Brynne, BC Food Systems Network
Expert Review of the B.C. Ecological Services Initiative and Recommendations
- 12:30 **Light Lunch**
- 1:30 **Parking lot questions**
- 2:00 **Breakouts: Making it Work**
- 3:00 Breakout reports
- 3:30 **Wrap-up**