



**Investment  
Agriculture  
Foundation**  
*of British Columbia*

# Livestock Waste Tissue Initiative

April 27, 2006

## 2005 Annual Report

*Funding provided by:*



**Investment  
Agriculture  
Foundation**  
*of British Columbia*



**BRITISH  
COLUMBIA**

## Table of Contents

Introduction .....	2
Initiative Management .....	2
Summary of Applications .....	3
Communication Activities .....	4
Web Page .....	4
MAL/MEIS Meeting.....	4
Field Day at Rodear Meats.....	4
Agency Up-Date Meeting .....	4
Province Consultation Meetings.....	5
Funding Program Announcement .....	5
Proposed and Actual Activities.....	5
Initiative Funds .....	9

## 1. INTRODUCTION

The Management Committee met five times during the development of the Initiatives Strategic Plan and 2005 Work Plan: April 29 at MAFF in Abbotsford, May 12 at West Coast Reduction in Vancouver, May 31 in Chilliwack, June 9 in Abbotsford, and June 27 a conference call. This annual report covers the last six months 2005 from July to December 31, 2005 the period after IAF executive approved the Initiatives Strategic Plan and 2005 Work Plan.

## 2. INITIATIVE MANAGEMENT

The Management Committee decided to expand its membership by three to bring in another person representing the Union of British Columbia Municipalities, and representatives from the Canadian Food Inspection Agency and the BC Ministry of Environment. The full Management Committee is shown in the following table.

Representing	Person	Voting
British Columbia Agriculture Council – BC Cattlemen’s Association	Bonter, Pete	Yes
British Columbia Agriculture Council – BC Milk Producers Association	Hertgers, Cornelis	Yes
British Columbia Agriculture Council – BC Pork Producers Association	Hoogeveen, Ard	Yes
British Columbia Agriculture Council – BC Poultry Association	Janzen, Derek	Yes
British Columbia Food Processors Association	Fernie, David	Yes
British Columbia Food Processors Association	Windsor, Bonnie	Yes
Ministry of Agriculture and Lands	Glasier, Harvey	Yes
Union of British Columbia Municipalities	Alan Madrigga	Yes
Union of British Columbia Municipalities	Wright, Jared	Yes
West Coast Reduction	Koch, Humphry	Yes
Agriculture and Agri-Food Canada	Legendre, Elise	Ex-officio
Canadian Food Inspection Agency	Roblesky, Ken	Ex-officio
Investment Agriculture Foundation of British Columbia	Moroziuk, Coreen: Staff	Ex-officio
Investment Agriculture Foundation of British Columbia	Siemens, Walter	Ex-officio
Investment Agriculture Foundation of British Columbia	Van Kleeck, Rick: <b>Coordinator</b> , Staff	Ex-officio
Ministry of Agriculture and Lands	Nickel, Ken: <b>Chair</b>	Ex-officio
Ministry of Environment	Bryden, Jack	Ex-officio

The Management Committee met five more times: July 15 a conference call, August 17 at Blue Mountain Packer in Salmon Arm, October 12 at MAFF in Abbotsford, December 1 a conference call, and December 13 in Vancouver. For these five meetings the average attendance of voting members is 70 % and 82 % for ex-officio members.

The Management Committee is working very well as a group, with almost all decisions being unanimous. As laid out in the initiatives strategic plan to protect confidential information, all non-government members signed a non-disclosure agreement (government staff sign a similar agreement as part of their employment).

A full time coordinator was seconded from the Ministry of Agriculture and Lands for this initiative.

### 3. SUMMARY OF APPLICATIONS

<b>Project</b>	<b>Title/From</b>	<b>LWTI MC / Funding</b>	<b>Contract</b>	<b>Status (Dec. 31, 2005)</b>
LWT001	An Evaluation of Gasification Technology as an Alternative Disposal Method for Specified Risk Material from Packing and Slaughterhouses in British Columbia. / <b>Thompson Rivers University</b>	July 15, 2005 <b>Approved</b> \$60,800 total \$24,800 IAF	Fully executed December 6, 2005	Project completed. Awaiting final report
LWT002	Comprehensive solution to deal with BC generated ruminant material, including SRM, and mass carcass disposal feasibility studies and infrastructure development. / <b>West Coast Reduction</b>	August 17, 2005 <b>Deferred</b> (needs clarification)		
LWT003	An Evaluation of High Temperature Incineration as a Disposal Method for Solid Waste Containing SRM from Packing and Slaughterhouses in BC. / <b>Thompson Rivers University</b>	August 17, 2005 <b>Approved</b> \$60,400 total \$24,900 IAF	Fully executed December 6, 2005	Project completed. Awaiting final report
LWT004	Assessment of Economic Feasibility of Gasification System for Disposal of Carcass Waste Material at Blue Mountain Packers. / <b>Blue Mountain Packers</b>	October 12, 2005 <b>Deferred</b> (needs clarification)		
LWT005	Proposal to Update the Foreign Animal Disease Emergency Support (FADES) Plan for BC. / <b>LWTI-RFP-Smart Risk Control</b>	October 12, 2005 <b>Approved</b> \$59,447 total \$59,447 IAF	Fully executed November 29, 2005	Project on schedule completion expected March 31, 2006
LWT006	Economic Feasibility Study of Separating Existing Operation of Beef Slaughter and Pork Slaughter. / <b>Johnston Packers (1995) Ltd.</b>	December 1, 2005 <b>Approved</b> \$33,400 total \$20,000 IAF		Project just starting.
LWT007	Assessment of Economic Feasibility of Gasification System for Disposal of Carcass Waste Material at Blue Mountain Packers. / <b>Blue Mountain Packers</b>	December 1, 2005 <b>Approved</b> \$71,688 total \$57,350 IAF	Sent out December 6, 2005	Project just starting.
LWT008	104 Week Greenwave Route Expansion Funding. / <b>Greenwave Farms Ltd.</b>	December 13, 2005 <b>Deferred</b> (demonstrate need)		
LWT009	Situation Analysis and Solution Identification Program. / <b>LWTI</b>	December 13, 2005 <b>Approved</b> 100% IAF to \$2,000 maximum per applicant	Contracts with each separate applicant	Project just starting.
LWT010	Assistance in Applying for a Ministry of Environment Permit Program. / <b>LWTI</b>	December 13, 2005 <b>Approved</b> 75% IAF to \$15,000 maximum per applicant	Contracts with each separate applicant	Project just starting.

## **4. COMMUNICATION ACTIVITIES**

### **Web Page**

A link from the IAF home page ([www.iafbc.ca](http://www.iafbc.ca)) to a LWTI page was set up shortly after the Initiatives approval. The LWTI page contains some general information about the initiatives two missions and contact information for the coordinator, along with links to:

- More detailed information about the initiative:
  - Summary
  - Strategic Plan
  - 2005 Work Plan, and
  - Management Committee Members
- Information for applicants:
  - Application Form
  - Application Guideline
  - Funding Plan
  - Project Plan Expenditures, and
  - Expenditures Example
- Summary of Approved Projects

### **MAL/MEIS Meeting**

On September 12 a meeting at the Vancouver Airport Fairmont was held with Ministry of Agriculture and Lands staff and MIES advisors. The purpose of the meeting was to updated people on LWTI, provincial emergency planning and MIES activities. The meeting highlighted the need for the LWTI to consider local community wishes when approving projects. Regional Ministry of Agriculture and Lands Agrologists and the MIES advisors agreed to initiate local meetings to determine interest in local and regional solutions to SRM disposal needs

### **Field Day at Rodear Meats**

As part of LWTI 003 project “An Evaluation of High Temperature Incineration as a Disposal Method for Solid Waste Containing SRM from Packing and Slaughterhouses in BC.” by Thompson Rivers University a field day was held on 5 October, 2005 At Rodear Meats in Big Lake BC. This afternoon event attracted about a dozen people to see the incineration in use and to get their questions answered.

### **Agency Up-Date Meeting**

On October 12 a meeting was held in Abbotsford to up-date LWTI Management Committee, Ministry of Agriculture and Lands staff, and local Canadian Food Inspection Agency staff about:

- The MIES Program presentation by Don Davidson
- Report by Thompson Rivers University on the gasification and incineration projects presentation by Tom Dickinson
- CFIA risk assessment of disposal options presentation by Penny Greenwood
- Disposal options presentation by Andrew Raphael and Adam Levine, and
- CFIA proposed permitting process presentation by Penny Greenwood.

## **Province Consultation Meetings**

Eight regional meeting were held around the province in the fall of 2005 as follows: 24 Oct. Vanderhoof, 25 Oct. Williams Lake, 1 Nov. Salmon Arm, 2 Nov. Penticton, 3 Nov. Dawson Creek, 21 Nov. Cranbrook, 30 Nov. Abbotsford, and 1 Dec. Nanaimo.

The meetings were well attended by slaughter plant owners (56 people) and interested agency staff and others (80 people). The purpose of the meetings was to bring people up-to-date on the Initiative activities, rules and regulations around slaughter plant waste management, and to determine the disposal options the industry was interested in having along with what LWTI could do to help the individual slaughter plant operator when addressing their waste issues.

## **Funding Program Announcement**

With the approval of projects LWTI 009 “Situation Analysis and Solution Identification Program” and LWTI 010 “Assistance in Applying for a Ministry of Environment Permit Program” on December 13, 2005 an announcement describing both programs was e-mailed to 47, faxed to 23 and mailed to 35 slaughter plant operators who’s contact information was known.

## **5. PROPOSED AND ACTUAL ACTIVITIES**

<b>Proposed Activities</b>	<b>Actual Activities</b>	<b>Comments</b>
<p><b>Action Item 1.1.1.</b> A clear understanding from CFIA of:</p> <ul style="list-style-type: none"> <li>• The technical requirements to be met that would allow the Minister to grant approval for the slaughter plans method of SRM handling and disposal.</li> <li>• The administrative requirements to be met to gain Minister approval.</li> <li>• When the regulations will be coming into effect.</li> </ul>	<p>Bullets one and two achieved by attending federal/provincial/territorial meetings and by having CFIA present information at the agency up-date meeting held October 12, 2005.</p>	<p>New Federal government has resulted in the content and timing of the new regulations being questioned.</p>
<p><b>Action Item 1.1.2.</b> Identify existing slaughter plants that will be unable to obtain federal Minister approval for their SRM handling and disposal methods without temporarily closing the plant to cattle. Temporary closures may be caused for administration reasons or to allow for acceptable disposal methods to come on stream.</p>	<p>Slaughter facilities were not evaluated.</p> <p>Slaughter plant operators were invited to attend one of eight regional meeting where existing Ministry of Environment and proposed CFIA requirements were explained.</p>	<p>56 people representing 30 slaughter plants attended the meetings.</p>
<p><b>Action Item 1.1.3.</b> Develop a contingency plan for each plant requiring one (identified in Action Item 1.1.2.). The contingency plan to identify steps and timing to be taken to minimize or eliminate the need for a plant closure. For some slaughter plants it will mean moving the slaughter wastes to an acceptable disposal site.</p>	<p>A program was started to address the need for individual planning LWT009 “Situation Analysis and Solution Identification Program”.</p>	<p>Program is just started and interest is good with eight requests for applications.</p>

Proposed Activities	Actual Activities	Comments
<p><b>Action Item 1.1.4.</b> The Management Committee delivers a project best suited to meet the need of the slaughter plants that need temporary help. The Management Committee will consider:</p>	<p>No requests for temporary assistance were received.</p>	
<p><b>Action Item 2.1.1.</b> A clear understanding of the discharge requirements that need to be met for a technology to be used in BC. At the present time there is an interest in incineration and gasification; future interest may include composting and others. A project steering group consisting of WLAP, Health, CFIA and the Coordinator will for each technology, write the terms of reference and select a consultant to gather the required information so that the steering committee can develop the discharge criteria. The Management Committee will approve the consultant for IAF to have a contact with.</p>	<p>Informal discussions were held with CFIA and Ministry of Environment staff regarding discharge requirements and the process to obtain approval. However, no formal process was established for establishing acceptable discharge criteria for the different disposal methods being considered.</p>	
<p><b>Action Item 2.1.2.</b> To conduct feasibility studies on potential technologies to improve the knowledge base about: conditions required to make the process technologically and economically viable, inputs and outputs products, permitting requirements and timelines for adoption. At the present time there is an interest in incineration and gasification feasibility projects.</p>	<p>Two feasibility projects were approved:</p> <ul style="list-style-type: none"> <li>▪ LWT006, Economic Feasibility Study of Separating Existing Operation of Beef Slaughter and Pork Slaughter. Submitted by Johnston Packers (1995) Ltd.</li> <li>▪ LWT007, Assessment of Economic Feasibility of Gasification System for Disposal of Carcass Waste Material at Blue Mountain Packers. Submitted by Blue Mountain Packers</li> </ul>	
<p><b>Action Item 2.1.3.</b> To demonstrate and/or test potentially feasible technologies through pilot projects to improve the knowledge of the technologies ability to treat tissue wastes in an affordable manner while complying with legislation. At the present time there is an interest in incineration and gasification pilot projects.</p>	<p>Two projects were approved that tested existing technology:</p> <ul style="list-style-type: none"> <li>▪ An Evaluation of Gasification Technology as an Alternative Disposal Method for Specified Risk Material from Packing and Slaughterhouses in British Columbia. Submitted by Thompson Rivers University</li> <li>▪ An Evaluation of High Temperature Incineration as a Disposal Method for Solid Waste Containing SRM from Packing and Slaughterhouses in BC. Submitted by Thompson Rivers University</li> </ul>	
<p><b>Action Item 2.2.1.</b> To increase the number of slaughter plants operating in compliance with CFIA and waste disposal regulations by</p>	<p>A program was started to provide technical assistance when evaluating disposal options, LWT009 "Situation</p>	

Proposed Activities	Actual Activities	Comments
providing technical and financial assist to slaughter plant operators. This action item would not likely start until the last quarter of the year at the earliest.	Analysis and Solution Identification Program".	
<b>Action Item 2.2.4.</b> To provide technical assistance to slaughter plant operators and regulator agencies to expedite where possible the permit approval process. This assistance will be required for some of the feasibility projects, most of the pilot projects, and likely all of the slaughter plant on-site disposal projects.	A program was started to provide financial support for slaughter plants in obtaining waste disposal permits, LWT012 "Assistance in Applying for a Ministry of Environment Permit Program."	
<b>Action Item 2.3.1.</b> To conduct an education program with local governments and other stakeholders to improve their understanding of livestock waste tissue management practically regarding economic development associated with the meat industry (production, processing, disposal, etc.), health issues and disposal of livestock carcasses in response to an emergency. This project will start in the last quarter of this year building up to full ongoing work in 2006. The education project is tied to the completion of action item 3.1.4. as soon as possible.	Local government emergency planners and waste managers and other interested stakeholders were invited to attend one of eight regional meeting where existing Ministry of Environment and proposed CFIA requirements were explained.	<ul style="list-style-type: none"> <li>▪ 22 local government staff attended the meetings</li> <li>▪ 27 agency staff attended the meetings</li> <li>▪ 24 other interested stakeholders attended the meetings.</li> </ul>
<b>Action Item 3.1.1.</b> Inventory of existing SRM management practices used and considered for use in BC. This will be carried out by the Coordinator and members of the Management Committee.	Through phone interviews and confirmation at the eight community meetings a date base of slaughter plants was developed. Information on existing disposal practices was tabulated.	
<b>Action Item 3.1.2.</b> A Request for Proposal (RFP) will be produced for a consultant to identify existing applicable risk assessments and conduct an information gap analysis comparing the risk assessments that have been complete and the disposal methods identified in Action Item 3.1.1.	These action item was not completed by the LWTI because CFIA completed risk assessments for all disposal methods of interest to BC.	
<b>Action Item 3.1.3.</b> As part of the contract given in Action Item 3.1.2. a consultant will conduct risk assessment for the identified practices where an existing risk assessment is not done. This assessment is identify risk in absolute terms and in relation to other risks for the risk of BSE impacting to human and animal health or the environment.		

Proposed Activities	Actual Activities	Comments
<p><b>Action Item 3.1.4.</b> As part of the contract given in Action Item 3.1.2. a consultant will produce an easily understood document that summarizes the absolute and relative risks associated with SRM management methods expected to be of interest to BC stakeholders.</p>		
<p><b>Action Item 4.1.1.</b> A RFP will be developed for a consultant to scan other jurisdictions for technology options or alternative uses for tissue wastes and report on findings. This contract may start in 2005 but will not finish until March 2006.</p>	Not started	
<p><b>Action Item 5.1.1.</b> UBCM to administer a program for Regional Districts in conjunction with Local Governments and local stakeholders to develop Emergency Plans for mass livestock carcass disposal for their communities. This will involve the Coordinator working closely with staff from UBCM to develop the proposal and program components.</p>	Much work has occurred in developing this project with UBCM; however, no project has started at this time. This project will likely be broken into two or three smaller projects and start in 2006.	
<p><b>Action Item 5.2.1.</b> Develop a new Foreign Animal Disease Emergency Support Plan to reflect what was learned through BSE and AI outbreaks. A project steering group consisting of MAFF, Health, PEP, CFIA, PSEPC and the Coordinator will develop the terms of reference and select a consultant to carry out the work. The Management Committee will approve the consultant for IAF to have a contact with.</p>	This project has started under LWT005 "Proposal to Update the Foreign Animal Disease Emergency Support (FADES) Plan for BC." With the consultant hired through an RFP process being Smart Risk Control.	The contract with the consultant is for phase I of a two phase process. Phase II to start at the completion of Phase I.

## 6. INITIATIVE FUNDS

### Revenue:

Provincial Government Grant	\$5,000,000.00	
Increase in value	91,438.78	
<u>Provincial Contribution</u>	<u>1,209.00</u>	
<b>Total Revenue</b>		<b>\$5,092,647.77</b>

### Expenses:

Projects:		
LWTI 001	\$18,675.00	
<u>LWTI003</u>	<u>18,600.00</u>	
Total Projects		\$37,275.00
LWTI Administration:		
Coordinator salary & expenses	62,837.11	
Management Committee		
Per diem & expenses	4,662.64	
<u>Meeting expenses</u>	<u>13,320.85</u>	
Total LWTI Administration		\$80,820.60
<u>IAF Management</u>	<u>\$32,103.05</u>	
<b>Total Expenses</b>		<b>\$150,198.65</b>

**Balance:** **\$4,942,449.12**