

Evaluation Framework and Results for
An Orientation Program on Ecological Integrity:
A Call to Action

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Performance, Audit and Review Group
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EXECUTIVE SUMMARY

In response to the *Report of the Panel on the Ecological Integrity of Canada's National Parks* (March 2000), Parks Canada implemented a national training and orientation program in ecological integrity for Parks Canada staff, managers and partners with the objective of developing employee awareness of the principles and practices of ecological integrity. It was intended that the program be designed and implemented over the two years period from April, 2000 to June, 2002.

Training began in March 2001 and continued to June 2002. A total of 240 training sessions were provided (189 two-day training sessions, and 51 half day sessions) to approximately 4,300 participants (i.e., approximately 3,500 Parks Canada employees, and approximately 800 partners). Participants were generally satisfied with their training. Surveys of participants immediately before and after training show that the majority reported favourable attitudes and opinions regarding ecological integrity, especially with respect to personal knowledge, understanding and contribution to EI, and that percentage of favourable responding increased with training and was maintained in a subsample of participants six months after training.

In view of the extensive amount of program performance information gathered by the training program managers and the fact that the program has ended, no additional evaluation of this program is recommended at this time.

Parks Canada intends to incorporate EI training into an orientation program for new employees as recommended in the *Report of the Panel on the Ecological Integrity of Canada's National Parks* (March 2000). It is expected that this training will be implemented in Spring 2003. The orientation program should be evaluated three years after it is implemented (i.e., Spring 2006).

Ecological integrity training itself should be seen as one element aimed at affecting a general cultural shift in Parks Canada toward a greater focus on ecological integrity. Over time, this culture shift should be reflected in a variety of organizational changes including changes in organizational structures, policies and procedures, changes in the qualifications and training of staff, and changes in the activities (e.g., partnering) and results (e.g., improvements in measuring and reporting on ecological integrity) at the field unit, service centre and national level. An independent evaluation to assess progress in affecting this culture change is recommended for the 2004-2005 fiscal year.

EVALUATION FRAMEWORK AND RESULTS FOR AN ORIENTATION PROGRAM ON ECOLOGICAL INTEGRITY - A CALL TO ACTION

INTRODUCTION

On March 23, 2000 the Honourable Sheila Copps, Minister of Canadian Heritage released the *Report of the Panel on the Ecological Integrity of Canada's National Parks* (the Report). Among the 127 recommendations, the Panel recommended that:

... Parks Canada develop a detailed and ongoing program for ecological integrity orientation and training, with initial delivery to be completed within 18 months by all current employees (including contract employees, co-operating associations, partners, and co-operators such as commercial operators within parks). Make this training part of every new employees orientation package. Conduct a third-party audit of the orientation program after three years to assess the status and future needs for the program.¹

The Minister's Action Plan in Response to the Report of the Panel on the Ecological Integrity of Canada's National Parks (the Action Plan), released simultaneously with the Report, highlighted four major themes:

- C making ecological integrity central in legislation and policy;
- C building partnerships;
- C planning for ecological integrity; and
- C renewal of Parks Canada to better support the ecological integrity mandate.

Under the 4th theme Renewal, the Minister announced the implementation of a national training and orientation program in ecological integrity for Parks Canada staff, managers and partners with the objective of developing employee awareness of the principles and practices of ecological integrity. It was intended that the program be designed and implemented over the two years period from April, 2000 to June, 2002.

Parks Canada's Executive Board² has directed that an evaluation framework be developed for new programs and policies in the Agency. Subsequently, both Treasury Board and Parks Canada

1. Report on the Ecological Integrity of Canada's National Parks, 2000. Pg. 2-8, section 2-4

2 The Parks Canada, 1999 Framework for Audit, Evaluation and Review, approved in November 1999 by the Executive Board requires that an evaluation framework be prepared for all new or significantly revised programs.

Evaluation Policies have reinforced this direction. Typically, an evaluation framework identifies what the program is intended to accomplish, how it operates and who is responsible for collecting specific information at specific intervals on the program's performance. Following this, performance information gaps would be identified as well as questions to be addressed in a future formative and/or summative evaluation(s), along with associated costs and time frames.

The current framework provides a short description of the performance framework for the ecological integrity training program and what performance information has been collected. However, in view of the fact, that this framework is being completed at the end of the training program and that a good deal of performance information has already been collected, the focus will be on what additional information, if any, is required in order to assess the overall achievement of the program's goals.

Background

Parks Canada first introduced the principle of ecological integrity in 1979 and formalized it in the 1988 amendment to the *National Parks Act*. The 2000 amendment to the Canada National Parks Act (October 20, 2000) firmly established ecological integrity in the management of existing and new national parks. A working definition of ecological integrity was provided:

ecological integrity means, with respect to a park, a condition that is determined to be characteristic of its natural region and likely to persist, including abiotic components and the composition and abundance of native species and biological communities, rates of change and supporting processes

Section 8(2) of the Act states that the “*maintenance or restoration of ecological integrity, through the protection of natural resources and natural processes, shall be the first priority of the Minister when considering all aspects of the management of parks*”.

PROGRAM OBJECTIVES AND COURSE OUTCOMES

Based on the Panel recommendation, an employee *Orientation Program on Ecological Integrity - A Call to Action* (the Program) was developed over an 8 month period (May-December 2000).

The objectives of the Training Program were to:

- integrate ecological integrity within all Parks Canada functions.
- increase Parks Canada staff awareness about ecological integrity concepts and issues.
- implement a National Orientation Program on Ecological Integrity as stated in the Minister's Action Plan.

As a result of participating in the course participants were expected to:

- enhance their personal understanding of ecological concepts and how they relate

- to their work.
- strengthen their ability to work with colleagues, Aboriginal Peoples and partners to solve park problems efficiently.
- contribute to a national initiative to enhance Parks Canada's ability to serve future generations.
- increase their sense of ownership and accountability to ensure that ecological integrity management practices continue to evolve.

PROGRAM PERFORMANCE FRAMEWORK

The framework describes the resources (people, money, time) that were used in the program, the program activities (creating the course, training trainers, delivery of training), the reach (how many people were trained) and the outcomes (course satisfaction, knowledge, understanding, behaviour with respect to EI). A summary of the performance framework is shown in Appendix A.

Resources and Inputs

People

The Executive Director of the Ecological Integrity Branch of the National Parks Directorate is responsible for the implementation of the Minister's Action Plan. In March 2000, a Project Manager, reporting to the Executive Director, was appointed full time to develop the Orientation Program.³ The Executive Director and Project Manager were provided advice and direction by the Ecological Integrity Strategic Directions Committee (EISDC).

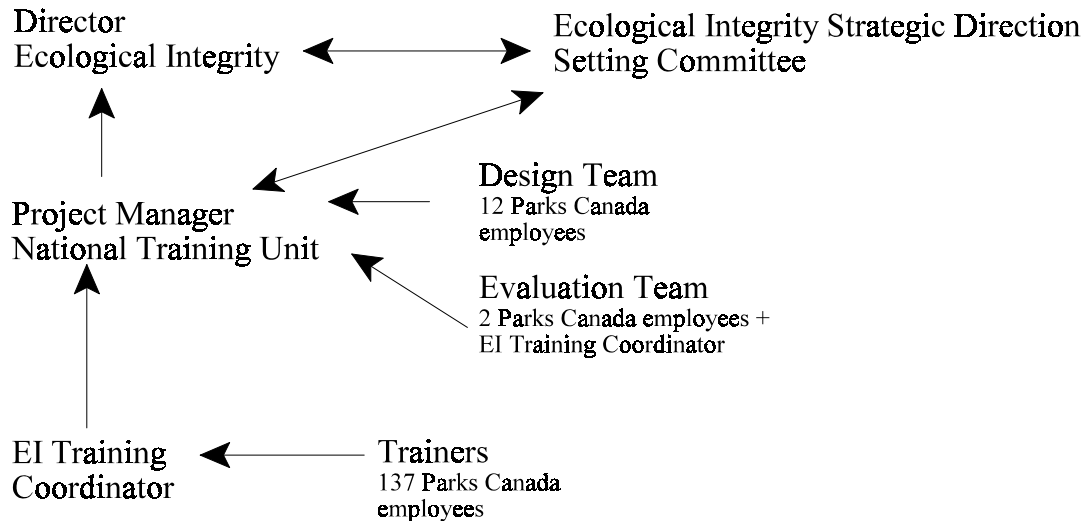
An EI Training Coordinator (the Training Coordinator) was also appointed, reporting to the project manager. The Training Coordinator was responsible for coordinating Train the Trainer sessions, day-to-day management of the Program (e.g., the delivery of training materials to each trainer, developing databases to manage course information, managing contracts with consultants⁴) and maintaining working contact with the trainers to address problems or help to identify issues that arise from training sessions.

In EI training coordinator was assisted by the a course design team and an evaluation team. Training was delivered by 137 Parks Canada employees. Relationships between the personnel are shown in Figure 1.

³ With the departure of the National Coordinator in January 2002, these duties were assumed by the Ecological Integrity Training Coordinator.

⁴ Three different consulting firms were hired to assist with course design and training the trainers

Management of Orientation Program



Budget

In total, between April 1, 2000 to March 31, 2002, Parks Canada invested \$870,000 to design a 2 day course, a half-day summary course, develop and deliver one Train the Trainer session and a follow-up training session for both experienced and new trainers, print and deliver all training materials, pay the salary and benefits of the EI Training Coordination and provide for administrative assistance as required. Field units were also reimbursed \$10/per participant to help cover training costs (i.e. facilities and meals) once participants attendance was verified by the trainers.

Program Activities

Course Design and Content

The course was designed by 12 Parks Canada employees drawn from across Parks Canada who were noted for their expertise and commitment in the area of ecological integrity. The Team developed an in-depth course outline for both a 2 day course and a half day Summary course. Three consulting firms (Innovative Management Solutions, Allegro, SMS Consulting) were hired to help design the training and course material, and develop and deliver a Train the Trainer program.

The 2 day course consisted of 4 independent but related modules 1) setting the context, 2)

understanding ecological integrity, 3) applying ecological integrity, 4) taking responsibility for ecological integrity. Modules 1-3 provided a process for thinking about and addressing ecological integrity issues and Module 4 providing an opportunity to apply the learned process. The half day Summary course delivered the primary messages of Modules 1-3. The trainers were given the leeway to customize the course to their audience.

Changes were made to module 4 in August 2001 based on feedback over the first four months of training (March to June 2001). The original "Action Plan" (a Plan to address an EI issue) was replaced with "Exploring the Options" where the course participants are asked to identify options for improving ecological integrity at their place of work. Trainers were however given the option to use either the "Action Plan" or "Exploring the Options" based on their assessment of the dynamics of the group.

Train the Trainers

The 137 course trainers were Parks Canada employees. Some of these employees participated in a train the trainer session prior to the first sessions for staff (February 28 to March 3, 2001). A second Train the Trainer conference was held October 28 to November 1, 2001 bring in some new trainers, review how the content and methodology were working and look at new ways of facilitating individual training programs and to share and learn from others trainers.

Training Sessions

Between March 2001 and June 2002, a total of 189 twelve-hour training sessions were provided. An additional 51 three hour training sessions were also offered.

PROGRAM PERFORMANCE INFORMATION

How Information Was Gathered

Identification and collection of performance information was managed by the course evaluation team supported by a contractor (Alteos) who was hired in May 2001 to process the data from course evaluation forms.

Following each course, the trainers reported the number of people attending the course, the date and place of the course and the type of course delivered. This was used to track program reach.

Several questionnaires were developed to gather information on participant demographics (i.e. their location and area of work) and process information (i.e. satisfaction with course material, instructor, facilities) and course outcomes.

Trainers were responsible for ensuring the completion of the questionnaires by each participant and mailing of forms to the contractor for processing. Process information (i.e., satisfaction with course material, exercises, location, instructors) specific to the first three course modules was collected for four months (March to June 2001) and then discontinued. Process information

related to Module 4 was collected for 10 months (March to December 2001) and then discontinued.

In addition to process data, each participant was asked to fill out a questionnaire pre and post training that included nine questions regarding their attitudes, beliefs and behaviour related to ecological integrity. These are the key outcome measures of the training and are discussed below. The same questions were asked of a sample of participants at six and twelve month intervals after the training in order to test the stability of the self reported changes in knowledge, attitudes or behaviours.

Reach

The intent was to reach all of Parks Canada's approximately 5,000 employees, including seasonal and new employees, by June 30, 2002. As well, an estimated 1,337 partners were targeted for training. The number of people in each of the target groups reached by the training by time period is shown in Figure 2.

Figure 2: Number and Percentage of Target Populations Trained by Length of Training

	Length of Training	March to October 2001	November 2001 to June 2002	Total Number Trained	Hours of Training
Parks Canada Employees (N=5,000)	12 hours	2,542 (51%)	742 (15%)	3,284 (66%)	39,408
	3 hours	556 (11%)	243 (5%)	799 (16%)	2,397
Partners (N=1,337)	12 hours	103 (8%)	119 (9%)	222 (17%)	2,664
	3 hours	11 (1%)	36 (3%)	47 (4%)	141
				4,352	44,610

* Source: Program Management

In summary, about 82% of Parks Canada's estimated 5,000 employees took the training. Most of those taking the training (about 80%), were exposed to the more intensive 12 hour course. In total 269 (20%) of the population of partners were trained. Again most of these (83%) took the more intensive 12 hour training.

The approximately 42,000 hours of training taken by Parks Canada employees represents the equivalent of about 28 person years spent in training. Additional time was invested by the 137 Parks Canada employees who acted as trainers (i.e., an estimate of 10 to 16 hours preparing for a course).

Outcomes

Results from pre and post course surveys of 2,600 of the 3,300 participants between March 2001 and December 2001 are contained in a May 2002 report provided by the program management.

Information, from the participants trained between March and the end of October 2001, concerning the critical nine questions that track attitudes and behaviours regarding EI is shown in Table 1 below.⁵ The May 2002 Report also contains results of a follow-up survey (administered by E-mail) of approximately 700 employees (excluding seasonal employees) who had participated in the course between March and September 2001. A total of 205 completed survey forms were returned for an approximate response rate of 29%. A final summary evaluation report on the program is due in September 2002.

TABLE 1: Percentage of Participants Agreeing Pre and Post Course (n=2,290) and Six Months Following Training (n=205).

	% Agreeing with Statement		
	Pre-course	Post-Course	6-months after
I understand my roles and responsibilities with respect to ecological integrity	66	95	95
I consider ecological integrity in all of my work decisions	73	92	94
I have knowledge and skills I need to contribute to ecological integrity in my work	66	92	94
I feel I can speak confidentially about ecological integrity	66	90	93
There is nothing that prevents me from contributing to ecological integrity in my work	77	85	80
Maintaining ecological integrity is central to my job	56	65	79
My co-workers understand ecological integrity	50	79	83
I participate in ecological integrity activities with people in other work areas	51	75	76
I involve partners in ecological integrity activities	51	77	77

A majority of participants agreed with each of the statements before taking the training. The level of agreement with each statement increased immediately post course and has generally remained at the same levels in the subsample of participants surveyed six months after they participated. Agreement is highest for the first four statements assessing personal knowledge,

⁵

The May 2002 Evaluation Report for the Program includes targets to minimize the % of participants who disagree with the statements (target is less than 6%) and to maximize the % of participants who strongly agree with the statements (target is 40% or more). There is only one question, "I understand my role and responsibilities with respect to ecological integrity", where both these targets were fully met.

understanding and contribution to ecological integrity.

Fewer, but still a clear majority of the participants agreed that nothing prevents them contributing to EI, that EI was central to their jobs, that they worked with people in other work areas on EI activities, that they involved partners with EI and that their coworkers understood EI. These latter questions all focussed on others' understanding of EI and engaging others in working on EI rather than personal knowledge, understanding and contribution to EI as did the first group of questions.

RECOMMENDATIONS

The program management has collected considerable performance information about the reach of the training program, participants' reactions to each training module (i.e., effectiveness of specific material and exercises) and overall reactions to the training (i.e., level of satisfaction). This information led to modifications of the training as it progressed. They have also collected relevant information about participants' self reported knowledge, attitudes and behaviours related to EI both at the time of training and at several month intervals following training.

In view of this extensive information base and the fact that the training program has come to an end, additional evaluation of this specific EI training program is not recommended. As noted in the introduction, one recommendation contained in the *Report of the Panel on the Ecological Integrity of Canada's National Parks* was that ecological integrity training be made a part of every new employee's orientation package and that this training should be subject to a third-party audit after three years to assess the status and future needs for the program (p.2-8 recommendation 2.4). Parks Canada is in the process of developing an employee orientation training program which will include training related to ecological integrity as one component. The first training sessions are expected in spring 2003. The employee orientation program should be evaluated three years after it is implemented (i.e., spring 2006).

Ecological integrity training itself should be seen as one element aimed at affecting a general cultural shift in Parks Canada toward a greater focus on ecological integrity. Over time, this culture shift should be reflected in a variety of organizational changes including changes in organizational structures, policies and procedures, changes in the qualifications and training of staff, and changes in the activities (e.g., partnering) and results (e.g., improvements in measuring and reporting on ecological integrity) at the field unit, service centre and national level. An independent evaluation to assess progress in affecting this culture change is recommended for the 2004-2005 fiscal year.

APPENDIX A: SUMMARY OF PERFORMANCE FRAMEWORK FOR EI TRAINING

HOW			WHO	WHY	
Inputs	Activities	Outputs	Reach	Direct Outcomes	Long Term Outcomes
Core Team - 2 FTE's Trainers - 137 persons Evaluation Team - 2 persons (@.25 FTE (includes 1 Core Team member) Course Design Team - 12 persons Contractor (3) - course design Contractor (1) - data analysis Operations and Salary Budget 2000/01 - \$420,000 2001/02 - \$450,000	Project Manager - hire contractor to design course - manage course design - liaise with DG -EI and EISDC EI Training Coordinator - coordinate Train the Trainer sessions - manage delivery of courses - develop databases - maintain course records - coordinate Evaluation Team Course Design Team - develop course content and provide input and feedback to contractor on course design learning materials Trainers - course delivery - prepare pre-course materials - complete course implementation and summary record and evaluation forms - mail evaluation forms to contractor Participants - complete 3 hour or 2 day course - complete Action Plan record and evaluation forms Evaluation Team - prepare Evaluation Plan - develop questionnaires, on-line surveys - create databases - liaise with Project Manager and Design Team - prepare interim and final reports	Half-day and 2 day courses designed Progress reports submitted Trainers trained Course material provided Courses delivered Databases developed Half-day and 2 day courses designed Summary and 2 day courses delivered Implementation Plans developed Action Plans completed Course evaluations completed Employees trained Partners trained Plan developed Questionnaires and on-line surveys designed and administered Databases delivered Data analysis and databases managed Interim and final evaluation reports completed	Employees n=4,083 or 82% of approximately 5,000 employees Partners 269 or 20% of 1,337 identified	Participants Learning -understand the concept of EI -understand the use of Tools and decision processes to implement EI -integrate EI into their work -implement a local EI Action Plan within a team environment Participants Satisfaction -commitment to EI -satisfaction with training, degree to which expectations meet	Improvement in ecological integrity within Parks Canada and amongst partners as a result of the Orientation Program