



Forest Worker Essentials Program Pilot

Final Report

C20LMP002

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Submitted by Zielke Consulting Ltd.



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The views and opinions expressed in this report are those of its author(s) and not the official policy or position of the Government of British Columbia

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Executive Summary

In 2019, BC Forest Safety Council (BCFSC) applied to the Sector Labour Market Program (SLMP) to seek funding to support implementation and evaluation of the Forest Worker Essentials (FWE) pilot project. It was proposed the FWE training would be a 12-week program, tailored to the unique regional needs of employers across the province. The SLMP project was anticipated to be 18 months in length to allow for Post Secondary Institutions (PSIs) to stagger implementation and the overall evaluation of the project. Regional support and employment opportunities would be established in collaboration between the BCFSC, the local PSIs, local employers and industry groups.

The BCFSC SLMP program application to develop and pilot the training FWE program was approved in 2019. A Steering Committee made up of PSIs, employers and BCFSC staff was also struck to guide the SLMP project implementation and support the development of the implementation plan for future delivery. Learning resources, instructional materials, program standards and a program approach were developed and made ready to be pilot tested starting the fall of 2019.

Six PSIs - Okanagan College (OC), Selkirk College (SC), College of New Caledonia (CNC) and Coast Mountain College (CMTN), North Island College (NIC) and Vancouver Island University (VIU) – participated in program development and pilot testing of the program materials. OC, SC, CNC and CMTN piloted the entire FWE program. VIU and NIC institutions shared best practices and previous learnings with the piloting PSIs and tested the new FWE learning materials. VIU and NIC's mature programs served as a good model for the four PSIs delivering FWE pilots. VIU and NIC should be recognized on the hard work they put in to establish their programs and be thanked for sharing their information during program development and pilot delivery.

Through the dedicated work of the BCFSC project team, Steering Committee members, PSI program administrators, instructors, local employers and engaged learners, and despite the impact of COVID-19 on program delivery, the project successfully completed in December 2021. Four participant groups including PSI training providers (PSI Program Administrators and Instructors), Program Pilot Participants, Employers, and the Steering Committee provided continuous feedback to the evaluator on all aspects of the project. Based on the formative evaluation and its analysis 35 recommendations were made and action taken to improve and revise the program materials and delivery approach.

The project concluded with the development of a sustainability model and a 'turnkey' Forest Worker Essentials training program that can be delivered by a variety of partners who are interested in establishing a pool of work-ready individuals. The legacy Project materials will be ready for use in early 2022. BCFSC and the Steering Committee should be commended for their proactive management and continuous improvement approach during the pilot period.

OC, SC, CNC, and CMTN are exploring opportunities to offer the program in 2022. VIU and NIC continue to offer the program in their regular programming. BCFSC continues to work with various Industry Association groups to promote the program. Industry Association groups including the Truck Loggers Association (TLA), Interior Logging Association (ILA) and the Coast Harvesting Advisory Group (CHAG) are supportive of the program development to date and are reviewing options for partnerships in the future. ILA and TLA represent contractor forestry employers across BC. CHAG includes representatives from licensees, timberland owners, contractors, and the United Steelworkers. Several other groups – including Indigenous employers – have contacted BCFSC to discuss using the FWE program to further develop their workforce.

The following is a summary of achievements based on the analysis of evaluation feedback:

1. FWE training curriculum and learning materials were developed.
 - 15 new student learning resources of the Forest Worker Essentials Training curriculum were developed and tested.
 - VIU and NIC provided marketing materials and shared their marketing strategy with the other PSIs.
 - VIU provided participant screening assessment materials and led efforts to adapt them to meet the needs of the FWE program.
 - NIC shared ideas about how to combine the FWE curriculum with other content e.g. their 17-week program.
 - An FWE instructor manual and lesson plans were developed and tested.
 - Based on evaluation feedback, all FWE Program Materials were revised, and a Participant Manual and Online Instructor Training were developed.
 - Areas of concern or dissatisfaction expressed by the program participants were reviewed and revised to improve future learning experiences.
 - Based on evaluation feedback, online learning management system materials were updated and made available for use. A more user-friendly approach was applied.
 - Revised Program Materials were reviewed by the Steering Committee and approved December 2021.
 - Program Materials were made ready for early 2022 regular delivery.
2. FWE training pilots were delivered between October 2019 and June 2021.
 - Four PSIs delivered the FWE program. (OC, SC, CNC, CMTN)
 - Two PSIs (VIU, NIC) tested the curriculum and learning resources and provided feedback. In addition, SD72 was provided access to the materials.
 - A preferred delivery model and approach was identified and developed along with strategies to ensure continued delivery post pilot.
 - A sustainability plan for ongoing maintenance of the Program Materials and delivery was developed and approved September 30, 2021.
3. Pilot student participants had positive outcomes.
 - 29 participants started the program with 15 completing.
 - Access to training for Indigenous Peoples and other traditionally under-represented individuals was facilitated. PSI's reached out to local Indigenous groups and promoted the program and access to training.
 - CNC, and CMTN enrolled Indigenous Peoples and women in their programs. SC had discussions with the BC First Nations Forestry Council about future programming.
 - VIU and NIC have established relationships with local Indigenous groups and regularly have participation of Indigenous People.
 - Participants engaged in the pilot program stated they felt they adequately acquired the introductory knowledge to help them transition to 25 plus forestry occupations.
 - Of those who completed the program, the majority were satisfied with the experience.
 - Five of the pilot participants who completed the program gained employment in the forest sector. Several others stated they plan to pursue further education in the sector.
 - Participants in the established VIU and NIC programs have a good transition rate to

employment and/or continuation to additional learning.

- VIU indicated that their students have about a 75% retention of these individuals continuing with their employment in the forest industry.
- NIC indicated that their success rate is high, particularly the sponsored students who went on to work at Huu-ay-aht First Nations or with Western Forest Products. In their project interview with the evaluator, NIC stated that Western Forest Products already wants to hire 4 students next summer as they were happy with the students who completed in 2021.
- Employers who were involved in the project - reviewing materials, as a member of the steering committee, participating in pilot activities - stated they were satisfied that participants who completed the program would have a good foundation to enter the industry as an entry level worker.
- VIU and NIC stated those employers involved with their programs are satisfied with the FWE training content and acknowledge they have a greater pool of quality workers ready for entry level employment.

4. The Forest Worker Essentials (FWE) Program Materials will be available for use by training providers in early 2022 to support participants' positive transitions into entry level work in a forest sector career pathway through the following actions:

- BCFSC will be responsible for the administration and maintenance of the FWE Curriculum with administration costs recovered via a "Service Agreement" support fee and learning resource access fee.
- PSIs involved in the pilot have stated they will use the program materials in future delivery.
- BCFSC will work with contracted training providers to monitor and ensure program delivery meets the FWE Program Standards.
- BCFSC will undertake outreach to ensure industry, Non-Governmental Organizations and training providers are aware of the curriculum's availability for use.
- A Steering Committee will be established and meet on a basis determined by the committee to gather information on current and/or changing industry standards and employment outcomes of program participants to recommend updates/revisions to the curriculum.

Pilot Participant Feedback
(Taken from evaluation data as written)

"I was invited by the local Selkirk College to advise on what training would be an asset to the participants and was informed on who some of the applicants were and their compatibility with this type of training. We were willing and able to assist in onsite visits both in the field and a Sawmill tour but because of COVID-19 they did not take place." **SC Employer 2020**

"I led the group to three different site visits to do with silviculture." **SC Employer 2020**

"If I was a contractor looking for employees, I would hire from this program because of the readiness of the worker." **SC Employer 2020**

"I gave the class a face-to-face presentation on BC Timber Sales and its role in FLNRORD. It was a great experience, and all participants were engaged. They were a great group, and it was a relaxed atmosphere." **CMTN Industry Partner 2021**

"Gained knowledge about the forestry industry and how everything works. Hazards in forestry. Work skills and resume work. How to find a job in forestry and the resources." **OC Program Participant 2020**

"The online course was quite well done, the instructors for chain saw, first aid, transportation ticket, fall protection, knew their courses backwards and forwards." **CNC Program Participant 2020**

"Best part of the program was learning about the s100 basic fire suppression. It was great to learn how to set up for a wildfire, the hoses, pump and pack up." **CMTN Program Participant 2021**

"I found out what I really want to do in the forest industry. Gave more confidence to pursue that path." **CMTN Program Participant 2021**

"Antler Creek Logging grapple yarder show on Skeena sawmills Cutblock by far the best was given a map and being on the cutblock with the map and seeing the grapple yarder yarding turns helped put everything together that you learn in the classroom!" **CMTN Program Participant 2021**

"I found employment as a Forestry Worker thinning and brushing, slash and burn, some layout of cut blocks." **CMTN Program Participant 2021**

"I found employment as an Infield surveyor, collecting data, plotting blocks, checking saplings. I am helping with Fire Smart BC here in Terrace and will be assessing homes and help doing mailouts." **CMTN Program Participant 2021**

"I found employment as a Sawmill worker- clean up, snow shoveling." **CMTN Program Participant 2021**

"I found employment working in forest sector on Vancouver Island. I am looking at taking Faller Training." **CMTN Program Participant 2021**

"I found work one month after completing the program with a local forest company. I took an interest in the company as soon as they did their presentation. They like that I want to learn, and I ask lots of questions. Being a young aboriginal woman has also made me more successful." **CMTN Program Participant 2021**

"The collaboration between the PSI and local employers is outstanding (Especially during COVID-19). We used the Beaver Lodge lands across the road from the training location. Students also went out in the field with BC Timber Sales, Western Forest Products, Woodlots, and Mosaic." **NIC Program Administrator 2021**

Part One: About the Project

a. Background

In May 2018 the BC Forest Safety Council (BCFSC) completed a Sector Labour Market Partnership (SLMP) project that identified the knowledge and skills workers need to demonstrate competence in for 32 occupations across the forestry sector, and an industry assessment process to validate these competencies. Project work was validated by employers who sat on the governance committee. Occupations were mapped for: mechanical harvesting, yarding, faller, road building, and log truck driving. The project identified a common 10 units of competence (modules of knowledge and skills) required by all 32 occupations.

Employers and BCFSC proposed an industry-recognized training program called 'Forestry Fundamentals' for entry level workers to help develop these competencies.

In June 2018 Vancouver Island University (VIU) completed a pilot project for the Forestry Fundamentals course, funded by the Regional District of Mount Waddington. VIU pilot tested the competencies identified by the SLMP project against the real-life skills required by Western Forest Products for entry level positions; 11 of the 12 participants from the program obtained employment within two months of completion, with an average hourly wage above \$30/hour.

In October 2018, Sherson and Talbot Ltd. completed a separate SLMP engagement project to inform new policy and program development for the Ministry of Advanced Education, Skills and Training. This project confirmed the Ministry's understanding of the forestry sectors' training needs. Key findings included identification by employers of the importance of launching the Forestry Fundamentals course in other regions of B.C., and the need to adapt the training to regional differences within the sector.

In 2019, BCFSC applied to the SLMP program to support implementation and evaluation of the Forestry Fundamentals pilot project. It was proposed the Forestry Fundamentals training would be a 12-week program, tailored to the unique regional needs of employers across the province. The SLMP project was anticipated to be 18 months in length to allow for PSIs to stagger implementation and the project evaluation. Regional support and employment opportunities would be established in collaboration between the BCFSC, the local PSIs, and local employers and industry groups. This approach addressed the recommendations found in the Forest Sector Workforce Initiative Roadmap, the BC Forest Safety Council: Forestry Pilot Report and the Sector LMP C17LMP014 project.

The BCFSC SLMP program application was approved in 2019 to develop Forestry Foundation learning resources, instructional materials, and support pilot testing and evaluation of the program. The Forestry Foundation program was to be delivered by four PSIs in BC: Okanagan College (OC), Selkirk College (SK), College of New Caledonia (CNC) and Coast Mountain College (CMTN). Two PSIs, North Island College/School District #72 (NIC), agreed to include Forestry Foundation materials as part of its Coast Forest Resource Program and Vancouver Island University (VIU) would deliver the Forest Harvesting Practices Program during the pilot timeframe. Both NIC and VIU were included in the SLMP project to assist in the development of the program materials utilizing their current Forest Foundation Program delivery expertise, testing materials and providing feedback on the learning resources and instructor materials.

A Steering Committee was also struck to guide the SLMP project implementation. Early in the Project, the Committee identified the project name 'Forestry Fundamentals Training' did not adequately reflect the program content, so a temporary name change was made to Entry Level Forest Worker (ELFW) for the duration of the pilots. Based on pilot feedback and discussion among the Steering Committee, the Committee changed the name to Forest Worker Essentials (FWE) at the conclusion of the pilots. As a note, some of the historic documents

contained in this report may still reflect the earlier names (Forestry Fundamentals or ELFW). For ease of reviewing this report, the historical program names may be updated to Forest Worker Essentials at the discretion of the report's author.

b. Project Objectives

In 2019, the aim of the BCFSC SLMP project was to develop and test FWE Program Materials that supported post-secondary instructors to deliver foundational training that could accelerate the positive transition of new workers' entry into a career pathway in the forest sector. A Project Logic Model was developed to support the development of the Evaluation Strategy and Framework and identify key project components and outcomes. (See Appendix One: FWE Logic Model) The following intended outcomes were established at the start of the Project to guide both the project activities and evaluation:

1. FWE Program Materials developed, revised, and approved by the project Steering Committee.
2. PSIs complete the FWE pilots and review the delivery model to identify improvements prior to regular delivery.
3. PSIs commit to ongoing involvement in the model for FWE training after the conclusion of the Project.
4. Access to training for Indigenous and other traditionally under-represented individuals is facilitated as a direct result of delivery of the pilot program at the local level at six PSIs across B.C.
5. Participants are aware of pathways to become qualified in other forest industry occupations.
6. Some pilot participants gain employment in entry-level forestry jobs after completion of the FWE Training.
7. Employers are confident in the work performance of the newly trained employees.
8. Employers and participants view the entry-level training as a first step towards helping individuals progress along defined forest sector career pathways.
9. Formative and summative evaluation is conducted throughout the project that results in continuous improvement of project activities over the course of the pilots.
10. A Sustainability Plan for ongoing delivery is developed.

c. Project Components

The following Project components were established to deliver the core tasks and activities of the Project:

1. Forest Worker Essentials Training Curriculum and Learning Resources Development

The curriculum and learning resources draft documents would be tested and revised with final versions approved by the Steering Committee to make the curriculum ready for regular delivery at PSIs by 2022

- a. Development of 15 units of the FWE Training curriculum.
- b. Testing of the entire FWE Training curriculum.
- c. Revision and approval of final curriculum after pilots completed.

Timeline: June 2019 to December 2021

2. Forest Worker Essentials Training Pilot Delivery

The project would allow BCFSC to evaluate the outcomes from all six PSIs by 2021.

- a. Pilot test of FWE Program Materials including curriculum and learning resources at six sites.
- b. Evaluation of pilot test including pre-pilot, pilot and post-pilot audit and analysis that includes interactions with instructors, participants, and employers to gather their feedback and satisfaction with the curriculum, learning resources and delivery method.

- c. Findings of the evaluation discussed by the Steering Committee and a preferred delivery approach identified.
- d. Recommendations for revision to delivery model, curriculum and learning resources made.

Timeline: September 2019 to October 2021

3. Participants participate in Training, Complete Program and Find Employment

Through participation in the pilot, both participants and employers would benefit.

- a. Access to training for Indigenous and other traditionally under-represented individuals would be facilitated as a direct result of outreach and delivery of the pilot program at the local level at six colleges across B.C.
- b. Participants would engage in training to acquire the introductory knowledge to help them make successful transition to 25 plus forestry occupations.
- c. Participants who complete the program would have greater access to forestry entry level jobs.
- d. Employers would have a pool of quality workers ready for entry level employment.

Timeline: October 2019 to October 2021

4. Development of a Sustainability Plan for Future Delivery of Forest Worker Essentials Training

The Steering Committee will:

- a. identify successful elements of the Project that will be maintained.
- b. identify strategies that will ensure financial sustainability for those continuing Project elements.
- c. create transition plan of actions that will take place to move the Project from pilot to continued programming status; and,
- d. create a description of the risks and any mitigation strategies identified for the ongoing sustainability of the Project.

Timeline: March 2020 to October 2021

d. Project Approach

The Project utilized the expertise of BCFSC staff, forest sector employers/stakeholders, subject matter experts PSI staff and instructors, technical writing consultants, curriculum experts and an evaluation specialist to ensure the tasks and activities in the June 2020 revised workplan were delivered on schedule. To support the completion of the “Project Deliverables”, BCFSC’s contract stated it would:

- a. Convene a governance committee consisting of forest sector employers, forest sector industry associations, and post-secondary institute project partners to ensure their active participation and input on the Project, including the review and approval of all deliverables.
- b. Maintain a consultative process with key forest sector stakeholders throughout the Term to ensure validity of the development, implementation, and evaluation of pilot programming.
- c. Have consideration for and be consistent with the recommendations identified in the Forest Sector Workforce Initiative Roadmap, the BC Forest Safety Council: Forestry Pilot Report and the Sector LMP C17LMP014 project approved Evaluation Framework deliverable.
- d. Develop inputs for curriculum development; and
- e. Take on a coordinating and supportive role with the six PSIs that will be delivering the “Forest Fundamentals” training course or piloting the program materials.
 - i. Coast Mountain College (CMTN)

- ii. College of New Caledonia (CNC)
 - iii. North Island College (NIC)/School District #72 (SD#72) (pilot program materials)
 - iv. Okanagan College (OC)
 - v. Selkirk College (SC)
 - vi. Vancouver Island University (VIU) (pilot program materials)
- b) Evaluate the Forest Fundamentals training program and materials delivered by the six post-secondary institutions.

e. Project Team

BC Forest Safety Council (BCFSC) provided the oversight and project management. The original Project team consisted of Gerard Messier as Project Manager, Allison Thompson as Project Coordinator, and Consultants including Jessi Zielke, Zielke Consulting Ltd. as evaluator, and IS Solutions and CT Resources Inc. as curriculum consultants. Six PSIs were responsible for pilot delivery and reporting outcomes. In May 2020, Allison Thompson, assumed the role of Project Manager and Richard King joined the steering committee as BCFSC sponsor in his role as Director, Programs and Training responsible for general oversight of the project. Gerard Messier continued to support program development activities on the project.

Part Two: Summary of Project Activities from July 12, 2019 to October 31, 2021

Between July 12, 2019 and October 31, 2021, the Project delivered the milestone deliverables and completed the activities as required in the SLMP C20LMP002 contract. A summary of the completed milestones, activities and participant feedback collected by the evaluator follows.

a. Progress Achieved on Project Milestones between July 12, 2019 to October 31 2021

Eight milestone deliverables were completed and approved by the Steering Committee between July 12, 2019 and October 31, 2021 and included:

| Milestone Completed | |
|---|---------------------|
| 1. Project Work Plan | July 12, 2019 |
| 2. Draft Curriculum #1 Learning Resources | July 31, 2019 |
| 3. Evaluation Strategy | August 2, 2019 |
| 4. Evaluation Tools | August 30, 2019 |
| 5. Draft Curriculum #2 Instructor Materials | September 13, 2020 |
| 6. Interim Progress Report #1 | January 31, 2020 |
| 7. Interim Progress Report #2 | April 1, 2020 |
| 8. Interim Progress Report #3 | May 15, 2021 |
| 9. Interim Progress Report #4 | September 30, 2021* |
| 10. Draft Final Report | October 31, 2021 |

* Internal project deliverable added by BCFSC

b. Progress Achieved on Project Activities

The following activities were completed between July 12, 2019 to October 31, 2021:

Pilot Project Activity between July 12, 2019 to September 13, 2019

- Completion of the BCFSC Progress Report.
- BCFSC delivery of Instructor Orientation to group one pilot instructor.
- Identification of pilot locations, delivery start and completion dates.
- Start of pilot one (Okanagan College (OC) -Revelstoke).
- Steering Committee Meetings and notes.

Pilot Project Activity between January 1, 2020 to March 31, 2020

- Completion of the BCFSC Progress Report.
- BCFSC delivery of Instructor Orientation to group two pilot instructors.
- Completion of pilot one (OC - Revelstoke).
- Start of pilot two (Selkirk College (SC) – Grand Forks).
- Vancouver Island University (VIU) and North Island College (NIC) using program materials.
- Identification of remaining pilot locations, delivery start and completion dates.
- Steering Committee Meetings and notes.

Pilot Project Activity between April 1, 2020 to March 31, 2021

- Completion of the BCFSC Progress Report. Update of project workplan and project evaluation plan June 2020.
- Update of the remaining pilot locations, delivery start and completion dates.
- Delivery and completion of pilot two (SC– Grand Forks).
- Delivery and completion of the pilot three (College of New Caledonia (CNC) - Vanderhoof).
- Start of pilot four (Coast Mountain College (CMTN) – Terrace).
- VIU and NIC using Program Materials.
- Program materials were shared with SD72 to use as a resource.
- Creation of sustainability workplan and identification of subgroup committee members.
- Steering Committee Meetings and notes.

Pilot Project Activity Description March 31 to September 30th, 2021

- Completion of the BCFSC Progress Report. Update of the remaining pilot locations, delivery start and completion dates.
- Delivery and completion of the CMTN Pilot – Terrace.
- Completion of a sustainability plan for continuation of the Project beyond term.
- Performed work on curriculum revisions including creation of new program materials based on the feedback from program participants.
- VIU and NIC interviews and report on usage of program materials with VIU and NIC.
- Steering Committee Meetings and notes.

c. Evaluation Analysis: Summary of Pilot Participant Feedback

There were four active participant groups that provided feedback at various stages throughout the pilot activities. These groups included PSI training providers (PSI Program Administrators and Instructors), Program Pilot Participants, Employers, and the Steering Committee. Approved evaluation tools were used by the evaluator to gather feedback from participants on the schedule laid out in the Evaluation Strategy/Framework.

Each group provided effective feedback, lessons learned and recommendations throughout the pilot project that were captured in each of the four Interim Reports. The findings of the Four Interim Reports were reviewed by BCFSC and the Steering Committee and formed the basis for a continuous improvement approach to all project components. Based on the formative evaluation and analysis of the participant input, 35 recommendations were generated during the four reporting periods. A table of those recommendations, the actions taken, and status of completion can be found on page 24.

This active participant feedback facilitated continuous improvement, the successful delivery, revision, and preparation of the Program Materials for use after the completion of the project. The legacy Project materials will be ready for use in early 2022. BCFSC and the Steering Committee should be commended for their proactive management and continuous improvement approach during the pilot period.

The following is a summary of participant feedback on each project component:

1. Component: Forest Worker Essentials Training Curriculum and Learning Resources

Generally, the amount of feedback on the curriculum and learning resources was good. Each participant group stated the resources proved to be a suitable mechanism for the delivery of the FWE Training and would lead to good outcomes for participants (students) who completed the program.

Training Provider Feedback (Source: Pre-pilot PSI interviews, PSI Completion Reports)

- Training providers stated they were satisfied with the Program Materials and stated that the materials helped them to implement pilot delivery.
- Training providers stated they were satisfied with the quality of the curriculum and learning materials, instructor materials and believed they provided a solid foundation from which to deliver the FWE program content.
- Training providers stated that the forest policy content may be more than is required for the type of program that is being delivered, so they suggested reducing the content to a more general knowledge level.
- OC stated “the content in the Lesson Plans and Learning Resources is excellent. The expertise, editing and formatting that went into the development of these materials is obviously second to none. The material succeeds significantly in providing a user-friendly interface for a classroom instructor.”
- SC stated “the curriculum is very thorough well laid out. The binders made it convenient to reference supporting materials. There is a lot of material, and it does take some time for the instructor to be comfortable and oriented with how to use the binders.”
- CNC stated “the curriculum and supporting resources are set-up to be user friendly. However, the instructor CNC hired has done some instruction for us in the past, but he was still not used to this level of detailed instructional tools. The instructor is a Registered Professional Forester not a certified instructor so it would be good to have ‘cheat sheets’ available and some direct training with a trained instructor to work out how to deliver the module content effectively.”
- Vancouver Island University and North Island College which had existing programs, incorporated learning resources into their ongoing delivery and provided positive feedback on the materials.

Instructor Feedback (Source: Interview)

- Based on a mid-program evaluator instructor interview, each instructor indicated the level of detail for most of the units was good, easy to follow and assisted them to ensure they could deliver all the program content.
 - One instructor delivered the program at two colleges (SC and CMTN) and stated it was easier to deliver the program a second time as he was more familiar with the learning materials.
 - Instructors stated it would be useful to include additional guidance on ideas for field trips that related to specific program content.
 - Instructors stated the learning management system (LMS) was a useful tool as a resource during lesson delivery and as a way for participants to review content prior to or post instruction periods.
 - Instructors commented the unit on legislation and regulation was too detailed for an entry level program.
 - Instructors suggested more time to prepare for field sites visits and instructor training should be built into the budget so they can adequately review the learning

- materials and plan for program delivery.
- NIC and VIU instructors used the learning resources during their regular delivery in 2019 and 2021 and reported their instructors were satisfied with the materials and plan to continue to use them for subsequent program delivery

Employer feedback (Source: Employer Survey, PSI Completion Report, PSI Interview)

- Ongoing employer feedback on program content was gathered by BCFSC and used to revise and refine the materials.
- Each PSI stated they had employer involvement during the pilot program including participation in selection process, assistance in confirming the regional focus of the training, assistance with field site selection, and guest speaking.
- The employers who sat on the Steering Committee were satisfied with the program materials and stated that the content was appropriate for developing the abilities of an entry level worker and felt that potential employees would be more employable after receiving training.
- The final program delivery (CMTN) demonstrated good employer engagement with 12 employers engaged in either hosting a field trip or offering to guest speak. This keen involvement, despite the challenge with COVID-19, was welcome by both the college and the participants. Many participants had not experienced some of the work settings and expressed that this helped them formulate their idea of what their next work steps might be.
- Many VIU students who complete the program are hired by Western Forest Products, and VIU reports that more and more contractors are talking about the program they offer out of Woss and are keen to hire those graduates.
- VIU stated that employers are looking forward to hiring program completers from the next cohort that starts in March of 2022.

Steering Committee

- The steering committee was satisfied with the curriculum and learning resources and provided feedback to BCFSC on a continuous basis as materials became available and throughout the revision process.

2. Component: Forest Worker Essentials Training Pilot Delivered

Generally, there was positive feedback from all participants in relation to the pilot delivery approach.

- The program delivery format with both in-class and experiential learning (field trips and certificate training) was deemed by all groups to be essential to a positive learning experience and outcomes for participants.
- Training providers and participants stated that the content could have been delivered in a shorter time frame.
- Engagement with employers in a supporting role was favoured by all.
- Pilot participants (students) who completed the program were satisfied with their experience and stated that it helped them to identify their career aspirations and/or helped them find employment in the forest sector.

Training Provider Feedback (Source: PSI Completion Report, PSI Interview,)

- Four colleges – Okanagan College, Selkirk College, College of New Caledonia, and Coast Mountain College – successfully delivered the program using the program standards, program outline, instructor guide, curriculum and learning resources.
- Each PSI that delivered the pilot program or tested the materials, completed a Program Completion Report.
- PSIs stated the program standards were useful as a guide to pilot implementation.
- The format for utilizing employers during participant recruitment and selection was deemed to be effective by training providers.

- Training providers were satisfied with the result of their efforts to attract under-represented groups – women, young people and Indigenous Peoples – and recruited through various networks, social media, and through word of mouth
- Training providers undertook outreach to local Indigenous groups and on several occasions worked with them to support entry into the program.
- 41.38% of the participants were women, 82% of the participants were under the age of 34 (55.17% were under the age of 24) and 48.28% of the participants self-identified as an Indigenous person.
- VIU and NIC who have established programs have partnerships with First Nations in their local area.
- Training providers recommended additional strategies be added to the Program Materials to help them identify appropriate field sites that would support program content delivery.

Steering Committee (Steering Committee meeting notes)

- The Steering Committee monitored progress of each pilot delivery and generated feedback to assist training providers and BCFSC to refine the delivery approach throughout the contract period.
- The Sustainability Plan sub-committee provided feedback to the Steering Committee that recommended a shortened program length, minor reduction in content and improved focus on industry engagement citing this would improve the outcomes for participants and employers.
- The sub-committee recommended a revised program outline and delivery approach which was approved by the Steering Committee September 23, 2021. BCFSC committed to the changes and will make ready all program materials by early 2022.

3. Component: Participants Engage in Training, Complete Program and Find Employment

Program participant’s feedback was gathered throughout the project and used to inform subsequent program implementation and delivery. Each group of program participants actively participated in the evaluation activities during the pilot. Satisfactory feedback was gathered while the participants were at the PSI, however, collecting feedback post completion proved to be difficult.

Participants were generally satisfied with the program approach, program content and instruction. Several participants stated that the length of program was too long, and that content could have been delivered in a shorter timeframe. Experiential learning opportunities were highly regarded by all participants. They stated it improved their understanding of program content and provided ‘real life’ skills that they thought would be useful in a work setting.

PSIs stated that employment outcomes were impacted by several issues. OC stated that the 2019 economic downturn and negative press about the forest industry impacted their recruitment efforts and completing participants ability to secure work in the forest sector. SC, CNC and CMTN were all impacted by COVID-19, depending on timing. Some areas experienced industry slow down, while others reported nervousness about hiring during the pandemic.

It should be noted that as restrictions were put in place that mitigated the impact of COVID-19, the CMTN participants had a better result finding work. The forest industry also experienced a resurgence over 2021 which led to greater demand for workers. This was positive for those students looking for work from the CMTN program.

The following information was gathered by the evaluator via PSI Completion Reports, via the mid-pilot interviews and two on-line surveys. The ‘working 3-6 months after’ results were difficult to collect since this information is dependent on students completing their post course surveys or advising their PSI of their employment status.

Summary of Participation Outcomes for Pilot Participants (Source: PSI Completion Reports)

| PSI | Start Training | Complete Training | Working 3-6 months after |
|-------------|----------------|-------------------|--------------------------|
| OC (2019) | 5 | 4 | No response |
| SC*(2020) | 7 | 3 | No response |
| CNC (2020) | 8 | 3 | No response |
| CMTN (2021) | 8 | 5 | 5 |

*Pilot was interrupted due to COVID-19 restrictions

Pre-Pilot Participant Demographic Information (Source: Pre-Pilot Survey)

A Pre-program Participant survey was administered between October 2019 and February 2021 to gather information on participant work and learning background. Below is a summary of the data points that were collected via the on-line survey. The information provided a starting point from which PSIs could determine the progress of their participants’ learning as they progressed through the pilot materials.

- Number of Participants completing the online survey
 - OC 5 responses (October 2019)
 - SC 8 responses (March 2020)
 - CNC 8 responses (October 2020)
 - CMTN 8 responses (March 2021)

- Knowledge of Forest Sector Occupations
 - 10.34% had no prior knowledge of forest industry occupations.
 - 20.69% can name one or two forest industry occupations.
 - 34.48% can name 3-4 forest industry occupations.
 - 24.14% have been investigating careers in the forest industry so are familiar with occupations.
 - 10.34% have been working in the forest industry so are very familiar with forest sector occupations.

- Work History
 - 62.7% were working in the months prior to applying and starting the training.
 - 37.95% were not working prior to applying and starting the training.

- Wage History

The following was the last hourly wage of respondents

| ANSWER CHOICES | RESPONSES |
|-----------------------------|-----------|
| \$10.00 to \$15.00 per hour | 24.14% |
| \$16.00 to \$20.00 per hour | 20.69% |
| \$21.00 to \$25.00 per hour | 13.79% |
| \$26.00 to \$30.00 per hour | 3.45% |
| \$31.00 to \$35.00 per hour | 13.79% |
| \$36.00 to \$40.00 per hour | 6.90% |
| \$41.00 and above per hour | 0.00% |
| Not Applicable | 20.69% |
| Total Respondents: 29 | |

- Industry participants were working in prior to starting the program

| ANSWER CHOICES | RESPONSES |
|-----------------------------------|-----------|
| Agriculture | 20.69% |
| Construction | 31.03% |
| Education | 13.79% |
| Energy/Resources/Utilities/Mining | 20.69% |
| Financial Services | 3.45% |
| Healthcare | 10.34% |
| Hospitality/Tourism | 20.69% |
| Sports/Recreation | 3.45% |
| Transportation | 10.34% |
| Total Respondents: 29 | |

* Of those working in Energy/Resources/Utilities/Mining 3 were working in the Forest Sector.

- Level of Education of Participants

| ANSWER CHOICES | RESPONSES |
|---|-----------|
| Not finished High School yet | 31.03% |
| High school graduation certificate | 55.17% |
| Completed some post secondary | 27.59% |
| Technical school or institute certificate | 6.90% |
| College diploma or certificate | 17.24% |
| University degree or diploma | 0.00% |
| None of the above | 0.00% |
| Total Respondents: 29 | |

- Gender of Participants

| ANSWER CHOICES | RESPONSES |
|-----------------------|-----------|
| Male | 51.72% |
| Female | 41.38% |
| Other | 0.00% |
| Prefer not to say | 6.90% |
| Total Respondents: 29 | |

- Age Group of Participants

| ANSWER CHOICES | RESPONSES |
|-----------------------|-----------|
| 15 to 24 | 55.17% |
| 25 to 34 | 27.59% |
| 35 to 44 | 10.34% |
| 45 to 54 | 3.45% |
| 55 to 64 | 3.45% |
| 65 or older | 0.00% |
| Total Respondents: 29 | |

- Cultural Background in addition to being Canadian, participants identified with (note some respondents chose more than one option)

| ANSWER CHOICES | RESPONSES | |
|--|-----------|----|
| (Select all that apply.) | 3.45% | 1 |
| White Caucasian | 72.41% | 21 |
| South Asian (including East Indian, Pakistani, Sri Lankan) | 0.00% | 0 |
| Chinese | 6.90% | 2 |
| Black | 3.45% | 1 |
| Filipino | 0.00% | 0 |
| Latin American | 0.00% | 0 |
| Arab | 0.00% | 0 |
| Southeast Asian (including Vietnamese, Cambodian, Laotian, Thai, Indonesian) | 0.00% | 0 |
| West Asian (including Iranian, Afghan) | 0.00% | 0 |
| Korean | 0.00% | 0 |
| Japanese | 0.00% | 0 |
| Another ethnic or cultural background | 48.28% | 14 |
| Total Respondents: 29 | | |

- Participants who self-identified as an Indigenous Person

| ANSWER CHOICES | RESPONSES |
|-----------------------|-----------|
| Yes | 48.28% |
| No | 51.72% |
| Total Respondents: 29 | |

Mid-Pilot Focus Group Interviews: (Source: Mid Pilot Focus Group/Interview)

Program Participants took part in mid program focus groups/interviews lead by the evaluator. Four OC students participated in an in person focus group, four CNC participants joined a group Zoom focus group and eight CMTN students participated in an individual interview via the phone with the evaluator. SC students were not available to participate due to the disruption of their program because of COVID-19 restrictions. Below is a summary of the data that was collected through the focus groups.

Program Delivery and Learning Materials

- Generally, participants were satisfied with the program delivery model, however they reported that some aspects of the program – group work, field trips, and access to field sites – were hindered by COVID-19 restrictions.
- Overall participants expressed they were satisfied with the quality of the learning materials used to the mid-point in their program.

- Participant feedback on the Learning Management System (LMS) was positive with many stating it was a useful tool to provide additional context and review opportunities before or after lessons.
- Some participants stated they would have liked to see better links between what the instructor taught and the content they were to review in the LMS. Several participants from one PSI stated they would have liked more direct correlation between the LMS content and instructor delivered lessons.
- Participants stated the section on legislation and regulations was too detailed.
- Participants were very satisfied with the experiential learning and field trips they were able to participate in and stated they wished there were more of these types of opportunities.
- Participants were thankful for the field gear that was provided as many felt they could not afford the items had they been required to buy them personally.

Program Participant Completion Feedback (Source Program Completion Survey)

A Pilot Participant Completion survey was administered between January 2020 and June 2021 to gather information on participants' learning experiences and their intention to continue their career path in the Forest Sector. The following data was analyzed by the evaluator and integrated into the 35 recommendations that were made to improve the program approach and learning materials. Areas of dissatisfaction or concern were discussed by the Steering Committee and action taken to address gaps.

Below is a summary of participant data points collected across all piloting PSIs.

- Number of Participants completing the online program completion survey
 - OC 4 responses (February 2020)
 - SC 0 responses
 - CNC 1 responses (December 2020)
 - CMTN 6 responses (June 2021)

- Participant overall satisfaction with program delivery and content
 - 45.5% (5 participants) rated satisfaction as **OK**
 - 45.5% (5 participants) rated satisfaction as **Satisfied**
 - 9.09% (1 participant) rated satisfaction as **Very Satisfied**

- The following is the satisfaction with aspects of training experience

| | VERY DISATISFIED | DISATISFIED | OK | SATISFIED | VERY SATISFIED | TOTAL |
|--|------------------|-------------|-------------|-------------|----------------|-------|
| Over all training experience | 0.00% 0 | 0.00% 0 | 9.09% 1 | 72.73% 8 | 18.18% 2 | 11 |
| Instructional learning materials | 0.00% 0 | 0.00% 0 | 45.45% 5 | 18.18% 2 | 36.36% 4 | 11 |
| Curriculum - course content | 0.00% 0 | 0.00% 0 | 36.36% 4 | 36.36% 4 | 27.27% 3 | 11 |
| Learning environment – interactions with instructor | 0.00% 0 | 18.18% 2 | 9.09% 1 | 27.27% 3 | 45.45% 5 | 11 |
| In-classroom instruction | 0.00% 0 | 9.09% 1 | 36.36% 4 | 27.27% 3 | 27.27% 3 | 11 |
| BCFSC On-line Learning Centre | 0.00% 0 | 18.18% 2 | 27.27% 3 | 27.27% 3 | 27.27% 3 | 11 |
| Field site learning/practical hands on learning | 0.00% 0 | 10.00% 1 | 10.00% 1 | 40.00% 4 | 40.00% 4 | 10 |
| Participant learning supports provided by college/university | 0.00% 0 | 0.00% 0 | 27.27% 3 | 36.36% 4 | 36.36% 4 | 11 |
| School provided equipment and apparel | 0.00% 0 | 0.00% 0 | 9.09% 1 | 45.45% 5 | 45.45% 5 | 11 |

- Participant satisfaction with what they learned in the following program content areas:

| | VERY DISATISFIED | DISATISFIED | OK | SATISFIED | VERY SATISFIED | TOTAL |
|--|------------------|-------------|-------------|-------------|----------------|-------|
| Cluster A – Occupational First Aid, Fall Protection, WHMIS | 0.00% 0 | 0.00% 0 | 0.00% 0 | 63.64% 7 | 36.36% 4 | 11 |
| Cluster B – Essential Work Skills | 0.00% 0 | 9.09% 1 | 36.36% 4 | 54.55% 6 | 0.00% 0 | 11 |
| Cluster C – General Forestry Occupational Skills | 0.00% 0 | 9.09% 1 | 18.18% 2 | 72.73% 8 | 0.00% 0 | 11 |
| Cluster D – Legislation and Regulation | 0.00% 0 | 9.09% 1 | 45.45% 5 | 36.36% 4 | 9.09% 1 | 11 |
| Cluster E – Hazards | 0.00% 0 | 0.00% 0 | 27.27% 3 | 54.55% 6 | 18.18% 2 | 11 |
| Cluster F – Yarding and Mechanized Harvesting | 0.00% 0 | 9.09% 1 | 18.18% 2 | 63.64% 7 | 9.09% 1 | 11 |
| Cluster G - Road Building | 0.00% 0 | 0.00% 0 | 36.36% 4 | 54.55% 6 | 9.09% 1 | 11 |
| Cluster H – Mechanical | 0.00% 0 | 36.36% 4 | 9.09% 1 | 45.45% 5 | 9.09% 1 | 11 |
| Cluster I – Stand Tending | 0.00% 0 | 9.09% 1 | 36.36% 4 | 27.27% 3 | 27.27% 3 | 11 |
| Cluster J – Driving | 0.00% 0 | 9.09% 1 | 36.36% 4 | 36.36% 4 | 18.18% 2 | 11 |

- Individual written comments regarding the strengths of the program below were taken directly from the on-line survey:
 - Online Modules, First Aid certificates, ATV certificate, field days/tours.
 - Field trips time on a cut block Antler Creek Logging show was by far the best.

- The online learning modules were a very helpful and useful tool. The part where you can download the lessons pdf helps when I get foggy on some information, and I can refer to
 - In field or hands on experiences really stood out to me as well.
 - Hands-on learning.
 - The outdoor site visits.
 - Hands-on work within field trips and or just being outside in general.
 - The online course was quite well done, the instructors for chain saw, first aid, transportation ticket, fall protection, knew their courses backwards and forwards.
 - The field trips.
 - E learning.
 - Knowledge about the forestry industry and how everything works. Hazards in forestry. Work skills and resume work. How to find a job in forestry and the resources.
- Participant rating of importance of field trips/experiential learning
 - 9.09% (1 participant) responded - **OK**
 - 90.91% (10 participants) - **Very Important**
- Challenges with the program: individual responses
 - The only challenge I had was sitting at a desk for so long.
 - It was a lot of information to absorb, I feel we learned a little about allot of things and not enough in any one thing to considered well trained.
- Positive examples of things participants learning during field trips: individual responses
 - How to start, run, check, file, and take care of a chainsaw
 - Antler Creek Logging grapple yarder show on Skeena sawmills cutblock by far the best was given a map and being on the cutblock with the map and seeing the grapple yarder yarding turns helped put everything together that you learn in the classroom!
 - Cypress's work with Terrace's community forest. I was a skeptic at first. I felt it was labeled community forest, but they were exploiting it. Going out and seeing the work they did, how organized and to heart they take it was very impactful. Visiting Seaton sawmill was positive as well. Seeing how a regular couple had an idea and built it up.
 - Always wear layers. It's not as scary as i thought it would be
 - Witnessing a yarder "out in the wild", planting trees as a group.
 - Just being with the class, getting to know each other than working together out in the field because going to a new job you don't know anything like how we did not know each other in the start.
 - The companies were very businesslike and showed what goes on in their fields of work.
 - the S-100 basic fire suppression. it was great to learn how to set up for a wildfire, the hoses, pump and pack up
 - About the chainsaw
 - Learning how to take a chainsaw apart and put it back together again and how to use one properly
- Negative experiences during field trips or hands on learning and suggested improvement: individual responses
 - The faults that I saw were not with the companies but with our classroom instructor who accompanied us on these outing. The lack of an ERP plan on all three trips and first aid kit. And not doing a check of the students on the bus before and after the field trips.
 - Just that we missed one because of weather, and I have been in enough shops in my life to not really gain anything from that trip.

- Only negatives are the many field experiences that didn't happen. Example like a mill tour or we didn't see a logging show either.
- Personal successes and challenges experiences by participants: individual responses
 - Found out what I really want to do in the forest industry. Gave more confidence to pursue that path.
 - I support Mother Nature, and as an aboriginal woman I feel I am not taken as seriously as the males in the forest industry.
 - Learning more about field work and getting over my fear of chainsaw.
 - I am so glad to be able to run and maintain a saw. It was something I was always afraid of but wanted to learn.
 - Chainsaw training. The process of logging. Resume work.
- Overall comments on how the program could be improved: individual responses taken from survey
 - More training certificates, more field days.
 - More hands-on experience. More time on active cut blocks Less time in classroom.
 - Women in forestry -practical skills like mapping, GPS -innovative ideas for the future of forestry.
 - Organization.
 - Add some of the history of the history of forestry.
 - Shorter time length -ATV training -Hands on experience in most things.
 - The classroom information compared to the online course was poor explained and the instructor did not offer a positive or knowledgeable learning space.
 - Too much redundancy. The online material did not need to be explained to us again in class. should have been one or the other and the field trips and guest speakers to add to the online material. And, I think some of it would not really be applicable in a real world situation, if felt like bureaucrats put together the material and not actual forest workers
 - More organized, and more experience of work.
 - Have candidate interviews before accepting them into the course. More organized. Tie the online stuff with class work better.
 - Maybe shorten the amount of time it takes to do it to work. Also, the online stuff didn't tell us that we had completed it and we were told we had also it would be nice if we would have gotten a book or something that we could refer to you later on.
- Participant's rate their knowledge of forest industry job or occupations after completing the program
 - 9.09% (1 participant) stated they had no understanding of forest industry occupations.
 - 27.27% (3 participants) stated they can name 3-4 forest industry occupations.
 - 54.55% (6 participants) stated they have been investigating forest industry careers.
 - 9.09% (1 participant) stated they have already worked in the industry so are familiar with the occupations found in forestry.
- Participant's transition work status at program completion

| ANSWER CHOICES | RESPONSES | |
|---|-----------|---|
| Yes, in the forestry industry | 36.36% | 4 |
| Yes, in the forest industry and with the employer that referred me to the program | 0.00% | 0 |
| Yes, but not in the forest industry | 27.27% | 3 |
| No I do not have work yet - (skip to answer question 18 and 19) | 36.36% | 4 |
| Total Respondents: 11 | | |

- If working in forest, what is your new job title/description
 - Forestry Worker thinning and brushing, slash and burn, some layout of cut blocks
 - Infield surveyor, collecting data, plotting blocks, checking saplings
 - I am helping with Fire Smart BC here in Terrace and will be assessing homes and help doing mailouts.
 - Sawmill worker- clean up, snow shoveling
 - A fifth participant was reported working by CMTN but did not identify the occupation

- Participant’s salary for new employment situation and if the salary was going to be higher

| ANSWER CHOICES | RESPONSES | |
|--|-----------|-----------|
| Yes | 40.00% | 4 |
| No | 40.00% | 4 |
| I am not sure yet what my wage will be | 20.00% | 2 |
| I had no previous paid work experience | 0.00% | 0 |
| TOTAL | | 10 |

- Participants who do not have work yet, but plan to look for work in forestry: individual responses
 - I would love to be a forest tech and to a lesser degree an equipment operator
 - Yes, maybe park attendant, tree planter
 - Would love to run a feller-buncher

Post Program Completion Participant Feedback (Source: Post Program Completion Survey)

A Post Pilot Participant survey was administered to gather information on employment outcomes at the 3-6 months and to gather the participant’s view of how their training impacted their ability to gain employment. The survey link and instructions were emailed to each pilot program administrator so they could distribute to their students. Several attempts were made by PSI’s administrators to encourage completion of the survey. Despite that effort, only one response was received. Below is a summary of the response from the one participant who completed the Post Program Completion survey:

- The CMTN female Indigenous participant found work one month after completing the program with a local forest company.
- She is a “Compass Man/Field Assistant” who is assisting in site planning, site layout, stream traversing, waste, and residue assessment.
- She stated she was successful at finding work because: “I took an interest in the company as soon as they did their presentation. They like that I want to learn, and I ask lots of questions. Being a young aboriginal woman has also made me more successful.”
- She stated that she believed her job prospects were improved because she took the program. It got her in the door with a great company.

d. Recommendations Based on the Analysis of the Participant Feedback

By the fall of 2021, the formative evaluation and continuous improvement approach resulted in 35 recommendations and in beneficial revisions to both the program model and materials. Pilot two, three, and four learned from the previous pilot delivery and adjusted their own program delivery to better meet the needs of participants. Actions to address gaps or concerns were formulated by the Steering Committee with responses undertaken by the appropriate Project participant.

The following table details the 35 recommendations, response or actions taken.

Interim Report One (January 31, 2020)

| Recommendation | Response/Action Taken | Status |
|--|---|-----------|
| 1. Review the Training Provider Standards post- pilot to ensure the standards for the instructor are reflective of the qualifications that are required to successfully deliver the program. | Reviewed by BCFSC and Steering Committee. It was agreed that they were suitable. | Completed |
| 2. Instructor orientation session should be conducted 3-4 weeks prior to direct delivery of the program. | Process is covered in the Session Worksheet when onboarding Training Providers. Additional Instructor Orientation materials have also been created in an on-line platform. | Completed |
| 3. Establish a recommended lead time to ensure all preparations for the pilot can be in place to adequately allow for instructor training and preparation; engagement of employer/industry, securing field sites; and recruiting and interviewing potential candidates. | Recommended administrator timeline has been added to the Program Outline. A Session Worksheet will be completed by the Training Provider with input from BCFSC to ensure that training provider arrangements are appropriate. | Completed |
| 4. Provide a chance mid program for the participants to meet with the program administrator and/or BCFSC instructor to go over how they are feeling about the learning materials and approach. The session could be a round table with set questions to generate discussion about content, field experience and learning activities. | This is a best practice and isn't required in the program outline. It will be discussed with the Training Provider during the Session Worksheet review. | Completed |
| 5. Consider updating the schedule to start with forest industry job information and a field trip, so they get a sense of how the certification fits within the day-to-day operations of the forest sector. | The revised program has a much higher emphasis on field trips throughout the program. | Completed |
| 6. Once the pilot is complete, BCFSC should review the curriculum to identify where there may be repetition and consider reducing the occurrence or adding contextual information. | Review undertaken by BCFSC to identify and update sections that were repetitive. Instructor Guide, Lesson Plans and | Completed |

| | | |
|---|--|-----------|
| | Learning Resources have been revised. | |
| 7. PSIs work proactively with employers in the region to develop possible employment opportunities or at minimum opportunities for training participants to have information interviews well ahead of the start of the program. | This has been added to the Program Outline. A Session Worksheet review will be completed by the Training Provider with input from BCFSC to ensure that employer engagement is appropriate. | Completed |
| 8. Include job coaching and connection with local WorkBC office would be beneficial to help participants conduct work search activities. | This has been added to the Program Outline and Instructor Guide. | Completed |
| 9. Determine an optimal time for instructor preparation prior to delivery and discuss impact on funding if the instructor needs to be secured to allow for optimal preparation time. | This has been added to the Program Outline. | Completed |
| 10. Due to the full program content, discuss and explore ways to support instructors during preparation and delivery time. | Added to Program Outline and Instructor Guide. Developed online training resources. Will be discussed as part of Session Worksheet review. | Completed |
| 11. Consider creating a participant manual that contains similar but streamlined information to the instructor manual to provide learning aids that can be used by the instructor and as a takeaway for participants. | A participant manual was developed. | Completed |
| 12. Upon conclusion of the pilot, gather instructors together to discuss the development of learning aids to support instruction. | Curriculum Development contractor contacted instructors and discussed learning aids and adjusted where appropriate. | Completed |

Interim Report Two (April 1, 2020)

| Recommendation | Response/Action Taken | Status |
|---|---|-----------|
| 13. Consider developing a 'getting ready guide' that details program administrators' roles and responsibilities in relation to the Training Standards. | A PSI took lead in this and offered suggestions to the Curriculum Development contractor to include in updated program materials. | Completed |
| 14. Program administrator should attend future instructor orientation sessions. | Pilot PSI program administrators attended instructor orientation sessions. Future Session Worksheet review will also address. | Completed |
| 15. Discuss and develop strategies for outreach to current entry level employees as potential candidates may be more likely to be engaged in learning as they already have experience demonstrated interest in this sector. | Training Providers can work with their regional employers and groups that represent underrepresented participants. | Completed |

| | | |
|---|--|-----------|
| | BCFSC can support Industry Associations upon request. | |
| 16. Discuss the optimal time for this program to run that considers variations by region to develop a guideline to assist in program planning at the college level. | Steering Committee members discussed the best time of year to offer the program and that it varies by region. This is addressed as a topic for consideration in the Program Outline and Session Worksheet. | Completed |
| 17. Explore strengthening employer's participation in creating awareness of work opportunities during the program delivery through activities such as job fairs, informational employer interviews, guest speaking and mentoring. This is especially needed if there are students are new to the sector and/or participants with weak employment history. | This will be discussed during the Session Worksheet review. | Completed |

Interim Report Three (May 15, 2021)

| Recommendation | Response/Action Taken | Status |
|---|---|---------------|
| 18. Create a task checklist for use by program administration for program start up. This could include COVID-19 safety protocols (if needed), instructor pre-course training, instructor quality assurance methods and suggested employer involvement considerations. | The planning timeframe and tasks were developed and are included in the program outline. | Completed |
| 19. The Steering Committee should reflect on the instructor qualifications to determine if there should be additional guidelines included. There have been several comments over the evaluation periods that instructor readiness and qualifications are especially important to ensure the program is delivered as intended. | This was discussed by the steering committee with confirmation and has been finalized in the Program Outline. This is also included in the Session Worksheet. | Completed |
| 20. Increase the preparation time for instructors to connect with employers, set up potential field sites and to prepare learning materials in advance of the program start. | Added to the Program Outline and Instructor Guide. | Approved |
| 21. BCFSC recommended that consideration be given to increased instructor training and quality assurance for future program delivery. | Added to the Program Outline and Instructor Guide. Developed online training for Instructors. | Approved |
| 22. An updated PPE and related field gear list should be made along with an updated budget that should be considered. | The PPE list is one of the handouts and has been updated. There is flexibility for PSI's and their Instructors to determine what meets regulation and suits their regional needs so the budget will be site specific. | Completed |

| Recommendation | Response/Action Taken | Status |
|--|--|-----------------------------------|
| 23. A discussion regarding the use and application of the pre-assessment tools should occur. Several program administrators stated the assessment may assess knowledge that is not a pre-requisite for entering the program. An exit assessment could be used to identify gaps that need to be addressed prior to continuing training. | There has been discussion regarding the pre-assessment tools. There was a variety of experiences with the tools and BCFSC would like to continue with the use of the tools and would like to discuss with Training providers during the Session Worksheet review. | Completed |
| 24. The pre-assessment tools should be reviewed to ensure they reflect the content in the program. | There are differing opinions on whether changes are required. More input should be gathered before making any changes. BCFSC recommends that more feedback be obtained, and this be considered by the steering committee in the future | Follow up after future deliveries |
| 25. Pre-requisites such as work experience, grade level achievement and recommendation by employers could be considered as pre-screening. | There has been discussion and each PSI will consider their pre-requisites prior to advertising the program. This will be discussed during the Session Worksheet review. | Completed |
| 26. The need for quality assurance from a safety point of view could be discussed as a feature of ongoing programming. | PSI quality assurance needs to be in place to ensure a safe learning environment. This will be discussed during the Session Worksheet review. | Completed |
| 27. A review of the completion criteria should be undertaken to ensure consistency across all PSIs. | The completion criteria were stated in the Program Outline | Completed |
| 28. BCFSC recommends that there be some employer champions that are actively involved in all aspects of the program with a strong intent to hire, like Western Forest Products involvement with VIU's Fundamentals of Forest Harvesting Practices Certificate program, or to Homalco First Nation involvement with North Island College's Coastal Forest Worker certificate program. | <p>The notion of employer engagement will be an ongoing discussion when new training providers are on-boarded. This will be discussed during the application process and during the completion of the Session Worksheet.</p> <p>BCFSC has proactively continued to work with various Industry Association groups to ensure they are aware of the availability of the program materials. As an example, Industry Association groups including the Truck Loggers Association (TLA), Interior</p> | Completed |

| Recommendation | Response/Action Taken | Status |
|----------------|--|--------|
| | Logging Association (ILA) and the Coast Harvesting Advisory Group (CHAG) are supportive of the program development to date and are reviewing options for partnerships in the future. ILA and TLA represent contractor forestry employers across BC. CHAG includes representatives from licensees, timberland owners, contractors, and the United Steelworkers. | |

Interim Report Four (September 30, 2021)

| Recommendation | Response/Action Taken | Status |
|--|---|-----------|
| <p>29. Instructors/Trainers require support, and the need will vary depending on PSI requirements and trainer experience. Consideration should be given to:</p> <ol style="list-style-type: none"> 1. PSI onboarding (PSI policies, tech support, program requirements) 2. Principles of adult learning 3. Lesson planning 4. Classroom/behaviour management 5. Preparation time to arrange for equipment, PPE and site visits. 6. Preparation time to review program materials. 7. Trainer development and quality assurance | <p>An instructor program overview and online course has been developed.</p> <p>Instructor requirements will also be discussed during the application and on-boarding process.</p> | Completed |
| <p>30. BCFSC has observed that some program information that committee members have received has not been shared effectively with the various program staff (internal PSI) responsible for program delivery. This is possibly a factor of the COVID-19 delay, or a result of PSI members shifting as the program transitioned from conceptual to operational. It is recommended that a strong PSI Administrator onboarding process be established.</p> | <p>The Program Outline has been enhanced and the new Session Worksheet and process will support the training provider in sharing information with their employees and instructor.</p> | Completed |
| <p>31. Engage employers in the selection process to support appropriate selection of candidates who are interested in and suitable to take the training.</p> | <p>Included in Program Outline and will be discussed in the Session Worksheet review.</p> | Completed |
| <p>32. Engagement with employers prior to, during and post-delivery is optimal through regular communication/and or via an advisory group.</p> | <p>Added to Program Outline and will be discussed in the Session Worksheet review.</p> | Completed |
| <p>33. Program administrator should work with industry to identify and secure experiential learning experiences that are timed and related to in-class content delivery</p> | <p>Added to Program Outline and Instructor Guide.</p> | Completed |

| Recommendation | Response/Action Taken | Status |
|--|---|------------------|
| <p>well before program delivery begins. These experiences should be incorporated into the PSI specific course outline.</p> | | |
| <p>34. Shorten the length of the program to focus on areas that are essential for forest worker entry level employment. Then if requested by employers the PSI can add on learning units that focus on training gaps that have been identified through consultation with employers and assessment of local labour pool's skills, abilities, and knowledge.</p> | <p>12 weeks shortened to 6 (optional 7 weeks), focusing on more field activities. The new program has the flexibility for training providers to add on additional learning.</p> | <p>Completed</p> |
| <p>35. The CMTN instructor noted that in their region the ATV safety certificate training as well as a GPS course and a geocaching event could be added to the program as it will make the students more employable.</p> | <p>The program design is flexible and allows for regional variations to be incorporated, or added in.</p> | <p>Completed</p> |

e. Governance Group Involvement and Nature of Input.

Members of the governance committee represented forest sector employers, forest sector industry associations, and Post Secondary Institutions. The committee met 23 times over the duration of the Project, reviewed and approved all milestone deliverables. Several members participated in the Sustainability Plan development sub-committee. The active participation and engagement of advisory group members helped this project achieve its intended outcomes. Meeting notes were published and recorded in each of the four interim reports.

The committee fulfilled its mandate by:

- ensuring validity of the development, implementation, and evaluation of pilot programming.
- considering and being consistent with the recommendations identified in the Forest Sector Workforce Initiative Roadmap, the BC Forest Safety Council: Forestry Pilot Report and the Sector LMP C17LMP014 project approved Evaluation Framework deliverable when providing input and feedback.
- providing input into deliverables as required, especially the draft curriculum materials and draft final report.
- approving project deliverables.

Steering Committee members included:

| | |
|---|----------------------------------|
| BC Forest Safety Council | Allison Thompson, Richard King |
| Employer/Industry Representative - Interfor | Jim Magowan |
| Project Consultant | Jessi Zielke |
| Selkirk College | Tiffany Snauwaert, Helen Worth |
| Vancouver Island University | Paul Mottershead, Lauren Wapple |
| Coast Mountain College | Laurie-Lynn Kallio, Lorrie Gowen |
| College of New Caledonia | Troy Morin, Erin Siemens |
| Employer/Industry Representative LTN Contracting, Prince George | Mike Bayley |
| Employer/Industry Representative - Stamer Logging, Barriere | Ward Stamer |
| Ministry of Advanced Education and Skills Training | Matthew Boddy (observer) |
| North Island College | Coleen MacLean, Cheryl O'Connell |
| Okanagan College | Mary Kline |

Part Three: Project Evaluation Summary

a. Project Outcomes (Metrics)

After concluding the formative and summative pilot evaluation activities of the Project, the evaluator can report that the project satisfactorily met the immediate and short-term project outcomes established at the start of the contract term as identified in the Forest Workers Essential (FWE) Logic Model.

The following are the confirmed Project achievements:

1. FWE Training Program Materials were reviewed, revised, and final versions were approved by the project Steering Committee (December 2021).
2. Six PSIs completed FWE Training pilots and/or tested and reviewed the delivery approach and identified improvements and revisions that could be made prior to commencing regular delivery.
3. PSIs committed to their ongoing involvement in the model for FWE Training.

4. Access to training for Indigenous and other traditionally under-represented individuals was facilitated as a direct result of delivery of the pilot program materials at the local level at six PSIs across B.C.
5. Participants stated they are aware of pathways to become qualified in other forest industry occupations.
6. 5 Pilot participants are employed in entry-level forestry jobs 6 months after completion of the Entry Level Forest Worker Training.
7. Employers stated they have confidence that the program will result in individuals who are employable in the industry.
8. Employers and participants stated they view the FWE training as a first step towards helping individuals progress along defined forest sector career pathways.
9. Regional support for the FWE Training pilot and employment opportunities was established in collaboration between the BCFSC, the local PSI, and local employers during the pilot planning and delivery.
10. A sustainability plan for ongoing regular delivery and use of the Program Materials post project was developed.

b. Evaluation Process

The evaluator used the methodology, approach and tools detailed in the approved 2019 (revised 2020) FWE Evaluation/Strategy Framework and Tools Report to conduct formative and summative evaluation to confirm Project progress and to document the accomplishments of the contractor (BCFSC) against contract deliverables. Input and feedback were received from pilot participants between July 2019 and October 2021 and included data gathered from BCFSC staff, PSI staff, pilot participants, and employers engaged with pilot site program delivery.

Evaluation results were reported in each of the Four Interim Reports where the evaluator reported on Project successes, challenges, and made recommendations based on feedback from pilot participants. This information was used by the project team and Steering Committee to apply a continuous improvement approach to the usage of Program Materials during program delivery and as a guide for ongoing content revisions. The Steering Committee used the feedback gathered through the quantitative and qualitative data to help formulate a sustainability strategy and plan for on-going regular delivery of the FWE program.

The following evaluation activities took place:

- a. Monitoring the progress of the development of curriculum and learning materials.
- b. Monitoring the progress of the Entry Level Forest Worker Training pilot at six PSI sites.
- c. Monitoring the progress of participants in the Entry Level Forest Worker Training pilots.
- d. Monitoring the feedback on the curriculum content and learning material delivery.
- e. Monitoring the activities of the Steering Committee who support the work of the project.
- f. Conducting pre-pilot auditing, pilot auditing and post auditing to evaluate against the intended outcomes to identify successes, challenges and make recommendations.
- g. Aggregating and analyzing data to assist the Steering Committee in the development of a draft sustainability plan to support ongoing regular delivery of the Entry Level Forest Worker Training program.

The following is a summary of the evaluation data collection:

1. Quantitative Data

a. PSI Data

- PSI summary of applicant information including baseline employment data collected at the start of each pilot.
- 29 participants were registered at the start of the four pilot sites
- PSI pre-audit checklist collected during pre-audit interview at each pilot site.

- The four pilot sites participated in an interview with the evaluator and met the program standard requirements.
 - PSI completion results collected from each pilot site and aggregated to summarize results in their completion reports.
 - The four pilot sites reported their completion results 15 completing the program.
 - VIU and NIC provided feedback on their programs and use of the materials via interviews.
- b. Pre-learning, pilot completion and post-pilot participant on-line survey with results aggregated across all sites and participants.
- 29 participants completed the pre-learning pilot.
 - 11 participants completed the pilot completion survey
 - One participant completed the post pilot survey
- c. Post pilot employer on-line survey including participation data and level of satisfaction with work readiness of program completers with results aggregated across all sites and participants.
- Six employers completed the on-line post pilot employer engagement survey

2. Qualitative Data

- a. BCFSC
- Monitoring interview(s) with BCFSC staff
 - The evaluator met regularly with the BCFSC lead staff person to discuss the project, ongoing continuous improvement activities and to discuss the progress of the evaluation activities.
 - Monthly progress reports against program deliverables (phone meetings)
 - BCFSC reported progress to the evaluator on a regular basis provided anecdotal information on BCFSC's activities related to pilot implementation at each of the pilot sites.
 - Interim progress reports (written summary of activities to date)
 - BCFSC submitted a summative report of pilot activities that was included in each of the four Interim Reports. This report provided detail on all project components as well as formative information on ongoing outreach industry groups and employers.
 - Curriculum and learning resource feedback and revision summary report
 - BCFSC reported on a regular basis, its progress on the status of the development of the curriculum and learning resources and provided a summary account in its final progress report November 2021.
- b. PSIs
- Pre-audit interview with PSIs (on site)
 - One in person pre-audit interview and three phone call pre-audit interviews were held to identify the adequacy or any shortfalls in the PSIs ability to meet the FWE Program Standards
 - Interview with PSI instructor during pilot (on site during program)
 - Three instructors were involved in pilot delivery with one instructor delivering at both Selkirk College and Coast Mountain College. One instructor (OC) was interviewed in person while the other two were interviewed via the phone.
 - Instructor and participant feedback on learning materials (ongoing throughout the program)
 - While not part of the evaluator's direct responsibility, the instructor and participant feedback were submitted and utilized by the BCFSC curriculum writer.
 - PSI Completion Report) from each PSI pilot site with data aggregated for analysis

- A pilot summary report was submitted by each of the PSIs piloting the Program Materials.
 - Additional feedback on Program materials was gathered via an interview and/or written submission from the two other training providers participating in the pilot activities.
- c. Participant Data
- Focus group discussions on site with pilot participants with data aggregated for analysis
 - Three focus group discussions were held by the evaluator involving a total of 16 program participants:
 1. The OC focus group (OC) was held in person at the Revelstoke campus November 29th, 2019.
 2. The CNC focus group was held November 18, 2020, virtually.
 3. The CMTN focus group was conducted May 7, 2021, via an individual phone call with each participant.
 - The fourth pilot (SC) site did not have a focus group conducted due to the disruption of the program by the COVID-19 pandemic.

Successes and challenges associated with implementation of the evaluation strategy

Implementation of the evaluation strategy was generally successful. The evaluation tools provided an effective means to gather detailed input and feedback from program participants. The most effective tools were the qualitative tools when interactions were person to person. The on-line survey allowed for aggregation and comparison of data but relied on individual initiative to complete the survey. PSIs who incorporated the completion of the on-line survey into its programming resulted in the most successful survey completion rate.

The most successful aspect of the implementation of the strategy was the aggregation and reporting on evaluation results within the Four Interim Reports. This allowed both BCFSC and the PSIs to continually improve their progress against the deliverables which had a direct impact on an actionable sustainability plan and on the readiness and transition of the FWE Program Materials to enable regular ongoing delivery starting early 2022.

While there was adequate feedback gathered from all project participants during pre-pilot, during pilot and program completion milestones, gathering feedback ‘3 month after program completion’ was difficult despite repeated outreach by PSIs to contact program completers. PSIs undertook additional outreach in November 2021, but there was no additional feedback received. PSIs provided anecdotal employment outcomes, but only one program participant completed the post pilot participant survey. There was no reason given by PSIs as to why there was difficulty in getting feedback from program completers.

A similar challenge was faced with collecting post pilot input, with only six employers completing the employer survey. PSIs sent the survey link on several occasions (right after the pilot and over the following few months) with a request to complete the survey. No reason was given, and it would be difficult for the evaluator to speculate why employers did not complete the survey. Despite the lack of post pilot feedback, there was good evidence of industry engagement across all pilots prior to and during the pilots in the form of input on localized program content, attending selection interviews, making field trip sites available and through guest speaking sessions. The PSIs also provided good anecdotal feedback and evidence via field trip schedules and planned on-worksites learning activities that can only be deemed to demonstrate employers were keen to participate. In the case of the two mature programs (VIU and NIC) they have excellent employer and Indigenous Peoples involvement with both groups sponsoring whole cohorts.

There were some challenges to data collection due to COVID-19 restrictions but those were overcome by switching to an electronic or virtual data collection approach.

c. Evaluation Findings: Successes, Challenges and Lessons Learned Three Project Components

1. FWE training curriculum and learning resources were developed

Successes

The FWE Program Materials were tested and revised with final versions approved by the Steering Committee December 2021. The curriculum is ready for regular delivery starting early 2022 at PSIs or through other training partners.

- 15 units of the Entry Level Forest Worker Training curriculum were developed.
- The Forest Worker Essentials Training Program Materials were tested and evaluated.
- Online learning materials updated and ready to use.
- Program Materials were revised based on evaluation feedback and recommendations.
- Revised Program Materials was reviewed by the Steering Committee and approved December 2021.
- Program Materials are ready for regular delivery early 2022.

Timeline: June 2019 to December 2021

Challenges

Scope of revisions was unknown until pilots had occurred and feedback was gathered.

Lessons Learned

It would have been helpful to allow more time for revisions and required approvals.

2. Entry Level Forest Worker training pilot was delivered

Successes

The FWE Program Materials was delivered at four PSI sites between October 2019 and June 2021. Twenty-nine participants started the program with fifteen completing.

- Four sites delivered the Entry Level Forest Worker Training Program using the Program Materials. SC's program was interrupted due to COVID-19 restrictions and later had to be modified. This pause resulted in 4 students unable to return as they had found work elsewhere. Other PSI's participant attrition was due to a variety of reasons, including death in a family, unable to afford to continue, no daycare, mental health challenges, and dissatisfaction with the instruction.
- Evaluation of each pilot was conducted throughout the pilot period in accordance with the evaluation framework.
- Two PSIs who had existing regular programming, tested the curriculum and learning resources and participated by providing feedback to the evaluator through an interview and written report.
- Findings of the evaluation were discussed by the Steering Committee with actions taken based on the recommendations. (See table pages 23-28)
- A preferred delivery model and approach was identified along with strategies to ensure continued delivery post pilot.
- A sustainability plan for ongoing maintenance of the Program Materials and delivery was developed and approved September 30, 2021.

Timeline: September 2019 to October 2021

Challenges

COVID-19 impacted the delivery at three of the PSIs.

- OC started its program during an industry downtime, and this impacted student application and enrollment of suitable candidates as they felt uncertain.
- CNC's student application and enrollment of suitable candidates impacted by both industry downturn and the onset of COVID-19.
- SC was also impacted by industry downturn and COVID-19 restrictions. SC had to pause its delivery mid-program and restart later which resulted in several students unable to attend to complete program.
- CMTN had challenges securing several field sites/trips they had intended to offer, and students were unable to participate in certain group activities. In addition, employer participation as subject matter experts in the CMTN pilot were limited.

Lessons Learned

- PSIs commented on the importance of candidate selection and choosing suitable candidates who are interested in exploring the Forest Sector and work opportunities. Early engagement is important to ensure employers are aware of the program so they can connect with the trainees post program to explore work opportunities with them.
- Programs that were able to engage employers more fully had better outcomes. (Note several programs were impacted by COVID-19 so participant outcomes were not as good as they could have been)
- Securing an instructor is key to the success of the program. Instructors with localized knowledge, connections to industry, who had a broad knowledge of the Forest Sector were more successful with retaining participants and had higher completion rates.
- Administrators need to take an active role in the administration of the program to ensure the pre-delivery industry connection is maintained and that the training is being delivered as expected.

3. Participants entered training, completed the program, and found employment

Through participation in the pilot, both participants and employers benefited as evidenced through the findings of the evaluation process.

Successes

- Access to training for Indigenous and other traditionally under-represented individuals was facilitated as a direct result of outreach. CNC, CMTN, VIU, and NIC all enrolled Indigenous Peoples and women in their programs. Each PSI administrator took an active role in advertising to local Indigenous communities to ensure they were aware of the training opportunity. SC reached out to the BC First Nations Forestry Council, and while they were too late to register students for the pilot, they had preliminary discussion about future partnerships.
- The CNC, CMNT, VIU and NIC programs all had Indigenous Peoples and female students enrolled in their programs.
- Participants engaged in training stated through focus group input and via completion survey that they felt they adequately acquired the introductory knowledge to help them make successful transition to 25 plus forestry occupations.
- Of those who completed the program, the majority were satisfied with their learning

experience.

- Pilot participants who completed the program had a greater access to forestry entry level jobs with 5 gaining employment and others mentioning they would pursue further education in the sector.
- Participants in the already established programs at VIU and NIC have a high transition rate to employment and/or continuation to additional learning. (Reported via interview).
- Employers who were involved in the pilot and VIU and NIC programs stated they are satisfied with the FWE training content and acknowledge they have a greater pool of quality workers ready for entry level employment.
- Those participants who completed the CMTN program (June 2021) experienced a situation where the impact of COVID-19 on worksites was known so hiring new employees appeared to be more comfortable for employers.

Timeline: June 2020 to October 2021

Challenges

Availability of work post program due to the industry downturn and COVID-19 was limited especially for the first three pilots (2019—2020).

Transition to employment for the SC and CNC pilots was impacted by COVID-19. Some employers were either closing operations or not in the position to hire new workers due to reduced business activities.

Lessons Learned

Participants may not have been able to secure jobs in their desired occupations, but they are better equipped to get jobs in the future.

d. Impacts of COVID-19 to the Project and program delivery

The onset of COVID-19 restrictions in March 2020 ultimately had minimal impact on the ability of BCFSC to deliver on the Project. BCFSC modified its face-to-face meetings by implementing virtual options. Consultants interacted virtually with the BCFSC project manager to review progress on contract deliverables.

Program delivery was successfully completed at the four sites although participant experience was impacted by COVID-19 restrictions. Program administrators reported that group activities, field trips and engagement with employers was less than anticipated due to restrictions on personal interactions and on the willingness of employers to engage with participants via field trips.

By the final pilot delivery at CMTN, public health regulations had been issued that supported the college to create a COVID-19 safety plan that facilitated an increased amount of student and employer interaction.

BCFSC was able to leverage project efficiencies with the shift from some face-to-face activities to virtual activities to expand the curriculum revisions undertaken, as well as to update some of the online training to a more user-friendly format.

Part Four: Sustainability Plan

About the development of the Sustainability Plan

A Sustainability Plan development sub-committee was formed in April of 2021 made up of Steering Committee members. The aim of the sub-committee was to determine the steps needed to identify a path forward to support the continuation of the pilot tested FWE Program Materials beyond the conclusion of Project contract period.

Between May and September 2021, the sub-committee met to discuss the Project pilot activities, evaluation outcomes to develop ideas and actions that could maintain the FWE project elements. At the May 27, 2021, Steering Committee meeting, the sub-committee presented the vision for ongoing delivery, successful elements to be maintained, and the strategies and actions to be taken that would ensure the FWE Program Materials would be ready for regular programming in January 2022. The final sustainability approach and accompanying materials produced to date were approved September 30, 2021.

Vision For Ongoing FWE Delivery

The Forest Worker Essentials (FWE) Program Materials will be available for use by training providers to support participants' positive transitions into entry level work in a forest sector career pathway through the following actions:

- BCFSC will be responsible for the administration and maintenance of the FWE Curriculum with administration costs recovered via a "Service Agreement" application fee and Learning Resources Access fee.
- BCFSC will work with contracted training providers to monitor and ensure program delivery meets the FWE Program Standards.
- BCFSC will undertake outreach to ensure industry, Non-Governmental Organizations and training providers are aware of the curriculum's availability for use.
- BCFSC will share information regarding funding sources such as <https://www.workbc.ca/Employment-Services/Community-Workforce-Response-Grant.aspx> and <https://www.workbc.ca/employer-resources/bc-employer-training-grant.aspx>
- A Steering Committee will be established and meet on a yearly basis to gather information on current and/or changing industry standards and employment outcomes of program participants to recommend updates/revisions to the curriculum.

Successful Elements of the Program to be Maintained

The following are the successful elements of the Program that were identified and approved by the Steering Committee to be maintained beyond the end of the Project.

1. FWE Program Materials that included:
 - a. Curriculum: Program Outline/Administrator Guide, Instructor Materials and Lesson Plans, Participant Manual and On-line Courses. The Steering Committee took an active role in the review of feedback from training providers, program instructors, program participants and employers on the program materials and approved revisions to the curriculum and approved the final package. The revised curriculum will be complete December 2021 and ready for use early 2022.
 - b. Learning Management System (LMS): BCFSC, based on input from the Steering Committee, program instructors and program participants, revised content as needed and has made ready

the LMS for use by training providers, delivery partners and program participants starting December 2021.

- c. Program Approach/Delivery: The program that was piloted was a 12-week program. Based on feedback from pilot participants, the sub-committee suggested that the program be modified to a 6-week core program with an optional 7th week with suggested extension to program content based on regional demand and needs of local employers. The approach will use a blend of instructions, experiential learning and supervised on-line learning. It was recommended to keep instructor qualifications and a participant application/selection process. The Program Outline/Administrator Guide, Instructor Guide and Lesson Plans were updated to reflect the change.
2. Employer Engagement: Employers were an integral part of in the development of the program materials and the delivery of the pilots. Each PSI worked with employers in a slightly different way depending on their local situation. Employers assisted with participant selection, provided input into program content, offered in class presentations on various topics of local interest, hosted field site visits and discussed employment options post program completion. For the mature programs (NIC/VIU) the hiring rate of participants post program is high and it is anticipated once the program moved to regular delivery and is better known, there will be better transition to employment that there was for the pilot. It was recommended to maintain industry involvement through a mechanism that works for the local community. Involvement could include advisory group membership, employer input on program content, employer participation in program participant referral, during the selection interview and/or by hosting field site visits.
3. Outreach to Under-represented Groups: The pilot was successful in attracting participants from under-represented groups. It was recommended, and the Steering Committee approved continued outreach by training providers and by BCFSC to reach groups that could offer targeted training to under-represented groups.
4. Steering Committee: The role of the Steering Committee was integral to the success of the Pilot Project. It was recommended and approved that an advisory group be maintained that provided a forum for discussion and input on updates to the program content and delivery. The group would be made of BCFSC, employers, and training providers and meet on regular (annual/semi-annual?) basis.

Strategies and Actions to Support Financial Sustainability for Continuing FWE Program Elements

There was keen interest among those PSIs that participated in the pilot and other steering committee members to establish an approach for maintaining and accessing the FWE Program Materials for future delivery. The sub-committee developed an approach that focuses on a cost recovery model user pay model that will support BCFSC to administer the use of the access to, and the maintenance of the FWE Program materials. Strategies and actions to support the continuing program elements were recommended by the sub-committee and approved by the Steering Committee September 30, 2021. These include:

1. BCFSC to continue in its role as Chair of the FWE advisory group, administering the use of program materials, supporting training delivery as needed, and updating program materials.
Action: BCFSC to identify a lead staff member to provide oversight. (Complete)

2. BCFSC to create an application for Service Agreement Application for the FWE Program Materials. This application would allow BCFSC to ensure suitable delivery partners are identified and offer support through the program delivery.
Action: Create the Service Agreement application (Complete and approved)

3. Costing of an application and LMS user fee that would support BCFSC's ongoing oversight of the continuing program elements. This fee would support program administration and update of FWE Program Materials.
Action: Seek approval for an application fee. (Complete and approved)

4. Establishment of a post pilot FWE Advisory Group.
Action: Identify and select members including PSI, industry training providers, NGO's, Indigenous training providers, and other industry/employer stakeholders.
Action: Develop a terms of reference and meeting schedule. (Draft complete and ready to be discussed and approved by members)

5. Create or distribute legacy FWE communication materials for use by BCFSC and for training providers to adapt and use for the promotion of the program.
Action: BCFSC distribute the legacy communication materials generated through the pilot project to stakeholders and instructors for their use and adaptation.

6. Review the pilot budget and its line items and create a recommended budget so training providers can establish their own delivery budget.
Action: Make a recommended budget ready and available for distribution during the application process. (Complete)

Transition Plan

The following actions and timeline were recommended to move the project from pilot to ongoing regular delivery:

| Action | Responsibility | Completion Date |
|---|-------------------------------|---------------------------|
| BCFSC to identify a lead staff member to provide oversight. | BCFSC | Complete |
| Create the Service Agreement Application | BCFSC/Steering Committee (SC) | In Draft December 2021 |
| Seek approval for an application fee | BCFSC/SC | Complete |
| Make the pilot budget available in a format ready for distribution to trainers who may want to use it as a basis for their own program costing. | BCFSC | Complete |
| Identify potential members including PSI, industry training providers, Indigenous training providers, and industry/employer stakeholders. | BCFSC/Steering Committee | December 2021 |
| Develop a terms of reference and meeting schedule. | BCFSC/Steering Committee | December 2021 |
| BCFSC communicate to various stakeholders that the FWE Program Materials are available for use and application process. | BCFSC | January 2022 |

| | | |
|---|-------|--------------|
| BCFSC distribute the legacy communication materials generated through the pilot project to stakeholders and instructors for their use and adaptation. | BCFSC | January 2022 |
|---|-------|--------------|

Risks and Mitigation Strategies for the Ongoing Sustainability of the Project

The Steering Committee has articulated there is little risk in the approach to on-going delivery that has been established but could include the following:

Risk: BCFSC does not maintain FWE Program Materials

Mitigation: The committee would decide on another holder of the FWE Program Materials

Risk: There is no future FWE programming

Mitigation: BCFSC and Advisory Group Members continue to provide outreach to stakeholders.

Appendix One: FWE Logic Model

Forest Worker Essentials Program Project Logic Model



