

CREDENTIAL ASSESSMENT PROCESS

**For Internationally-Trained Applicants
and Graduates of Non-Accredited Programs**

FOREST PROFESSIONAL REGULATORS OF CANADA



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1. PREAMBLE

The following members of the Forest Professional Regulators of Canada (FPRC) have guided this process:

- Association of British Columbia Forest Professionals
- Association of Registered Professional Foresters of New Brunswick
- Association of Saskatchewan Forestry Professionals
- Association of Alberta Forest Management Professionals
- Ontario Professional Foresters Association
- l'Ordre des ingénieurs forestier du Québec
- Registered Professional Foresters Association of Nova Scotia
- Registered Professional Foresters of Newfoundland and Labrador
- Canadian Institute of Forestry

FOREST PROFESSIONAL REGULATORY BODIES IN CANADA



The support from our non-regulatory forestry partners – the Canadian Forestry Accreditation Board and the Canadian Institute of Forestry – has been central to the success of this project.

This manual was produced by the FPRC's [Central Assessment Authority \(CAA\)](#) – a subgroup of the FPRC responsible for the process, website and assessor training for the Credential Assessment Process (CAP). This manual was approved by the FPRC on September 3, 2020.

2. FOREWORD

The [Forest Professional Regulators of Canada \(FPRC\)](#) sets national academic [certification standards](#) for Canadian professional forestry practice. The FPRC facilitates a [Credential Assessment Process \(CAP\)](#) for all Canadian forestry regulatory bodies.

The purpose of CAP is to assess if prospective applicants wishing to enter the profession meet the required competency standards.

Suitable applicants for the CAP are graduates of Canadian or international post-secondary programs that are not accredited by the [Canadian Forestry Accreditation Board \(CFAB\)](#). CAP assessments are used by regulatory bodies to support competency requirement of applicants for licensure.

This manual explains CAP policies and procedures and provides an overview of the CAP. Online guidance documents provide detail and examples for specific assessment areas for CAP.

The CAP meets the intent of federal and provincial labour mobility agreements and commitments as assessments are transferable between the provinces.

Several provinces have fair [registration](#) practices legislation to ensure that the registration of professional foresters is governed by practices that are transparent, objective, impartial and fair. This applies to all applicants including those internationally trained and those who have graduated from non-accredited programs, who may possess sufficient [education](#), training and experiential learning to competently work as a professional forester. The CAP sought, and will continue to seek, input from the Canadian Forestry Accreditation Board (CFAB) and the Association of University Forestry Schools of Canada (AUFSC).

3. INTRODUCTION

3.1 BECOME A REGISTERED PROFESSIONAL FORESTER IN CANADA

Canada benefits from professional foresters who bring diverse skills and experiences from other educational backgrounds including individuals that are internationally-trained and who have graduated from Canadian **non-accredited** post-secondary programs.

Credentials are assessed by trained national assessors to determine if applicants meet the national certification standards for professional forestry practice. The CAP process is developed by the FPRC and is adopted by all professional forester regulatory bodies in Canada. Applications for registration to any of the provincial regulatory bodies will follow the same credential assessment process. Applicants who wish to apply to the province of Québec, must apply directly to l'Ordre des ingénieurs forestier du Québec (OIFQ).

3.2 REGISTERED PROFESSIONAL FORESTERS

The practice of professional forestry is a regulated profession across most of Canada. This means regulatory bodies have the responsibility, through provincial legislation, to govern registrants to practice ethically, competently and accountably, in the public interest. Titles of forest professionals are protected by law. The title used in English is “Registered Professional Forester (RPF)”. The title in Québec is “ingénieur forestier (ing.f.)”. Only registrants of forester regulatory bodies are authorized to use these protected titles. To practice professional forestry in a regulated jurisdiction, individuals must be authorized to practice by the regulatory body of the province where they wish to work and follow its licensing regulations. Each regulatory body has a website with specific information about professional practice within its jurisdiction

3.3 REQUIREMENTS TO MEET CERTIFICATION STANDARDS

To meet the certification standards, an applicant must:

- 1 **Have, at a minimum equivalent to a Canadian four-year, science-based baccalaureate degree, or its combined academic and practice equivalent;**
- 2 **Meet the demonstrable competencies of the current certification standards;**

Important: the CAP only determines if applicants “Meet the demonstrable competencies of the current certification standards” (i.e. point 2 above).

Each province has a unique registration process. Applicants must contact their chosen regulatory body to obtain the specific requirements.

NOTE:

Undergoing the CAP does not guarantee acceptance of registration with a provincial regulatory body. Also, registration with a regulatory body does not guarantee job placement.

3.4. THE CREDENTIAL ASSESSMENT PROCESS

The Credential Assessment Process uses a common set of competency-based requirements that applicants must demonstrate to be eligible to apply for registration with a provincial regulatory body. These **standards** are termed certification standards. The assessment procedures are designed to provide a consistent method for Canadian provincial regulatory bodies to verify applicant qualifications, knowledge, and skills (competency) and to identify any gaps that need to be addressed prior to applicants being granted professional forester registration. It is, therefore, absolutely critical that the documentation applicants provide to support the assessment be clear, comprehensive and relevant to professional practice. Assessors are trained volunteers who are Canadian registered professional foresters. Their primary means of assessing applicants against the certification standards is through the application packages and supporting documentation. Applicants should ensure their applications are well prepared, concise and contain all the relevant information. This manual and associated guidance documents, together with on-going communications with the provincial regulatory body in the province applicants are seeking registration, are key to developing the application package.

3.5 CERTIFICATION STANDARDS

The **Certification Standards** used in the assessment process are listed below (and further detailed on the FPRC website).

- Standard 1: Foundational Studies**
- Standard 2: Communications, Critical Reasoning and Leadership**
- Standard 3: Professionalism and Ethics**
- Standard 4: Trees and Stands**
- Standard 5: Forested Landscapes**
- Standard 6: Information Acquisition and Analysis**
- Standard 7: Planning and Administration**
- Standard 8a: Forest Management**
- Standard 8b: Natural Resources and Ecosystem Management**
- Standard 8c: Urban Forestry**
- Standard 8d: Forest Operations**
- Standard 8e: Ecological Restoration and Management**

Each standard is described by essential measurement points called **demonstrable competencies**. Meanwhile, related **competency elements** provide context and guidance (see **Appendix 2**, Summary Table: *2017 National Certification Standards – Professional Forestry Practice*). Regulatory bodies assess Standard 1, while the CAP will determine if applicants meet all of the competencies of Standards 2 through 7, and one of Standards 8A through 8E. Applicants must select the area of practice in Standard 8 where they feel most competent. However, **certification** under one of Standards 8A through 8E does not restrict a registered professional forester from practicing in other areas of practice, provided the registrant can demonstrate competence. Each provincial regulatory body has its own requirements for registrants to demonstrate competency. Registrants must meet provincial competency requirements.

4. GUIDING PRINCIPLES

The following principles were fundamental to developing this assessment process. They will continue to guide all who participate in it.

4.1 FAIRNESS

- a. The criteria used to determine competence are objective, reasonable and free of bias.
- b. All applicants, regardless of country of education or training, are assessed to the same standards.
- c. The methods and materials used for assessing demonstrable competencies are both necessary and sufficient for determining whether occupational standards are met.
- d. Assessment processes are efficient and avoid duplication.
- e. What is learned is important; not where or how it is learned. Formal education as well as learning from life and work experience are considered equally.

4.2 TRANSPARENCY

- a. Requirements for applying, methods for assessment, and criteria for determining competency are fully described, easy to understand, and accessible to applicants.
- b. Results of assessment will be stated clearly and include reasons for the decision.
- c. Applicants will be informed of their options if all certification standard competency requirements are not fully met through the assessment process.

4.3 TIMELINESS

- a. The assessment and recognition of demonstrable competency attainment, including communication of assessment decisions, will be carried out as promptly and efficiently as possible recognizing that the assessors are volunteers

4.4 CONSISTENCY

- a. Methods for assessment, including criteria used for recognition of competencies, are consistent for all applicants.
- b. Completed assessments are accepted by all forester regulatory bodies who are members of the FPRC.
- c. Consistent training of assessors across all forester regulatory bodies of the FPRC.

4.5 CONFIDENTIALITY

- a. All information provided by applicants and products supplied by the candidate and their witnesses or produced by the CAP shall only be used for the CAP, registration of the candidate and enforcement of the rules set by the regulatory body. It shall be kept confidential by all parties involved in the CAP, in accordance with privacy legislation.

5. ROLES AND RESPONSIBILITIES

5.1 FORESTER REGULATORY BODIES

Across Canada, forester regulatory bodies are public organizations mandated by provincial governments to protect the public interest in forests. Regulatory bodies fulfill this mandate by establishing, monitoring and enforcing ethical, competent and accountable professional forestry practice. Regulatory bodies set registration requirements for anyone entering the profession; develop and enforce codes of ethics and standards of practice; set requirements for continuing competence; and investigate and address complaints and concerns.

Professional forester regulatory body responsibilities include the following with respect to CAP:

- a. Are the point of contact for applicants;
- b. Provide information and guidance on the process, including internet web page resources and answering specific questions about the assessment process;
- c. Determine whether applicant qualifications meets the requirements of Standard 1;
- d. Provide applicant access to the database;
- e. Receive all documents directly from an approved third party, such as official transcripts, translation services and foreign credential evaluation reports, and uploading the documents into the database;
- f. Inform applicants of any obvious deficiencies in the [application portfolio](#);
- g. Direct applicants on how to submit applicable fees;
- h. Inform the applicant, in writing, that their application is complete and may be submitted;
- i. Ensure a complete digital application portfolio is submitted for the assessment;
- j. Receive final report from the assessors;
- k. Make the final competency decision and send a written report to the applicant;
- l. Discuss assessment outcomes with the applicant.

5.2 ASSESSORS AND ASSESSMENT PANELS

Assessor responsibilities consist of the following:

- a. Complete required assessor training prescribed by the FPRC prior to undertaking assessments;
- b. Read and follow the assessor database users guide and other supplemental information on the assessor's web portal;
- c. Assess applicant portfolios/credentials;
- d. Discuss an applicant's competencies with other assessors and deciding whether the evidence presented is adequate to address each demonstrable competency;
- e. Consult with other experts, if required, to perform a fair assessment;

- f. Clarify applicant competencies when needed. This should occur only in exceptional circumstances and does not permit the panel to request additional materials. Panels cannot reject an application, but prior to completing a report a panel chair may ask regulatory bodies for further clarification if the panel finds there are mis-numbered or missing documents that have been listed in the applicants portfolio;
- g. Keep assessments and applicant portfolios completely confidential except as required under point (d) above and in accordance with privacy legislation. Assessors must not divulge any information about an applicant's portfolio or the outcome of the assessment or share possible demonstrable competency strengths or deficiencies, other than to the applicable regulatory body and CAA, or designate;
- h. Report the assessment findings to the regulatory body;
- i. Provide additional information as requested by regulatory bodies about assessment considerations;
- j. Avoid situations of real or perceived conflict of interest by excusing oneself from an assessment where an assessor knows an applicant personally at a level that could be perceived as potentially biasing the outcome of the assessment.

5.3 APPLICANTS

Applicant responsibilities consist of the following:

- a. Study and follow this manual and directions provided by the regulatory body and through the applicant's portal, to compile and submit a clear, complete, and concise application portfolio;
- b. Identify appropriate witnesses to competency in the professional standards and provide them with necessary instruction.
- c. Work with provincial regulatory body to ensure that witnesses provide appropriate proof of competencies in the certification standards.
- d. Arrange for official transcripts and any other third-party reports (e.g. course outlines) to be sent directly from issuing institutions to the regulatory body;
- e. Arrange for a third-party comprehensive credential evaluation of international educational credentials, if required by the regulatory body;
- f. Arrange for translations of course outlines and other documents in either English or French, as required by the regulatory body;
- g. Provide additional information and supporting documentation as requested;
- h. Pay all applicable fees; and
- i. Participate in the applicant interview if requested by the regulatory body.

5.4 WITNESSES OF COMPETENCIES

Witness responsibilities consist of the following:

Witnesses are required to verify aspects of an application portfolio. For demonstrable competencies and competency elements that are not validated by an education course but, instead, by work experience, applicants should have a witness attest to their abilities. Witnesses may also verify components of applicant portfolios when education courses have been taken but the documentation is not available (for reasons deemed acceptable by the regulatory body).

Witnesses must:

- a. Be professionally competent in the demonstrable competencies and competency elements for which they are verifying;
- b. Have in-depth knowledge of the area(s) of an applicant's competence to which they are attesting;
- c. Verify each competency element only when they are able to confirm that an applicant meets that specific knowledge or skill level of Bloom's taxonomy (see [Appendix 3](#));
- d. Provide a witness testimonial to explain how they have verified an applicant's ability to meet the specific competency and elements.

See [Appendix 5: FPRC Credential Assessment Process – Witness Information](#) for details.

Assessors will consider witness feedback in conjunction with educational and experiential qualifications when conducting their assessments.

5.5 ADAPTIVE MANAGEMENT & MONITORING

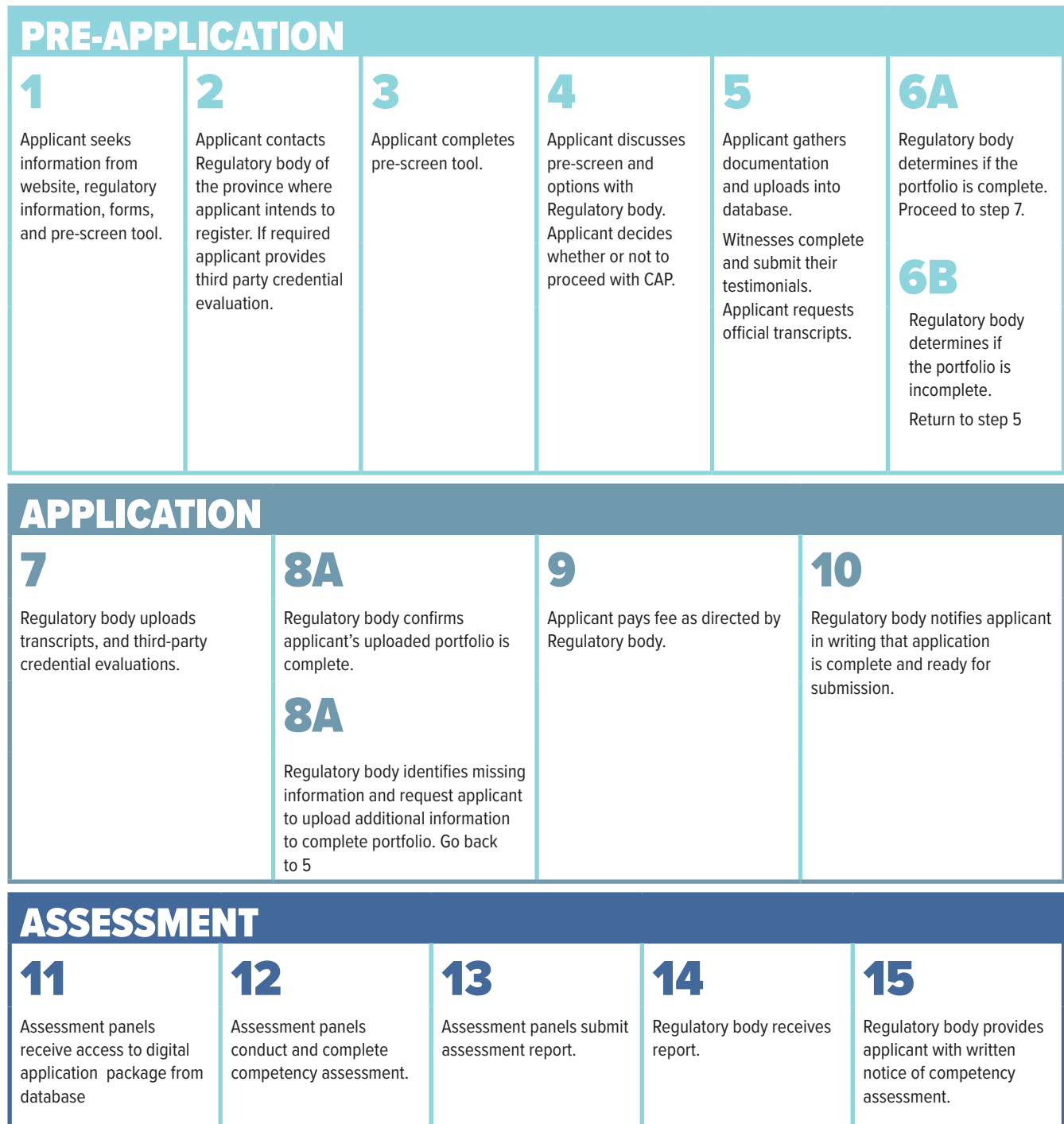
The CAA oversees a periodic review (5 years +/-) of this assessment methodology to increase transparency, fairness and consistency, and incorporate developments in training and education. All those involved in the assessment process will be included in continuous improvement activities.

6. THE APPLICATION PROCESS

6.1. THE CAP FLOW CHART

Steps to the CAP are summarized below in Figure 1 – The CAP Flow Chart

FIGURE 1 – THE CAP FLOW CHART



6.2 PREPARING THE APPLICATION:

6.2.1 PRE-APPLICATION:

Note: The numbering of the steps herein follows those shown in Figure 1 – The CAP Flow Chart.

1

APPLICANT SEEKS INFORMATION.

- ▶ The applicant reviews the information from the FPRC and provincial regulatory body web sites in order to understand whether professional forestry is potentially a good fit with the applicant's education and experiential background.

2

APPLICANT CONTACTS REGULATORY BODY OF PROVINCE WHERE APPLICANT INTENDS TO BECOME A REGISTRANT.

- ▶ The regulatory body and the applicant will:
 - Briefly discuss applicant qualifications, competencies, work experience and the assessment process.
 - Ensure the applicant understands the enrollment and/or registration process that may occur after with the assessment.
 - Assess whether the Credential Assessment Process is appropriate given the applicant's qualifications, experience, and career goals.
 - If an applicant does not have at least a four-year, science-based baccalaureate degree or equivalent, the regulatory body might advise that the Credential Assessment Process is likely not ideal for them and discuss alternatives.
 - The applicant will be directed to visit the [FPRC web site for information](#), forms, procedures and the [pre-screening tool](#). This website includes a brief introductory video, contact information for the provincial regulatory bodies and all of the forms required to complete the application process.
 - Applicants will be advised to request official academic transcripts from post-secondary institution(s). All documents must be in the language of the regulatory body and must be sent directly to the regulatory body by the issuing institution or credential evaluation service.

3

APPLICANT COMPLETES PRE-SCREEN TOOL

- ▶ The pre-screen tool is an online platform that lists the required certification standards and competency elements. The pre-screen tool will help potential applicants identify their competencies and key evidence of these competencies. After completing the pre-screening, the applicant will save the pre-screening report for discussion with the regulatory body.

4

APPLICANT DISCUSSES PRE-SCREEN RESULTS WITH REGULATORY BODY.

- ▶ After conducting the pre-screening and discussing it with the regulatory body, an applicant should broadly understand the potential for credential recognition and eventual registration as a professional forester. Should the regulatory body find an applicant's education and experience in alignment with the standards, the applicant will be directed to the online procedures, guidelines and application materials. Alternatively, the regulatory body may inform an applicant they do not have the equivalent academic and work experience to proceed with the Credential Assessment Process at this time and suggest more suitable options.
- ▶ The regulatory body will provide details about format, timelines, fees, and specific provincial requirements.
- ▶ The decision to proceed or not proceed with the application is made by the applicant.

5

APPLICANT GATHERS DOCUMENTATION AND UPLOADS PORTFOLIO INTO DATA BASE. APPLICANT REQUESTS OFFICIAL TRANSCRIPTS.

- ▶ Prior to one of the quarterly **deadline dates**, the applicant must upload their application portfolio into the database and have the portfolio approved for assessment. The regulatory body will advise the applicant of the submission deadline. The applicant must also pay the non-refundable assessment fee as directed by the regulatory body.
- ▶ Applicants are advised to retain a digital copy of their portfolio documents for their own records.
- ▶ Ensure the following items are included in the application portfolio:
 - a. Provided by the applicant:
 - i Completed application checklist
 - ii **Curriculum Vitae (CV)**
 - iii Course outlines
 - iv Supporting documents
 - v Fees (as directed by regulatory body)
 - b. Requested by the applicant and sent directly to the regulatory body:
 - i Transcripts from educational institution(s)
 - ii Formal credential evaluation completed by an independent and recognized third party (if required)
- ▶ Assessors come from across Canada and forestry **jargon** varies by jurisdiction. The use of **acronyms** should be avoided whenever possible. If an applicant must use acronyms, they must provide the full written term at the first use followed with the acronym in brackets. A list of acronyms and meanings must be provided as reference.

► **The database**

- a. Instructions for the access and use of the database will be provided by the regulatory body to the applicant.
- b. The entire application must be submitted in digital format. The database lists all the items required in an application.
- c. Applicants will upload evidence to support their competencies into the database. Required qualifications, knowledge, skills, and abilities (competencies) may be demonstrated from several sources, such as academic program content, documented work experience and additional continuing education and workshops. All learning methods will be considered equally, provided that they adequately document the applicant's competency.
- d. Evidence and a [learning narrative](#) should be entered into the database to clarify exactly how the evidence being cited demonstrates an applicant's competency. Explanations and the evidence referenced must address applicant competency to the level described by the action verb in the demonstrable competency. To do so successfully, applicants will need to refer to Bloom's taxonomy (see [Appendix 3: Bloom's Taxonomy For Learning Outcomes \(Adapted\)](#)). If applicants have work experience in a field related to forestry, it is important to document the relevance of the work as it relates to professional forestry.
- e. When referencing multiple course outlines or supporting documents for a competency element, applicants must list them in order of significance to that specific competency element. The strongest evidence of their competency should be listed first.

► **Supporting documents**

- a. Applicants can view examples of items that make good evidence on the FPRC applicant web portal. Evidence is unique to each applicant, so additional items may be provided if appropriate.
- b. Supporting documents may include, but are not limited to, the following:
 - i Presentation or workshop agendas; including a detailed list of the topics covered, proof indicating that the applicant attended the course.
 - ii A written learning narrative that thoroughly but succinctly describes what was learned and/or can apply to a particular competency element. In order to save time and space the use of point form is preferred (see example learning narrative on the applicant's web portal). Learning narratives are limited to 2000 characters per narrative.
 - iii Portfolio of professional work products such as: forest development plans, community wildfire protection plans, pest management plans, stewardship plans, land use plans, forest management plans, requests for proposals, final project reports, or others, proposals (bid proposals or requests for proposals that you prepared), training materials that you developed or delivered, professional development plans.
 - iv Where applicants participated as part of a team, a description of their specific roles in projects, or creation of documents must be provided.
 - v Professional development reviews from their employers/supervisors, outlines of self-study and challenge exams.

- c. Applicants must assemble the supporting documents that are referenced in the applicant portal into the correct format to ensure easy reference by the assessors. These documents must be in digital format according to the file naming protocol on the applicant web portal.
 - d. Gathering evidence material will require significant time and effort. Applicants are advised to give themselves enough time to do this part well. Evidence must be adequate and specific enough to demonstrate their competency, but not excessive. One article of evidence may be used to demonstrate more than one competency.
- **Witness Feedback** (See [Appendix 5: FPRC Credential Assessment Process –Witness Information](#) for details):
- a. Competency witnesses are required to validate certain parts of an applicant’s portfolio. These witnesses must have in-depth knowledge of the applicant’s experience and/or skills, to be able to validate one or more competency elements confirming that they meet that specific knowledge or skill level.
 - b. A competency witness can attest to the applicant’s ability to perform those elements and demonstrable competencies not validated by a course or course outline but instead by work or volunteer experience.
 - c. In rare circumstances, some applicants may not be able to arrange for transcripts or documents describing their academic history because of their circumstances upon immigration (e.g., refugees) or because of the social and political climate in the country where studies were completed. When documentation for education is not available alternative information can be provided. Applicants should discuss options with the regulatory body.
 - d. A witness can not be a spouse or immediate family member of a candidate unless approved by the regulatory body. Ideal witnesses are Canadian registered professional foresters/ ingénieurs forestiers or the equivalent forest professionals in other countries. Witnesses may come from other professions as well. However, a witness must be professionally competent in the competency for which they are attesting and able to verify an applicant’s competence. For example, a professional geologist is not the ideal witness to sign-off on a competency related to creating a forest management plan, although the geologist may have abilities in preparing certain parts of the plan.
 - e. Witnesses are a vital part of the portfolio and applicants are encouraged to have multiple competency witnesses to cover the range of competencies. There is no limit to the number of witnesses applicants can have for the whole application, provided that they meet the eligibility requirements described above. Applicants may provide up to three witnesses for a single competency element. Please note that witness verification for specific elements and demonstrable competencies does not guarantee assessment of full competency in these practice areas.
 - f. Witnesses can review the applicant’s database submission and supporting documents if applicable, and confirm the competency element(s) that they can validate, by entering the required information into the witness section of the database. Applicants must ensure enough time is provided to the competency witnesses for them to provide detailed information.
 - g. The regulatory body will inform the applicant if any of their witnesses fail to provide the required information into the witness portal.

- ▶ **Official transcripts and (if appropriate) and third-party credential evaluations.**
 - a. Applicants should request official academic transcripts as early in the process as possible, especially if they are seeking documents from post-secondary institutions outside of Canada.
 - b. Internationally trained individuals must obtain and submit a comprehensive educational credential assessment (ECA) that evaluates post-secondary degrees from other countries. There are different types of ECAs; a basic ECA is only required for immigration purposes. A comprehensive course-by-course assessment is required for a credential assessment and entry into a regulated profession. Upon completion of an ECA, an assessment report will be provided, which in turn will be included in a CAP application as recognition of international academic credentials. The report provided must show that the foreign credential is valid and equal to a completed Canadian post-secondary credential.
 - c. The regulatory body will inform an applicant when the documents have been received and will digitize and upload the documents to the applicant’s portal.

- ▶ **Program and course outlines**
 - a. When contacting post-secondary institutions to obtain transcripts, applicants are advised to obtain detailed course outlines for all applicable courses. Examples of acceptable and unacceptable course outlines that are available on the applicant’s web portal.
 - b. All document translations will be uploaded into the database by the applicant.

- ▶ **Curriculum vitae (CV)**
 - a. CV’s should detail up-to-date relevant experience regardless of where it was obtained and include: education, work experience, membership in professional organizations, volunteer activities, community involvement, continuing education, professional projects and leadership.
 - b. Enough information must be included in the CV that the assessors can fully understand the applicant’s role and responsibility for the experiences they described.
 - c. CV’s must be line numbered and cross-referenced to the competency entries in the database. In cross referencing with the CV, applicants should use specific line numbers, not “lines 21-43”. When referencing lines in the CV, experience should be listed in order of relevance with those that contribute most to the competency element listed first.

6

A REGULATORY BODY DETERMINES APPLICANT’S PORTFOLIO IS COMPLETE.

- ▶ The regulatory body will review the documents for completeness of the content and format.

B REGULATORY BODY DETERMINES APPLICATION IS INCOMPLETE. GO BACK TO STEP 5.

- ▶ If the regulatory body finds the portfolio is incomplete, applicants are advised to correct any deficiencies to complete the portfolio.

6.2.2 APPLICATION:

7

REGULATORY BODY UPLOADS TRANSCRIPTS AND THRID-PARTY CREDENTIAL EVALUATIONS

- ▶ The following records will be forwarded directly to the regulatory body from the service provider. Records received in any other format will not be accepted.
 - a. Transcripts from post-secondary institutions;
 - b. Comprehensive, post-secondary, course-by-course assessments that evaluate educational credentials.
- ▶ The regulatory body will upload these documents into the database on behalf of the applicant.

8

A REGULATORY BODY CONFIRMS APPLICANT'S UPLOADED PORTFOLIO IS COMPLETE.

- ▶ The regulatory body will review the application portfolio for completeness after it has been uploaded in the applicant's portal.

B REGULATORY BODY IDENTIFIES MISSING INFORMATION AND REQUESTS APPLICANT TO COMPLETE PORTFOLIO. GO BACK TO STEP 5.

- ▶ The regulatory body will identify obvious deficiencies and notify the applicant if the application portfolio is not complete or any information is deemed inadequate. It is the applicant's responsibility to supply the missing materials. The portfolio will not be assessed until all the missing information has been provided.

9

PAYMENT OF FEES

- ▶ The applicant will be advised by the regulatory body the submission of application fees to FPRC.

10

REGULATORY BODY NOTIFIES APPLICANT OF COMPLETE APPLICATION FOR SUBMISSION.

- ▶ Once the regulatory body is satisfied that the application portfolio is complete, the regulatory body will notify the applicant in writing of the decision to proceed with assessment. At this point the Credential Assessment Process is ready to begin at the next scheduled assessment date.

7. ASSESSMENT PROCESS

Note: The numbering of the steps herein follows those shown in Figure 1 – The CAP Flow Chart.

11 PANELS RECEIVE ACCESS TO ASSESSMENT PACKAGE FROM DATABASE.

- ▶ Completed applications will be assigned to the [assessment panels](#). The assessment panels receive access to the application package in the database.
- ▶ Assessment panels are comprised of forest professionals. Assessors are selected based on their expertise in a specific field or by their breadth and depth of knowledge in general forestry matters.

12 PANELS CONDUCT AND COMPLETE COMPETENCY ASSESSMENT.

- ▶ Assessors will review all documentation and evaluate the applicant's qualifications, knowledge, skills and abilities as they relate to the demonstrable competencies and certification standards.
- ▶ There are two assessment panels.
 - 1 **Panel A is responsible for assessing the qualifications of an applicant's portfolio from academic institutions.**
 - 2 **Panel B is responsible for assessing an applicant's portfolio with respect to other training and/or experiential learning.**
- ▶ All competency assessment determinations made by a panel are by consensus.
- ▶ After considering an applicant's portfolio, the panel members will agree whether, for each competency element, the portfolio demonstrates that an applicant meets or does not meet the competencies defined in the certification standards.

13 PANELS SUBMIT ASSESSMENT REPORT.

- ▶ An assessment report detailing the outcomes of the credential assessment is submitted in the database. The assessment report details the findings for each competency and standard.
- ▶ The assessment panel(s) may provide additional information in the comments section of the report. Comments are likely to indicate more specifically where an applicant is weak or deficient in the competencies and/or standard requirements. The report is accessed by the regulatory body via the database.

14 REGULATORY BODY RECEIVES REPORT

- ▶ The regulatory body will access the report from the database and review. The regulatory body makes the final competency decision and sends a written decision to the applicant.

15 REGULATORY BODY PROVIDES APPLICANT WITH NOTICE OF COMPETENCY DECISION AND DISCUSSES ANY GAP FILLING REQUIREMENTS.

- ▶ The applicant will be notified in writing of the competency assessment, including an explanation of that decision and a summary of next steps.

8. TIMING AND TIMELINES

Timelines are important for all parties involved and every effort should be made to meet them.

After the regulatory bodies and the CAA have determined the number of assessments for an intake, the CAA will select assessor volunteers from a national list. The CAA, or its designate, will notify volunteers of expected time commitments. Assessors will have access to the database to review completed application portfolios shortly after the submission deadline. If an assessor is unable to perform an assessment, an alternate may be called upon.

Assessment panels are expected to complete and the assessments and submit reports within the timelines specified (see schedule below) for each round of assessments.

Regulatory bodies will process the assessment reports and make demonstrable competency decisions. If needed, the regulatory body may contact assessment panel chairs for clarification.

Competency assessments are undertaken quarterly (four intakes per year). Intake deadlines* are:

- **January 1**
- **April 1**
- **July 1**
- **October 1**

*Deadlines are moved automatically to the next working day if the date falls on a weekend/holiday.

Applications and written notices of completion must be received by the applicants prior to each deadline date to be included in the review for the corresponding quarter.

The time required for an assessment is dependent on the quality and content of the application portfolio. It is the intention of the review process that all applications will be assessed, and results reported back to the relevant regulatory body, within the calendar quarter the application deadline was met. Assessors will be contacted by the CAA, or its designate, prior to the application deadline to confirm participation on a panel. This will be referred to as “Week 0”; and the process will build from there.

DETAILED SCHEDULE

WEEK 0	<p>Potential assessors contacted to confirm availability.</p> <p>CAA, or its designate, assigns applicant package to each assessment team.</p>
WEEK 1	<p>Assessors advised of Panel (A or B) participation, granted database access to the applications they are to assess. The review process will begin.</p>
WEEKS 2-4	<p>Panel A reviews an application package and completes an assessment to evaluate the degree to which formal education meets the requirements of the certification standards.</p>
WEEK 5	<p>Panel A completes an assessment report noting any demonstrable competency gaps identified.</p>
WEEKS 6-8	<p>If demonstrable competency gaps are identified by Panel A, Panel B reviews the application package and completes assessments to evaluate the degree to which any experiential learning meets the requirements of gaps identified in the certification standards by Panel A.</p>
WEEKS 9-10	<p>Panel B completes a final assessment report with the findings and comments of the panel and submits this to the CAA.</p>
WEEK 11	<p>The regulatory body receives completed assessment reports and reviews their contents.</p>
WEEK 11-12	<p>The regulatory body may contact the Panel A and/or B chairs for clarification or additional information relating to the reports. Panel responses will be provided within this timeframe.</p>
WEEKS 11-13	<p>Regulatory bodies will provide written responses to applicants regarding the assessment results.</p>

9. INFORMATION FOR APPLICANTS

PAY ATTENTION TO THE VERB!

The language used in the matrix to describe each demonstrable competency and competency element is critical. The action verb used in each demonstrable competency indicates the level of competency required.

The verb helps applicants decide if their skills and knowledge meet the competency. Certain tasks require different levels of performance. Some require knowledge or comprehension while others require higher levels of performance such as application, analysis, or synthesis. A higher ability requirement would be the evaluation of products or activities within a competency area. Applicants should be using verbs that reflect their personal skill level. For a list of verbs recommended to describe competency levels and abilities, see Blooms Taxonomy in Appendix 3.

FEES

Applicants are responsible for all costs associated with an application and its assessment. Fees must be paid prior to the application portfolio being submitted and are non-refundable.

Fees associated with an application include the following:

1 Assessment Costs:

The schedule of current fees for the Credential Assessment Process is located on the applicant's portal through the FPRC Credential Assessment Process web site (www.fprc-orfpc.ca).

2 Other potential costs:

Costs payable to other organizations (if applicable):

- **Transcripts and translations.**
- **Credential evaluation report (international credentials evaluated for Canadian equivalency by a third-party credential evaluation service)**

ADEQUATE TIME TO PREPARE!

The application process is time consuming and requires commitment to complete properly. The quality of an application is important. A well-prepared application is needed for the assessors to accurately assess competency. The applicant's task is to convince the assessment panel of their competence. Applicants are expected to spend considerable time collecting information, completing the forms required, and preparing a complete application. Applicants must ensure that their applications provide appropriate, detailed and succinct information that relates specifically to the demonstrable competencies and competency elements that will be described in the application.

Supporting documentation may be difficult to find in cases where the post-secondary education or other courses were taken several years ago, and/or for internationally trained individuals. If this is the case, applicants should include work documents/experience that demonstrate each competency.

SCORING SYSTEM

The CAA sets the minimum scores that applicants must achieve to meet certification standards.

Applicants must achieve minimum percent scores for each demonstrable competency (DC) and certification standard.

- To meet a DC, applicants must score a minimum of 50% for each individual competency element (CE).
- To meet a standard, applicants must score a minimum of 70% for all CEs combined within a standard (see [Appendix 4: Assessment Scoring](#)).

Applicants who do not meet the minimum scores will be deemed to have one or more competency gaps. The final assessment report will tabulate the scores and will indicate which of the required scores have been met.

HOW LONG IS AN ASSESSMENT REPORT VALID?

The competency assessment is considered valid for five years from the issuance date of the written report by the regulatory body.

WHERE CAN AN ASSESSMENT REPORT BE USED?

The competency assessment is valid across all Canadian provinces with FPRC membership. In accordance with Canadian labour mobility agreements, once registration status is achieved in one province, it is transferrable to a different regulated province without a reassessment. If an assessment is completed but professional status is not achieved at the time of the transfer to another province, the receiving regulatory body will advise the applicant as to what is required to proceed with registration in that province.

10. INFORMATION FOR ASSESSORS:

THE ASSESSMENT PANELS

There are two assessment panels.

ASSESSMENT PANEL A

Panel A will meet first to assess an applicant's academic portfolio. Panel A is responsible for:

- 1 Assessing the qualifications of an applicant's portfolio from academic institutions to determine whether the required scores have been achieved for each demonstrable competency and competency element (See summary of scoring on the CAP website);**
 - a. Each Panel A assessor individually reviews an application package and completes an assessment.
 - b. To evaluate the degree to which formal education meets the requirements of the certification standards a teleconference call should be held on, or by, week 4 to harmonize the Panel A evaluations.
- 2 Preparing a report that identifies competency achievement and gaps based on a review of the academic program of study of an applicant;**
 - a. Panel A chair completes an assessment report noting any demonstrable competency gaps identified.
 - b. The report is posted to the assessor's web portal.
- 3 If competency gaps are found, providing a copy of the report to Panel B in a timely manner, along with any comments the panel may have;**
- 4 If no competency gaps are found, submitting a final assessment report to the database in a timely manner.**
 - a. Panel A chair will submit the report and inform Panel B that the report has been submitted.

ASSESSMENT PANEL B

Panel B is responsible for:

- 1 Assessing an applicant's competency gaps identified by Panel A with respect to other training and/or experiential learning submitted in the application to determine if an applicant has achieved the demonstrable competency and competency elements;**
 - a. If Panel B has questions about the Panel A report, they may contact the chair of Panel A for clarification.
 - b. Each Panel B member individually assesses the degree to which experiential learning contributes to meeting the requirements of the Certification Standards.
 - c. A teleconference call should be held in week 8 to harmonize the Panel B evaluations.
- 2 Preparing a final assessment report identifying any remaining competency gaps;**
 - a. Panel B chair will complete an assessment report with the findings and comments of the panel.
- 3 Providing the final report in the portal, along with any comments the panel may have on an applicant's competencies or lack thereof, in a timely manner.**
 - a. the final assessment report is submitted to the database by the Panel B chair.

WITNESSES

Witness statements are primarily for the benefit of Panel B. There may be instances where a professor/instructor elaborates on course outlines to confirm to Panel A that certain aspects of a standard have been met. See [Appendix 5: FPRC Credential Assessment Process –Witness Information](#) for details.

SCORING

Detailed information on the scoring system will be provided to assessors during training. The system requires applicants to meet required minimum scores for each demonstrable competency and for each standard (see [Appendix 4: Assessment Scoring](#)). Applicants who do not meet the minimum scores will be deemed to have competency gaps. The final assessment report will tabulate the scores and will indicate which of the required scores have been met.

COMMUNICATION

Applicants will communicate directly with the regulatory body. Assessors communicate with the CAA designate to coordinate assessments. Reports and comments submitted by assessors are provided by the CAA to the regulatory body. Regulatory bodies will direct any questions or concerns to the Assessor Chair(s).

AFTER THE ASSESSMENT

The assessors' initial responsibilities are completed when the final assessment report and any comments are submitted. The regulatory body may request clarification regarding the report from the Assessor Chair(s).

APPENDIX 1: GLOSSARY

The following definitions used by FPRC ensure consistent understanding among regulatory bodies, applicants, and assessors.

A

Accreditation: a process of education assurance through which formal recognition of the quality and necessary curriculum content of a program of study is conferred by a responsible authority. In the professional forestry context in Canada, the CFAB is the responsible authority empowered to assess university level programs on behalf of the provincial professional forester/ingénieurs forestiers regulatory bodies and to determine whether they deliver the academic requirements for a graduate's entrance into the profession. The CFAB conducts its accreditation assessments on a national basis for each of these regulatory bodies who have agreed, collectively, to abide by the Board's accreditation decisions.

Accreditation Standards: criteria approved by the FPRC member agencies and used by the CFAB for assessment of university forestry programs. The Accreditation Standards are based on, and are fully harmonized with, the *Certification Standards for the Profession of Forestry in Canada (2017)*.

Acronyms: words formed from the initial letters or groups of letters of words in a set phrase or series of words, as in "RPF" from Registered Professional Forester.

Application Portfolio: the total package submitted by an applicant to demonstrate competency.

Assessment Panel: A panel of volunteer professionals trained and designated to complete credential assessments on behalf of the FPRC

B C

Canadian Forestry Accreditation Board (CFAB): a committee of FPRC. Its role is to provide a service to its member agencies for the accreditation of forestry programs, at the baccalaureate level and higher, for the purpose of determining if the academic requirements for professional forester certification (registration) are being met.

Central Assessment Authority (CAA): a committee of the FPRC charged with overseeing the Credential Assessment Process for foreign-trained applicants and graduates of programs not accredited by the CFAB.

Certification: the authoritative endorsement by a governing body that a person has attained occupational proficiency. In the professional forestry context, certification means that an individual's qualifications have been assessed by one or more of the professional bodies to determine whether the requirements for entry into the profession have been met.

Certification standards: criteria approved by the FPRC member agencies to determine whether the requirements for entry into the profession have been met. The certification standards were the basis for, and are fully harmonized with, the accreditation standards.

Competency element: an area of professional competence designated as necessary for the attainment of a specific demonstrable competency.

Course outline: the detailed description of a course of instruction related to the certification standards.

Credential Assessment Process (CAP): An evaluation process developed and overseen by the Forest Professional Regulators of Canada (FPRC) used to assess competency of applicants against national academic certification standards for Canadian professional forestry practice.

Curriculum vitae (CV): an overview of a person's life and qualifications, including detail on education, work experience, volunteer activities, and anything else that may provide insight into an individual's training and qualifications.

D

Deadline date: the latest date that an application package will be accepted by the regulatory body. Submission deadline dates for application portfolios may change from time to time depending on the number of applicants to be assessed, and other factors, in an assessment period.

Demonstrable competencies: the skills, knowledge and abilities that form the core requirements for both the certification standards and the accreditation standards. Demonstrable competencies are assessed at the entry level. This is the level of, or is equivalent to the level of, a new graduate of an accredited university forestry program.

E

Education: any formal learning experiences that have had a formative effect on the mind, character, or physical ability of an individual, relevant to the profession of forestry. Education can be in the realms of knowledge, skills, and values.

Educational credential assessment (ECA): a comprehensive and independent external assessment used to verify that foreign degrees, diplomas, or certificates (or other proof of a credential) is valid and equal to a Canadian one.

Equivalent: equal in value, measure, force, effect or significance. Corresponding in position or function. In the Credential Assessment Process, “equivalence” may be demonstrated by an applicant providing evidence of having taken, and passed, a number of technical and/or university courses which, in combination, can be considered to have covered the material to the same depth and breadth that the material would have been covered in a four-year science-based degree. Further, the evidence of equivalence, and thus competency in a subject, may be established by an applicant’s detailed work experience and participation in the preparation of papers, articles and presentations.

Experience: knowledge of, or skill in, or observation gained through practice in, or exposure to, a thing or event.

F

Forest Professional Regulators of Canada (FPRC): a body comprised of the provincial professional forester/ingénieurs forestiers associations of Canada and the Canadian Institute of Forestry. Its mandate is to provide coordination of programs and services enabling transparent, impartial and procedurally fair registration practices of forest professionals by regulators in Canada.

G

H

I

Ingénieur forestier (ing.f.): an individual who, through membership in l’Ordre des ingénieurs forestiers du Québec (OIFQ), is entitled to use a protected title and is licensed to practice professional forestry in the province of Québec.

J

Jargon: the language, especially the vocabulary, peculiar to a particular trade, profession, or group, and the use of acronyms.

K

L

Learning narrative: For the purposes of CAP; a learning narrative is a description of what the applicant has learned, and applied, with respect to a particular competency element through participation in field work, reports, workshops and/or other activities that are substantiated by documented evidence for the element. The narrative is to be provided by the applicant as part of the application package and may be in point form.

M

N

O

P

Pre-screening tool: The Pre-screening Tool is an online tool that allows applicants to assess their ability to meet the demonstrable competencies and competency elements of the certification standards. Applicants who complete the Pre-screening Tool will get a report that provides them with a self-assessment of their abilities. This report will be used by the applicant and the regulatory body to determine whether an applicant appears to be an appropriate candidate for the CAP. However, the results of the report produced by the Pre-screening Tool do not guarantee that an applicant will meet any of the Demonstrable Competencies or Competency Elements of the Certification Standards.

Q

R

Registered Professional Forester (RPF): an individual who, through membership in one or more of the professional foresters associations in Canada (Québec excluded), is entitled to use a protected title and/or is licensed to practice professional forestry within a defined geographical jurisdiction (province). In Québec, the designation is “ingénieur forestier” (ing.f.). In New Brunswick, the designation may be “RPF” or “f.a.” (forestier agréé)

Registrar: an individual so designated for a provincial regulatory body of one of the FPRC member agencies listed in this manual.

Registration: the act of recognizing an individual’s qualifications and entering them in the register of the profession.

Regulatory body: (also regulatory authority, licensure or regulator) is a public authority or government agency responsible for exercising autonomous authority over some area of professional practice in a regulatory or supervisory capacity.

S

Science-based degree: a program of study in which the majority of time is spent exploring the natural, physical, or social sciences.

Standard: Means the individual standards of the certification standards, as defined above.

T

U

V

W

Witness: An individual who is able to attest to an applicant’s ability to meet a competency element or demonstrable competency of the certification standards. A witness must be competent in the area(s) of the demonstrable competency for which they are attesting.

APPENDIX 2

Summary Table: 2017 Certification Standards – Professional Forestry Practice¹

STANDARD	DEMONSTRABLE COMPETENCIES	COMPETENCY ELEMENTS
Standard 1: Foundational Studies		
1.1	Describe basic/introductory humanities, social science and scientific knowledge	Scientific principles-
		Concepts of biology, chemistry and mathematics
		Social structures and processes
		Economic structures and processes
		Institutions and values of importance to society in Canada
Standard 2: Communications, Critical Reasoning and Leadership		
2.1	Communicate effectively with a wide variety of audiences regarding forest resource issues	Proper concepts and terminology
		Clear and persuasive arguments
		Effective listening and reading comprehension skills
		Cultural and social sensitivity
		Formal written report(s)
		Formal presentation(s) (oral and visual media)
		Other forms of communication (including social media.)
2.2	Apply critical reasoning	Relevant background information and documents
		Logical arguments and development of rationales
		Appropriate supporting documentation
		Role of external expertise
		Professional judgment
		Processes to balance objectives
2.3	Use leadership skills in collaborative decision making	Leadership styles and their application
		Effective team participation and leadership
		Approaches to collaborative decision making
		Conflict resolution skills

¹ Summarized from the Forest Professional Regulators of Canada 2017 Certification Standards - <https://www.fprc-orfpc.ca/2017-certification-standards>

STANDARD	DEMONSTRABLE COMPETENCIES	COMPETENCY ELEMENTS
Standard 3 – Professionalism and Ethics		
3.1	Identify the functions of professional regulatory bodies	Structure and functions of regulated professions in Canada
		Relations amongst professions
		Criteria for entry into a profession, and quality assurance standards
		Roles of codes of conduct/ethics and standards of practice
3.2	Articulate the duties and obligations of professionals	Scope of practice
		Standards of practice
		Codes of conduct/ethics
		Service to the public, profession, employer and resource
		Professional practice documentation
		Conflict of interest
		Commitment to maintain competency
Standard 4: Trees and Stands		
4.1	Identify trees and other plants and describe their growth characteristics	Tree and other plant recognition (regional context), including the use of identification keys
		Plant anatomy, morphology and physiology
		Tree genetics, silvics and life cycle
		Plant and tree autecology
		Plant and tree synecology
4.2	Describe tree attributes and their relationship to forest values.	Attributes - size, form, age, health, quality, etc.
		Factors affecting tree attributes
		Tree values (wildlife habitat, shade, wood fibre, air quality, etc.)
4.3	Explain past, current and possible future stand conditions and the processes that lead to them.	Stand origin and structure (species composition, size distributions, age and spatial arrangements)
		Forest soil properties and influences on stand origin and development
		Stand values (wildlife habitat, wood fibre, water management, recreation, etc.)
		Stand dynamics
		Biotic and abiotic agents, including climate, affecting stand dynamics
		Silviculture and silvicultural prescriptions

STANDARD	DEMONSTRABLE COMPETENCIES	COMPETENCY ELEMENTS
Standard 5: Forested Landscapes		
5.1	Identify the components, characteristics and processes in forested ecosystems and how they interact.	Concepts and principles of landscape-level ecology
		Forest ecosystem components and connectivity
		Concepts and measures of diversity including spatial and temporal diversity
		Forest ecosystem function and dynamics (e.g. carbon capture and storage, forest hydrology, forest nutrient cycling, fish and wildlife)
5.2	Apply ecological classification systems in a regional context.	Principles of forest ecological classification systems
		Forest soil classification
		Forest climatology
5.3	Apply knowledge of the influences and interactions of agents of change in the management of forested landscapes.	Biotic and abiotic disturbance factors (insects, disease, fire, meteorological effects, human interventions, etc.) and their effects on forest ecosystem function
		Invasive species
		Climate change
		Ecosystem resilience
		Protection and mitigation activities
Standard 6: Information Acquisition and Analysis		
6.1	Employ tools for the measurement of forest resource attributes.	Orienteering (compass, maps and Global Positioning System (GPS))
		Field measurement tools and procedures
		Remote sensing tools and procedures
		Geographic Information Systems (GIS)
6.2	Design basic sampling strategies.	Principles of basic statistics
		Sampling design and methods and their suitability for use
		Sampling precision, bias and effectiveness
6.3	Analyze and interpret forest resource data.	Databases, spreadsheets and graphic presentations
		Geographic Information Systems (GIS)
		Forest resource inventory
		Statistical packages

STANDARD	DEMONSTRABLE COMPETENCIES	COMPETENCY ELEMENTS
Standard 7: Planning & Administration		
7.1	Discuss the role of economics in planning.	Financial and economic analysis
		Socio-economic and market forces
		Forest products and ecological services valuation
		End use and value-added
7.2	Identify societal factors, governance, and regulation in your work.	Role of government forest policies (at varied levels: municipal, provincial, federal)
		Legal and policy framework
		Forest values (ecological, social, and economic)
		Indigenous Peoples' Treaty and other rights, claims, traditions and interests
		Public and stakeholder concerns and interests
7.3	Employ resource planning principles.	Human resources
		Principles of project planning and implementation
		Criteria, indicators, and measures
		Principles of adaptive management
7.3	Employ resource planning principles.	Forest certification schemes
		Principles of adaptive management
		Criteria, indicators, and measures
		Principles of project planning and implementation
Standard 8A: Forest Management		
8A.1	Discuss the forest management process, and its requirements and levels.	Components of the forest management process
		Purpose of forest management planning
		Domestic and global trends
		Concepts and applications of sustainability
		Strategic, tactical and operational planning levels
8A.2	Design stand and forest-level plans.	Legal and policy requirements
		Stakeholder consultation
		Forest values (ecological, social, and economic)
		Current stand and forest-level conditions
		Management objectives and constraints
		Stand-level actions (silviculture) and forest-level scenarios to attain different management objectives
		Stand-level projection models
		Landscape/forest-level projection models
Performance measurement criteria and methodologies		

STANDARD	DEMONSTRABLE COMPETENCIES	COMPETENCY ELEMENTS
8A.3	Develop operational plans.	Business and operational objectives and constraints
		Resources required
		Basic operational planning including forest access, silviculture, protection, harvesting, monitoring, etc.
Standard 8B: Natural Resources and Ecosystem Management		
8B.1	Discuss the landscape management process, requirements and levels.	Components of the landscape management process
		Purpose of landscape-level management planning
		Domestic and global trends
		Concept and applications of sustainability
		Strategic, tactical and operational planning levels
8B.2	Design environmental/landscape-level plans.	Legal and policy requirements
		Stakeholder consultation
		Landscape values (ecological, social, and economic)
		Current landscape conditions
		Management objectives and constraints
		Landscape/forest-level projection models
		Actions (silviculture) used to attain different management objectives
		Performance measurement criteria and methodologies
8B.3	Develop operational plans.	Business and operational objectives and constraints
		Resources required
		Basic operational planning including access, silviculture, protection, use management, etc.
Standard 8C: Urban Forestry		
8C.1	Identify the variety of values and interests in an urban and peri-urban forest.	Ecological, social and economic benefits
		Green infrastructure systems, storm water attenuation, natural hydrologic cycles in built environments, moderation of local climate and urban heat, etc.
		Interests, rights and responsibilities of private landowners, local residents, municipal governments, ENGOs, community groups, local residents, etc.
		Multicultural values and considerations
		Species at Risk and their habitats
		The process of extensive urbanization (“development”) and intensive urbanization (“infilling”)

STANDARD	DEMONSTRABLE COMPETENCIES	COMPETENCY ELEMENTS
8C.2	Communicate urban forest strategic and operational planning principles.	Components of urban forest planning and landscape design
		Principles of urban planning including the various levels of planning documents (site plan approval, plans of subdivision, etc.)
		Purpose of urban forest planning
		Domestic and global trends
		Urban forest health issues
		Management objectives: types, setting and attainment
		Role and application of monitoring in urban forestry
		Arboriculture practices on the urban landscape (including selection and placement of trees, proper maintenance, hazard trees and risk assessment factors, determining and managing tree values)
		Tools (models and methods) used in urban forestry
8C.3	Develop a resource plan for an urban or peri-urban forest.	Legal and policy requirements
		Tree/landscape inventory
		Stakeholder consultation
		Ecological, social and economic values
		Management objectives and constraints
		Actions (silviculture) used to attain different management objectives
		Performance measurement criteria and methodologies
Standard 8D: Forest Operations		
8D.1	Discuss the forest management process, and its requirements and levels.	Components of the forest management process
		Purpose of forest management planning
		Domestic and global trends
		Concepts and applications of sustainability
		Strategic, tactical and operational planning levels
8D.2	Discuss purpose and components of forest planning.	Forest values (ecological, social, and economic)
		Legal and policy requirements
		Current stand and forest-level conditions
		Management objectives and constraints
		Stand-level actions (silviculture) and forest-level scenarios to attain different management objectives
		Stand-level projection models
		Landscape/forest-level projection models
Harvest methods for variable terrain and timber types		

STANDARD	DEMONSTRABLE COMPETENCIES	COMPETENCY ELEMENTS
8D.3	Design forest road systems and road crossing implementation strategies.	Access management and planning
		Legal requirements for access to public highways and wetland, stream and river crossings
		Road design and crossing design (bridges, culverts)
		Operational constraints of road and crossing design
		Economics of road and crossing design
		Road and crossing design safety
		Options for road and crossing design under a variety of terrain and soil conditions including unstable terrain
		Options for road and crossing inspections
8D.4	Develop operational plans.	Stakeholder consultation
		Operational objectives
		Economics of timber extraction
		Harvest strategies, roads, crossings, production and delivery schedules (may include stand establishment and tending)
		Safety considerations for workers and the public
		Performance measurement criteria and methodologies
Standard 8E: Ecological Restoration and Management		
8E.1	Discuss the principles of maintaining or building soils and related management.	Principles for management and/or mitigation of industrial soil disturbance
		Principles and management techniques for remediation of soil ecosystem contaminants
		Impact of substrates, topography and vegetation on pedogenic development
		Management considerations for soil fertility and soil water across a range of soil conditions
8E.2	Identify the principles of restoration of functioning ecosystems.	Restoration ecology including the role of climate, fire, soils, water, plants, and animals and their interactions
		Differences between active ecosystem restoration and “natural recovery”
		Development of species assemblies, the impact of agronomic species, exotic species
8E.3	Articulate ecological restoration planning, and its requirements and levels.	Legal and policy framework
		Domestic and global trends
		Purpose of restoration/reclamation planning
		Components of restoration/reclamation
		Strategic, tactical and operational planning levels

STANDARD	DEMONSTRABLE COMPETENCIES	COMPETENCY ELEMENTS
8E.4	Develop restoration plans.	Stakeholder consultation
		Management objectives and constraints
		Actions used to attain different management objectives
		Resources required
		Basic restoration planning including access, silviculture, protection, monitoring, etc.
		Performance measurement criteria and methodologies

APPENDIX 3: BLOOM'S TAXONOMY FOR LEARNING OUTCOMES (ADAPTED)¹

Bloom's levels of educational learning provide a framework to consider what applicants know and where the educational effort should be targeted in order to further promote additional and more sophisticated learning. For these standards, Bloom's hierarchical taxonomy has been adapted as given below.

CATEGORY	KEYWORDS
<p>1. Knowledge: remembering information (The learner first must be made aware of the situation.)</p>	<p>Define label state list match (Rote memory)</p>
<p>2. Comprehension: explaining the meaning of information (The learner must then comprehend the value of information.)</p>	<p>Describe identify paraphrase summarize estimate (Translate to your words)</p>
<p>3. Application: using abstracts in concrete situations (The learner must be able to consider what they have learned in one situation and use it in another different situation.)</p>	<p>Determine chart implement prepare solve use develop <i>(Apply general principle)</i></p>
<p>4. Analysis: breaking down a whole into component parts (The learner acquires additional information about the situation and begins to look at the different pieces of information that comprise the whole story.)</p>	<p>Point out differentiate distinguish discriminate compare <i>(Break down into parts)</i></p>
<p>5. Synthesis: putting parts together to form a new and integrated whole (The learner then develops the skills to assemble that information in new ways, rather than simply reflecting back what they have learned.)</p>	<p>Create design plan organize generate write <i>(Create a whole from parts)</i></p>
<p>6. Evaluation: making judgements about the merits of ideals, materials or phenomena (The learner is able to judge the information and make decisions for him/herself about its (good or bad) value based on criteria.)</p>	<p>Appraise critique evaluate judge weigh select (Judge according to Standards)</p>

1 Bloom B.S. 1956. Taxonomy of educational objectives: the classification of educational goals. Handbook 1: Cognitive Domain. Longman, White Plains, NY.

ACTION VERB DEFINITIONS

The action verbs² given below are as found in the *Certification Standards for the Profession of Forestry in Canada (2017)* of the Forest Professional Regulators of Canada (FPRC).

BLOOM'S LEVEL AND ACTION VERB	ACTION VERB DEFINITION
1. Knowledge	No verbs in this level.
2. Comprehension	
Describe	Give an account of (something), in words or by representation
Discuss	Talk or write about (a topic) in detail, taking into account different issues or ideas
Explain	Make an idea or situation clear by describing it or by revealing relevant facts; give the reason for or cause of (something); show the logical development or relationship of (something)
Identify	Establish or indicate (what something is) to a high degree of certainty
3. Application	
Apply	Put into operation or effect; put to use for some practical purpose
Articulate	Express an idea fluently and coherently
Communicate	Convey ideas to, or evoke understanding in others; convey knowledge of, or information about (something); share or exchange information
Employ	Make use of (something); hold or deploy as a means of accomplishing or achieving (something) (see also "use")
Use	Act or practice of employing (something); take, hold or deploy as a means of accomplishing or achieving (something) (see also "employ")
4. Analysis	
Analyse	Examine methodically and in detail in order to explain and interpret (something); discover or reveal (something) through close examination; study or determine the nature and relationship of the parts of (something)
Interpret	Explain the meaning of (something); understand something as having a particular meaning; present in understandable terms
5. Synthesis	
Design	Conceive of and produce a plan or drawing of (something) before it is made; do or plan (something) with a specific purpose in mind; devise for a specific function or end
Develop	Create or produce by deliberate effort; make available or usable; set forth or make clear by degrees or in detail; convert to a new purpose by making other use of resources
6. Evaluation	No verbs in this level.

2 Jenkins, A. and D. Unwin. 2001. How to write learning outcomes.
<http://www.ncgia.ucsb.edu/education/curricula/giscc/units/format/outcomes.html>.

APPENDIX 4: ASSESSMENT SCORING

The CAA sets the minimum scores that applicants must achieve to meet certification standards.

Applicants must achieve minimum percent scores for each demonstrable competency (DC) and certification standard (see *Table 1: Certification Standards Scoring Summary*).

- To meet a DC, applicants must score a minimum of 50% for each individual competency element (CE).
- To meet a standard, applicants must score a minimum of 70% for all CEs combined within a standard.

**TABLE 1: CERTIFICATION STANDARDS SCORING SUMMARY
(SEPTEMBER 5, 2017)**

Standard (#)	Demonstrable Competency (DC)	#Competency Elements (CEs) per DC	# CEs Needed to Pass
1		5	Assessed by Regulatory Body
2	2.1	7	Need 4 CEs to get 50%
	2.2	6	Need 3 CEs to get 50%
	2.3	4	Need 2 CEs to get 50%
	TOTAL	17	Need 12 out of 17 CEs to get 70%
3	3.1	5	Need 3 CEs to get 50%
	3.2	9	Need 5 CEs to get 50%
	TOTAL	14	Need 10 out of 14 CEs to get 70%
4	4.1	5	Need 3 CEs to get 50%
	4.2	3	Need 2 CEs to get 50%
	4.3	6	Need 3 CEs to get 50%
	TOTAL	14	Need 10 out of 14 CEs to get 70%
5	5.1	4	Need 2 CEs to get 50%
	5.2	3	Need 2 CEs to get 50%
	5.3	5	Need 3 CEs to get 50%
	TOTAL	12	Need 9 out of 12 CEs to get 70%
6	6.1	4	Need 2 CEs to get 50%
	6.2	3	Need 2 CEs to get 50%
	6.3	4	Need 2 CEs to get 50%
	TOTAL	11	Need 8 out of 11 CEs to get 70%

Standard (#)	Demonstrable Competency (DC)	#Competency Elements (CEs) per DC	# CEs Needed to Pass
7	7.1	4	Need 2 CEs to get 50%
	7.2	6	Need 3 CEs to get 50%
	7.3	4	Need 2 CEs to get 50%
	TOTAL	14	Need 10 out of 14 CEs to get 70%
8a	8a.1	5	Need 3 CEs to get 50%
	8a.2	9	Need 5 CEs to get 50%
	8a.3	3	Need 2 CEs to get 50%
	TOTAL	17	Need 12 out of 17 CEs to get 70%
8b	8b.1	5	Need 3 CEs to get 50%
	8b.2	8	Need 4 CEs to get 50%
	8b.3	3	Need 2 CEs to get 50%
	TOTAL	16	Need 12 out of 16 CEs to get 70%
8c	8c.1	6	Need 3 CEs to get 50%
	8c.2	9	Need 5 CEs to get 50%
	8c.3	7	Need 4 CEs to get 50%
	TOTAL	22	Need 16 out of 22 CEs to get 70%
8d	8d.1	5	Need 3 CEs to get 50%
	8d.2	9	Need 5 CEs to get 50%
	8d.3	8	Need 4 CEs to get 50%
	8d.4	6	Need 3 CEs to get 50%
	TOTAL	28	Need 20 out of 28 CEs to get 70%
8e	8e.1	4	Need 2 CEs to get 50%
	8e.2	3	Need 2 CEs to get 50%
	8e.3	5	Need 3 CEs to get 50%
	83.4	6	Need 3 CEs to get 50%
	TOTAL	18	Need 13 out of 18 CEs to get 70%

APPENDIX 5

FOREST PROFESSIONAL REGULATORS OF CANADA ORGANISMES DE RÉGLEMENTATION DES FORESTIERS PROFESSIONNELS DU CANADA

CREDENTIAL ASSESSMENT PROCESS – WITNESS INFORMATION

(August 2020)

WITNESSES VERIFY APPLICANT PORTFOLIOS:

Witnesses attest to an applicant’s ability to perform the demonstrable competencies (DCs) and competency elements (CEs) of the certification standards for professional forestry. Each competency element that is validated with experience-based evidence (i.e. not validated by a course or course outline but instead by work or volunteer experience) should be verified by at least one witness. When documentation for education-based evidence is not available (for acceptable reasons as defined by the regulatory body) witnesses, such as post-secondary institution instructors, may also verify evidence for education-based competencies. Applicants will likely need several competency witnesses to verify evidence.

SUITABLE WITNESSES:

Ideal witnesses are Canadian registered professional foresters/ingénieurs forestiers, or the equivalent forest professionals in other countries.

Witnesses may also come from other professions. However, a witness must be familiar with the competency being attested. For example, a professional geologist is not an ideal witness to verify competencies related to creating a forest management plan, although a geologist may have abilities in preparing certain parts of a plan.

To avoid conflict of interest, witnesses **must not** be an applicant’s spouse or family member, or a staff member who is supervised by the applicant.

Witnesses are required to provide a short biography to demonstrate their suitability to attest to an applicant’s abilities. A resume or curriculum vitae may be provided in lieu of a short biography.

There is no limit to the total number of competency witnesses used to verify an applicant’s ability. Applicants may provide up to three witnesses for a single competency element.

WITNESS RESPONSIBILITIES AND OBLIGATIONS:

Witnesses play a critical role in the credential assessment process (CAP). Through the documents they submit, witnesses attest to observing specific applicant activities (such as in the field) or to reviewing work-related documents that applicants present for consideration.

Witnesses are the eyes and ears for the CAP to ensure that applicants are able to perform at an entry-to-practice level for a specific demonstrable competency (DC) and competency element (CE). Witness verification is an alternative to, or equivalent to, a university professor attesting to achieving a certain competency.

Witnesses must be professionally competent in the DCs and CEs for which they are verifying and have in-depth knowledge of the area(s) of an applicant’s competence to which they are attesting.

Witnesses must only verify competency elements where they can attest to experiential evidence. DCs and CEs that are fully supported by course related materials do not require witness verification. More than one witness may verify a competency element.

Witnesses should keep the following top of mind when attesting to applicant competency:

- This is not a popularity contest, or a report to please a friend. Witness verification is an assessment of the applicant’s actual competence in aspects of the DCs and CEs where the witness has personal knowledge of the applicant’s competence.
- The witness’ first responsibility is to read the DCs, the CEs from the *Certification Standards* (see [Appendix 2: Summary Table 2017 Certification Standards – Professional Forestry Practice](#)) and *Bloom’s Taxonomy* (see [Appendix 3: Bloom’s Taxonomy for Learning Outcomes](#)), in order to comprehend the level of competence that is required for each DC and CE.

Witnesses must ask themselves, “*would I accept a report on this (DC or CE) with little question*”, or, “*would I send the applicant out to do this (DC or CE) with little or no further direction*”. If the answer is yes, then witnesses attest that the applicant is competent; if the answer is no, witnesses must not attest that the applicant is competent.

- Witnesses should only attest to those capabilities of an applicant, which they have seen the applicant perform, or for which they have critically reviewed a report prepared by the applicant;
- If witnesses are unsure of the applicant’s competency for a competency element, or if it does not meet the performance level, witnesses must not attest the applicant as being competent in that aspect;
- Witnesses should note any areas of weakness they observed with regard to the applicant’s competencies as part of the supporting statements (i.e. testimonials) in the *Witness Feedback* form. Noting areas of weakness does not mean that the applicant is a poor performer, but that he/she requires some additional training/work experiences in order to become “competent” in the specific DC or CE;
- As part of the verification process, witnesses must include *written statements (testimonials)* describing how they see the applicant perform a specific DC or CE.

For example, “*Standard 1 DC 1 (a) - I worked in the field with applicant X doing plant assessments and soil analyses. She is able to meet the CE for plant identification and tree species identification*”

or

“*Applicant X has done the field work and wrote and prepared a report on forest management options for the District. I reviewed this in my capacity as her supervisor and I am confident that she meets the criteria of Standard 8A competency element 8A.1.1.*”

Testimonials are of great value for the national assessors as they help confirm whether a competency has been adequately satisfied. This type of approach makes it very clear on “**how**” the competency was assessed and “**which**” specific DC and CE’s are being addressed. It also makes it clear to assessors that the witnesses understand their role.