

This package contains examples of good answers that were submitted for sit down portion of the 2011 RPF registration exam. Although the answers were chosen as the two better answers submitted in 2011, take note of the score each answer received and be advised that answers may contain errors. Some questions in this package may not have been answered by enough examinees to provide examples of at least one or two good answers.

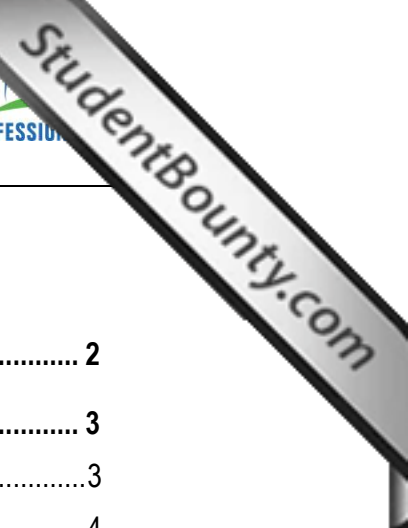


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Question 1 (Essay)

You are under pressure from your employer to reduce costs, look for efficiencies and manage risks. In balancing safety, economic efficiency and environmental standards:

- a) What guidance can you get from legislation and policy? (5 marks)
- b) What should a competent professional do to meet these demands? (5 marks)

Answer 1 (scored 9.5)

As a forest professional, I am bound to the ABCFP Code of Ethics (2003). Bylaw 11.2 of this code states that I have a responsibility to the public, the profession, my employer, and other members. It is therefore my duty as a forest professional to balance safety, economic efficiency, and environmental standards.

- A) There are several sources of guidance found in legislation and policy from which I can draw assistance from. First and foremost, the ABCFP Code of Ethics (2003) can guide my ethical choices and decisions when attempting to balance safety, costs, and environmental standards. Three important bylaws which outline my responsibilities as a forest professional with this task include bylaws 11.3.1, 11.3.10, and 11.5.1. Bylaw 11.3.1 states that I must advocate and practice good stewardship of forest land based on sound ecological principles to sustain those values that have been assigned by society (ABCFP, 2003). With respect to safety, bylaw 11.3.10 states that I must have proper regard in all work for the safety of others (ABCFP, 2003). Finally, my responsibility to my employer for providing economic efficiencies is stated in bylaw 11.5.1 as acting conscientiously and diligently in providing professional services.

Bylaw 12, the Standards of Professional Practice (ABCFP, 2010) also outlines standards with which to guide my decisions. Bylaw 12.6.1 states that I must demonstrate stewardship by balancing present and future values against the capacity of the land to provide them (ABCFP, 2010). The safety standard, Bylaw 12.7.1 states that I must maintain safe work practices and consider the safety of workers and others in the practice of professional forestry (ABCFP, 2010). These two standards build on the responsibilities outlined in the ABCFP Code of Ethics discussed previously.

Pertinent legislation from which I can find guidance on these issues can be found in most forestry related acts established in British Columbia. For example, the Forest and Range Practices Act (FRPA) (2002) is “intended to maintain the environmental standards of the code” (ABCFP Policy Reference Guide, 2011). Goals of this maintenance are outlined in Part 5, Division 1 of FRPA (2002).

Other guiding legislation of which I would follow and use to make decisions with include any portions of the Forest Practices Code which have carried over, the Wildfire Act (2004), the Range Act (2004), the Private Managed Forest Land Act (2004) (If on private land), the Species at Risk Act, and any other legislation for which the employers area may overlap (for example – Fisheries Act if high frequency of salmon streams are present).

B) As defined in the ABCFP's Standards of Professional Practice (2010), professional competence is demonstrated by someone who is properly qualified; having sufficient capacity; ability or authority; possessing the requisite physical, mental, natural, or legal qualifications; sufficient for the necessities of the work. First I must assess myself in being competent to meet these three demands of my employer. Assuming that I am competent, I will continue. As a forest professional I know that the overriding principles to meet these demands are established in Bylaw 11.3.2 – to uphold professional principles above the demands of employment (ABCFP, 2003). Therefore I must consider the safety and the environmental standards above the demands of employment (economic efficiency). With this in mind, I may follow the pertinent guiding legislation and policy outlined in section A) above in seeking to balance the three demands. I must also consider other guiding documentation such as forest stewardship plans, and non-statutory conditions such as local agreements with First Nations and local user groups.

So long as I use the outlined legislation and policy to guide my decision making, and act as a competent forest professional in doing so, I should be able to successfully achieve the demand of balancing safety, economic efficiency, and environmental standards to the level which I, as a forest professional am expected to.

Answer 2 (scored 9)

As an RPF, I have obligations to the public, the profession, and other members as well as the obligations I have toward my employer (ABCFP Code of Ethics, 21.-2.4). Balancing these often competing demands is the essence of professional forestry. The new era of professional reliance, as established under FRPA, means that it is now appropriate for an employer to expect a professional to balance these demands, and to expect to be able to rely on their decisions and advice, as professional accept responsibility and can be held accountable for their decisions and advice (PRTF Committee, 2006).

Guidance from legislation/policy includes Section 1(f) of the Forester's Act defines professional forestry as "assessing, analyzing... etc ... capability of forest lands to yield a flow of timber while recognising public values..... forests and forest ecosystems." Public values today very much include respect for the integrity of forest ecosystems, protecting them from being unduly damaged, protecting Species At Risk, incorporating wildlife values, and a general environment-first paradigm. Therefore, a professional cannot disregard these values and properly practice professional forestry. This helps uphold environmental standards. As well, the Forester's Act 4(2)b – object of the ABCFP (and by extension its members) "to advocate/uphold principles of stewardship ... forests/lands/ecosystems/resources". Again, through this stewardship standards, the employer can be sure members will uphold environmental standards. This also helps ensure economic efficiency, as both good stewardship and public values (as well as the Public Interest – Forester's Act 4(1)a) mean avoiding waste and maximizing value and best use of forest resources.

Further guidance for the professional comes from the ABCFP bylaws. The Code of Ethics (Bylaw 11) requires members to uphold professional principles above the demands of employment (11.3.2), which includes everything in the Code of Ethics. To discharge my professional obligations and act as a competent professional, the primary way to meet these demands is to

uphold the principles of the Code of Ethics. The obligations to the Public (11.3) include practicing good stewardship, which ensures economic efficiency as well as environmental protection, as described previously. They also include having regard for legislation (11.3.3) which would mean upholding environmental standards set out in legislation/regulations. Examples include the objectives for the 11 values in FRPA section 149 specified in the Forest Planning and Practices Regulation (FPPR), which are environmental standards. Other examples could include water quality standards established under the Drinking Water Protection Act, or under the Federal Fisheries Act.

Safety of others (11.3.10) is another responsibility under the code of ethics. Doing work competently and correctly (competence – 11.3.7) means avoiding shortcuts that would endanger others. Completeness and correctness is part of competence, as laid out in Bylaw 12.2 (the SOPP). Appropriate judgement and due care (12.2.3) means taking all the factors into account when looking to do what the employer wants.

My obligations to my employer (11.5) include gaining a complete understanding of objectives (11.5.3). This is enabled through clear communication going both ways. I would ensure to document everything and submit a plan to improve costs/efficiency/risks, which is a good step in due diligence (11.5.1). If I was not competent to do the work requested, determined through self-assessment (11.5.4), I would seek the advice of a qualified professional. In discharging my obligations to my employer under the COE, I will have to ensure to balance safety, efficiency and the environment.

In conclusion, a competent professional (one who has adequate training, education, and experience) will balance safety, economic efficiency, and environmental standards while doing what the employer asks if they adhere to the ethics of their profession. In this case, ethics are mandated in Bylaw 11. Exercising professional independence is key, one of the pillars of professional practice in the Forester's Act. Employers can rely on a professional to do their job, but only so far as ethically and legally allowed. Reliance on the professional to do so is appropriate under FRPA and is defence under Section 72(a). A professional acting ethically can safely be relied on so I would simply adhere to the Code of Ethics in this case.

Question 2 (Essay)

- a) How do you know when you are working outside of the bounds of your competence? (5 marks)
- b) What options do you have to address this situation? (5 marks)

Answer 1 (scored 10)

Competence is one of the standards of professional practice applicable to all members of the ABCFP. Competence includes being properly qualified and able to perform a task to a high level of quality. As outlined in Bylaw 12.2, to meet the competence standard, members need to maintain sufficient knowledge in their fields of practice (12.2.1), ensure their work is complete, correct and clear (12.2.2), and exercise appropriate judgement and discretion with due care (12.2.3). As a professional forester, I need to recognize situations in which I may be working outside the bounds of my competence. This may be simple, in situations where I am asked to do something which I clearly have no knowledge or experience in, or more complicated, in situations where I started working within my competence, but the situation has progressed to the point where I am no longer working within my competence.

I need to be able to assess if I am within my competence by asking myself the following questions:

- am I legally qualified to do this work?
- do I have a good background knowledge of this area of practice, gained through formal education, continuing education courses or prior experience?
- am I aware of current developments, new science and best practices relating to this subject?
- should I be consulting an expert, specialist or knowledgeable peer to further understand the subject?
- am I aware of legal requirements, policies and practical options related to this subject?
- is my work clear, free of errors and omissions, scientifically and technically sound?
- what would a similarly educated professional do in the same situation?
- would I feel comfortable if my work was published in a newspaper?
- have I documented all background information, available options and reasons for my decisions in a written rationale?

If the answer to any of these questions causes me to realize that I am not competent to perform the work, I should stop immediately to further assess and remedy the situation. Under the Code of Ethics, I have obligations to only practice in fields where training and knowledge make me professionally competent (Bylaw 11.3.7), to express a professional opinion only when it is founded on adequate knowledge and experience (Bylaw 11.3.9), and to accept only those assignments for which I am qualified, or seek assistance from specialists whenever a field of practice is outside my competence (Bylaw 11.5.4).

To address a situation in which I find myself potentially working outside the bounds of my competence, I need to first assess which aspect of competence may be lacking. Is it the knowledge standard, the completeness and correctness standard, or the professional care standard that is lacking, or a combination of the above? I may wish to contact the confidential Practice Advisory Service to obtain advice on the situation, and how to proceed. I could also discuss the situation with my supervisor, or another member whom I trust, to gain advice. I may consider asking my

supervisor, or another member whom I respect and trust, to work through the Professional Accountability Processes (ABC FP 2011) guide to determine an appropriate non-discipline option to improve my competency. These options include informal agreement, formal agreement, voluntary peer review, or the ABCFP coordinating a work review.

If it is determined that the aspect of competence in which I am lacking is the knowledge standard, some options to improve my competency include:

- taking a continuing education course (e.g. at a local college, university, or online)
- keeping current on the topic through reading peer-reviewed journal articles, government publications, professional publications or other reputable sources
- participation in discussion groups or committees related to the subject.
- developing a network of mentors, colleagues and other professionals with who I can have constructive dialogue on the topic
- consulting a specialist or expert on the topic

(adapted from ABCFP 2010, Standards of Professional Practice: Guidelines for Interpretation)

If the aspect of competence in which I need improvement is the completeness and correctness standard, some options to improve my competence include:

- asking my supervisor or knowledgeable peer to peer-review and/or proof-read my work prior to the final draft.
- reviewing legal requirements to ensure I have met and addressed them all.
- ensuring I include a professional quality, written rationale for my decisions, which documents the relevant considerations, implications and options
- ensuring my grammar, punctuation and formatting are correct (eg. use spellcheck and the “Help” functions available in many computer programs)

Finally, if it is the professional care standard that needs improvement, some options to improve my competence include:

- ensuring to write professional rationales to accompany my professional work and decisions
- evaluating what a similarly educated professional would do in this situation
- ensuring my professional judgement is reasonable, justified and transparent.
- evaluating whether a common practice meets the high standards expected of a professional.

Answer 2 (scored 10)

Competence is one of the four pillars of professional practice embodied in the Forester’s Act (SOPP Guidelines - 2002). In their guidelines, ABCFP authors used the definition of

Properly qualified; having sufficient capacity; ability, authority; sufficient qualifications (mental, natural, legal, physical) (paraphrased).

Competence to perform a task means having knowledge and skill and the ability to use them (SOPP Guidelines – 2002).

Knowledge is the first component of competence (Bylaw 12.2.1). To determine if you are working outside your competence, the knowledge standard is the first test. You can start with a self-assessment. Do I have the education, training or experience needed to perform this task? If I am unsure, I could ask the advice of a qualified professional, or ask them to assess me. The next

test is the completeness and correctness standard (12.2.2). I would need to assess whether my work is up to the standards listed in the SOPP guidelines, such as:

- scientifically/technically sound
- respects competing values
- clear analysis of all options
- error free
- meets legal requirements
- supported by sufficient rationale

Again, if unable to self-assess, I could bring my work to a qualified professional for them to assess.

The third test of competence is the professional care standard. If I am unable to exercise proper professional care, I am outside my competence. Professional care is like due diligence, is founded on knowledge/experience/training, and is “the degree of care a professional must exercise to avoid an undesired outcome” (SOPP Guidelines, 2002). If I don’t have the qualifications etc I won’t be able to exercise professional care. If I broke a law or another undesired outcome happened, that would say I failed this test. If nothing had happened yet, I would get a qualified professional to assess my ability to exercise professional care.

When one of these tests tells me I am outside my competence, as a professional, I must take steps to address this situation immediately. I cannot practice outside my competence and practice good stewardship (Bylaw 11.3.1) due diligence (11.5.1) or properly represent facts (11.4.4). Assuming I am an employee, I would inform my supervisor that I am not competent to continue working as I am, and would be able to defend this further through the Code of Ethics. This is part of my duty to the public, (11.3.7 – practice where competent; 11.3.8 – not to misrepresent qualification/experience; 11.3.2 – professional principles above employment) my duty to the profession (11.4.1 – high standards of conduct; 11.4.4 – not to misrepresent facts), and my duty to that employer himself (11.5.1 – act conscientiously/diligently; 11.5.4 – accept assignments only where qualified; 11.5.5 – inform about poor stewardship). The employer may be relying upon my decisions/advice as a professional as permitted under law such as FRPA sect. 72(a) and as a point of good stewardship.

I would inform my employer that there are several ways to address this problem. I could stop working and ask to be reassigned and replaced by a competent, qualified professional. I would offer to help determine what qualifications that person would require. I would also take steps to become competent. These steps would be agreed upon by the employer and myself, subject to the time and expense the employer would be willing to invest and minimizing both. Options include (depending on the situation):

- course, educational workshops, certification courses
- research, reviewing literature
- working with a qualified professional to mentor under them and train (perhaps a specialist in the field)

Once a plan had been agreed upon and carried out, I would follow-up on work previously done, to ensure it was complete and correct (bylaw 12.2.) as well as met all legal requirements (Bylaw 12.2.2, 11.3.3). If anything was improper, I would address it with appropriate measures, including informing gov’t or the client if need be. This follow-up is required for me to exercise due diligence (11.5.1) and also for the protection of my employer under FRPA 72(a). I would also have my

future work reviewed by a qualified professional until a point where they were satisfied that I am competent.

Question 3 (Essay)

You have been asked to reassess visual quality objectives in order to improve short term timber supply. What would you include in a report to your supervisors regarding the trade-offs between short term timber supply and visual quality objectives? **(10 marks)**

Sample Answers Not Available

Question 4 (Essay)

- a) Discuss the importance of accurate resource inventories in forest management. **(5 marks)**
- b) As a professional, what is your role in contributing to and using the inventory information required to manage the land base? **(5 marks)**

Answer 1 (scored 10)

a) Accurate resource inventory is extremely important in forest management and has significant impact on resource planning and value. It is important that a resource inventory is an accurate reflection of what is on the ground as inventories relay information regarding a variety of attributes such as timber species, age, location volumes, non-timber products, range water, recreation, cultural, historical values, soils, sensitive sites, habitat and forest health conditions to name a few.

Resource inventories help us plan and manage our natural resources and can provide us with an indication if we have managed our lands properly. It is important that inventories are current, complete, understandable, cost effective, flexible (easy updating, storage, and access). Depending on the method of capture for an inventory, an inventory has several variables that determine its usefulness with regards to sustainable forest management.

The accuracy, size of area covered, objective of inventory, time constraints, costs (funds) methods (ground, satellite, aerial) all impact how an inventory can be used. Inventories aid in TSR and ultimately AAC determinations, habitat (WHA, UWR, GAR section 7 notices), TCP, OGMA, and n Land Use Objectives such as old growth targets or EBM are (Land Use Orders) to name a few. It is critical that inventories be accurate so that they accomplish the desired goal of forest management.

Issues that can arise if inventories are incorrect are; inadequate protection of a resource, over protection of a resource, protection on a non-resource. An example of the importance of accurate inventories can be seen in the lack of inventory for non-timber forest products, which could lead to over harvesting, lack of planning and unsustainable economic use.

VRI is heavily depended on for the AAC determination, land use planning, modeling, harvest planning habitat modeling and thus needs to be accurate. Inventories whether used at a strategic level to make decisions or used at a tactical and operational level to provide direction on where resource occur, inventories need to be accurate especially where overlapping values occur and the remaining land base decreases to ensure proper forest management and food stewardship. (Concepts from a Conversation on BC Forests - S. Miesner & Study Group Notes)

b) As a professional with the rights to title and practice (Foresters Act) my primary obligation is to the public and also to have regard for existing legislation, regulation and policy (bylaw 11.3.3). Current policy pertaining to resource inventory can be found in the Forest Act (sec. 9) which specifies that a TFL holder maybe required at the request of the Chief Forester to assist him in the AAC determination capture adequate inventory for the required analysis.

Other policies that apply and that I am obligated to consider are FPPR sec 86 update VRI with depletions and milestone activities. Policies that are contained within an FSP will impact my role as a professional using inventories. I would need to consider all objectives within the FSP some of which would be related to the use of inventories such as WHA, WWR, higher level plan objectives (such as EBM old growth targets). I would need to practice and advocate good stewardship (11.3.1) and work to improve practices and policies affecting the stewardship of the land (11.3.5) I would want to practice due diligence (12.5) in using inventories to ensure the inventory is complete and correct. As new inventories emerge or new collection methods, and attributes of inventories occur I would need to ensure that I was competent in using the inventories ie. for modelling, resource location, strategic planning etc. I would need to again ensure my due diligence as to express my opinion on adequate knowledge (11.3.9) and not misrepresent facts (11.4.4) I would want to have a clear understanding of my employer's objectives (11.5.3) when utilizing inventory information to manage the land base to ensure I was using the inventory correctly, at appropriate scales and time frames. Using the code of ethics and bylaw 12 standards of practice as my guidance to determine my role in contributing to and using the inventory information required to manage the land base will ensure that appropriate use of inventories occur and good stewardship of the land is practiced.

Answer 2 (scored 9)

- a) Accurate resource inventories provide the very important basis for what good forest stewardship is built on. Accounting for what exists from stand to stand assists Forest Professionals with making the long lasting important decisions that are put in front of them. It helps to ensure that decisions are made using this information meet legal obligations and contractual obligations (11.3.1) Without good inventories, we would not be able to assess what the best suited management objectives are because we would not be able to know what factors to properly balance, or where the resources are located. Current Resource Inventories are:
1. Vegetation Resources Inventory (VRI),
 2. Terrestrial Ecosystem Mapping (TEM),
 3. Predictive Ecosystem Mapping (PEM),
 4. RAAD – Archaeological Info, and
 5. Traditional Use Studies (MFLNRO database).

Usually these inventories include: forests, fisheries, ecosystems, water, cultural heritage resources, biodiversity, archaeology, recreation, range resources, wildlife populations visual quality areas and also non-timber values over areas (Assessment of the Status of Forest Inventories in BC – ABCFP 2007). These resources are recorded in applicable databases and systems to be used when making decisions/recommendations on the land. This data is often not perfect, so if there seems to be discrepancy in information versus known local information then ground truthing by qualified professional will be necessary. Information may be used in Timber Supply Review process which accentuates the importance of resource inventories (Assessment of the Status of Forest Inventories in BC – ABCFP 2007).

The Resource Inventory Standards Committee (RISC) is responsible for standardizing data, gathering, storing, analyzing, interpreting, and reporting for natural and cultural resource inventories in BC, as a group made up from various BC Ministries and agencies, BC & Federal government and First Nations peoples.

Good Quality Resource Inventories form the basis of good stewardship decisions.

Question 5 (Essay)

As a consulting RPF you have been hired to develop a landscape level plan to minimize the risk of wildfire to local communities. The area within the landscape unit includes timber harvesting land base, First Nations traditional territories, dispersed rural residences (that are not considered interface as they are too scattered but they are a high value), as well as a small local community that is considered an interface area. The local community is considering a Community Wildfire Protection Plan (CWPP) and is asking for your advice and input for the area within 2 km of the community. They are also concerned with a large fire starting in the forest and burning into their community or threatening the rural residents.

- a) What are the important considerations that must be part of the CWPP and landscape level plans for this area? **(5 marks)**
- b) What options do you have to address this situation? **(5 marks)**

Sample Answers Not Available

Question 6 (Short answer)

Due diligence is one of the cornerstones of professional reliance.

- a) In your own words, define due diligence. **(3 marks)**
- b) As a forest professional, how can you demonstrate due diligence in ONE of the following scenarios? You must answer (1) or (2) but not both. Be specific as to the considerations at each stage. **(7 marks)**
- (1) Taking a block from the "Forest Stewardship Plan stage" through "Layout" to "Cruising" to "Appraisal" (and any other necessary stages) through to the Cutting Permit Application; or
- (2) From harvest completion to "free growing."

Answer 1 (scored 10)

A) I would define due diligence in several parts. It is a complex concept the way it is understood and used in our profession, and no single definition exists in FRPA, even though section 72(a) lists it as a defence from administrative remedy. My definition:

Taking all necessary steps due (merited by) a desired outcome, or to avoid negative consequences or an undesired outcome. This includes filling all obligations, which for an RPF includes completeness, correctness, and ethical conduct. Providing documentation of steps and adequate rationale for decisions. Following up and monitoring to ensure outcomes are as desired/intended.

Necessary steps could be things like:

- Enlisting appropriate/qualified professionals (bylaw 11.3.7)
- Getting complete understanding of objectives from client/employer (Bylaw 11.5.3)
- Having regard for legislation (11.3.3)
- Planning, monitoring actions
- Implementing QA or follow up inspections

B) To be duly diligent, work must be complete, correct and clear, and founded on adequate knowledge (Bylaw 12.2). Any area of CP development that I am not competent to do independently will be completed under supervision.

The following are things that can be done in the CP development at my workplace in order for me to fully discharge my obligations to be duly diligent by meeting completeness/correctness:

Adequate planning – FSP's contain specific objectives and strategies for use in each area. Blocks/CP's need to be planned to be consistent with these. Consider all values (wildlife, visual, timber, ecosystem health, landscape objectives, etc) and ensure your plan covers them (Good stewardship - Forester's Act 4(2)b, Bylaw 11.3.1). Collect all information required, from previous data, maps, or in field if need be. A recce is usually a good idea. Check status of consultation for the CP, ensure it is up to date. ID features (streams, wetlands, OGMA's) that

need special treatment in block planning. Ensure you fully understand and try to achieve employer objectives (11.5.3). Find out about Species At Risk (SAR) in the permit area, use FSP objectives/strategies. Plan reserves to meet legal requirements (ie: FPPR RRZ's for classified streams). Ensure block design accounts for operability (ex: skidding routes maintained, distances appropriate.) Completely plan road locations and crossings. Ensure your plan will meet economical requirements (ie: timber profile to be harvested will be profitable with roads/harvesting costs expected.) Have another professional review your plans.

Layout – use trained and competent crew. Provide training/mentoring opportunities if need be (11.6.3) and monitor work quality/correctness as it's being done. Assess all features on maps or found in the field (ie: all streams are looked at by someone trained to assess, verify wetlands mapped correctly). Ensure crew safety through meetings and discussion (Bylaw 11.3.10) and follow company safety policy. Also watch out for logger safety by locating and mapping hazards (ie: steep slopes, unstable sites). Ensure marking is adequate in field to avoid trespass or other problems. Follow up completely on anything reported or ID'd by crew, or anything they were unaware of (ie: an unknown stick nest – get it looked at). Take appropriate measures to adjust plans according to what is found in the field. Provide complete and thorough documentation of work and notes on safety or operability.

Cruise – cruise design done as per appraisal manual (Bylaw 11.3.3, 12.2.2). Try and maximise sampling efficiency by using count/measure plots and grid size adjustments (11.4.6 – stay informed) while ensuring work will be efficient. Use qualified crews, check qualifications if needed. Pre-stratify the blocks and ID NSR areas before sampling (to avoid bias and stay legal you can't do it after). Carry out check cruising to ensure quality before submitting.

Ministry Check cruise – request check cruise, go along to make sure they do it right.

SP data collection – collect adequate ecology data, using qualified staff.

SP writing – refer to appropriate FSP stocking standards, write SP to meet FSP objectives.

Collect other info as required for appraisal submission, such as Engineering Cost Estimate for roads.

Ensure consultation is done as required prior to submission. If any changes of an old plan (IE; FDP block) re-triggered it you may need to re-consult First Nations, Trappers, Guides. When submitting appraisal ensure it is complete and correct. Get a qualified professional to review your product and all the supporting documentation you created.

Answer 2 (scored 9.5)

- a) I define due diligence as taking every possible action to ensure: that the intended outcome is achieved and that the chance of negative consequences of effects is minimized to the smallest possible. Furthermore it is the clear documentation of those actions, considerations, and critical analysis, and the maintenance of the documentation in files. Lastly, it is the clear documentation of professional decisions and recommendations such that another professional could read the rationale and reasonably come to the same conclusion. Due diligence includes not accepting information or recommendations blindly, but critically analyzing them and checking if they make sense according to previous knowledge and common sense. Due diligence is not being too rushed or stressed, on too tight of a budget or too intimidated to consult a peer, a specialist, do some research, ask some tough questions or ask for clarification. Due diligence is the cornerstone of professional reliance and is ultimately a big part of gaining and maintain public credibility and public trust.
- b) As a forest professional taking an area of land from harvest to free growing, I would demonstrate due diligence in the following ways:
- Ensure my practices were consistent with FSP and operational plans, including stocking standards
 - Ensure practices are consistent with FRPA, FPPR, align with the objectives set by government, seed transfer guidelines
 - Maintain current on research and scientific findings to ensure that practices, such as species selection, planting density and other factors reflected in the stocking standards are going to result in a productive stand, achieve growth and yield and timber objectives of my company/employer, and not create future forest health issues for either the government (if after FG) or for my employer (if pre-FG).
 - Maintain up to date on new objectives set by government, wildlife habitat area, or government action regulations that effect the area in question and would necessitate an FSP amendment.
 - Check to see that those doing field work for me are competent to carry out those duties and that I am comfortable taking professional accountability for recommendations made from data they collected (Supervision Guideline 2004). This may include checking that they are accredited, talking to peers, or going out to view their work and/or train them (stocking, survival, regeneration, or free growing surveys).
 - Check a portion of work (both field & recommendations) randomly to see that it makes sense according to my knowledge of the area and my expertise (11.4.5).
 - Discuss professional opinions and recommendations with peers or colleagues, for either formal or informal peer review.

- In all cases where the characteristic of the decision are not evident, write a rationale to support my decision (Guidance for Professional Quality Rationales). This rationale should not misrepresent facts or only state facts supporting my decision (11.4.4).
- I would use checklists, standard operating procedures to ensure that relevant steps or considerations are not missed (Standards of Professional Practice Guidelines for Interpretation)
- Ensure that I am familiar with the relevant characteristics for the area I am working on (SOPP Guidelines for Interp).
- I would keep a daily professional journal documenting these actions and maintain them in a filing system that is easily accessible.
- In the case that I saw areas for improvement, either in practices or in policy that may be limiting or encourage poor or sub-par stewardship, that I advocate for change through the appropriate avenue. This may be appropriate to do through my employer (11.5.5, 11.3.5, 11.3.2), to the ministry, or through other agencies.

By practicing due diligence, ensuring my work is complete, correct & clear (12.2.2) and that I am competent in my field, I am helping to uphold my responsibilities as a Professional Forester. As well, I am helping to keep a strong framework of professional reliance so that the profession can maintain public trust & along with that the great privilege granted on us, the Right to Title & the Right to Practice (sect 19, 20 Foresters Act).

Question 7 (Essay)

You are supervising the logging on a cutblock. You have done a prework assessment with the crew and gone over the logging plan, safety requirements and critical site factors. The falling has been underway for a couple of days. The logging contractor calls you in the evening at home and tells you that his crew is getting attacked by what appear to be at least two pairs of hawks. The contractor says that his crew has identified what appear to be two active nests within the block. There is no mention of nests in any of the prework materials you have.

- What if any legislation applies in this case? **(2 marks)**
- What are your legal and professional obligations? **(3 marks)**
- What would you do? **(5 marks)**

Answer 1 (scored 9.5)

- There are many pieces of legislation that may be at work in this situation. First, Forest and Range Practices Act (Forest Planning and Practices Regulation - FPPR) outlines that wildlife habitat areas should be defined during forest activities, in Wildlife Management Strategy and the needs of those identified wildlife are met through land use objectives, habitat set asides and restrictions. This could/should have been identified when this area during field reconnaissance. 85 species at risk are

identified under FRPA. It is unknown if the hawks are considered threatened, endangered or a species at risk or not.

Workers Compensation Act (WCA) may come into play if any workers were/are hurt during operations.

Species At Risk Act (SARA) is a Federal Act that may be applicable if the hawks are on a threatened or endangered list and lack adequate protection under Provincial legislation.

Wildfire Act may have protection under this act, although I do not believe there are many protected species under the Wildfire Act.

- b) My professional and legal obligations are to have the contractor stop work until further assessment can be conducted on the hawks and determination made whether harvesting could or should go ahead. I have the professional obligation to the public to practice and advocate for good stewardship (11.3.1). The public have indicated wildlife and species at risk as important factors for consideration in resource management, therefore I must consider the importance of these hawks. I must also consider my employer (11.3.2) and understand the potential impact this shut down may impose on the production. I also have a commitment to safety (12.7.1) and I have identified it is not safe to keep working with attacking hawks. Since I have identified something that may have been missed by the Professional Forester that recommended or approved this cut block, potentially causing detrimental stewardship (11.4), I would contact that Professional Forester and let them know what has happened. I would give them the benefit of the doubt and approach them with respect. Given that they are professionals, I would expect they will be on board with finding more out about these hawks, mitigating this unsafe interaction and coming up with a plan.

My next obligation is to go (safely!) out to attempt to identify the hawk species, habitat, additional nests location(s) and other factors of their habitat. I would try to identify the area as dangerous, perhaps ribboning it off. I need to determine whether or not this hawk is a protected species. If identifying birds is outside my scope of practice, I would consult a professional who knows/identifies hawks and determine if special considerations beyond what is outlined for wildlife in the Forest Planning and Practices Regulation and higher level plans.

- c) If faced with this situation I would have told the contractor to halt logging operations until further determinations can be made about these hawks. Without having the management requirements for hawks handy or knowing the species (or if it is even hawks causing a problem). Having people working in unsafe environment is not acceptable (12.7.1), nor is causing the undue stress on the 2 pairs or more of hawks, (assuming the contractor has identified them properly).

I would notify my supervisor that I had shut down logging operations because of safety concerns. I would then respectfully discuss this finding with the Professional that signed off on this development (cut block). Together with the other professional, I would develop a plan moving forward on how to manage the disturbance of hawks. A field visit is necessary to verify the species of hawk, the extent of their habitat, disturbance to habitat with already logged area and nesting sites that I may be able to identify. Depending on the season, I could expect the hawks to be more aggressive if they have young/eggs they are protecting, or perhaps if they are protecting a feed source like a dead moose. Identifying all factors is important. If I am

unable to do so, I would consult with a credible Registered Professional Biologist who has experience and expertise in this field of practice. I would have them verify the species, and then I would be able to determine if special habitat considerations as a species at risk needed to be factored into our management strategy or those listed in the FPPR, and FRPA will suffice.

At the very least, I would assist the signing Professional Forester who signed off on the cutting permit in developing a plan. Ideas to mitigate this interaction would be:

- abandon harvesting (economic considerations to licensee)
- create wildlife tree patch, amend harvest plans
- have contractor log other area until risk of hawk attacks have subsided

Moving forward I would identify further educational information be shared with layout crews and/or forest professionals regarding identifying nests, habitat to incorporate in site plan and FSP and attempt to assess why the nests were not identified before harvesting had begun. Hopefully this would alleviate the risk of this happening again.