

# Key Elk Questions for Qualified Environmental Professionals Major Projects

Resource Management, FLNRO – South Coast Region  
June 19, 2017 – Version 2.0

Date:

South Coast Region Resource Management of the Ministry of Forests, Lands and Natural Resource Operations recommends that the following questions be filled out and submitted by Qualified Environmental Professionals working on behalf of the

project. A completed form will assist in clarifying the information prepared by Qualified Environmental Professionals on behalf of the project proponent and improve the efficiency of the review process.

Please be advised that a Qualified Environmental Professional is an applied scientist or technologist, acting alone or together with another Qualified Environmental Professional. He or she must be registered and in an appropriate professional organization constituted under an Act, acting under that association’s code of ethics and subject to disciplinary action by that association. To be able to certify that they are qualified to provide an answer to a particular question posed, the individual’s area of expertise must be one that is acceptable for the purpose of providing all or part of a report in respect of the particular development proposal that is being assessed. The individual is considered a Qualified Environmental Professional only for that portion of the assessment that is within their area of expertise. In this case, it is expected that the Qualified Environmental Professional(s) will be experienced in assessing the impacts, mitigation and off-sets/mitigation associated with industrial or recreational activities on Elk and their habitat.

<b>1.0 Professional Accountability</b>			
<b>1.1</b>	<b>Has the submission been signed off by a certified professional experienced in assessing impacts, mitigation, off-sets and monitoring of industrial or recreational activities associated with Elk and their habitat?</b>		Unknown
<b>Professional</b>			<b>Portion(s) of Environmental Assessment Responsible For</b>
<b>Name</b>	<b>Accreditation</b>	<b>Signature</b>	
_____	_____	_____	_____
_____	_____	_____	_____
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<b>2.0 Assessment of Elk Components</b>		
<b>2.1</b>	<b>Habitat</b>	
2.1.1	Is Elk habitat fully understood and described?	Unknown
2.1.2	Has suitable Elk habitat been identified within the Regional Study Area?	Unknown
2.1.2.1	Has a Habitat Suitability Index (HSI) been used?	Unknown
2.1.2.2	Has a 6 class rating scheme been used (as per RISC 1999)?	Unknown
2.1.2.3	Have Terrestrial Ecosystem Mapping data been used?	Unknown
2.1.2.4	Have Predictive Ecosystem Mapping data been used?	Unknown
2.1.2.5	Does the Regional Study Area avoid approved or proposed Elk Ungulate Winter Range polygons?	Unknown
2.1.3	Were all major life requisites assessed?	Unknown
2.1.4	Does habitat modelling address indirect effects?	Unknown
<b>2.2</b>	<b>Populations and Individuals</b>	
2.2.1	Have regional FLNR biologists been contacted regarding current knowledge of the presence and status of Elk in the Regional Study Area?	Unknown
2.2.2	Have provincial and/or federal data repositories (e.g., Wildlife Survey Inventory database; CDC database) been searched?	Unknown
2.2.3	Have any surveys, following RISC standards where applicable, been conducted in the Regional Study Area to improve understanding of baseline conditions?	Unknown
<b>3.0 Assessment of Potential/Expected Impacts to Elk</b>		
<b>3.1</b>	<b>Project Footprint - Habitat</b>	
3.1.1	Are the direct impacts of the project components that overlap or intersect Elk range fully considered, understood and described?	Unknown
3.1.2	Do the direct impacts of the project components include consideration of the effects of habitat loss or alteration?	Unknown
<b>3.2</b>	<b>Project Operation – Habitat, Individuals and Populations</b>	
3.2.1	Are the impacts of project operations that interact with Elk or their habitats fully considered, understood and described?	Unknown
3.2.1.1	Are activities that can cause displacement from or changes to movement within key habitats fully considered, understood and described?	Unknown
3.2.1.2	Are activities that can cause stress to animals or increase mortality risk fully considered, understood and described?	Unknown
3.2.1.3	Do the activities that can cause stress to animals or increase mortality that are fully considered, understood and described include the following:	
a	<i>heavy machinery operation;</i>	Unknown
b	<i>increased human activity and vehicle traffic; and/or,</i>	Unknown

c	<i>other ongoing maintenance activities?</i>	Unknown
3.2.1.4	Were other potential pathways of effects considered?	Unknown
<b>3.3</b>	<b>Project Construction – Individuals and Populations</b>	
3.3.1	Have construction activities that potentially intersect with critical periods for Elk been fully considered, understood and described?	Unknown
3.3.2	Have construction activities that increase mortality risk been fully considered, understood and described?	Unknown
3.3.2.1	Are effects of construction on Elk habitat and populations/individuals addressed through the following pathways:	
a	<i>habitat loss/alteration (quantitatively);</i>	Unknown
b	<i>movement (quantitatively or qualitatively); and/or,</i>	Unknown
c	<i>other pathways?</i>	Unknown
<b>4.0 Mitigation and Offsets</b>		
<b>4.1</b>	<b>Impact Avoidance</b>	
4.1.1	Was the Environmental Mitigation Policy (MOE 2014) applied?	Unknown
4.1.2	Have Cumulative Effects been taken into account in considering project effects on elk?	Unknown
4.1.3	Has Climate Change been considered in developing mitigative strategies for elk?	Unknown
4.1.4	Are project components designed, located or other measures taken to avoid impacts to Elk habitat?	Unknown
4.1.4.1	Was there spatial avoidance of Elk habitat and habitat features, including mineral licks?	Unknown
4.1.4.2	Was there temporal avoidance of Elk habitat (i.e. consideration of least risk timing windows)?	Unknown
4.1.4.3	Was there consideration of General Wildlife Measures (GWMs) for work within Ungulate Winter Range (and adherence to the GWMs for those projects where GWMs are legal obligations)?	Unknown
4.1.5	Are project components designed, located or other measures taken to avoid mortality risks to Elk?	Unknown
4.1.5.1	Are project components designed, located or other measures taken to avoid impacts to Elk?	Unknown
4.1.5.2	Was there spatial avoidance of Elk occurring in the area?	Unknown
4.1.5.3	Was there temporal avoidance of Elk (i.e. consideration of least risk timing windows)?	Unknown
4.1.5.4	Was there consideration of General Wildlife Measures (GWMs) for work within Ungulate Winter Range (and adherence to the GWMs for those projects where GWMs are legal obligations)?	Unknown
4.1.6	Are project components designed, located or other measures taken to avoid changes in movement of Elk?	Unknown
<b>4.2</b>	<b>Mitigation</b>	
4.2.1	Are project components designed, located or other measures taken to minimize or otherwise mitigate impacts to Elk habitat?	Unknown
4.2.1.1	Where Elk habitat could not be avoided, were activities overlapping Elk habitat and habitat features minimized or otherwise mitigated?	Unknown
4.2.1.2	Where Elk habitat could not be avoided while in seasonal use, was scheduling carried out to minimize or mitigate activities in Elk habitat (i.e. consideration of least risk timing windows)?	Unknown

4.2.2	Are project components designed, located or other measures taken to reduce or mitigate mortality risks to Elk?	Unknown
4.2.2.1	Where Elk could not be avoided, were activities potentially impacting Elk minimized or otherwise mitigated?	Unknown
4.2.2.2	Where Elk could not be avoided, where there efforts to schedule activities to minimize or mitigate impacts to Elk (i.e. consideration of least risk timing windows)?	Unknown
4.2.3	Are project components designed, located or other measures taken to minimize or otherwise mitigate changes in movement of Elk?	Unknown
4.2.4	Will disturbed Elk habitat be restored to the fullest, functional extent feasible?	Unknown
<b>4.3</b>	<b>Offsetting</b>	
4.3.1	If applicable, does the proposed off-set provide ecological equivalency (like-for-like) to directly address residual impacts from changes in habitat quantity and quality?	Unknown
4.3.1.1	If there are deviations from like-for-like off-setting, have the associated assumptions and uncertainties been outlined and has a description been provided as to why the conservation outcomes will be a better environmental outcome (i.e., like-for-better)?	Unknown
4.3.2	If applicable, is the proposed off-set in proximity to the habitat that has been lost or damaged?	Unknown
4.3.2.1	Will the offset location contribute to a functioning ecosystem, providing similar ecosystem goods and services as the soon to be impacted site, at both the site level and landscape level?	Unknown
<b>5.0 Monitoring</b>		
5.1	Will the implementation of mitigation and restoration activities be monitored and reported?	Unknown
5.2	Will adaptive management be used should mitigation prove to be less effective than predicted?	Unknown

This questionnaire can be submitted with the development plan when submitting a project proposal through the Front Counter BC.