

## REPORT

### Town of Canmore

Third-party Review of EIS  
Peaks Landing Development  
Prepared by Associated Environmental



January 2, 2019

ISO 9001 and 14001 Certified | An Associated Engineering Company



**CONFIDENTIALITY AND © COPYRIGHT**

This document is for the sole use of the addressee and Associated Environmental Consultants Inc. The document contains proprietary and confidential information that shall not be reproduced in any manner or disclosed to or discussed with any other parties without the express written permission of Associated Environmental Consultants Inc. Information in this document is to be considered the intellectual property of Associated Environmental Consultants Inc. in accordance with Canadian copyright law.

This report was prepared by Associated Environmental Consultants Inc. for the account of Town of Canmore. The material in it reflects Associated Environmental Consultants Inc.'s best judgement, in the light of the information available to it, at the time of preparation. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. Associated Environmental Consultants Inc. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

## Executive Summary

Associated Environmental Consultants Inc. (Associated) is contracted by the Town of Canmore to provide an independent third-party review of the Environmental Impact Statement (EIS) prepared for Hillcroft Developments Ltd. for the proposed Peaks Landing Development (the Project).

Hillcroft Developments Ltd. and partners are proposing to develop three parcels of land in the Peaks of Grassi neighbourhood of the Town of Canmore, Alberta. The proposed project, called Peaks Landing, is proposed to include a total of 27 to 40 units that will add an estimated 68 residents to the neighbourhood. The project is adjacent to the Quarry Lake Local Habitat Patch (QLLHP) and approximately 100 m north of the Three Sisters Along Valley Movement Corridor (TSAVC) and about 770 m west of the Tipple Across Valley Movement Corridor.

As part of the reapplication for the Peaks Landing project, an Environmental Impact Statement (EIS) was completed by the Applicant in accordance with requirements of Canmore's Municipal Development Plan (2016) and EIS Policy (2016).

Associated Environmental's (Associated) review of the EIS indicates that requirements identified in the Terms of Reference (ToR) have been provided in the EIS. The use of existing information and data as well as field survey data collected within the project area are deemed appropriate to describe existing conditions. Based on the baseline information, public engagement and project description provided in the EIS, Associated is satisfied that the Valued Ecosystem Components (VECs) and Local Study Area (LSA) selected for the EIS are appropriate. Associated is also satisfied that the potential effects from the project and potential impacts to the VECs identified in the EIS are appropriate for the proposed project.

The potential for increased human-wildlife conflicts is identified as a potential effect of the project given its proximity to the QLLHP and TSAVC and mitigation measures are proposed in the EIS to address human-wildlife conflicts. Associated agrees with the predicted environmental effects of the project, that impacts will be local in nature and that a regional cumulative effects assessment is not required given the mitigations provided. Associated also agrees that there is uncertainty in the potential impacts of the project and the measures proposed to avoid or mitigate a potential increase in human-wildlife interactions because of the project. Success of the proposed mitigation measures will require long-term commitments (e.g., education, monitoring or follow-up) by the Applicant and/or the Town of Canmore as well as enforcement by Alberta Environment and Parks.

## Table of Contents

<b>SECTION</b>	<b>PAGE NO.</b>
<b>Executive Summary</b>	<b>i</b>
<b>Table of Contents</b>	<b>ii</b>
<b>1 Introduction</b>	<b>3</b>
1.1 Background	3
1.2 Scope of the Third-party review	3
<b>2 Approach to Third-party Review</b>	<b>4</b>
<b>3 Completeness of Information Requested in the Terms of Reference</b>	<b>5</b>
<b>4 Baseline Conditions and Impact Assessment</b>	<b>5</b>
4.1 Baseline Conditions	5
4.2 Impact Assessment	6
<b>5 Mitigation</b>	<b>11</b>
<b>6 Conclusions</b>	<b>13</b>
<b>7 Closure</b>	<b>14</b>
<b>References</b>	

# 1 Introduction

## 1.1 BACKGROUND

The Peaks Landing lands were part of the Natural Resources Conservation Board (NRCB) decision in 1992 in relation to Three Sisters Golf Resort application. As part of the NRCB process, a full Environmental Impact Assessment (EIA) was submitted and approved, and the EIA included the Peak Landing site. Two applications for land use amendment for Peaks Landing were submitted in 2014 and 2015, and a subdivision application in 2016. Reports that were previously submitted in support of the applications included an environmental brief, along with a Steep Creek Risk Assessment, a Wildfire Risk Assessment, an undermining review, a geotechnical report, and detailed designs for storm water management and utilities. The land use bylaw amendment was approved by Town of Canmore Council in 2015; however, an application for a judicial review was subsequently granted, which ultimately resulted in the approval being invalidated by the Court of Queen's Bench of Alberta due to the breach in duty of fairness related to the 1998 Municipal Development Plan requirement for completion of an Environmental Impact Statement.

Hillcroft Developments Ltd. (the Applicant) and partners are proposing to develop three parcels of land in the Peaks of Grassi area of the Town of Canmore, Alberta. The proposed project, called Peaks Landing, includes a total of 27 to 40 units with 14 row townhouses on the western parcel, 8 duplex homes with permitted legal suites on the middle parcel and 5 single homes on the eastern parcel. The Applicant is applying for a land use bylaw amendment and subsequent subdivision of Peaks Landing to allow for development of their project proposal. As part of the reapplication for the Peaks Landing project, an Environmental Impact Statement (EIS) that meets the requirements of the Town of Canmore's Municipal Development Plan (2016) and EIS Policy (2016) was completed following the Terms of Reference for the Peaks Landing application finalized on September 10, 2018.

## 1.2 SCOPE OF THE THIRD-PARTY REVIEW

Associated Environmental Consultants Inc. (Associated) is contracted by the Town of Canmore to provide an independent third-party review of the Environmental Impact Statement (EIS) prepared for Hillcroft Developments Ltd. and their proposed Peaks Landing development (the Project) completed by Corvidea Environmental Consulting Ltd.

The Town of Canmore's EIS Policy (2016) requires that the EIS Terms of Reference (ToR) and the resulting EIS are reviewed by an independent third-party. Associated provided input to the Terms of Reference on August 10, 2018 and provided a preliminary review of the draft EIS provided to the Town of Canmore on September 8, 2018. A final EIS was received by the Town of Canmore from the Applicant on December 7, 2018. A final Third-party review was completed of this EIS by Associated.

This Third-party Review is presented in five sections:

- Approach to the Third-party Review (Section 2);
- Completeness of Information Requested in the Terms of Reference (Section 3);

- Baseline Conditions and Impact Assessment (Section 4);
- Mitigation (Section 5); and
- Conclusions (Section 6).

## 2 Approach to Third-party Review

The purpose of the EIS is to provide sufficient information to Council to make an informed decision on the proposed Peaks Landing development. In summary, the EIS should:

- Describe existing conditions;
- Identify significant natural and ecological features;
- Determine the nature and scale of the potential impacts generated by the proposed project prior to mitigation;
- Provide recommendations to avoid or mitigate these impacts;
- Identify residual impacts and their significance after implementation of proposed mitigation;
- Recommend if any further studies and/or monitoring programs are to be undertaken through the course of implementation; and
- Where significant residual impacts are identified, discuss cumulative effects of the project in combination with existing, approved, and future developments in the area.

Information in the EIS was assessed based on the following questions:

- Was all information requested in the Terms of Reference provided?
- Is the baseline information and understanding of the Project used to address project impacts appropriate?
- Is the impact assessment thorough and complete?
  - Were all the key issues addressed, and positive and negative effects identified?
  - Are the impact assessment and significance ratings for the effects appropriate, and if not why?
  - Do any of the effects of the project require the completion of a cumulative effects assessment?
- Were the mitigation and management recommendations thorough?
- Are additional mitigation, monitoring or management plans required?

### 3 **Completeness of Information Requested in the Terms of Reference**

*Was all information requested in the Terms of Reference provided?*

The final ToR for the proposed Peaks Landing project was agreed to by the Town of Canmore and the Applicant on September 10, 2018. Development of the final ToR included Third-party input and review as required by the Canmore EIS Policy (2016).

Associated cross-referenced information in the EIS with the ToR and determined that the EIS content aligns with ToR information requirements. Although some of the information in the EIS is noted to be disorganized, the EIS content is still considered to be thorough. Associated also notes that public engagement, current policy, guidelines and legislation relevant to the proposed project appear to have been considered in the assessment.

## 4 **Baseline Conditions and Impact Assessment**

### 4.1 **BASELINE CONDITIONS**

*Is the baseline information and understanding of the Project used to address project impacts appropriate?*

The desktop data and information combined with the field data collected for the proposed project area is adequate. The most current and available wildlife tracking data from AEP was used, as was information collected during site visits completed in 2014, 2016 and 2018. Associated notes that timing of field surveys was completed outside of the best months for vegetation growth, generally between June and August. However, based on the habitat present and FireSmart activities completed within the three project area parcels, completion of the field surveys outside of this time period is not considered a deficiency. This is because of the absence of sensitive habitat or features (e.g., wetlands, creeks, or montane) within the project area that may provide habitat for rare plants. Breeding bird surveys completed in May 2016 were completed during an appropriate time period. Field surveys completed in 2014 and 2018 were completed on similar dates in September allowing for a reasonable comparison of change between these years, as described in the EIS. Associated notes that biodiversity is not directly mentioned in the EIS, although the desktop review and field surveys suggest that no unique or special status vegetation or wildlife species were observed in the proposed project area. The most significant natural and ecological features within the Local Study Area (LSA) include the Quarry Lake Local Habitat Patch (QLLHP) and the Three Sisters Along Valley Movement Corridor (TSAVC) and are identified as important wildlife habitat and movement areas in the EIS. Therefore, Associated does not consider the exclusion of a specific discussion regarding biodiversity as a deficiency since the relevant components of biodiversity are addressed in the EIS. However, Associated notes that all

information requirements identified in the ToR should be addressed in the EIS to demonstrate that the Applicant has followed the ToR.

While it appears field surveys were completed within the three parcels of land proposed for development, it is not clear that surveys were completed in the location of berm construction. Habitat in the location of the proposed berm appears to be similar to habitat within the three parcels of land; however, based on Associated's visit to the project area understory FireSmart activities appear to have not been completed in this area. As per mitigation measures proposed in the EIS, pre-construction migratory breeding bird surveys should also be completed in the location of the berm if any clearing is proposed to occur during the active breeding period.

Results from past public engagement are summarized in the EIS and note that common public concerns associated with the project include impacts to wildlife, loss of wildlife habitat, increased human use in the area and flood risk of the project area. Baseline conditions in the EIS address wildlife, wildlife habitat, and human use in the project and local study areas. Associated notes that flood risk is addressed in another consultant report and is not required in the EIS. However, the berm that will be constructed to mitigate flood risk is described in the EIS, although existing vegetation and habitat conditions within the proposed berm location are not explicitly provided in the baseline section.

## 4.2 IMPACT ASSESSMENT

### *Is the impact assessment thorough and complete?*

Associated considers the description of the proposed project and baseline information provided in the EIS to be thorough, which allows for impacts in the project area and the LSA to be assessed where changes to existing conditions are anticipated. Associated observes that the impacts assessed in the EIS are consistent with anticipated construction of residential homes in the project area and anticipated changes to baseline conditions.

It is noted that potential impacts of the proposed project (the project footprint) on the three land parcels is 0.74 ha (7400 m<sup>2</sup>) in size, including an additional 0.07 ha (700 m<sup>2</sup>) for the flood mitigation berm. The LSA selected includes a 150 m buffer surrounding the proposed three land parcels to be developed as residential properties. Associated considers the spatial boundary of the LSA appropriate for the EIS in that it includes relevant human and ecological areas adjacent to or within proximity of the proposed project that may be affected by the project. These include portions of the existing Peaks of Grassi Neighbourhood, QLLHP, TSAVC, Quarry lake Park/Off-leash dog area and the Altalink right-of-way (ROW). Although the proposed project does not directly impact these areas through soil or vegetation disturbances, these areas are either adjacent or within close enough proximity to the project area that project activities may result in effects in these areas.



Overall, Associated finds that the Impact Assessment requirements provided in the EIS meet the ToR. Additional commentary regarding the information provided in the Impact Assessment is provided in the sections below.

*Were all the key issues addressed and positive and negative effects identified?*

Associated observes that the Impact Assessment provided in Section 7 of the EIS includes the selection of four Valued Ecosystem Components (VECs), a description of potential effects during the construction and operation phases of the project (i.e., complete build-out of the proposed project) and a description of potential effects to the selected VECs.

The VECs selected for the assessment comprise black bear, grizzly bear, cougar and elk and the EIS provides rationale for the selection of these VECs, including physical, biological and socio-economic justification for their selection. Given the proximity of the proposed project area to the QLLHP and TSAVC, as well as existing developments (i.e., Peaks of Grassi neighbourhood and the Altalink Utility ROW), construction and build-out of the project area can be reasonably expected to result in potential interactions with the selected VECs. Associated has reviewed the baseline information provided in the EIS, including concerns compiled from previous stakeholder engagement, data collected from field surveys and wildlife tracking data acquired from AEP. Based on this information Associated agrees with the VECs selected for the EIS.

Associated notes that the ToR indicates the EIS should focus on vegetation and wildlife components. Associated also notes that no vegetation VECs were selected for the EIS. Based on the baseline conditions of vegetation in the project area, such as the absence of rare plants and rare plant communities and FireSmart activities, Associated agrees that VECs for vegetation are not included.

Associated observes that FireSmart activities completed in the project area have resulted in the clearing of understory vegetation such as tree saplings and shrubs (i.e., willows [*Salix spp.*], buffalo berry [*Shepherdia canadensis*] and other tall shrubs). The EIS baseline information also indicates that no rare plants, natural water bodies (e.g. wetlands, watercourses or lakes) or natural aquatic habitats were observed in the project area or LSA; therefore, the exclusion of VECs for vegetation, natural water bodies or aquatic habitats is appropriate. Field surveys suggest that no provincial or federal bird species at risk were identified in the project area; therefore, the exclusion of bird species as a VEC is also appropriate. Similarly, the absence of aquatic habitats in the project area also suggest that the exclusion of a VEC comprising amphibians is appropriate.

The EIS identifies negative and positive effects to VECs. Negative effects are predicted to occur during both the construction and build-out phases of the project, including potential negative effects resulting in change to habitat, change to wildlife movement and change in mortality risk for the selected VECs. Positive effects are also predicted to occur during the build-out phase. Associated reviews the negative and positive effects predicted for the project in the sections below.

### **Predicted Negative Effects**

The EIS identifies various activities as well as the potential for noise to impact VECs during the construction phase. It is noted that the EIS addresses the construction of a berm for flood risk mitigation in various sections; however, construction of the berm is not provided in the list of construction activities provided in Section 7.3 of the EIS. This is not a deficiency in the content of the EIS, as impacts from construction of the berm are identified in the EIS, but rather an organizational omission. Associated notes that all relevant construction activities should be identified in the appropriate section of the EIS.

Given that baseline conditions in the project area include existing infrastructure such as an access road, a lift station, and stormwater infrastructure, Associated is satisfied that the key issues affecting VECs during the construction phase of the project are adequately addressed in the EIS. Based on the proposed project layout, baseline conditions and VECs assessed, Associated agrees with the potential environmental effects predicted during construction, as provided in Table 4 of the EIS.

Associated observes that the application will include Municipal Reserve (MR) north of the east land parcel. The proposed MR appears to preclude development on steep terrain in the project area; Associated observes that the impact assessment does not need to assess steep terrain because the MR will not be developed by the Applicant.

During the operation phase, when all proposed homes have been built-out and new residents are living within these homes, Associated observes that the EIS identifies relevant potential negative effects to the VECs including effects from additional traffic, parking and amenities as well as potential increased use of adjacent lands by people. Section 7.4 of the EIS does not explicitly identify the potential for increased human-wildlife interactions because of more people living in the neighbourhood and moving into the adjacent QLLHP and TSAVC. However, potential human-wildlife interactions are addressed through the assessment of the effects of human use on wildlife movement and mortality risk. This is appropriate, since an increase in human use may result in more wildlife interactions resulting in negative conflicts where people could be injured/killed and wildlife relocated/destroyed as a consequence of these interactions.

Quarry Lake Park has been identified as a high conflict area for black bears and humans and the Human-Wildlife Coexistence report (GoA 2018) suggests that human-black bear conflicts account for the largest proportion of relocations and destruction of animals in the Bow Valley. Indeed, an increase in traffic may result in an increased probability that individual animals from the VECs may be killed through collisions; however, potential impacts from outdoor recreation (i.e., potentially more residents using the Altalink ROW, Quarry Lake Park or entering the QLLHP and TSAVC) may have a greater impact to the VECs. Current research (e.g., Hojnowski 2017), and management initiatives (e.g., 2018 Human-Wildlife Coexistence Report [GoA 2018]) indicate human-wildlife interactions are an important consideration for the proposed project. Associated is satisfied that the EIS addresses this key issue, including changes to habitat and movement, which have the potential to result in negative impacts to wildlife as a result of the project. Associated agrees with the

potential environmental effects described in Table 6 of the EIS based on existing information suggesting that VEC use of the project area is currently infrequent, the project footprint is relatively small and within an existing neighbourhood, the predicted number of new residents is modest, and mitigation measures are expected to be effective (e.g., FireSmart activities that have also removed large amounts of buffaloberry in the project area; installation of signage by AEP prohibiting access to the QLLHP and TSAVC along undesignated trails).

Uncertainty regarding potential project impacts is noted in the EIS, including uncertainty in identifying potential impacts on different species as well as uncertainty regarding the mitigation measures proposed and their future adoption by residents. Associated agrees that these uncertainties are relevant to the project area. With respect to the proposed project, Associated notes that there is uncertainty in the magnitude and duration of effects predicted for wildlife movement and mortality because the nature and location of future human-wildlife interactions are also uncertain. However, the identification of uncertainty in the EIS is not a deficiency; the discussion of potential uncertainties serves to provide additional context as to the type of mitigation and monitoring proposed.

### **Positive Effects**

Positive effects are also provided in the EIS, and are described in terms of benefits of the proposed project. The EIS indicates that the proposed berm will provide flood risk mitigation and will also include a two-rail fence. The fence and berm, combined with signage prohibiting entrance into the adjacent QLLHP and TSAVC are hypothesized to provide a barrier discouraging people from entering these areas. Similarly, construction of new homes within the three parcels of land is hypothesized to provide a “hard edge” barrier to discourage wildlife movement into the Peaks of Grassi neighbourhood from the Altalink ROW. Neither the fence or the new homes will provide a contiguous barrier and will dissuade rather than prevent people from entering the QLLHP and TSAVC, and their function to prevent wildlife from entering the community are uncertain. Associated agrees that it is reasonable to predict that these mitigations combined with public education and AEP enforcement will help to minimize potential human-wildlife conflicts; however, these measures will require monitoring by appropriate agencies to ensure they are achieving desired results. Additional comments regarding mitigation are provided in Section 5.

### *Are the impact assessment and significance ratings for the effects appropriate, and if not why?*

Potential effects to vegetation, wildlife and wildlife habitat during construction indicate that wildlife habitat will be primarily impacted in the project area, with short-term impacts to wildlife movement and mortality in the LSA as a result of construction for an estimated duration of 2 years. Construction has a finite time scale, and Associated agrees that it is appropriate to conclude that potential impacts from construction activities will be reversible when completed. This is supported by available existing information and the mitigations proposed in the EIS. Impacts of construction on the individual VECs remain uncertain as it is difficult to quantify how a species or individuals in a species will respond to these activities. Recent research in the Bow Valley (e.g., Hojnowski 2017) suggests that some of the VECs identified in the EIS will change behaviours (e.g., avoid high

human use areas) in response to the construction activities and that when these activities cease, wildlife may more likely to use these areas. Therefore, Associated agrees that the predicted effects on VECs during construction, provided in Table 5 of the EIA are appropriate given the identified low use of the project area by the VEC and existing habitat.

Potential effects to the VECs after build-out when new residents have moved into the project area are summarized in Table 6 of the EIS. The EIS identifies that added human use may lead to an increased potential for human-bear interactions because of increased foot traffic, pets, and presence of attractants. Similarly, the EIS also predicts that interactions involving humans and cougars may increase, although potential interactions would be less likely than for bears. The EIS indicates that elk are habituated to residential use and that risks associated with increased vehicle traffic and human use are predicted to remain minimal. Based on the data available for elk and cougars in the Bow Valley, Associated agrees that it is appropriate to conclude that potential increases in negative human interactions with cougars and elk will remain minimal as a result of the project; however, negative human interactions with bears could increase, in particular since Quarry Lake Park area is recognized as an area of high human-black bear conflict. FireSmart activities resulting in the removal of preferred food for bears in the project area will reduce the risk of negative human interactions with bears. However, because the proposed project is adjacent to the QLLHP and near the TSAVC, an increase in the residential population could result in increased negative human-wildlife interactions if more residents enter these areas.

Several mitigation measures are identified in the EIS to address human-wildlife conflicts, including fencing discouraging people from entering the QLLHP, education, signage installed by AEP prohibiting entry into the QLLHP and TSAVC, and implementation of FireSmart and WildSmart measures. Based on the proposed project area and its location within an existing neighbourhood, Associated agrees with the predicted effects during operations identified in Table 7 of the EIS. Associated agrees that it is uncertain how mitigation measures intended to reduce human-wildlife interactions will function in the long-term in the context of the final build-out of the project. The potential impacts of the proposed residential project and associated potential increase in outdoor recreation in adjacent areas are uncertain, with mitigation of these impacts largely contingent on reducing current and future human entry into the QLLHP as well as the TSAVC. Commitments by the Applicant, the Town of Canmore and enforcement by AEP will be required to ensure the effectiveness of mitigations proposed in the EIS for the build-out of the proposed project.

### *Do any of the effects of the project require the completion of a cumulative effects assessment?*

The EIS documents a potential increase in the population of Canmore of 0.5%, assuming that all residents moving into the proposed project area are new to the Town of Canmore. The project is predicted to result in 68 additional residents within the Peaks of Grassi neighbourhood. The EIS concludes that impacts will be within the project area and LSA. With the implementation of mitigation measures described in the EIS, the environmental consequences of the project are predicted to be low because they are local in extent, small in size, and within an existing residential neighbourhood where road access and other infrastructure are already in place. Therefore, a

regional study area (RSA) was not selected and a regional cumulative effects assessment was deemed not to be required. Considering the existing conditions of the project area, the predicted impacts of the project described in the EIS and the mitigation measures currently in effect and that are proposed for the construction and operation phases, Associated agrees that potential effects will be primarily within the project area with some impacts extending into the LSA. Associated observes that the EIS suggests that cumulative effects in the LSA will be minimal, as wildlife is anticipated to adjust to noise from construction and from the Peaks neighbourhood. Associated agrees that cumulative effects will be within the LSA with the implementation of mitigation measures described in the EIS. Associated also agrees that a cumulative effects assessment is not required for an RSA, since potential effects identified in the LSA can be mitigated using mitigation measures that are practicable and achievable.

## 5 Mitigation

### *Were the mitigation and management recommendations thorough?*

Associated observes that the mitigation measures proposed in the EIS address impacts during both the construction and operational phases of the proposed project. The EIS suggests that the Applicant, the Town of Canmore and AEP are implementing various measures that will cumulatively reduce potential project impacts on VECs and other environmental features. This includes, but is not limited to the construction of a two-rail fence on top of the berm to discourage human entry into the QLLHP, distribution of educational brochures to current Peaks of Grassi residents, installation of signage by AEP prohibiting entry into the QLLHP and TSAVC on undesignated trails, a “hard edge” deterrent by the new homes along the Altalink ROW, implementation of FireSmart actions that have reduced preferred food sources for bears, and implementation of a Construction Management Plan intended to mitigate and manage various potential environmental issues during construction.

Section 8 and Table 8 within the EIS provide an appropriate list of mitigation measures relevant for the different activities that will occur during the construction and operation phases of the proposed project area. Based on a visit to the project area, Associated observes that some of the mitigation measures proposed have been implemented, including FireSmart clearing of buffaloberry and installation of area closure signs by AEP. Indeed, compliance with and enforcement of mitigation measures will be critical in reducing potential impacts to the selected VECs (i.e., bears, cougars and elk), in particular mitigating potential human-wildlife conflicts. Human-wildlife conflicts are understood to be an important issue within the Town of Canmore and the greater Bow Valley and mitigation measures are proposed in the EIS to address this issue.

However, Associated notes that there are uncertainties with respect to the long-term success of some of the mitigation measures proposed. Neither the two-railing fence or “hard edge” associated with the construction of the new homes provide a contiguous or restrictive barrier that will exclude humans from adjacent habitat patches and wildlife corridors, or prevent wildlife entry into the Peaks

of Grassi neighbourhood. These features are permeable barriers that are unlikely to be effective on their own. However, it is reasonable to predict that these measures combined with education and AEP enforcement actions will help to minimize potential human-wildlife conflicts in the Peaks of Grassi neighbourhood after construction is complete. Continuing public education, enforcement and monitoring by the Town of Canmore and/or AEP will be important in achieving the goal of mitigations proposed in the EIS. Associated observes that the EIS does not provide details regarding implementation of these measures after the construction phase is complete. Associated also observes that monitoring is stated to be completed in Table 8 of the EIS; however, who is responsible for completing the monitoring is not provided (e.g., the Applicant, the Town of Canmore or AEP). Responsibility for monitoring commitments during and after construction should be confirmed prior to beginning construction.

### *Are additional mitigation, monitoring or management plans required?*

Associated notes that the mitigation measures proposed are thorough; however, the following should also be considered:

- The EIS suggests that a detailed migratory/breeding bird survey is to be completed prior to clearing if clearing is proposed to occur during the period from April 15 to August 15. Associated suggests extending this period to August 30 to account for late season breeding birds, as per Environment Canada and Climate Change's general nesting periods for migratory birds.
- Minimal details regarding the Construction Management Plan are provided in the EIS. Associated notes that this plan should be finalized and reviewed by the Town of Canmore well in advance of any vegetation clearing or construction. The plan should include appropriate construction schedules and other environmental provisions to avoid and manage human-wildlife conflicts, manage sediment, control erosion, manage spills from construction vehicles and equipment and control or eradicate regulated weeds throughout the construction phase. The Construction Management Plan should also identify who is responsible and accountable for different mitigation measures and monitoring during the construction phase (e.g., the Applicant, Contractors, Town of Canmore).
- Mitigation measures implemented during construction will apply to construction activities in the three parcels of land and for the construction of the flood mitigation berm.
- Monitoring the success of the signage and ongoing education regarding use of undesignated trails entering the QLLHP and TSAVC will be required. The EIS does not specify the extent to which the Applicant, the Town of Canmore or AEP will be responsible for on-going public education. AEP is responsible for enforcing the area closures and it remains unclear the extent to which enforcement will be completed. It is also unclear if any monitoring will be completed after construction, and if completed who will be responsible, to ensure fencing and signage installed along the QLLHP-neighbourhood boundary are effective.

## 6 Conclusions

Associated's review of the EIS indicates that information requirements identified in the ToR have been provided in the EIS. The use of existing information and data as well as field survey data collected within the project area are deemed appropriate to describe existing conditions. Based on the baseline information, public engagement and project description provided in the EIS, Associated is satisfied that the VECs and LSA selected for the EIS are appropriate. Potential effects to vegetation, wildlife and wildlife habitat were identified for the construction and operation phases of the project. Associated is also satisfied that the potential effects from the project and potential impacts to the VECs are appropriate for the project.

The EIS concludes that environmental effects will be limited to the project area and LSA with the implementation of mitigation measures intended to address impacts to VECs, such as change to habitat, change to wildlife movement and change to mortality risk. The potential for increased human-wildlife conflicts is identified as a key potential effect of the project given its proximity to the QLLHP and TSAVC. Mitigation measures are proposed in the EIS to address human-wildlife conflicts, including education, area closures, signage, and implementation of FireSmart and WildSmart measures to reduce the potential for conflict. Associated finds that the impact assessment addresses key issues and potential impacts to VECs during the construction and operation phases of the project. Associated agrees with the predicted environmental effects of the project, that impacts will be local in nature and that a regional cumulative effects assessment is not required given the mitigations provided. Associated also agrees that there is uncertainty in potential impacts from the project and the measures proposed to avoid or mitigate a potential increase in human-wildlife interactions because of the project. Success of the proposed mitigation measures will require long-term commitments (e.g., education, monitoring or follow-up) by the Applicant or the Town of Canmore as well as enforcement by AEP to achieve desired results.

## 7 Closure

Prepared by:

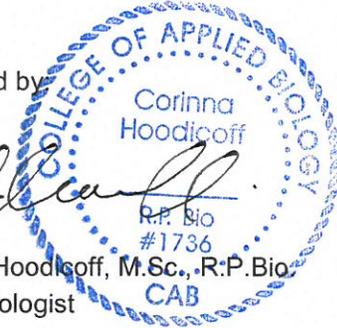


Ryan Ancelin, MES, P.Biol.  
Senior Environmental Planner

Reviewed by:



Corinna Hoodicoff, M.Sc., R.P.Bio.  
Senior Biologist



## References

Government of Alberta (GoA). 2018. Human-Wildlife Coexistence Recommendations for Improving Human-Wildlife Coexistence in the Bow Valley. Prepared by the Town of Canmore, Town of Banff and the Government of Alberta. June 2018.

Hojnowski, C.E. 2017. Spatial and Temporal Dynamics of Wildlife Use of a Human-Dominated Landscape. A dissertation submitted in partial satisfaction of the requirements for the degree of Doctor of Philosophy in Environmental Science, Policy, and Management in the Graduate Division of the University of California, Berkeley

Town of Canmore. 2016. Municipal Development Plan. Bylaw 2016-03.

Town of Canmore. 2016. Environmental Impact Statement (EIS) Policy.