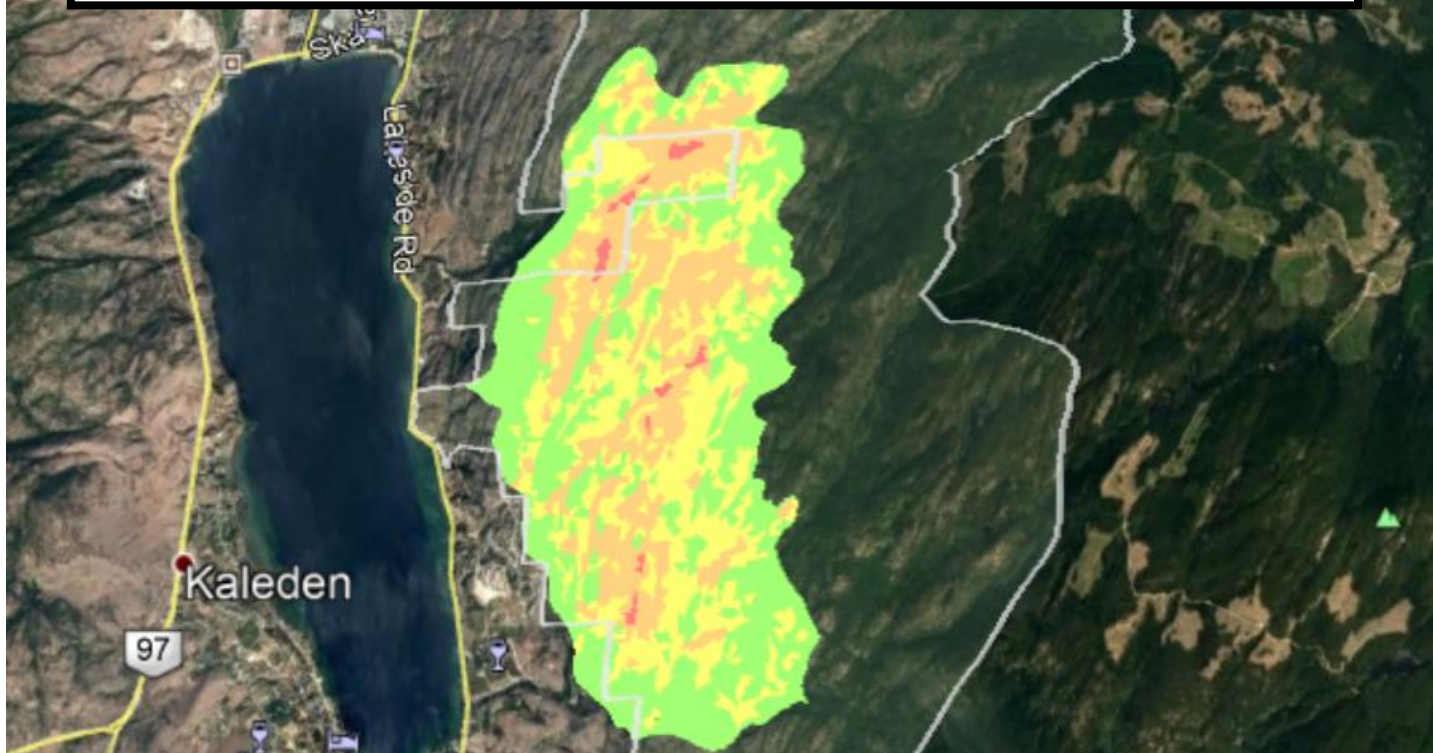




McTaggart-Cowan/ nsək'łniw't Wildlife Management Area: Post Wildfire Assessment



March 17, 2021 – Final REDACTED

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Executive Summary

This report is provided by the Penticton Indian Band Natural Resources (PIBNR) Department as an initial step in the development and reinforcement of a positive, cooperative caretakership relationship between the Penticton Indian Band Natural Resources (PIBNR) and Ecosystems Branch, BC Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD). The report together with its long and short-term recommendations are intended to provide direction and guide provincial land management actions in nsək'łniw't. nsək'łniw't roughly translated means “a gash on the side” and is the syilx placename for the area that includes the McTaggart-Cowan Wildlife Management Area (WMA).

A wildfire started in the nsək'łniw't area on August 18, 2020. These lands hold significant cultural values for members of the PIB and syilx nation. The areas burned by the Christie Mountain (K51287) wildfire have been protected by syilx people since time immemorial. The process used to define the recommendations in this report are in keeping with the values and principles of the syilx Traditional Ecological Knowledge (TEK) keepers, the PIB, and the syilx nation. The goal of this report is to identify impacts to cultural and wildlife habitat values within the WMA from the Christie Mountain wildfire. The focus of the impact assessment is on culturally significant bighorn sheep, ungulates, and species at risk. This report includes recommendations made by the syilx Traditional Ecological Knowledge (TEK) keeper group.



Photo: Okanaganxeriscape.org

“The place needs to be protected...The grass must have a chance to reestablish. Otherwise, cows will eat the tops of our medicine and food plants and the plants will not survive.”-
x^westikn



Acknowledgements

We wish to thank the syilx Traditional Ecological Knowledge (TEK) Keeper Group for the incredible input, guidance, and intergenerational knowledge they contributed to inform the recommendations contained in this report. We also wish to thank the PIB Chief and Council as well as the PIB community for their continued willingness to support and contribute to protection of syilx title and rights. We also wish to thank Josie Symonds, Ecosystems Branch, BC Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD) for contracting the Pentiction Indian Band (PIB) Natural Resources Department to carry out this important project and remaining adaptable during these challenging times. You are all very much appreciated. limləmt.



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Introduction

BC Legislature unanimously passed *Bill 41 – 2019: Declaration on the Rights of Indigenous Peoples Act (DRIPA)* November 2019. This bill is intended to provide the Province of BC with an action plan to implement reconciliation and to respect Indigenous human rights while supporting predictable economic opportunity. We raise our hands to BC as the first province in Canada to enact a bill that would require government to take measures to ensure provincial laws are consistent with the 46 Articles of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). For government and Indigenous communities to move forward collaboratively and cooperatively it is imperative to understand syilx title and rights interests. DRIPA obliges the Province of BC to build meaningful relationships with Indigenous peoples while communicating and managing expectations to the local community, non-government organizations, and the general public. At the time DRIPA was enacted no one knew the wildfire started by lightning August 2020 in the McTaggart-Cowan/nsək'niw't Wildlife Management Area (WMA) would become the catalyst for Ecosystems-MFLNRORD and Penticton Indian Band to move their relationship to a new level of cooperative management.

As the original people, the rightful title and right holders of this land, the Penticton Indian Band (PIB) carries the responsibility and obligation for the stewardship of all lands, waters, plants, and animals within the PIB area of responsibility. Our Natural Resources staff was contracted to complete a post wildfire assessment and work with Traditional Ecological Knowledge (TEK) keepers to develop these recommendations to guide land management actions for the McTaggart-Cowan/nsək'niw't WMA. This report is not intended to:

Create, define, diminish, abrogate or derogate from, or extinguish PIB, any other syilx community, the syilx Nation, or the syilx People's Indigenous title or rights;

Limit, alter, fulfill or partially fulfill the Crown's duty to consult and accommodate PIB, any other syilx community, or the syilx Nation or syilx People in relation to any decision to issue any permit, license or other authorization in relation to the Company's activities or operations in syilx Territory;

Provide PIB, any other syilx community, or the syilx Nation or syilx People's consent to any activity or any Crown decision to issue any permit, license or other authorization in relation to activities or operations in syilx Territory;

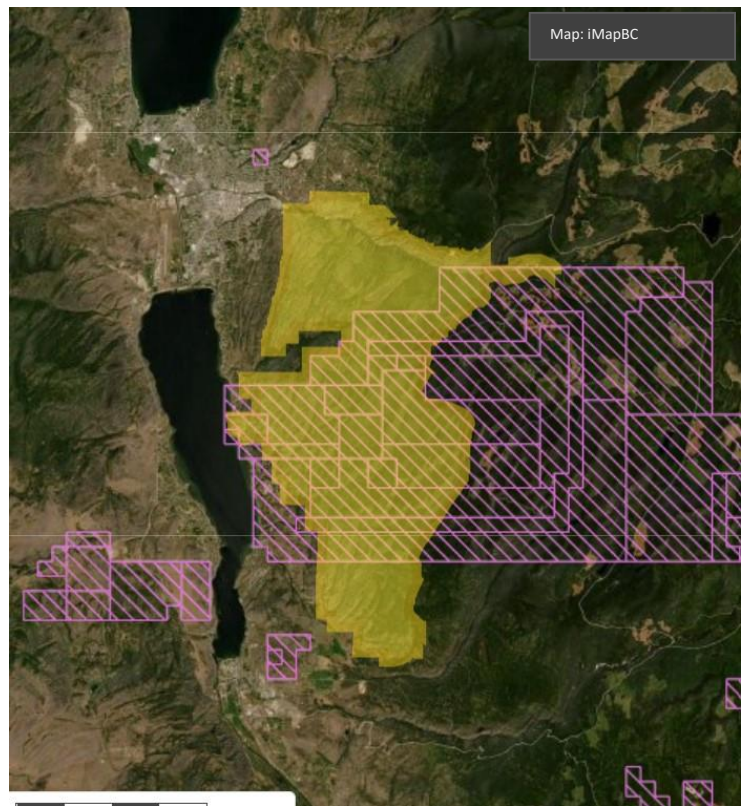
To document PIB use and occupancy or interests within the WMA area.



We communicate this information in good faith. However, the Pentiction Indian Band still claims title to these lands and resources and does not recognize the jurisdiction of either the Province of BC or FLNRORD. By this, the Band has not discharged the governments of British Columbia or Canada from their fiduciary obligations, as the title to the land and resources is not yet been settled.

This desktop assessment report as prepared by the Pentiction Indian Band Natural Resources Department and the recommendations made by the syilx TEK group contained within this document must be viewed as "living" to be implemented, regularly monitored, reviewed, and updated to address known and emerging land management issues.

“The land from lake to the top of the mountain is owned by syilx. But there are at least 100 mining claims up there. It would be good to know who holds these claims. They should be working with us.” *Snamtića?*

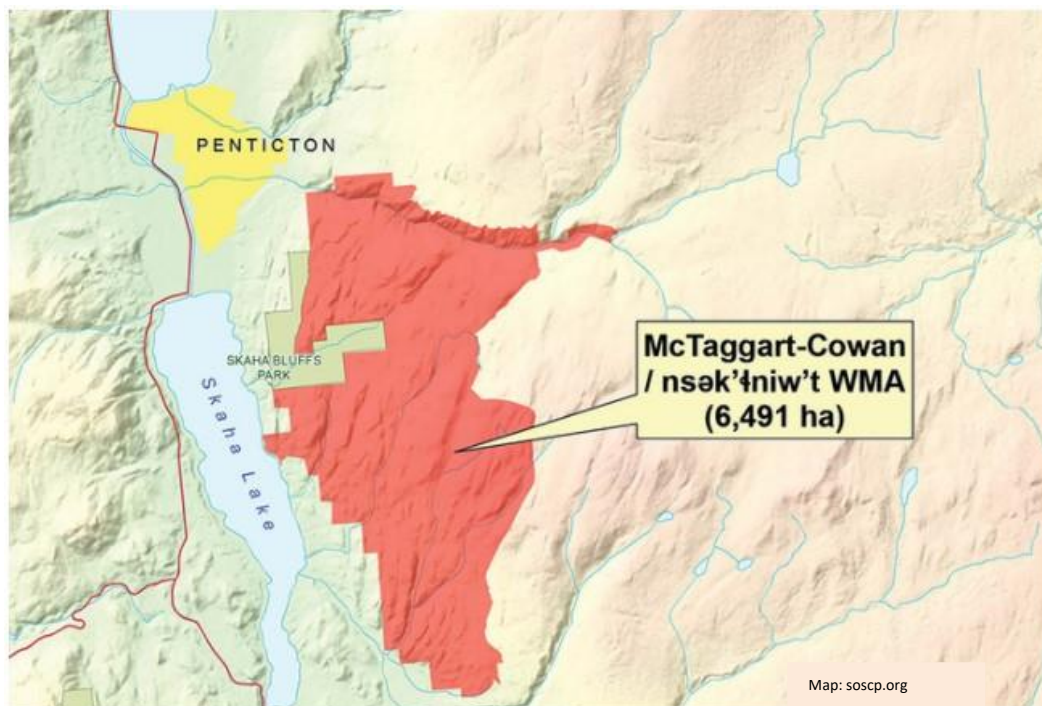




Study Area

In syilx cosmology and belief systems, the epistemology that justifies our beliefs are the laws embedded within captik^{wł}. One captik^{wł} tells of a time long ago when the continents of Earth were still bound together as one land mass. k'włəncútən provided everything syilx people required. k'włəncútən gave syilx the land and waters that would always provide for our people and allow us to live with all of creation in harmony and with respect. To show the deep respect held for this gift, syilx people have committed to uphold a sacred covenant of mutualism with the tmix^w and tmx^wula^wx. As long as syilx continue to respect, care for, and harmonize our behavior with all living organisms of the land and water, the land and water and all living organisms will always provide and care for us.

The McTaggart-Cowan/nsək'łniw't WMA is such an area. Established in April 2013 by the government of British Columbia (BC), this WMA was named after the late conservationist Ian McTaggart-Cowan, a founding member of the Nature Trust BC who died in 2010 a few months prior to his 100th birthday.



Although the WMA has been named after a respected Euro-Canadian, a person whose ideologies and actions are in line with syilx belief systems, the WMA also continues to retain the original syilx place name that defines this area of land. It should be noted that



nsək'łniw't has always provided food, medicine, ceremonial, cultural, and historical areas for syilx people in addition to caring for tmix^w and tmx^wula^wx relatives.



“These are interdependent systems, and they must be protected and TEK assessed by our people before we can really say what work should be done.”
qnqusus and ałn?m

In addition to filtering water and air, nsək'łniw't is an important syilx hunting area that once sustained abundant numbers of sheep, deer, moose, elk, medicinal, food, and technological plant resources. Further, ceremony is intrinsic to syilx hunting and harvesting practices. Reciprocity and the syilx obligation to honor the covenant made untold millennia ago is demonstrated through ceremony and is also associated with other life milestones such as youth training and rites of passage. These [REDACTED]

[REDACTED] to syilx people. The [REDACTED]
[REDACTED]
[REDACTED] the extraordinary profusion of biodiversity once common to nsək'łniw't. No one would ever consider climbing the walls of the Sistine Chapel. [REDACTED]

[REDACTED] Government must aspire to [REDACTED]
[REDACTED]

[REDACTED] Sadly, the *Heritage Conservation Act* (HCA) is rarely utilized to enforce the protection of archaeological sites. Conservation and enforcement officers cannot be everywhere and lack the syilx worldview and perspective when it comes to protecting unceded syilx lands, waters and resources. We must work in collaboration to ensure that HCA legislation does not remain sitting on the proverbial shelf collecting dust.



Methodology

The increase in Covid 19 cases throughout the Interior region is taken very seriously by the Penticton Indian Band. NR Staff and community members were asked to alter existing COVID operating processes and adapt the traditional methodology utilizing in person active sensory engagement to inform the work of this project. As indicated with the proposal submission for this project, informing the project did become severely constrained and limited to scheduling syilx TEK meetings via virtual meeting participation. This proved extraordinarily problematic due to the limitations of accessibility to internet, a computer, a tablet, or a smart phone. In some circumstances potential syilx TEK group participants have limited internet access, inconsistent signal and bandwidth, or little to no experience operating internet technological devices and as a result could not participate. Further, COVID safety social distancing restrictions made the face-to-face coaching on how to utilize tablets, computers, or other internet access devices, impossible.

In keeping with non-pandemic syilx TEK protocol, meetings were initiated by reaching out to each of the syilx TEK group members by phone. NR staff requested TEK members participate and discuss their knowledge about post wildfire impacts, the purpose of the planned discussion and relevance of syilx TEK guidance as well as the proposed meeting dates. 'Save the date flyers' would normally be provided to assist syilx TEK group members in planning personal schedules and as reminders to avoid double booking themselves during meeting event days and times. This normally simple procedure to ensure participation was restricted as well. NR staff adapted and reached out the morning of planned meetings to remind syilx TEK group members of the forthcoming meeting. No face-to-face syilx TEK group meetings were held due to COVID safety precautions and restrictions. Because only virtual syilx TEK group meetings could be scheduled to carry out engagement to inform this work participation suffered. Virtual meetings are a fairly new mechanism. Face-to-face meetings are normally considered the culturally appropriate means of facilitating syilx TEK group and/or community engagement sessions. This is because syilx communication is multi-sensory involving, intellectual, spiritual, physical, and emotional expression.

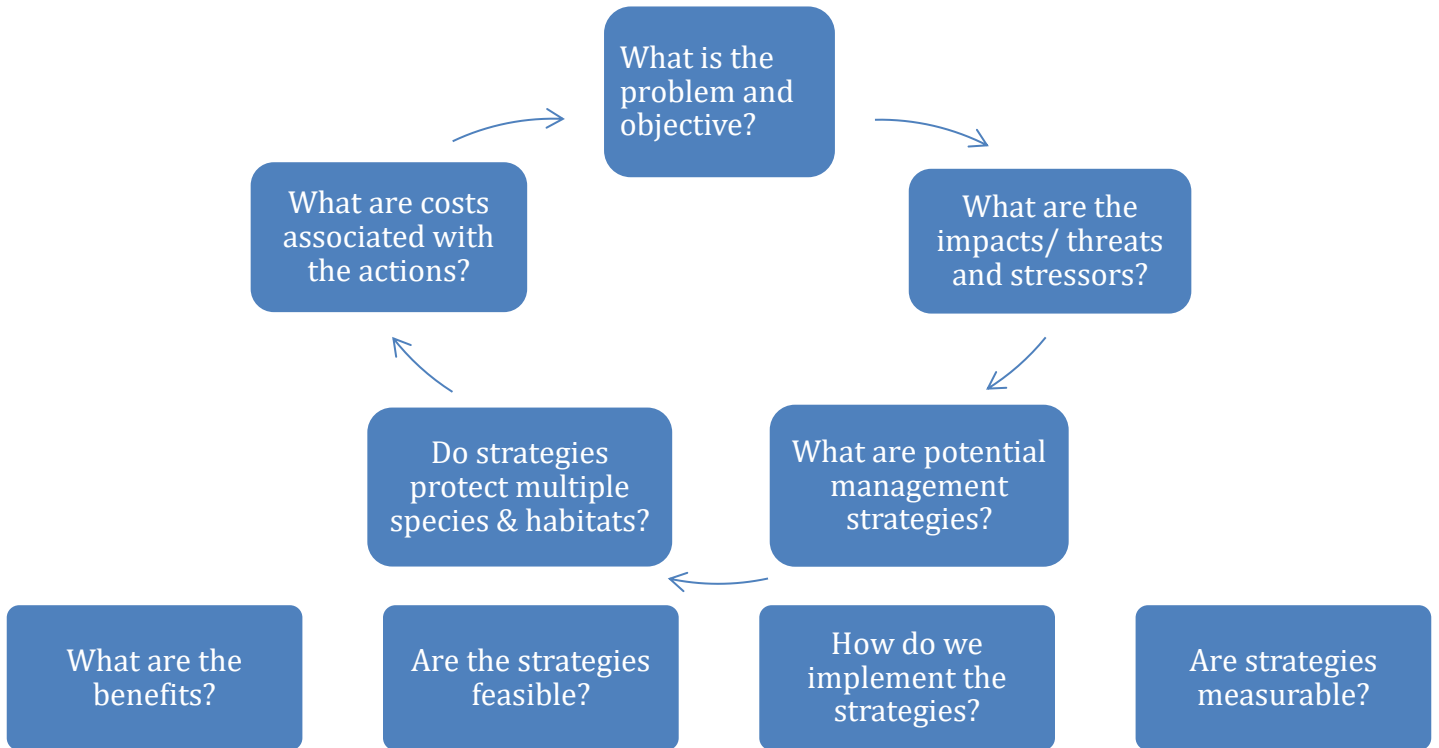
Upon the arrival of the meeting date, NR staff made every effort to ensure the online virtual venue was accessible and comfortable. Participants were encouraged to enjoy foods and beverages available to them in their home during the meeting. Six virtual meeting dates were confirmed by the facilitator in advance via phone outreach with syilx TEK group members. Up to 30 syilx TEK participants were anticipated to attend at least one of the 6 scheduled virtual meeting dates as follows:



January 19th, 2021
January 22nd, 2021
January 26th, 2021
January 29th, 2021 canceled

February 5th, 2021 canceled
February 9th, 2021
February 17th, 2021 *rescheduled date
March 3rd, 2021 *rescheduled date

To facilitate syilx TEK group discussion a power point presentation was developed on the topic of this assessment and post wildfire impact. The presentation included WMA background history, information regarding fire severity, as well as habitats and species at risk located in the WMA. The process was to begin discussion and define the potential for impact on sheep and other ungulate habitats and clarify the objectives for protecting these areas following the Christie Mountain wildfire.



TEK meeting discussion centered around: 1) consideration for burn severity levels and identifying the type of threats and stressors that may occur as a result of the fire, 2) the identification of threats and stressors to bighorn sheep and other ungulates as the primary umbrella species and species related habitat that may also provide for multiple culturally significant and at-risk species, 3) providing specific direction for the protection and regeneration of areas burned at various intensities and defining an appropriate level of syilx participation in post wildfire caretaking of the tmix^w, 4) determining the feasibility of




the recommended strategies, 5) determining the type of benefits that may result, and 6) determining if the recommendations will help multiple species.

Upon completion of each syilx TEK group meeting the power point was revised. New slides were included so map information requested could be viewed. Another slide was included to list identified threats and stressors. Stakeholder clubs and group information was included as likely to become allies in the implementation of the recommendations the syilx TEK group has provided as a result of these discussions. Following the first syilx TEK group meeting, all subsequent meetings utilized the extended presentation and additional information was reviewed again to initiate further discussion.





What type of work is needed?

- Identify the type of impact caused to cultural and wildlife habitat.
- syilx TEK to direct regeneration and caretaking of tmix[™] and tmx[™]ula[™]x (biodiversity) in the heart of PIB's jurisdiction.
- TEK on bighorn sheep and habitats that provide for goats, deer, moose, elk and species at risk .




The goal

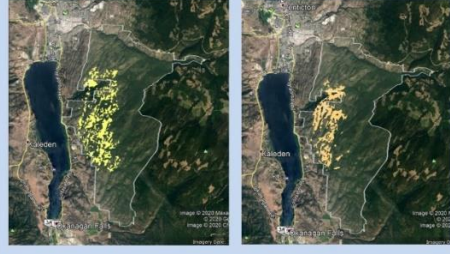
1. Identify the impact of the fire from a PIB TEK perspective.
2. Gather TEK recommendations for where and how to start protecting and regenerating areas.
3. Harmonize TEK recommendations with western scientific knowledge to guide future land management decisions.



High Heat & Unburned areas



Low & Medium heat areas



Understanding the benefits, feasibility and potential costs underscore all TEK land management action recommendations because they inform short and long-term action planning, monitoring and program adjustments if deemed necessary.

Important points captured during each meeting were shared back to the TEK group to verify accuracy, completeness, and to generate thought and consideration of impacts that may have come to mind for participants between meeting dates.

The syilx TEK group is to be commended considering the extent the COVID pandemic had on the course and completion of this project. The city of Penticton has identified approximately 200 positive cases of COVID since the pandemic social distancing



restrictions began in March 2020. All the while on PIB reserves there were no positive COVID cases identified until January 27, 2021 when one person tested positive. PIB Health staff commenced immediate contact tracing interviews. The situation evolved rapidly and several more people tested positive. PIB's COVID safety protocol was further heightened and Chief and Council encouraged the entire community (and staff) to protect their health and wellbeing by cooperating with health staff and supporting strict social distancing processes.



“Cattle ranging is going to be an issue. The cows will graze the grasses down to the root and will eat the tops off the native medicines and foods that provide for sheep and for us”.
x^westikn



Discussions

There are fewer and smaller natural areas set aside for wildlife and the critical habitats needed to provide for them. Development in the South Okanagan region is occurring at breakneck speed with little thought for the health and wellbeing of the land. Before Euro-Canadian settlement in syilx territory, the people, as well as the flora and fauna they depend upon lived together and flourished. One of the reasons the land remained highly productive is syilx people relied on cik?lax^{wm}. syilx burning of the land is actually a ceremony practiced for the enhancement and health of the land and the realms of the food Chiefs: skemxist, sia, ntixtix, and spitlem (Black bear, Saskatoon berry, Salmon and Bitterroot). These low intensity ceremonial fires were carried out on a regular and continuous basis to improve the health of grasslands, forests and all type of the habitats that provide for the needs of every living organism. The practice of cik?lax^{wm} as a ceremony was outlawed by the Indian Act in 1884. syilx people were jailed for performing cik?lax^{wm} ceremony on the land. Indeed, wildfires in general have been suppressed by the BC government for at least one hundred years.



Photo: Wilson, A. & E.

Today the practice of controlled fire is used to manage fuel loading and improve wildlife habitats for culturally significant species like mountain sheep. syilx have always known a clean forest is a healthy, productive, and safe forest. The practice of cik?lax^{wm} helps to enhance wildlife habitats and reduces the chance of catastrophic, uncontrollable wildfire that threaten communities living at the interface of forests. The syilx TEK group indicated the need to visit both high intensity and low or no intensity sites. Some areas in the WMA are left unburned. These places would benefit from the inclusion and practice of regular and ongoing cik?lax^{wm} ceremony woven together with western wildland urban interface fuel management or controlled burning. In areas that burned with high intensity, concern was expressed not only about danger trees and access, but also because water is not absorbed and moves across the surface of badly burned soils. There is high risk for erosion, slides, and mudflows in the intensely burned ravines. More than seeding with native grass mix is required. Particularly beyond fire guards created in the process of fighting fire. Even though this type of restoration work falls outside the current mandate of the Province of BC, in some areas soil stabilization and replanting with native trees and shrubs may be required. The syilx TEK group emphasized that the Christie Mountain fire is not the only stressor placed on soils and flora and fauna within and beyond the WMA.



There are cumulative impacts that have potential for direct impact on significant cultural and species habitats as well as to Indigenous title and rights. The regeneration, recovery and protections of the significant and sensitive overlapping ecosystems must address more than just contemporary management issues on the land; it must look at the root of centuries old human influenced impact.



“The place provides wintering grounds for the sheep goats and other ungulates because of the moss. These areas must be high priority.” *x^westikn*

The syilx TEK group talked about how the provincial and federal decision makers have allowed our relatives - the Caribou and California Bighorn Mountain Sheep, as well as other species to become extirpated and endangered. The threats to plants and animals are brought about by human action and government inaction. Provincial and Federal governments are responsible for allowing hundreds of species to be removed and extirpated from the land. They are willfully failing to carry out their legal fiduciary duty. Even mule deer populations are rapidly declining. Allowing the threat, endangerment, or extirpation of species at risk is outright forced removal. Those that stand by without doing all that can be done to protect the holistic health of these habitats are as culpable for the collapse of these ecosystems and death of the *tmix^w* as if they personally carried out the extermination. The syilx way is to reduce harvesting when needed. To allow plant and animal species time to rebound when necessary. This is a simple and practical cultural protocol for managing human activity and it is one of the ways that allows syilx peoples to live in harmony with the land.

The elimination of species continues daily across syilx and other first nation territories in BC. The removal is no different than when the international border was imposed in syilx territory and broke apart families. The removal is no different than when hydroelectric flooding and infrastructure forced syilx people and the *tmix^w* from our homes, far from the graves of our people and other cultural, spiritual, ceremonial, social, economic, and historical use sites. The removal is no different than the purposeful introduction of smallpox on syilx peoples or when we were forcibly confined to reservation lands or threatened with imprisonment by Sir John Macdonald, to send our children to residential schools to ‘kill the Indian’. The removal is no different than the purposeful extermination



of the q^wisp (bison) across the plains of North American for the purpose of supplanting native people by starving them and denying them the medicine, clothing and shelter these animal relatives provided. The willful failure to carry out the honor of the crown through the exercise of fiduciary duty for the Indigenous peoples of BC is outright denial of our right to maintain our sacred connection to the lands, the waters and all that syilx have relied on. This is nx^wəlx^wəltantət. nx^wəlx^wəltantət literally means that which gives us life, provides for our health, our wellbeing and has since the beginning of time.

The land and the living organisms the land provides for has experienced more than a century of human influenced ‘trauma’. But the historic trauma forced on all things native is systemically and altogether overlooked in government land management planning. This mindset needs to shift to one that is inclusion of PIB syilx TEK management strategies and programs designed and implemented by PIB syilx people. Government forgets the successes syilx communities have had in collaborating on previous projects around fuel management and salmon return and habitat restoration.

“You have to remember we were only recently boxed onto reservations. The whole territory is our backyard... the land is sacred to us, as is all the grass, trees, and animals.” *kʔsulax^w*

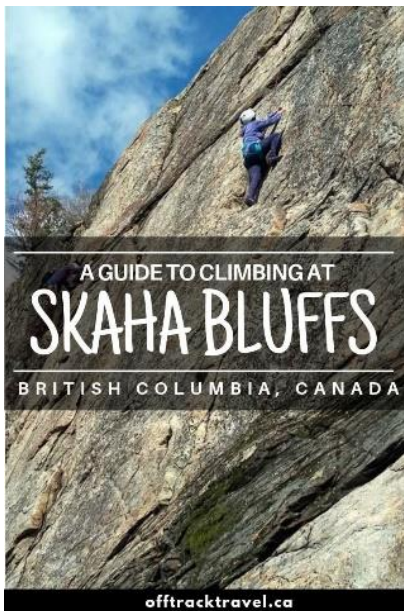


The proposed recommendations discussed here are specific actions. These are intended to protect, sustainably manage, and restore natural or modified ecosystems and to address societal challenges effectively and adaptively. It is possible to simultaneously provide for biodiversity and human well-being and by protecting and enhancing syilx title and rights (Tsilhqot’in 2014). It is unfortunate that it took so long to get to this point in time. The challenges we now face have literally been decades if not centuries in the making. Solutions may prove to be difficult and will take courage, time and effort. Nevertheless, the actions needed to regenerate and recover these culturally significant and species at risk areas as well as the strategies to implement the solutions, must come from a blending of the intergenerational and holistic knowledge of the syilx TEK group and western scientific methodology when reflected upon within a syilx cultural framework.



Threats, Stressors, and Impact Identification

The information contained within this report is the first step toward an ongoing process of meaningful and purposeful cooperative and collaborative management of human activities occurring within the WMA. The land and the habitats that provide for flora, fauna and syilx people are facing serious stressors and threats. The detrimental health and wellbeing issues currently being experienced on the land as a result of the Christie Mountain fire may seem apparent. However, post- firefighting rehabilitation is a legal requirement in British Columbia. This is because wildfires create and increase the likely hood of flooding, erosion, and sedimentation. Wildfires can leave large areas are bare and vulnerable to erosion caused by overland flow of rain and snowmelt. Rehabilitation is all too often applied in haste. Minimal consideration is made for wildlife and cultural values. The provision of funding to carry out appropriate rehabilitation work is moreover an afterthought. Broadcast seeding with an inexpensive and quick growing seed mixture is the most often relied on method of post-fire rehabilitation. Anecdotal experience and professional soil rehabilitation information sources agree broadcast seeding alone is seldom effective in solving steep slope stability issues.



“I like what caylx (Richard Armstrong) says about forming alliances...That way we know the groups, the others using that place will learn how to respect the land.” *qnqusus*

The assessment and recommendations developed for this report are also limited in scope. This is primarily due to the timing of funding as well as the unforeseen COVID 19 pandemic constraints. Although the known post fire-flood-erosion sequence is the driving force and rationale behind provision of resources for the completion of this assessment report, it is not the only threat or stressor placed on this area. Ecosystems Branch identified numerous licenses of occupation, provincial permits and tenure overlaps granted by the province of BC. Each of



the below land based provincial permits and recreational uses occurring within the WMA and carry potential for a varying degree of threat, stress or impact to culturally [REDACTED], culturally significant species and at-risk habitat recovery and regeneration, or management within the WMA.

- Introduction/spread of disease (e.g. *Psoroptes ovis* and *Mycoplasma ovipneumoniae*)
- Guide outfitter permit
- Hunting cabin permit
- Trap line permit
- Gas pipeline right of way
- Electric power line right of way
- Water line
- Mining claims and exploration activities
- Range grazing licenses
- Propagation and spread of invasive plant species
- Commercial recreation licenses
- Numerous water licenses
- Recreation tenure
- Bicycle trail systems
- Hiking trail systems
- Rock climbing trail systems

[REDACTED]

“Protection needs to include our NR field technicians as ‘guardians’ on the land. The Guardians can partner up with the conservation and enforcement officers by reporting contraventions. This is one way they can help until the land recovers enough to support sheep and other animal populations”. *x^wəstikn*





[Redacted text block]

[Redacted text block]



Photo: Angela Clyburn



Management Recommendations

The health of our *tmx^wula^wx* is the health of the water, the health of the air, the health of the animals, and the health of the people. If we all do our part to “tend to the wild” we will all reap the benefit of a harmonized, balanced, and reciprocal relationship with the land. Recognition of the fundamental role that ecosystems play in supporting human health and wellbeing is a cornerstone of *syilx* peoples’ belief systems and this is embedded within *syilx* traditional ecological knowledge systems.

The following are specific recommendations made:

- Prioritize the reduction of known and unknown threats and stressors on wildlife by restricting *all* recreational access, mushroom picking and grazing within the WMA and adjacent Skaha Bluffs Park (SBP) as well as trails originating from SBP. Restrictions should remain in place until TEK ground truth survey in high priority year-round sheep habitat areas has concluded.
- We don’t know what we don’t know. Develop a workplan, budget and the resourcing for a thorough TEK ground truth survey and assessment of high priority year-round sheep habitat areas to be carried out by PIBNR field staff working under guidance of *syilx* TEK group members and Provincial biologists or other experts as needed.

“Require all of our NR people to be trained by TEK to make sure they receive the teachings, protocols, and disciplines. Include the provincial staff and compliance guys in the TEK training. Make sure the resources to carry the TEK training is included so we can do this work”. *qnqnusus*



- Recommend the TEK assessment occur spring 2021 and as early as snow melt will permit. PIBNR field crew and TEK person must have opportunity to survey and visually inspect priority forests, grassland, creek banks, ravines areas, and soils. TEK and PIBNR Field Technicians must begin ground survey and TEK assessment in highest priority areas such as those most easily accessible to the public to determine the initial level of land management action.



The expectation is that specific recommendations will come out of in-field TEK assessment and will address specific area prescriptions (e.g. thinning, brushing, raking, restoration planting, controlled burns, topping, removal, or retainment of danger trees for wildlife habitat to support Lewis's Woodpecker, Flammulated and Western Screech Owl nesting sites). It is unreasonable to expect management decisions without actually being on the land. Speaking with and listening to the land is an important part of the syilx TEK process.

- Recommend range tenure remain 'vacant' until substantial recovery and reestablishment of native grass, plant and shrub species.
- Develop culturally structured short- and long-term land management plans with specific and measurable recovery, and rejuvenation strategies focused on the protection and enhancement of culturally significant habitat communities to support the entire life cycle of Bighorn sheep and other ungulates as well as the many species and habitats at risk.



“If our people are out there as Guardians then they also need to respect why they are out there. They have to refrain from hunting too”.
snamtića?

- Recommend the development of a syilx culturally structured management framework which will include a regular and ongoing PIBNR Guardian program.
- Recommend development of a PIBNR WMA Guardian training program and resourcing to enhance collaborative work with BC Compliance and Enforcement officers, RCMP and local Park Watch program staff for the protection and preservation of all culturally sensitive and sheep habitat areas.
- Develop multiyear resource program for PIBNR crew and provincial biologists to work together to complete regular ongoing [REDACTED] and wildlife monitoring work.



- Develop a process and provide resourcing for working with user group allies to create interpretive educational signage for areas most visited by the public.
- Develop syilx TEK outreach and educational component for PIBNR staff and Guardians to serve as ambassadors to the public for the wellbeing of sheep in the WMA and build cultural bridges through educational interaction with public stakeholders.
- Develop a workplan, budget and resourcing for syilx TEK, PIBNR staff, Guardians, and government representatives and biologists to work toward strengthening partnerships and building cross-cultural relationships between Penticton Indian Band, federal, provincial, municipal managers, and stakeholder groups.
- Develop a workplan, budget and resourcing for the delivery of syilx TEK protocol training workshop for delivery by syilx TEK members to MFLNRORD staff, BC Parks staff, PIB Guardian staff, municipal managers, range and other resource permit holders, as well as stakeholder groups such as naturalists, climbing, bicycling clubs.
- Develop a workplan, budget and resourcing for the delivery of a cross cultural educational workshop to be delivered by PIBNR staff under the guidance of a syilx TEK group member to MFLNRORD staff, BC Parks staff, municipal managers, range and other resource permit holders, and stakeholder groups such as naturalists, climbing, bicycling clubs to facilitate cross cultural awareness and sensitivity.



Additional Considerations

syilx TEK group meetings focused on providing recommendations for the health and wellbeing of mountain sheep and other ungulates. However, the following considerations were also made by the syilx TEK group:

- Will the threats and environmental stressors on California Bighorn Sheep and other ungulates be reduced by working to change human behavior in the WMA?
- Will the threat of erosion and the stressors that contribute to erosion and the impact of soil erosion on water be reduced by changing human behavior in the WMA?
- To what extent do post fire threats and stressors warrant human control and restricted access?
- Is resourcing available for temporary access restriction fencing to support habitat restoration and recovery recommended actions?
- How can we ensure the desired recovery outcome is clear and achievable using short- and long-term restricted access, stabilization, restoration, and monitoring?
- Is access restriction a cost-effective action when providing for habitat recovery and health of sheep, ungulates, and other animals?
- What are the social implications of restricted access?
- Have first nations title and rights and other syilx community values been considered along with scientific, technical, and practical information?
- Are recovery measure recommendations part of a systematic and long-term management program?
- Are recommendations for restricted access warranted and based on specific land impacts to Mountain Sheep and habitat supporting multiple species at risk?



Management Implications

- There is a currently a lack of environmental legislation to adequately protect species at risk and the habitats that provide for them.
- Government personal and stakeholder groups may not be willing to learn about syilx culture through participation in TEK protocol training or a cultural awareness workshop.
- Government personal and stakeholder groups would have opportunity to gain a basic understanding of DRIPA and Supreme Court of Canada (SCC) Indigenous case law decisions. But they may not have any interest in learning these things.

■ Provincial Government, PIB Leadership, syilx TEK group member and PIBNR staff could receive personal threats from individuals that will not agree if habitat recovery access restrictions are extended or introduced in the WMA, adjoining areas



Conclusion

Today unchecked development is outpacing our ability to care for the very environment that provides for our wellbeing. Even before the Christie Mountain wildfire occurred development posed a real threat to species at risk, their habitats and stressors on the animals that rely on this place existed. This knowledge would have greatly influenced former leadership at PIB in their support for the creation of the WMA. The WMA is a fraction of the land base known to support mountain sheep, other ungulates, and multiple species at risk habitat. If we are to support the conservation of the *tmix^w*, *tmx^wula^wx*, and *siwłk^w*, we cannot be pitted against one another. If we are all willing to make sacrifices, together we can provide certainty that will provide for the health and wellbeing of the land and animals and multiple recreational use activities. The nature-based solutions and the recommendations made for regeneration, recovery and protection of significant and sensitive overlapping ecosystems must address more than just contemporary management issues on the land; it must look at the root of centuries old colonial human influenced impact activities. The land has experienced more than a wildfire. A more than a century of colonial human activities and suppressed fire have greatly diminished the carrying capacity of the land. This centuries old 'trauma' systemically overlooks nature-based solutions through cultural sustainability TEK science and land-based management.

For Crown management regimes to meet all obligations, these management recommendations must be *syilx* led. *syilx* TEK can easily incorporate western scientific knowledge because it has both qualitative and quantitative components. *syilx* led indigenous recommendations are intended to reverse the current trend and downward spiral of habitat loss. This change in management regime and structure is particularly necessary due to the fact that more and more species being identified as at risk, threatened, endangered, or extirpated every year. Conscience transformation will be achieved with a *syilx*-led collaborative management regime which will include management strategies and programs designed and implemented by PIB *syilx* people in collaboration with the MFLNRORD. This report and the guidance provided by *syilx* TEK is intended to guide specific and general future land management actions. These actions will serve to protect, manage, and restore natural or modified ecosystems. And will also address societal challenges effectively and adaptively, while simultaneously proactively providing for the diversity of life in the WMA. The very biodiversity that provide for the health and wellbeing of *syilx* people while implementing provincial DRIPA obligations to uphold *syilx* title and rights.



The implementation of a cooperative syilx-led management program is crucial for Provincial land managers to implement DRIPA and the Truth and Reconciliation Commission's (TRC) Ten Principles for Reconciliation. By working with PIBNR to develop and carry out a cooperative syilx-led management strategies we can provide better protection for sheep and other culturally significant and species at risk found in the WMA and adjacent areas. We are at a crossroad. Cooperative management and collaborative work on the ground serves Provincial land managers by upholding the honor of the Crown, their legal obligation, and fiduciary duty under Constitutional, Federal, and Provincial law specifically intended to protect the inherit rights of syilx peoples whose rights and title have never been surrendered.



Glossary of nsyilxcən terms

captik^w† (syilx teachings and laws illustrated and taught in story format)

ćíkilax^wm (traditional burning of the land for the health of the four food Chiefs)

k^wlāncútən (Creator of all things e.g. the universe, earth, biological organisms and minerals)

limlāmt (thank you)

nsək^lniw^t (a narrow space on the side between a mountain and water)

nytix^tix (salmon)

nx^wəlx^wəltantət (exemplifies the syilx People's relationship to their territory and translates to "that which gives us life")

siya (saskatoon)

siw^lk^w (water)

skəmxist (black bear)

spítləm (bitter root)

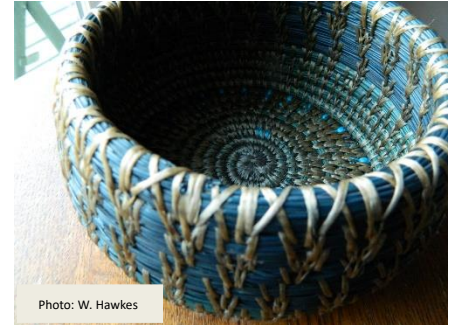
syilx (the term "Okanagan" peoples call them self in the context of the current phase of human experience. The word Okanagan is an English perversion of the word sukanaqinx)

tmix^w (the spirit of all living things). The nsyilxcən word that most closely translates as "ecology". tmix^w includes everything above – the land, water, insects, people, animals, plants and medicines.)

tmx^wula^wx (land) Underneath all of tmix^w is tmx^wulax^w, the core spirit from which all of creation arises and which unites everything. tmx^wulax^w is nsyilxcən for "the land".

q^wisp (bison)

"Our language is the power of the people".
Grace Greyeyes





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