STRATHCONA PARK PUBLIC ADVISORY COMMITTEE

November 16, 2018 - 6:00 pm – 10:00 pm BC Parks Office, Miracle Beach

SPPAC Members: Philip Stone (Chair), Darren Saare, Hardolph Wasteneys, Catrin Brown, Ryan Stuart, Bill Phipps, Jennifer Pass, Ryan Wanner.

BC Parks Staff: Andy Smith, Craig Meding, Aaron Miller, Jamie Godfrey, Erica McClaren (partial attendance)

Public: Jamie Wood, Juanita Wells CDMC, Allen Wells CDMC, Ken Rodonets CDMC.

Recorder: Catrin Brown

Introductions

- Including new member Ryan Wanner (first meeting).
- Confirmation of Sandra Borton's retirement from committee.

Approval of Agenda

• Jennifer referred to the previously circulated summary of the ToR, which has been suggested could be put at the front of the agenda in future meetings, to act as a quick reference for key objectives. Andy advised that he had discussed this with Regional Director who indicated if a summary is used that it be clear that it is only an unofficial summation and not to replace the current ToR.

<u>ACTION</u>: Jennifer to follow up and edit draft ToR summary for SPPAC to use at future meetings.

Topics

Nyrstar Presentation:

Nicole Pesonen (environmental advisor), Glenn Smith (general manager).

A written summary of the Nyrstar Myra falls operations update, circulated to the committee before the meeting, is attached to the minutes.

Additional notes:

- Significant investment ($100 \times 10^6 \text{ C}$ \$) is being made to restart the mine, with employment >300 people.
- Zn, Cu, Au, Ag, Pb are mined.

- Between March and September 2018 many structural upgrades, construction and rehabilitation projects took place.
- There are 2 new hydro generators and a new diesel fuel powerhouse installed since August 2018, so the mine is self-sufficient.
- Jim Mitchell road upgrade completed. Due to delays, the request to allow surface hauling from Price 13 (approved earlier in 2018) is being changed from one night/wk to 7 nights per week (night only 7 pm − 7 am) to avoid conflict with Parks traffic. The road will be open at night also, with traffic controllers. Regional Director to confirm new approval.
- Soil pH is generally too low on most of the site needs modifying for ongoing reclamation treatments.
- Upcoming reclamation research and planning will continue to involve SPPAC and BC Parks.
- Expansion application for clean rock quarry area (used for non acid-generating rock) within permit involves removal of 137 mature trees, 15 wildlife trees and 11 old growth. BC Parks is reviewing all information at this time prior to Regional Director making final decision. Approval is also required from Ministry of Mines.

New format of recording minutes

- Confirmed there was never an intention to have discussions captured verbatim/in detail.
- Minutes should just reflect different points of view, and record pros and cons expressed.
- Key points to be summarized and read back at the end of each agenda discussion to confirm decisions, outcomes and action points.

Strathcona Update (Andy)

A written summary of the update, circulated to the committee before the meeting, is attached to the minutes.

Additional notes:

- Capital projects: Questions were asked about the film crew based out of Ralph River Campground in August. A permit for filming was granted and fees paid (\$500 per day). Filming was done at two locations lower Myra Falls and Ralph river Campground. Some surprise was expressed at the decision, given the impact of the large crew on the public with closure of the campground and Myra Falls trail (Buttle Lake campground remained open). Filming in parks is an allowable activity and takes place all over the province. Permits are adjudicated the same as all permits, considering potential impacts to environment and public. Decisions are made accordingly and subject to various conditions. While the adjudication of a permit applications does not depend on benefits to the Park, there are often opportunities for benefits. In this case an upgrade to the main Myra Falls access trail was completed and a universal access trail is being built at Ralph River. While the Master Plan isn't considered directly in such temporary use activities, impacts, zoning and appropriateness consistent with the intent of the Master Plan are always considered.
- The new group site at Karst Creek is appreciated, though countered by some concern that it has caused disruption to day-trip users.
- Backcountry: Feedback on facility or trail related issues at Della Falls largely rely on input from the public due to remoteness. In addition to ongoing work on the cable car to

upgrade the sheaves, the dock is sinking and will need to receive capital project funding to be replaced.

New Heber Campground Update - Crest Creek (Bill)

- Recreation Sites and Trails are supporting the official development of a new rustic campsite adjacent to the Heber River, just outside the Park, 1.5 km from the climbing area. The site has been used for random camping over many years, and has lots of space to expand (the specific location is part of the old penstock water diversion corridor).
- A new connector trail following the pipe line corridor outside the park and adjacent to it within the park, to connect with Crest Creek Crags is being considered, with the possibility of upgrades in the future to make the trail bikeable.
- FLNRO have donated 2 picnic tables.
- BC parks have donated a surplus toilet.
- There is ongoing discussion about development options, i.e. firepit(s), camp pad location and number, signage, etc. The Climbers Access Society of BC has volunteered to be the official umbrella group and will sign an agreement with FLNRO to assist in managing the rec site
- The goal is to keep the site rustic, with signs on the highway and at the campground.

<u>ACTION</u>: Bill to continue being the lead on this project and will liaise with SPPAC, Climbers Access Society, BC Parks, FLNRO and all other Stakeholders.

Park Usage Concerns

There is general acknowledgement from personal experiences, social media postings and media reports that Park use is burgeoning. The increased impact from visitors has created concerns for safety and conservation, specifically in some parts of the Park.

Albert Edward route marking

- Multiple SAR call-outs over the summer gained media coverage and led to some pressure on Parks to increase signage. Parks response is that this is a mountain with a route, not a trail, and self-reliance is key. Over-developed routes do not lead to skill development for harder trips. But this mountain attracts a large population of inexperienced hikers due to its accessibility, and there may be a problem with consistency where developed trails stop and the terrain becomes more difficult.
- A compromise might be a sign at or above Circlet Lake, with a warning of the more challenging route-finding ahead. No markers should be placed beyond the large cairn located where the route comes onto the ridge.
- A related issue is the braiding of the route, particularly above Circlet Lake. It was agreed that measures should be taken to address this to mitigate further erosion. This would also define this section of the route more clearly.

<u>ACTION</u>: Andy will distribute ideas for response and possible signs. The zoning of the plateau within the MP allows for this

<u>Cream Lake camping Mt Burman north ridge camp King's Peak</u> – Concern of increased usage.

- A major problem is the lack of facilities for human waste collection. A suggestion was
 discussed of preventing or discouraging camping at Cream Lake, as is done relatively
 successfully at Landslide Lake. Cream Lake is more delicate terrain, however limiting
 camping options as numbers increase, brings new problems. It was noted that both
 campgrounds at Main Bedwell and Baby Bedwell, have been over-full this summer.
- Options for toilets were discussed, but all have budgetary implications, and it is uncertain
 whether fees could cover this. Zoning also prohibits this in some areas. A "TAJ" toilet was
 mentioned as a possibility, having the least impact on the environment, however, it is a
 flyout style and BC Parks is trying to move away from fly-outs due to costs and carbon
 footprint.
- The importance of education in back-country etiquette was noted. Programs for personal carry-out of human waste are used elsewhere, but might be difficult to develop here.
- Could limitations be placed on the number of people in the park, or areas closed off?
- In some cases, there are areas where there are no toilets, but camping occurs in parts of the Park where zoning doesn't permit facilities being installed
- Making changes to zoning within the Master Plan would be a multi-step process.
 Exceptions to the plan and/or corridors through areas could be considered. Changes might allow infrastructure to develop that would help mitigate impact. MP zoning: Cream Lake natural environment; Burman ridge wilderness conservation; King's Peak wilderness recreation.

Dogs off-leash

This issue was not discussed due to time constraint.

<u>Jutland area cabin(s)</u>

Surveying has confirmed the cabins are on TW land, the outhouse is in the Park. TW may survey further if necessary. TW has advised that they intend to remove as they are facilitating illegal firewood collection, ATV and snowmobile use etc.

Bouldering at Jim Mitchell Lake (http://www.vanisleboulder.ca/k2-topo-.html)

This issue was not discussed due to time constraint.

Vandalism (Darren)

Darren reported multiple cases of car break-ins and vandalsm over the summer.

Repealing Horse Use in Master Plan/ any Master Plan amendment process?

This issue was not discussed due to time constraint.

Date of Next Meeting

The date of the next meeting was not discussed.

Strathcona Update for SPPAC Meeting November 16, 2018 (Last update April 13, 2018)

Strathcona Staffing

Seasonal staff – Senior Ranger, Jamie Godfrey, has had his season extended from November 23rd until January 4th 2019, making this a record 8-1/2 month term for a Strathcona seasonal Ranger. We were also happy to have seasonal Ranger Harry Reddin return in May to a dedicated Strathcona position (his position was shared between areas in 2017). Harry's term ended October 14th.

While we didn't manage to secure a third backcountry Ranger in 2018, we were lucky to arrange a CAF volunteer position from August to October. This CAF program provides opportunities for retiring CAF personnel to temporarily check out civilian positions for up to 6 months in order for help them with new career path choices. The volunteer receives regular wages from CAF while working with our Ranger staff. Certainly a win-win situation for everyone and allowed us to do far more projects than we would have been able to do otherwise. While this was only a one term program, its success confirms that should we be approached by others in the future, we will certainly take advantage of this again.

Backcountry Maintenance Contract

Park Operator – "43K Wilderness Solutions" have completed their fourth season of a 10 year contract.

Frontcountry Maintenance Contract

"43K Wilderness Solutions", completed their second season of a 10 year contract, as the Strathcona Frontcountry Park Operator in the Buttle Lake corridor area.

Student Ranger Projects

The new Student Ranger crew program was implemented this year and we had a 6 person crew stationed out of Black Creek from end of May until late August. This crew spent one week in each operational area including Strathcona, where we had them do a variety of projects including; installing perimeter rock drain around Croteau Yurt along with staining this facility; cleaning and staining the SWI, Paradise Meadows Trailhead hut; Restoration work at Battleship Lake; Public Relations & dogs off leash patrols on Plateau; Restoration work at Crest Creek day use. We are anticipating that our region will receive another crew for the 2019 season and if so, Strathcona may again get another week's worth of their time.

Capital Projects

The multi-year upgrade of the Ralph River Campground was postponed this year due to the fire season closures and the a major film production project based out of Ralph River Campground starting the first week of August. The capital project will resume again in 2019.

The Capital Program has also committed to the following three other projects this season:

• Paradise Meadows - Replaced the previous pit toilet facility and added another, both with

disposal tanks. This project was completed in October with the installation of two cement style, wheelchair accessible "Leko" style units.

• Forbidden Plateau - Currently conducting research and planning for replacing and expanding number of tent pads at Kwai and Circlet Lake in F19/20. These will address increased camping demand/ reduce impact on environment. This plan will include backcountry grey water disposal solutions, bear cache facilities and new urine diversion toilet units. The survey work for these sites has been completed and we should have the first 'high level' design draft ready for comment before the holidays. This will be followed up with a presentation to discuss implementation process to include identification of recreation and conservation issues.

The goals of the plan:

- Maximize number of sites to address increasing visitor use while addressing conservation constraints
- Address waste mgmt. and grey water issues
- Utilize "pod" design to group camping opportunities with services

Hopefully we should have a solid plan developed this winter ready for an onsite review once the snow clears early summer. Following site review we will tweak as necessary and tender for fall construction (either complete project or phase 1 – budget & scope dependent).

- Karst Creek Installed new facilities at Karst Creek, i.e. two new toilets and creation of a small picnic area and installation of two universally accessible tables.
- Ralph River Campground reconstruction was deferred F18/19 due to movie production. Campground reconstruction is currently planned for fall of 2019, pending budgetary constraints in region

Croteau Lake Group Site

The Croteau Lake group site and yurt shelter was substantially completed in October 2017 and after some early spring finishing work (installing perimeter rock drain around yurt, installing grey water sump, and installing new sink inside the yurt), the group site opened for business by end of June 2018. We are happy with the first year results, attracting a total of 12 group nights within the reservation season (ended Sept 2nd), plus an additional 4 group nights outside the reservation season to cover use towards end of October.

We will be adjusting the reservation closing date to mid-September this next season, although we will accept other bookings outside this period if people contact us directly. There is still a need for continued marketing as the majority of people still are unaware of this new site and camping opportunity. Networking and word of mouth by people who use or see the site is very important.

At the end of October the Comox District Mountaineering Club, helped us out immensely by organizing a group of volunteers to add a deck on the front of the yurt as well as building an extra-large tent pad near outlet, for future use by a site host (we hope to develop a host program for implementation this summer – using volunteers for a minimum of 1 week stays). The deck's

final touch was the addition of two new Yellow Adirondack chairs (like those at Battleship Lake). The CDMC did a tremendous job and will be recognized with a plaque on each of the two projects – THANK YOU

Due to a very complex and busy season, the signage hasn't been completed yet but will be worked on over the winter so we can install the following signs; Hill-shaded area map with inset for site diagram and a couple of photos of key plateau areas; Campsite Occupied sign - required for when groups are using site as many people only think of it as a day-use site (we may direct day-users to the often overlooked rock bluffs at the other end of the lake).

We are currently trying to confirm a suitable tent for the proposed volunteer site host program and have been in talks with a potential tent manufacturer to enter into a partnership agreement (they supply the tent in exchange for the opportunity to showcase their product to visitors). Until an agreement is confirmed, it is inappropriate to release the name of the company. The tent would only be erected for the summer season when hosts are required.

The site host program will hopefully be offered next season and will hopefully be a win-win for everyone. It will probably be structured much like the current Mittlenatch Island program, where one to two hosts commit to a minimum of one week stays. The hosts will be required to meet and greet groups or day-users and help clean and maintain the site, in exchange for a free stay in a fully equipped tent site (only need to bring sleeping bag and food). BC Parks will also provide a non-mandatory list of other tasks the volunteers can choose to do or not. The volunteer hosts could also have the opportunity to provide programs/presentations to the groups and/or visiting public. Connecting with post-secondary schools, the host program could also provide an opportunity for students to stay at Croteau while doing some research or projects. Hosts could include, anyone interested, both locally as well as National or International; researchers; members of organized groups; students working on projects; others?

RALPH RIVER/LOWER MYRA FALLS FILM SHOOT

BC Parks issued a major commercial film permit for a large production (new Series called "SEE") with set locations at both Lower Myra Falls as well as Ralph River Campground. This came quite suddenly after the sites were scouted by the production company who then approached BC Parks in mid-July to work out details.

Lower Myra – scenes were shot showing actors climbing up single log ladders on multiple benches of the falls. Impacts were minor and mostly associated with existing trails, other than one small (approx. 12m) access trail to a spot on the falls which we had them construct a temporary staircase to minimize damage to soil. The staircase has since been removed and the corridor replanted and woody debris spread out. The main access trail down has been enhanced greatly with the addition of blue chip gravel that has made the trail more accommodating to visitors. Old boardwalk has been removed and replaced with culverts and new trail material. Minor impacts on trail edges have been restored to the satisfaction of BC Parks.

<u>Ralph River Campground</u> – this required the building of a village (about 12-14 buildings) on the lakeshore flats in front of the campground adjacent to the lake and river. Approvals were also given by FLNRO for working adjacent to water. To access the site, we met several times with

the film company to consider options, and in the end, we authorized the construction of a new trail off of the existing river access trail through a clump of Alders to minimize impacts. BC Parks supported this concept because we had already been discussing removal of brush as part of the capital upgrade to re-establish views which have become blocked by vegetation over the years. That discussion had included the potential development of a perimeter trail to enhance the recreational experience for campground and park users. The development of the access trail for the film production will result in a new universal access trail loop allowing all mobility challenged visitors the opportunity to get out to view the lake and river. The trail will also include a picnic site and interpretive signage.

<u>Karst Creek</u> – this became the location for the "Circus" and comprised of enough trailers and trucks to fill the entire site. While the boat launch was open to the public it was very restrictive due to production trailers and trucks. Signage was posted along highway on General Hill outside Elk Falls; at Elk Portal and also near the old park HQ. Advisories were also posted on the Strathcona Park web site.

Some prep work was done in set locations during the prime August camping season. However, BC Parks imposed conditions to ensure a good experience for campers and visitors was maintained. The fire ban also restricted prep work and the company worked and consulted with the Ministry of Forests Lands and Natural Resource Operations to comply with all fire ban regulations. After the reservation season ended on September 2nd, the film production company rented the entire Ralph River Campground up until early November (occupancy at Ralph River campground in September and October steadily declines and averages about 2%). Restoration work commenced at the beginning of November, after filming was complete and will continue until complete (probably by end of November). Planting may need to be postponed until next Spring due to risk of mortality and will be dependent on professional recommendations. While measures were in place to prevent the introduction of invasive species to the park during prep work and production, a post production invasive species management plan was also required as part of the permit. This plan will be finalized in the near future, and monitoring will occur in the coming years.

The local film commission and BC Parks were interested in perhaps retaining some of the village set for tourism potential. While the film company was willing to consider this, after having an engineer assess the facilities, it was determined that too many modifications would be required to make these temporary buildings into a permanent structure. We have also learned that one of the key actors has since purchased some of the buildings. The film commission may still pursue something, but it is unlikely that BC Parks will be involved. As an alternative, it is more likely that we acquire photos and videos of the village site for potential on-site signage.

BC HYDRO WATER USE PLAN – RECREATIONAL UPGRADES

For the last few years much planning and discussions have taken place regarding mandated recreational upgrades to be done by BC Hydro as part of their mitigation for ongoing impacts associated with the Campbell River Reservoir System. During September/October some of the long awaited physical works were started.

<u>Buttle Lake Boat Launch</u> – the old broken cement ribs were replaced with new modern cement ribs making the ramp much more accessible and safer. Rock berms were established along the sides of the ramp to help prevent illegal off-road vehicle access onto the lakeshore areas. This work was completed the week of November 12th.

Buttle Lake Campground Day-use trail – In order to create better access to the water for swimming, this project was a priority enhancement due to the limitations the summer low water conditions dictate. A new universal access trail (approx. 750m long) will start from site #2 in the campground and extend to the land point between the current bay and the campground boat launch area. The trail will end with a view point where two picnic sites will be developed and accessible by all mobility challenged visitors. A secondary spur trail will provide water access for swimmers.

<u>Karst Creek Boat Launch</u> – upgrades to this boat launch will be the same as done at the Buttle Lake boat launch, however, the extent of the work is completely dependent on remaining funds after the above two projects have been completed.

<u>Littoral Zone Planting</u> – Various sites around Buttle Lake (high visibility or high use) have been chosen as test sites to try out various planting techniques. These sites will be planted with willow and poplar using various methods and will be monitored over the next two years. Once assessed and best techniques confirmed, the planting will be extended to other areas around the lake. Two easily accessed sites include the Buttle Lake campground point (just below new day use area) and adjacent to the new upgraded Buttle Lake boat launch.

BACKCOUNTRY

Della Falls – Continuing reports this season of the cable car being too hard to use, sent the Rangers out again to assess and report back. After speaking to engineers, it has been decided that the only thing left to try is to have new bigger sheaves fabricated and installed. Funding dependent, fabrication will be done this winter for early spring installation. Some brushing work was also completed this season.

Gold Lake Trail – No change since last update. Ranger staff were unable to visit this location this season.

Elk River Trail – While the failing trail section could not be addressed this season, the Park Operator has been given approval and instructions to complete this upgrade in the Spring of 2019 prior to the rest of the park opening up.

Bedwell LakesTrail – No upgrades were completed in 2018. The trail and facilities will continue to be monitored for safety issues which will be addressed as needed (temporary or complete repair).

Bedwell River Trail – No changes during 2018. While the Ahousaht First Nation is still interested in upgrading this trail from Bedwell Lake down to Bedwell Sound, they have delayed any further plans until they have confirmed plans for the development of their IR at Bedwell Sound.

The Comox District Mountaineering Club – this group continues to help BC Parks maintain some of the less popular, lesser priority areas of Strathcona. The club also volunteered in October to construct the new deck on the front of the Croteau Lake yurt along with an extra large tent pad to accommodate the future Croteau Lake site host. BC Parks worked with CDMC to finalize designs, purchase all materials and coordinate helicopter shuttling of everything in and out of site.

Comox Glacier – While TW has agreed to support a proposed new sign shelter at or near the trailhead, we have been unable to schedule a joint field trip to confirm location. It was hoped to have things confirmed this fall so that we could work together with CDMC to get the sign shelter, which is already built (in pieces) installed in the Spring. The sign shelter will then display signs such as, a trail map of the area along with, user ethics, notices and general information.

Yellow Chair Program – Two new chairs have been added to the program and located at Croteau Lake to compliment the Battleship Lake chairs. Two additional chairs will be added in 2019, location yet to be decided.

Crest Creek Climbing Area & West Boundary Camping Proposal

While BC Parks is still enforcing the no camping regulation in the Crest Creek Lake day-use area, no issues were reported in 2018. Meanwhile, in hope of motivating people to comply with no camping in illegal areas, BC Parks has continued to work with Recreation Sites and Trails division of the Ministry of Forests, Lands and Natural Resource Operations (FLNRO), to facilitate the development of a new campsite just west of the park boundary at Heber River (only 1.5 km away from the Crags). Bill Phipps, of SPPAC has volunteered to take the lead as a liaison between SPPAC, BC Parks, the climbing community, FLNRO and other identified key stakeholders. An initial site meeting was held in early October to discuss site needs and process. BC Parks has also agreed to consider the development of a new connector trail from the Heber site to Crest Creek Crags day-use area and have already identified a couple of low impact options. It is hoped that basic field development of this site will start in 2019 based on feed back from the climbing community and other stakeholders. Climbers Access Society of BC has confirmed they are willing to be the official umbrella organization to sign an agreement with FLNRO for the overall management of the site.

Photo of Location of FLNRO Proposed Recreation Site/Campground on West Boundary



Wood Mountain Provincial Park

The Community clean-up effort is continuing through the "Forbidden Plateau Reclamation Society." BC Parks has finalized a multi-year contract (\$1) with the Society to allow them to remove foundations and debris from the site. Work started in Sept/Oct 2017 removing the main lodge foundation and knocking down several other foundations prior to stopping due to snow. Support funds have come from BC Parks and Ministry of Indigenous Relations and Reconciliation (lands are identified and being held as potential Treaty Settlement Lands). The following was accomplished during 2018:

- The Society has finalized an agreement with the Ministry of Forests, Lands and Natural Resource Operations to enable them to work on the Crown Land portion of the area.
- 5 chairlift towers removed in preparation for removal from the Mountain.
- Approximately 3/8 of mile of the chairlift cable has been removed. (the portion that had been cut by others who were taking the ski-lift chairs).
- BC Hydro has been contacted to remove the de-energized power lines (approval has been received by Komox First Nations). Still awaiting BC Hydro's schedule.
- SLR Environmental Consulting has been contacted to do new soil samples (samples were to be scheduled when a BC Hydro excavator was on site). An alternate plan is for SLR to retrieve samples using a smaller power auger. Society is awaiting SLR's availability to conduct the work.

NYRSTAR MYRA FALLS OPERATIONS UPDATE FOR November 16, 2018 SPPAC MEETING

Nyrstar information provided by Nicole Pesonen

Mine is currently still upgrading their facilities as they ramp up towards full operations and production. We are fortunate to have both Nicole (Environmental Advisor) and Genn Smith (General Manager) provide an update to SPPAC at the November 16, 2018 meeting. Below are some key points of the update:

General overview of the restart activities:

- Myra Falls started operating the Lynx Mine in August 2018, using the Ore Chute to bring ore to the mill surface stockpile, following updated Mine's Act Permit received July 5, 2018
- The Underground shaft is being retrofit to bring it up to current standards. Once completed, materials will be brought up from underground via the shaft an the existing conveyor system
- The mill facility was fully retrofit, replacing everything from internal piping networks to the HVAC system and ventilation.
 - An update to the existing site air permit was obtained to account for changes to the ventilation system and approved July 5, 2018.
- Milling started in Q2 2018 on a test basis. It will ramp up to full production starting over the next three years.
- Concentrate is now being trucked via a contract company to the port facility in Campbell River, please expect to see an increase in concentrate truck traffic.
- Permit update for the Mine's Act permit for the Price mining area on October 1, 2018 allowed an upgrade to the Jim Mitchell Road, and a surface haul of ore from Price 13 to the surface stockpile.
 - Nyrstar has provided a proposal to BC Parks to allow a night-shift only haul on this shared access road.
 - o Road has been widened in sections, reducing the blind narrow corners, improving drainage, and reducing the dips in the road in this section.

Requests upcoming/ongoing to BC Parks or Authorization consideration:

- Request for night-shift haulage of ore from Price Mine to Surface stockpile.
- Expansion of clean rock quarry.
 - Removal of vegetation (merchantable timber will be stockpiled for sale by BC Parks).
 - o Request to use ground vegetation for transplant trials.
- Danger Tree assessment request to allow modification & removal in critical areas for improved safety of workers.
- Addition of building in warehouse yard and an air quality monitoring remote station in the Core Rack area.
- Installation of a gate at the security location for site access control (open to the public).

Upcoming/ongoing permitting work with other regulators:

- Effluent Permit update: Nyrstar is working under direction of the Ministry of Environment & Climate Change Strategy on science-based water quality limits for parameters of concern Myra Creek based on 16 years of water quality data and fish and benthic invertebrate population data collected in Myra Creek. This work is being conducted by Nautilus Environmental and these limits are specifically designed to be protective to the Myra Creek ecosystem. If the study and results are acceptable to the MOE for consideration, the study will become a permit amendment application, and will be sent out for public comment and review.
- Air Permit: An additional update will be required to update the onsite laboratory ventilation, to include additional dust collection capacity (improvement on air effluent quality, increase in volume of air flow, overall improvement to total release from the facility).
- Mine's Act Permit:
 - o Continuing to work on the Reclamation Plan submitted in 2014, update in 2016.
 - Review of updated design for the Lynx Tailings Disposal Facility to meet the updated Mine's Act requirements from the 2017 update to the Health Safety and Reclamation Code.
 - o Expansion of Clean Rock quarry.