

What We Heard and Next Steps

Water Use in Mineral Exploration and Small-Scale Placer Mining

Overview

On October 9, 2018, the Province posted an [intentions paper](#) on a proposal to regulate water diversion and use for mineral exploration and small-scale placer mining. The *Water Act* (now repealed) allowed a person to use water to prospect for a mineral without an authorization, but did not define “prospect for a mineral”. As a result, mineral exploration and small-scale placer mining activities were interpreted to be exempted from requiring an authorization. When the [Water Sustainability Act](#) (WSA) replaced the *Water Act* in 2016, a definition for ‘prospecting for a mineral’ and a requirement for authorization were introduced.

Current Temporary Provisions Allowing Water Use

Given that mineral exploration and small-scale placer mining activities are already reviewed under the [Mines Act](#), which considers water resources, the Province enacted temporary provisions to allow the use of unrecorded (available) water for these activities without a separate water authorization. The temporary provisions are conditional in that the water user must have a valid *Mines Act* permit and follow restrictions to protect the environment and other water users.

Temporary Provisions Extension

The Province has extended the expiry for the existing temporary provisions under s.56 of [the Water Sustainability Regulation](#) several times to facilitate further engagement on the proposal. The current expiry date is December 31, 2019.

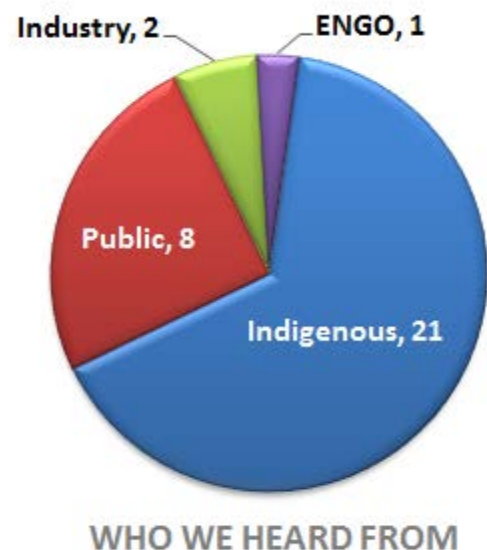
The Proposal

The intentions paper proposed:

- That the allowances and restrictions from these temporary provisions continue on an on-going basis; and
- A new provision giving WSA Water Managers or Engineers the authority to require mineral exploration and small-scale placer proponents to get a water authorization if there are significant risks to the stream or other water users.

Feedback

The Province asked for feedback on this proposal from Indigenous groups, environmental groups, the public and industry.



- The intentions paper was posted online for 48 days from October 9, 2018 through to November 26, 2018.
- Comments were accepted through the Province’s EngageBC website.
- The paper was mailed to 203 Indigenous nations, 3 Indigenous leadership groups and 34 Indigenous organizations.

In total, the Province received 32 responses to the proposal with 21 from Indigenous groups.

The feedback included both supporting and opposing comments and questions regarding how the Province planned to mitigate risks of environmental and water impacts and engage with Indigenous peoples about their rights and title concerns.

What We Heard Document

This document summarizes the comments received on the intentions paper.

This report is divided into three sections:

Section 1 summarizes the comments we received;

Section 2 outlines provisions revised in response to the feedback we heard; and

Section 3 clarifies and answers questions that were raised.

A Revised Proposal

The revised proposal discussed in section 2 recommends how Indigenous groups would be included in water-use assessments associated with mineral exploration and small-scale placer mining. The revised proposal is intended to uphold the Province’s commitments to supporting reconciliation and provide efficiencies of process in regulating natural resources in B.C.

Next Steps and Questions

We would like to thank the individuals, groups and organizations that spent time preparing feedback on the proposal. A final policy direction is planned for the fall of 2019 prior to expiry of the transitional extension on December 31, 2019.

If you would like to discuss this What We Heard document, please contact us to set up a meeting through livingwatersmart@gov.bc.ca.

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Section 1: What We Heard

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1.1. Public Responses

The Province received 11 responses from the public (including responses from citizens, NGOs and industry representatives).

Blog Posts and Email

We received 7 responses as comments posted on [Blog Post #25](#) and 1 email from a member of the public.

The comments included many opinions both supporting and opposing the proposal and questions about environmental protection and the proposed placer mining threshold (2,000 m3 of pay dirt per year). In general, there were concerns about mining and its impacts on drinking water, the environment and the need for more monitoring, compliance and enforcement. There was also concern that the *Mines Act* cannot properly protect aquifers and that removing the requirement to pay for a water authorization would remove the incentive to protect water.

"I am 100% in agreement with the proposed modification to the WSA. The volume of water used for these activities is small & returns quite rapidly to the ecosystem... the value back to the Crown for water fees, when weighed against Gov't administrative costs, is negligible."

"The use of water from these creeks and streams is imperative to the survival of placer miners. Done properly with no effect to the environment. It is imperative to the survival of an industry with great historical significance."

"The problem I see ... is the lack of reporting or tracking of that water use for mineral exploration or small scale placer mining. If the limits and conditions in the regulation are NOT followed the water managers have no means of tracking these water users ..."

Environmental Non-Governmental Organizations

A group of environmental non-governmental organizations (ENGOS) submitted a letter expressing their objections to the intentions paper and questioned whether the proposal keeps with the legislative intent of the WSA.

The letter was jointly-authored by the Environmental Law Centre, University of Victoria; Fair Mining Collaborative; Mining Watch Canada; and Northern Confluence.

The authors provided several reasons for their concerns:

- A 2,000 m³ pay dirt per year threshold for placer mining activities is “*arbitrary, high, and vulnerable to project splitting*” and could potentially exempt larger placer projects from the water authorization requirement, particularly if more than one permittee is involved;
- The Yukon requires environmental assessments for placer operations with proposed production of more than 400 m³ of pay dirt per year;
- Water authorizations are important to ensure flows are protected, such as by considering environmental flow thresholds;
- Determining when a water authorization is required should depend on “*the actual potential impacts to water, considered in the context of the density and intensity of similar activities within the watershed*”;
- Other persons, besides WSA Water Managers or Engineers, should be able to determine if there is a risk of significant adverse impact to a stream, including Indigenous groups, qualified professionals and Mines Inspectors;
- Many miners do not have the knowledge to assess risk to aquatic ecosystems and mining activity inspection rates are low; and
- Climate change, drought and cumulative effects are critical factors to consider.

“...the proposed approach appears out of keeping with the legislative intent of the Water Sustainability Act... Mineral exploration and placer mining activities producing up to 2000 cubic metres of paydirt annually can cause significant damage to water quality and riparian ecosystems, especially when there are multiple operations within a single watershed. In the context of inadequate monitoring and oversight, the voluntary good behaviour of miners is an insufficient guarantee of water protection to justify blanket exemptions from WSA water authorization requirements for these activities.”

1.2. Industry Responses

The Province received feedback from two industry associations:

- the Association of Mineral Exploration British Columbia; and
- the Cariboo Mining Association (communicated support for proposal outside of engagement period).

The mineral exploration and placer mining industries supported most of the proposed provisions in the intentions paper. The respondents cited that these industries have historically operated effectively under the *Mines Act* and, in the case of prospecting for a mineral, without the requirement to obtain a water authorization.

The industries asked for clarity on whether the proposed allowance includes water for camp use associated with the activities, as they have seen inconsistent interpretation across the Province.

Overall, we heard from both the mineral exploration and placer mining industries that the allowance for water use was important for them to be able to operate efficiently and sustainably.

"The temporary provision that was put into place in April 2016, and renewed for 2017 and 2018, has served industry well and allowed companies to conduct exploration activities in an efficient and sustainable manner..."

"We request that clarity be provided in the regulation (or in the accompanying policy), that all "exploration activities" as defined in the Health, Safety & Reclamation Code for Mines in British Columbia (the Code) are covered under the allowance. Of particular note are exploration camps, which are defined as an "exploration activity" under the Code. Clarity is needed because we have heard from some members that there is uncertainty between regional decision makers as to whether or not a camp water use authorization is required."

1.3. Responses from Indigenous Groups

All 203 Indigenous nations in B.C. and over 30 Indigenous organizations were sent letters inviting feedback on the intentions paper. We received 21 responses which varied from support, caution and opposition. We received a response from the following Indigenous nations and groups:

- Bonaparte Indian Band
- Ditidaht First Nation
- First Nations Fisheries Council
- Kaska Nation, Daylu Dena Council
- Kitsumkalum Indian Band
- Kwakiutl First Nation
- Kwikwetlem First Nation
- Lax Kw'alaams Band
- Leq'á:mel First Nation
- Maa-nulth First Nations
- Malahat Nation
- Matsqui First Nation
- Metlakatla First Nation
- Nak'azdli Whut'en
- Nicola Tribal Association
- Seabird Island Band
- Shuswap Nation Tribal Council
- Tsilhqot'in Nation
- Tseil Waututh Nation
- Wet'suwet'en Nation
- Yale First Nation

Eleven of the responses either did not oppose the proposal or declined to provide an opinion. Of those who did not provide an opinion, we commonly heard it was due to a lack of resourcing and capacity.

The 10 other responses voiced either opposition to the proposal, or posed questions they felt should be addressed. The following summarizes the questions and comments we received, organized by theme.

Water is Sacred

We heard that Indigenous peoples have an intrinsic connection to water, the watershed, fish and the environment; and that there are very strong concerns about protecting these resources. We heard that water is sacred to Indigenous peoples and we heard of the importance it has to Indigenous culture, society, history and Aboriginal and treaty rights and title.

"Water is sacred, alive and the lifeblood of First Nations' traditional territories. Access to healthy fresh water is essential to the continued survival of fish and other aquatic species, and to the protection of Aboriginal Title and Rights and Treaty Rights. For tens of thousands of years First Nations have practiced sustainable guardianship of lands and waters."

"[redacted] is intrinsically connected to our watershed and relies on fish. [redacted] has concerns with anything that has the potential to disturb our watersheds and the fish within them."

Water Availability

Several respondents asked the Province to assure protection of other uses of water and water availability. This includes:

- managing water in the face of climate change and drought conditions;
- for the exercise of Aboriginal and treaty rights; and
- protecting existing uses from the cumulative impacts of uses under regulation.

We heard that water use for mineral exploration can be significant and that larger projects should not be allowed to use water without first obtaining a water authorization.

"To generally allow the use of unrecorded water for mineral exploration is irresponsible. We should not be shirking our responsibilities to manage water in the face of climate change and drought conditions."

"The [redacted] are facing unprecedented low flow conditions in our territory which threaten our ability to exercise constitutional protected rights and secure Food, Social and Ceremonial needs."

"Scale of exempted water use can be significant, at times, and needs to be considered cumulatively with other uses. As one example, in [redacted] territory, we recently reviewed an application for a Mines Act Permit for exploration, that estimated water use for a mineral exploration camp has been estimated at 864m³/day (0.01 m³/s)..."

Monitoring, Compliance and Enforcement

Many of the comments highlighted the need for better tools and resourcing to improve monitoring, compliance and enforcement in the mining sector. Some respondents were frustrated about cases of non-compliance and many provided suggestions for improving oversight including:

- building better tools to determine unrecorded/available water and improve accuracy within existing tools, for example the BC Northwest Water Tool;
- strengthening the oversight of these activities and increasing the number of inspections;
- outlining the approach for monitoring water use and how the Province will determine a "significant risk of harm";
- properly staffing compliance and enforcement roles;
- investigating and eliminating the underreporting of activity size; and
- ensuring placer miners have a *Mines Act* permit and are aware of their obligations under the WSA.

“Exemptions prevent compliance and enforcement capacity to effectively monitor and manage the scale of water use and impacts to culturally and ecologically significant aquatic habitat.”

“The current mineral related legislation is weak and basically precludes the ability for regulators to not approve an application for works. The regulatory oversight is poor with inadequate monitoring, compliance and enforcement inspections for active claims.”

“One of the concerns with the proposed changes, is the lack of authorizations continues to make it easier for proponents to apply for the low threshold permit activities, but actually operate at higher threshold levels.”

“... if mineral exploration and small scale placer mining is exempt under the WSA there will be a push by the BC Government to do less inspections of those activities in regards to the water.”

Placer Threshold

There were concerns that the pay dirt threshold (2,000 m³ of pay dirt per year) for placer mines was too high. Many respondents also asked why the threshold is based on the amount of pay dirt processed instead of water flow and use.

“If there is going to be an attempt to provide an exemption it should be in the form of m³ volume of water or litres/second water used. WSA stands for water sustainability act and not dirt sustainability act.”

Impacts and Cumulative Effects

We heard concerns related to environmental flow needs; water availability, quality and quantity; contamination; and the impacts of climate change and drought. There were questions about how the Province considers potential impacts to flows, watersheds and aquatic ecosystems (including vulnerable and at-risk fish species) in the absence of water authorizations, recording and monitoring. There were also concerns that the government would not be receiving fees from the authorizations to compensate for this work.

Some respondents were concerned about the types of chemicals and lubricants used in mineral exploration and placer mining activities and many were very concerned about the environmental, social and cultural impact of cumulative effects from the frequency and intensity of water diversion or use associated with placer mining activities.

“...what mechanism would allow the water managers to know whether a proposed activity will impact the stream if the Mining Activities do not require a Water Sustainability Act authorization?”

"Most placer deposits are localized along specific watershed for geological reasons and as a result there will be a heavy concentration of placer claims within a small area and with the new proposal form a cluster of unregulated water usage with an unknown cumulative effect."

"We need to be working together to actively monitor and improve our tools to understand available/ unrecorded water and environmental flow needs. Financial resources to do this could come from water authorization fees."

Governance and Co-Management

Several respondents expressed the willingness of Indigenous nations to engage and partner with the B.C. government on managing and co-managing water resources.

"If the province is unwilling to regulate water for mineral exploration and placer mining, the [redacted] will fulfill this role on our territory."

"It is hoped that the steps to address the provincial commitments to Indigenous joint management of water will be expedited in the coming months. "

"...it is a concern the proposed changes are limited in scope to only address a minor change with no commitments on how larger more significant management changes to implement co-management of the water in the traditional territory are going to be achieved by the Government of British Columbia."

Camps and Other Uses

Questions were asked about how water requirements for camp use associated with mineral exploration and placer mining would be incorporated into the proposal.

Aboriginal and Treaty Rights, Aboriginal Title and Duty to Consult

Many respondents had questions about how Aboriginal rights, title and treaty rights would be considered in the proposal. Some felt that the proposal could impact Aboriginal rights, title and treaty rights by:

- potentially adversely affecting rights protected by s.35 of the *Constitution Act, 1982*, including rights to fish and hunt;
- allowing unrecorded water use activity to occur in a stream that could become the subject of a potential future treaty water reservation;
- potentially damaging archaeological sites and disturbing historical resources;
- potentially impacting sensitive and vulnerable ecosystems; and

- challenging the aspirations of Indigenous nations to manage resources in their territories.

We heard that more steps need to be taken by the Province to engage within a defined and uniform government-to-government consultation process with Indigenous nations based on reconciliation, recognition and accommodation of Aboriginal rights, title and treaty rights.

Questions were raised about how the Province would meet its duty to consult with Indigenous nations when it proposes to incorporate thresholds such as “significant risk of harm” and “risk of significant adverse impact”, while the duty to consult is triggered by potential for “adverse impact” to Aboriginal rights.

“... if a s.10 permit incorporates the Water Sustainability Regulation by reference, it is important that the regulation adequately protect [redacted]’s section 35 rights... the Mine Act provides that the Chief Inspector may exempt a class of people or a person from requiring a s.10 permit. In this case, it is crucial that the Water Sustainability Regulation prohibit water use and diversion for Mining Activities that would adversely impact section 35 rights.”

“...the proposed provisions do not require people engaged in the Mining Activities to ensure that their diversion or use of water does not adversely affect [redacted]’s rights that are protected under section 35 of the Constitution Act, 1982... the use of “significant risk of harm” is problematic because BC must consult with [redacted] wherever it authorizes uses of water that may adversely impact their rights. Since the threshold for “adverse impact” is lower than that for a “significant risk of harm,” such an approach to rights risks allowing Mining Activities that ought to trigger consultation about impacts to rights and any accommodation where required.”

UNDRIP, TRC and the Draft Principles

Some respondents communicated that the proposal does not reflect how the Province has committed to the:

- United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP);
- Calls to Action from the Truth and Reconciliation Commission (TRC);
- Principle of Free, Prior and Informed Consent; and
- Draft Principles that Guide the Province of British Columbia’s Relationship with Indigenous Peoples (the “Draft Principles”).

“Allowing for the use of available (unrecorded) water without an authorization fails to meet standards expressed in the Draft Principles that Guide the Province of British Columbia’s Relationship with Indigenous Peoples (the “Draft Principles”).”

Section 2: A Revised Proposal

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2.1. Overview

Comments received on the fall 2018 intentions paper provided valuable insights that helped identify ways the proposal could better serve British Columbians, including Indigenous peoples.

Whereas some individuals and industry representatives supported the proposal as presented, we heard concerns from many Indigenous groups and non-governmental organizations (NGOs), particularly about recognizing and accommodating Aboriginal rights, title and treaty rights. Likewise, we heard that some individuals were concerned that the proposed uses of water would become *de facto* exemptions where impacts to the environment would not be contemplated. Industry representatives also asked for clarity regarding how statutory decision makers would consider water use for camps.

Section 2 provides additional information on many of the concerns and questions raised, yet the Province is also proposing new provisions to accompany those described in the 2018 intentions paper. Much of the past year has been spent revisiting the proposal to ensure it provides a clear path for Indigenous nations to express concerns about the potential impacts of water use on Aboriginal rights, title or treaty rights, and engage in discussions regarding possible accommodations. In addition to providing direct opportunities to consult on potential impacts to Aboriginal rights, title or treaty rights, the new proposal provides clarity regarding water for camp use, and how WSA Water Managers and Engineers might be involved in the *Mines Act* permitting process.

2.2. Provisions to Continue from the 2018 Proposal

In October 2018, the Province released an intentions paper that described a proposal to allow water use in mineral exploration and small-scale placer mining without an authorization, subject to prescribed restrictions. Although some respondents asked for additional provisions to be added, we did not hear that any of the provisions should be removed. The Province therefore proposes continuing on an on-going basis the restrictions described in the intentions paper, which are summarized below:

1. The person must hold a permit under section 10 of the *Mines Act* in relation to the mineral exploration or placer mining activity;
2. The person may only divert or use available (unrecorded) water;
3. The person must not divert or use unrecorded water from:
 - a stream where there is a treaty water reservation or the Nisga'a water reservation;
 - a sensitive stream designated under the Water Sustainability Regulation;
 - a point of diversion within a protected area; or,
 - a stream when a temporary protection order under the WSA applies;

4. The person must not construct any permanent or semi-permanent works in the stream channel and must remove the works for diverting water from the stream after the placer mining activity or mineral exploration activity is completed;
5. The water supply intake must be equipped with a screen, or otherwise modified, to:
 - prevent potential loss of fish due to entrainment or impingement; and,
 - minimize disturbance of, or removal of sand and gravel from, the stream channel;
6. The person must ensure that any disturbance of the stream channel and riparian areas are minimized when accessing water from the stream; intakes should be hand placed and no sumps or other works dug in the stream channel;
7. The person must not operate mechanized hand-tools in or about a stream or stream channel;
8. The person must ensure that any water that is diverted and used is discharged without causing a significant risk of harm to public safety, the environment, land or other property;
9. The person must ensure that the water supply and works of persons who are lawfully diverting or using water under the WSA are not adversely affected; and,
10. The person must ensure that the diversion or use of water does not cause a risk of significant harm to fish, wildlife or the aquatic ecosystem of a stream.

In addition to these points, the Province also intends to continue with two other provisions described in the intentions paper. While diversion and use of available (unrecorded) water to prospect for a mineral with hand-held tools (but with no mechanical disturbance) has long been authorized, an allowance would now be extended to allow the use of available (unrecorded) water for mineral exploration using mechanized hand tools (including mechanical hand-drills and rock-saws). This would align with current practice and policy with respect to such low impact activities under the *Mines Act*, through which permitting for low impact activities is generally not required. Moreover, rock saws and mechanical hand drills use very little water (a few gallons per minute) and only for a limited duration of time. The expected impact of this use is negligible and likely does not require the added protections that an authorization would afford to further reduce any negligible impact.

Second, the Province intends to develop a provision that would give WSA Water Managers and Engineers the authority to require persons to obtain an authorization if they consider diversion or use of water may have a significant adverse impact on the stream, including on the flow of water within the stream, or on other authorized users. The Province is also considering how WSA Water Managers and Engineers might consider potential adverse impacts on cultural heritage resources – as discussed below.

2.3. New Provisions to the Proposal

In response to the broad range of comments received on the initial proposal, the Province is considering new provisions in addition to those communicated in the intentions paper.

The principle concern we heard came from Indigenous groups who had questions about how in the absence of a water authorization, the Province would accommodate concerns about potential impacts to Aboriginal rights, title and treaty rights. We understand the importance of these concerns and intend to modify the proposal in response.

Most often water use for these activities is temporary, non-consumptive and occurs in remote areas. Requiring an independent water authorization for each mineral exploration and small-scale placer activity would impose new permitting pressures on industry and government for potentially little additional value. These activities already undergo a review through the *Mines Act* permitting process, which includes considerations for the land activity, the proposed water use and a referral to Indigenous governments, and it is possible that potential impacts to Aboriginal rights, title and treaty rights could be effectively addressed through the *Mines Act* permitting process. This revised proposal aims to provide clearer opportunities to consider any potential impacts to Aboriginal rights, title, and treaty rights, and also provides clarity on how the possible provisions might apply to water diversion or use for camp use.

Proposed Provision: Cultural Heritage Resources

The Province has a duty to consult with and where required, accommodate Indigenous nations whenever a decision or activity could adversely affect established or asserted Aboriginal rights, title and treaty rights. Statutory decision makers must ensure adequate consultation and accommodation has been undertaken prior to making a decision that may impact Aboriginal rights, title and treaty rights.

To more directly address concerns regarding water use, the Province is considering adding reference to 'cultural heritage resources' to the matters WSA Water Managers and Engineers consider in determining whether an individual must obtain an authorization to use water. This concept is already reflected in other pieces of legislation, such as the *Mines Act*, *Mineral Tenures Act* and *Forest Act*. These references may serve as context for how we might include a similar concept within the revised provisions. Work continues to determine how this concept can best be expressed to align with other pieces of legislation and address concerns raised by Indigenous groups.

Including reference to cultural heritage resources could provide statutory decision makers with a more direct avenue to consider potential impacts of a proposed use of water for mineral exploration or small-scale placer mining on Aboriginal rights, title and treaty rights. If included, the Province would also develop policy to accompany the regulation clarifying how Indigenous nations' concerns related to the proposed water diversion or use that are raised during the *Mines Act* permit referral would be referred to WSA Water Managers or Engineers for consideration. For example, if the concern could not be adequately addressed through the terms and conditions of the *Mines Act* permit or another means, the WSA Water Manager or Engineer could order the individual to obtain an authorization under the WSA where terms and conditions could be attached or they could refuse to issue an authorization under the WSA. Types of terms and conditions a decision maker might consider include limiting water use to certain time periods or flow volumes, or adding additional protections for aquatic ecosystems.

The proposed referral process (see Appendix) describes one way the Province could potentially fulfill its commitment to address Indigenous concerns related to water, including where diversion and use of water and related temporary works are proposed. This process could be locally tailored to align with formal agreements between the Province and Indigenous groups.

The proposed referral process includes a forwarding of any concerns raised by Indigenous groups regarding water diversion or use that cannot be accommodated through the *Mines Act* permit directly to

WSA Water Managers or Engineers, who can then join consultation of how those concerns can be most appropriately addressed.

Further policy would also describe when a Mines Inspector should refer *Mines Act* permit applications to WSA decision makers, even in the absence of concerns raised by Indigenous groups, including situations where there are significant risks related but not limited to:

- cumulative impacts,
- water availability,
- impacts to the stream, or
- other authorized water users.

The proposed policy would provide advice on how Mines Inspectors might identify risks related to these factors, which would then precipitate a referral to a WSA decision maker.

The authority of WSA Water Managers and Engineers to require a water authorization would not be restricted to the time before a *Mines Act* permit is issued. Should a WSA decision maker become aware of a risk that meets the tests defined under the regulation after the *Mines Act* permit is issued, they could order that use of water stop until a water authorization is obtained.

Proposed Provision: Water for Camp Use

WSA Water Managers have historically not required separate water authorizations for small camps set-up for mineral exploration or placer mining activities because the volume required is small compared to the exploration or mining activities (typically 50-100 litres per person, per day), and some decision makers considered camp use to fall under the definition of a “mining activity”. Still, industry representatives stated that practice is interpreted differently across the province and asked for clarity on how water use for camps would be considered under the proposal.

Requiring a separate authorization to use water for all types of camps would eliminate many of the efficiencies offered by the proposed regulation. However, the Province recognizes that larger camps suggest a more significant operation using larger volumes of water and higher possibility of risk to streams, other authorized water users or Aboriginal rights, title or treaty rights. It is therefore proposed that the camp size for which mineral exploration and small-scale placer mining can use water without an authorization be limited to 20 people. Water use for a camp of this size is expected to be approximately equivalent to the volume of water generally needed for a domestic water purpose. Further, regardless of the camp size limit, a Water Manager or Engineer would maintain the authority to require an authorization as described above.

Section 3: Clarification and Answers to Questions

The Ministry of Environment and Climate Change Strategy has considered the comments and concerns from members of the public, industry groups and Indigenous groups. The following section provides more information on questions we received and outlines the steps the Province is taking to improve regulatory oversight of the mineral exploration and placer mining sector.

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3.1. Context for the Proposed Regulation

3.1.a. Why are new regulations proposed for mineral exploration and placer mining?

Mineral exploration and small-scale placer mining activities have historically been allowed to use water without an authorization by allowing diversion or use of unrecorded water for “prospecting for a mineral”. Water licences were not required under the *Water Act* for diversion or use of unrecorded water for that purpose.

A new definition of “prospecting for a mineral” was brought into force under the WSA in 2016, which limited water use without an authorization to only those activities that used hand-held tools. This change meant that mineral exploration and small-scale placer mining activities that used mechanical tools now required a water authorization to divert and use water, or they could have that water diversion or use allowed through regulation.

Given the existing regulatory oversight for these activities under the *Mines Act*, the Province implemented temporary provisions allowing the use of unrecorded water without an authorization (water that has not been licensed for other purposes) for mineral exploration and small-scale placer mining activities under regulation (Water Sustainability Regulation (WSR)). These provisions (in s.56 WSR) provided a temporary solution and introduced new requirements on water use for mineral exploration and placer mining, in addition to the terms and conditions already required under *Mines Act* permits. See question 3.6.e. for more information on these terms and conditions.

3.1.b. How do these proposed regulations for water use or diversion under the WSA relate to the Placer Mine Waste Control Regulation?

The two are not directly related. The proposed regulation gives clarity on applying the WSA to divert or use water for mineral exploration and small-scale placer mining activities across the province.

The [Placer Mining Waste Control Regulation](#) outlines the conditions under which water may be used in placer mining activities and states that water must be pumped back to the operation for reuse or be allowed to seep into the ground from settling ponds. The regulation names specific streams in B.C.'s north west that are exempt from these conditions and may discharge to the environment, provided they do not use mercury or chemicals to recover the placer mineral. The Regulation is currently under review, with a [proposal](#) to rescind large portions of the regulation related to the exemption of sediment control for certain streams.

3.2. Proposed Changes

3.2.a. What is the government proposing?

This proposal is to add more protections, including giving WSA Water Managers and Engineers the ability to require proponents to get a water authorization if there are risks of significant adverse impacts to streams and other authorized water users. The Province is also considering how WSA Water Managers and Engineers might consider potential adverse impacts to cultural heritage resources.

This proposal will give a basic set of restrictions for water diversion or use in the absence of separate water authorizations. This would free resources to allow the Province to concentrate and engage on higher-risk water diversions or uses in mineral exploration and placer mining.

3.2.b. Is this proposal a blanket exemption from WSA requirements?

No, the Province is not proposing an exemption from WSA requirements. This proposal is to allow diversion or use of water for mineral exploration and small-scale placer mining activities without a water authorization only if an individual meets the conditions set under new regulations to protect the environment, cultural heritage resources and other water users. Even if an individual meets these conditions, they may still need to get a water authorization to divert or use water from a stream or aquifer if directed to do so by a WSA Water Manager or Engineer.

3.2.c. Can a person get a water authorization even if they are eligible to divert or use water under the proposed regulations?

Yes, and the Province encourages placer miners and individuals undertaking mineral exploration activities to get a water authorization in areas where there are many other users or water availability concerns. In areas where there may be no unrecorded (unlicensed) water available, the regulation will not allow for water diversion or use. Also, a water authorization is the only way to have a water right protected during times of drought or water scarcity.

Individuals can submit an application for a water authorization through [Front Counter BC](#).

3.2.d. Are mineral exploration and placer mining activities allowed to conduct work within a stream?

No, mineral exploration and placer mining activities typically occur on land where previous streams and riverbeds deposited minerals. Restrictions under the WSA, *Mines Act*, *Environmental Management Act* (EMA), the Health, Safety and Reclamation Code, prevent mineral exploration and placer mining activities from occurring within a stream without proper authorization. Often these activities must operate at a setback distance from streams and their riparian areas; however, temporary water diversion works may be placed in the stream channel.

In cases where an operator needs to modify a stream, or carry out an activity within a stream or stream channel (e.g. “changes in and about a stream”), an individual must receive proper permission under the WSA, such as by obtaining a Change Approval.

3.2.e. How does the proposal consider camp use?

Under the repealed *Water Act*, “prospecting for a mineral” was not defined. As a consequence, Water Managers historically did not always consider that separate water authorizations were needed for small camps set up for mineral exploration or placer mining activities, as it was determined that they fell under the definition of “prospecting”.

The intention is to continue considering water requirements for camps as part of the allowance for these industries, subject to a new 20 person limit on camp size.

3.3. Using a Pay Dirt Threshold

3.3.a. Why is the placer mining threshold 2,000 m³ of pay dirt per year?

Historically, miners could only extract up to 2,000 m³ of pay dirt per year before they needed to obtain a placer mineral lease for their operation. This had previously been increased to 20,000 m³ of pay dirt, but the lower threshold was kept for this proposal because placer mining activities operating above 2,000 m³ of pay dirt per year are typically no longer considered hobbyists or doing exploration work and will likely have more substantial water demands. By keeping the threshold at 2,000 m³ of pay dirt, most sustained and productive placer mining operations will need a water authorization.

Mines Act permit applications record expected volume of pay dirt that applicants plan to process. Falsifying information on an application, like under-reporting pay dirt, is an offence and could lead the applicant to fines or legal action. Mines Inspectors check expected pay dirt volumes during their inspections.

3.3.b. How does B.C.’s approach to water use for placer compare to the regime in the Yukon?

While the Yukon has a robust legislative framework to regulate placer mining, it is important to remember that it uses a different statutory regime. A water licence for placer mining is generally not required in the Yukon unless a proponent plans to use more than 300 m³ of water per day, or is conducting an activity listed in schedule 6 of the Yukon Water Regulations. This volume far exceeds what would be needed for

a small-scale placer mining operation in B.C., as considered under this proposal (i.e. the volume of water needed to run a placer mine under 2,000 m³ of pay dirt per year).

The 400 m³ of pay dirt per year threshold in Yukon's Placer Mining Land Use Regulation is one factor used to identify a class 2 placer operation, which needs an environmental assessment. The Yukon government classifies class 2 operations as "grassroots" exploration¹, which is similar to B.C.'s view that small-scale placer miners are primarily hobbyists or individuals testing claims.

In the Yukon, class 2, 3 and 4 placer operations must have an environmental assessment under the Yukon Environmental and Socio-Economic Assessment Act. Similarly in B.C., placer mine operations involving mechanical disturbance of the ground (e.g. not undertaken with hand-held tools) must generally have a *Mines Act* permit, which involves a technical assessment and consultation with Indigenous nations.

3.4. Duty to Consult and Aboriginal and Treaty Rights

3.4.a. Where does the 'duty to consult' and opportunity for discussion about managing water resources occur under the proposal?

Under this proposal, an individual must generally have a *Mines Act* permit for mining activities. Any application for a *Mines Act* permit application for those mining activities (including related diversion and use of water without an authorization) that would have the potential to adversely affect asserted or established Aboriginal rights, title or treaty rights will trigger the duty to consult with Indigenous nations. During this consultation, Indigenous nations will be able to raise matters related to the impacts of the mining activity and its associated water diversion and use.

As considered above in section 3.2, if an Indigenous nation raises a question or concern about water diversion or use during the *Mines Act* permit application, that concern could be forwarded by the Mines Inspector to a WSA Water Manager or Engineer if the matter cannot be appropriately addressed by the Mines Inspector, such as by including a term or condition addressing the concern in the *Mines Act* permit. If the concerns about the impact to the stream or its flow of water cannot be effectively addressed in the *Mines Act* permit, the WSA Water Manager or Engineer, who may contact the Indigenous nation directly for further consultation, may be able to consider addressing the concern in a separate water authorization to be required, or by refusing to issue such a water authorization.

See the Appendix for a proposed referral process between Mines Inspectors, WSA Water Managers and Engineers and Indigenous nations on a *Mines Act* permit application.

3.4.b. Are there exploration activities that do not require a *Mines Act* permit?

There are very few exploration activities which are considered to not require a *Mines Act* permit. These are very low risk, low impact prospecting activities such as using hand-held rock saws, hand-held mineral exploration drills, or hand placer work. These activities use very little water and the water is often

¹ http://www.emr.gov.yk.ca/mining/mining_land_use.html

recirculated and returned to the same drainages it originated from, using settling ponds to remove fine sediments.

The *Mines Act* Permit Regulation also establishes certain mineral exploration activities as having [deemed authorizations](#). However, these activities only occur under an existing *Mines Act* permit. Proponents are required to notify the Ministry of Energy, Mines and Petroleum Resources prior to undertaking an activity that is deemed authorized and the notification is then referred to Indigenous governments.

A Mines Inspector may also order that the deemed authorization does not apply for a particular permit. This decision can be informed by input from an Indigenous nation regarding potential adverse effects of the activity on Aboriginal rights, title, or treaty rights. If that order is made, the proponent would need to submit a new *Mines Act* permit application to receive a permit amendment to allow the proposed activity. This application would then be subject to the full consultation process.

3.4.c. How does the proposal consider Aboriginal rights, including title and treaty rights under s.35 of the Constitution Act (1982) and Indigenous cultural values?

Section 35 of the *Constitution Act, 1982*, recognized and affirmed existing Aboriginal rights (including title) and treaty rights. The Province is committed to increasing transparency in how decision makers consider potential impacts to Aboriginal rights, title and treaty rights.

In light of what we heard, the Province is considering adding reference to ‘cultural heritage resources’ to the list of reasons why a WSA Water Manager or Engineer may require a water authorization. Decision makers could consider impacts of water use to cultural heritage resources in light of feedback provided by Indigenous groups on the *Mines Act* permit application and any other information about Indigenous interests the decision maker can access. WSA Water Managers or Engineers would ensure that concerns raised by Indigenous peoples during the consultation on a *Mines Act* permit application regarding any water diversion or use are appropriately addressed either through the addition of terms and conditions to an authorization or refusal to grant authorization.

3.4.d. What about risks to archaeological sites in riparian area?

The *Heritage Conservation Act* (HCA) protects all archaeological sites pre-dating 1846, whether on Provincial Crown or private land. Disturbance and/or removal of artifacts from an archaeological site without a permit may result in penalties under that legislation. Refer to the [Archaeology Branch](#) of The Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD) for more information.

This proposal prohibits a person from installing, constructing, or placing any permanent or semi-permanent works in a stream, in order to reduce surficial disturbance that might uncover streambed artifacts. Individuals must generally also get a *Mines Act* permit for mining activities before any related water diversion and use. Permits often have site-specific terms and conditions to protect streams and land, such as setback distances from riparian areas.

3.5. First Nation Treaty Water Reservations

3.5.a. How does this proposal protect First Nation treaty water reservations?

This proposal prohibits the use of unrecorded water from a stream or aquifer where there is a First Nation treaty water reservation.

3.5.b. How does this proposal impact future water reservations?

This proposal should not negatively impact future treaty water reservations. Persons will be prohibited from using unrecorded water from a stream or aquifer where there is a water reservation under s.40 [treaty First Nation water reservations] or s.41 [Nisga'a water reservation] of the WSA. Once a First Nation treaty water reservation applies to a stream or aquifer, the regulation will no longer allow water diversion or use from these sources (see s.56(4)(a) of WSR).

3.6. Environmental Impacts

3.6.a. How do WSA Water Managers and Engineers know how much water a *Mines Act* activity requires? Is this enough to determine environmental impacts?

The *Mines Act* permit application requires applicants who are proposing to divert and use water from a natural source to list and identify information about their use, including:

- proposed quantity of water for diversion and use, including for camp activities;
- name of water source;
- whether it is for surface or groundwater;
- pump size(s);
- use(s) of water; and
- location of water source and water-related works, including settling ponds, intakes and sediment control structures.

The *Mines Act* permit application also requests information on timing, land activities and potential impacts to Indigenous interests.

This information contains many of the key pieces of information that a WSA Water Managers or Engineer would receive under a water authorization application, which they would use to determine impacts to streams, the environment and other water users.

3.6.b. How do WSA Water Managers assess the impact when there is little information about a stream?

The Province will sometimes use information from authorizations on a stream or nearby watershed systems, or rely on observational data to make determinations about stream impacts, especially in remote areas where stream site visits are difficult.

Information that can help guide this work includes:

- information from past decisions;
- monitoring and geospatial data;
- hydrologic modelling software (such as the B.C. Water Tools);

- academic and government studies;
- information from industry;
- using information from nearby streams to make predictions (such as regression analysis); and
- predicting impacts to local and Indigenous interests by considering information about local users, aquatic species and sensitive ecosystems.

If there is uncertainty, the Province can attach terms and conditions to an authorization that mitigates risk, such as timing-windows, flow targets, or specific riparian protections. This proposal incorporates standard terms and conditions into regulations to protect streams from the predicted risks. All individuals undertaking mineral exploration and small-scale placer mining must follow these terms and conditions to use water without an authorization.

If the Province determines that there is a significant risk of adverse impact to the stream, authorized water users or (proposed) potential adverse impacts to cultural heritage resources, the WSA Water Manager or Engineer can require that the proponent apply for a water authorization for their activity. At that time additional information may be requested and site-specific terms and conditions may be applied.

3.6.c. How will environmental flow needs and low flow (drought) conditions be considered?

The water diversion and use associated with these activities is generally temporary and not extensive, so the risk posed to environmental flows remains low when contemplated in combination with protections under s.56 of the WSR.

If a WSA Water Manager or Engineer believes that a proposed diversion and use of water may have a risk of significant adverse impact to the stream or its aquatic ecosystem, they can require that the proponent apply for a water authorization where environmental flow needs (EFN) will need to be considered.

If use is already occurring, and it is found that an activity is causing a risk of significant harm to the aquatic ecosystem, decision makers can order the proponent to cease diverting and using water until an authorization is obtained.

During periods of drought the Province can take action by restricting diversion and use of water on the basis of priority. The Province can also issue a temporary protection order on a stream, under which proponents would lose their ability to divert and use water under the proposal.

3.6.d. How do mineral exploration and small-scale placer mining impact aquifers?

Mineral exploration and small-scale placer mining activities generally pose a low risk to aquifers. Mineral exploration activities typically divert water from streams, or have water delivered by truck or helicopter. The discharge water is typically stored in sumps and poses a minimal risk of contamination because drills generally use non-toxic lubricants, and s.59 of the WSA prohibits the introduction of prescribed substances, like lubricants, into a well.

Where drillers encounter pressured conditions, the Health, Safety and Reclamation Code also prohibits the flow of groundwater from a completed drill hole without the written authorization of an inspector.

Placer mining operations sometimes allow groundwater to seep into the settling ponds they use for processing placer material. The water discharged to these settling ponds mostly contains fine sediment materials that settle at the bottom of the pond and generally pose a low risk to aquifers or nearby streams.

3.6.e. Do *Mines Act* permits have conditions to protect the environment?

The *Health, Safety and Reclamation Code for Mines in British Columbia* (“the Code”), which miners and individuals undertaking mineral exploration activity must follow, has provisions to protect streamflow, land and the environment. Additionally, Mines Inspectors regularly add site-specific conditions to permits as necessary, including minimum riparian setback distances for streams, wetlands and lakes, and/or comments to address Indigenous concerns, under s.14 of the permit (special conditions).

3.6.f. Are individuals allowed to discharge waste to streams under the proposed provisions?

No, the *Environmental Management Act* prohibits individuals from introducing, causing or allowing waste to be introduced to the environment in the course of conducting their activity unless the discharge is allowed under a permit, approval, order or regulation. Section 46 of the WSA also prohibits a person from introducing foreign matter into a stream.

The [Placer Mining Waste Control Regulation](#) provides exemption from particular requirements for placer mining in limited circumstances, in very limited areas of the Province.

3.7. Monitoring, Compliance and Enforcement

3.7.a. How will the conditions of the proposal be enforced? What steps have been taken to improve compliance and enforcement in mineral exploration and small-scale placer mining activities?

Since 2016, the Ministry of Energy Mines and Petroleum Resources (EMPR) has taken many steps to improve compliance and enforcement including:

- creating a Deputy Minister-level Compliance and Enforcement Board to oversee strategic improvements to compliance and enforcement effectiveness and ensure greater integration between EMPR, Ministry of Environment and Climate Change Strategy (ENV), the Environmental Assessment Office (EAO) and other agencies;
- creating the Health, Safety and Enforcement Division within EMPR, which focuses on compliance and enforcement;
- developing a three-year Strategic Plan and an annual operational plan for mining compliance and enforcement in B.C.;
- establishing an investigations unit within EMPR;
- developing and implementing a Compliance and Enforcement Policy;
- implementing an Administrative Monetary Penalties program as an additional enforcement tool for non-compliant operators; and
- dedicating EMPR staff to inspections of regional mines (including mineral exploration and placer mining activities) to increase inspection frequency.

While Mines Inspectors take the lead role in inspecting mineral exploration and placer mining activities, Natural Resource Officers (NROs) and WSA Water Managers and Engineers are responsible for enforcing water use, diversion and storage under the WSA.

FLNRORD and EMPR are exploring strategies to increase joint inspections between WSA Water Managers and Engineers, NROs and Mines Inspectors; and to develop WSA training for Mines Inspectors so they can report potential areas of WSA non-compliance during inspections.

3.7.b. How will the Province assess and enforce water diversion and use associated with mineral exploration and small-scale placer mining activities without fees from water authorizations?

The fees associated with water authorization applications often do not recuperate the full-cycle cost of processing, reviewing and issuing a small water authorization. Under the proposed referral process (see Appendix), WSA Water Managers and Engineers would be able to require that persons involved in higher-risk mineral exploration and small-scale placer mining activities apply for a water authorization and would be able to dedicate their resources to reviewing and consulting on these higher-risk activities. Lower-risk activities would be authorized and regulated under regulation. Moreover, the compliance and enforcement program does not rely directly on WSA funding.

3.7.c. What happens if impacts to the stream are only identified after a *Mines Act* permit has been issued?

If it is found that diversion or use of water is causing a significant adverse impact on the stream and an individual is not in compliance with the provisions under s.56 WSR, a WSA Water Manager or Engineer could order the individual to come into compliance or cease diverting or using water and apply for a water authorization in accordance with the WSA.

3.8 More Information

3.8.a. Where do you find information about issued *Mines Act* permits?

Individuals can add data layers showing the location of ‘Notices of Work’ (authorized activities under a *Mines Act* permit) on [ImapBC](#). This can include information such as the mine number, location, site access information and term dates.

Individuals can obtain further information about *Mines Act* permits from [regional mines inspectors](#). The Province is exploring options to make more information about *Mines Act* permits available online.

3.8.b. How can you determine if a stream has a water use restriction on it?

Individuals can access information about stream notations and [water allocation restrictions](#) through [ImapBC](#):

- After opening the web tool and searching for a stream, click on the “data sources” tab; and
- Under the “Add Provincial Layers” button, select “water allocation restrictions-labels”.

Note that these notations are based off of past assessment by statutory decision makers, and do not represent a final determination regarding water availability in a source; and that some water allocation restrictions apply only under particular conditions.

Otherwise, you can inquire about a stream by contacting a local water officer through [FrontCounterBC](#).

Section 4: Next Steps

Following the release of this What We Heard document, the intent is to bring a proposal to government for decision before the existing temporary provisions regulating water use in mineral exploration and small-scale placer mining expire on December 31, 2019. Should government approve the proposal, staff from ENV, FLNRORD, EMPR, will develop policy related to consideration of water during *Mines Act* permit applications, including the proposed referral process between Mines Inspectors and WSA decision makers.

We also recognize that many respondents raised concerns about compliance and enforcement. In addition to the new compliance and enforcement methods introduced by EMPR (see section 3.7 of this document), the Province is investigating policy options for joint-inspections between Mines Inspectors and WSA Water Managers.

We appreciate all the feedback we received during engagement on the intentions paper. In addition to the intentions paper and What We Heard document released on this proposal, we are actively seeking ways to better engage the public and Indigenous groups on WSA-related material. In particular, we are currently working with Indigenous organizations to develop new strategies for engaging and collaborating with Indigenous peoples on WSA-related policy and regulation work.

If you wish to provide any additional feedback on the proposal, or discuss the proposal further, please contact us through livingwatersmart@gov.bc.ca.

Appendix: Possible Referral Process

