

Land and Water Boards of the Mackenzie Valley



Annex A: Interpretation and Reasoning

Reference Bulletin: Water Use

1.0 Background

In February 2020, during a working group meeting related to the development of the [Method for Determining Winter Water Source Capacity for Small-Scale Developments](#), staff from the Land and Water Boards of the Mackenzie Valley (LWBs) identified a gap in regulation of water use in the Mackenzie Valley. In particular, LWB staff determined that water circulated continuously from a watercourse to prevent freezing of pumps and lines for drilling operations was not being included in proposed total water use volumes in mineral exploration applications. As a result, this water use was not being considered during these regulatory proceedings or being included in the licence conditions. Further, LWB staff became aware that this water use is regulated and included in licence conditions for these types of projects in Nunavut.

Upon comparison of the Nunavut legislation to the applicable water legislation in the Mackenzie Valley, it is clear that the [Nunavut Waters and Nunavut Surface Rights Tribunals Act](#) (NWNSRTA) has a similarly broad definition for water use,¹ and the [Nunavut Waters Regulations](#) (NWR) set out similarly broad licensing criteria for direct water use for this type of project.² Given these similarities, this type of water

¹ "use" is defined in section 4 of the [NWNSRTA](#), as: in relation to waters, means a direct or indirect use of any kind, including, but not limited to,

- (a) any use of water power and geothermal resources;
- (b) any diversion or obstruction of waters;
- (c) any alteration of the flow of waters; and
- (d) any alteration of the bed or banks of a river, stream, lake or other body of water, whether or not the body of water is seasonal.

However, it does not include navigation or any other use connected with shipping activities that are governed by the *Canada Shipping Act, 2001*.

² Under the [NWR](#), for any type of undertaking other than a power undertaking, a type B water licence is required for the "use of

use should be regulated similarly in both regions.³

In reviewing this discrepancy, LWB staff concluded that a primary reason for this difference in interpretation is the lack of a common understanding and application of the definition of water ‘use’ among parties in the Mackenzie Valley. To provide clarity on this matter and related future matters, LWB staff prepared the *Reference Bulletin: Water Use* (Bulletin), which was issued in June 2020 under the direction of the LWBs’ Executive Directors Committee. From time to time, the LWBs develop and issue reference bulletins of this nature regarding legislative and policy interpretations in order to clarify the LWBs’ expectations and improve the efficiency and transparency of LWB proceedings. Because they are intended as clarification rather than as standalone guidance documents, reference bulletins are not typically developed through a public input and/or review process.

Although the Bulletin was initiated by the need to improve clarity regarding a specific water use, the Bulletin was intended to provide a broader interpretation of water use that would provide clarity for various circumstances. During the development of other LWB guidance documents⁴ and in LWB regulatory proceedings⁵ following the issuance of the Bulletin, LWB staff subsequently determined that water used for the construction and maintenance of ice-bridges (i.e., water used to thicken the portions of winter roads that cross watercourses) had also not historically been included in proposed total water use volumes in applications, and consequently, not included in, or reported under, licence conditions.

This ice-bridge water use is similar to water used to keep lines and pumps from freezing because water is returned to the same watercourse; however, there is a singular specific reference in the licensing criteria to an exception for ice-bridge water use, and parties do not agree on how this exception should be interpreted. During the most recent Mackenzie Valley Operational Dialogue (MVOD) discussion in February 2023, LWB staff and other participants acknowledged the need to formally resolve this issue and ensure expectations are clear to all parties. In order to determine how to advise applicants proposing winter roads as part of a project, LWB staff subsequently undertook further review of the legislation and the Bulletin.

50 m³ or more but less than 300 m³ per day,” and a type A licence is required for the “use of 300 m³ or per day.”

Under the [MVFAWR](#) and [Waters Regulations](#), for both industrial and miscellaneous projects, a type B water licence is required for the “use of 100 or more cubic metres per day and less than 300 cubic metres per day,” and a type A licence is required for the “use of 300 or more cubic metres per day.”

³ The LWBs also reviewed the Yukon’s [Waters Act](#) and [Waters Regulations](#); however, since the types of mineral exploration projects are largely dissimilar and are considered differently under the Yukon legislation, no comparison is provided here.

⁴ See the Policies and Resources page on any of the LWBs’ websites

(www.glwb.com/www.mvlwb.com/www.slwb.com/www.wlwb.ca/) to access the [LWB Standard Licence Conditions Template – Review Summary Tables](#) and the [LWB Guides to the Land Use Permitting and Water Licensing Processes – Review Summary Table](#).

⁵ There are numerous licences that include winter road water use in the authorized water use volume; however, in the majority of these licences, it is not clear that this should include water used for the ice-bridge portions of winter roads. In some more recent licences, this expectation has been more clearly set out in the licence conditions and/or the associated reasons for decision. For examples, see the LWBs’ public registry for [MV2022L2-0007 – KDI – Issuance – Type B Water Licence – Dec 22 22](#), [MV2014L2-0006 – CZN – ASR – Non-Fed Licence – Amendment – Aug 30 22](#), and [MV2022L8-0008 – EREX – Issuance – Type B Water Licence – Jan 3 23](#)

Based on this review, the LWBs' current understanding is that ice-bridge water use should be considered a direct water use and should be included in the total water use volume for the project, if a licence is required. For miscellaneous projects that otherwise exceed licensing criteria for water use, ice-bridge water use therefore contributes to the determination of whether a type A or type B licence is required. For some other types of projects, where the relevant Schedule does not set out ice-bridge water use as a below-threshold direct water use, ice road water use also contributes to the determination of whether a licence is required at all. The reasoning for the LWBs' interpretation of the legislation with respect to water use in general, and specifically with respect to ice-bridge water use, is detailed in section 2 below.

2.0 Interpretation of Licensing Legislation

2.1 Definition of Water Use

As noted above, the primary reason for developing the Bulletin was to clarify what is considered water use with respect to licensing. The legislated definition of 'use' with respect to water is very broad and includes both direct and indirect water uses.

In 2014, Aboriginal Affairs and Northern Development Canada (AANDC) responded to a request from the Nunavut Water Board to clarify AANDC's interpretation of water use under the [NWNSRTA](#), particularly with respect to water circulated continuously from a watercourse to prevent freezing of equipment. In summary, AANDC's response (attached) concludes that this is a water use, because in general, water removed from a source for any period of time is not available to other users during that time and therefore constitutes a water use.

While AANDC's letter refers to water use in general as both a withdrawal and a diversion, with respect to the [Mackenzie Valley Federal Areas Regulations](#) (MVFAWR) and [Waters Regulations](#) (collectively, the Regulations), not all water uses are diversions. Instead, the Schedules in the Regulations differentiate between direct water use and diversion of water, which is an indirect water use with its own specific licensing criteria. Since the letter was written in the context of the [NWR](#), which do not make this differentiation in the Schedules, this letter should not be taken to mean that all water uses can be broadly considered diversions under the Regulations in the Mackenzie Valley.

Regardless, AANDC's conclusion about the use of water to prevent equipment from freezing is that it should be included in the total water use volume, because it is being removed from a water source for a period of time, even if it is returned to the same source. This more general explanation of what constitutes a water use also provides clarity on other similar water uses, including ice-bridge water use. This conclusion is consistent with both the NWR and Regulations, neither of which specify that water returned to the source after use should be excluded when considering the licensing criteria in the Schedules.

Notwithstanding differences between the licensing criteria in the Regulations and the NWR (which are notably simpler and more general), the definition of water use in the [NWNSRTA](#) and the [Mackenzie Valley Resource Management Act](#) (MVRMA) and [Waters Act](#) are essentially identical, and these Acts all require

consideration of the effects of water use on other users.⁶ Accordingly, the LWBs consider AANDC's interpretation of water use applicable in the Mackenzie Valley.

2.2 Licensing Criteria for Water Use

Water licensing criteria for both direct and indirect water use (as well as deposit of waste) are set out in the Schedules in the [MVFAWR](#) and the [Waters Regulations](#). In all Schedules, for all categories and types of licences, criteria for direct water use are listed in item 1, while indirect use criteria are in item 2, and deposit of waste criteria are in item 3. Below-threshold water uses (i.e., water uses that do not, on their own, exceed minimum water licensing criteria) are listed in column II of each item in a Schedule.

For some licence categories set out in the Schedules to the Regulations, the direct water use criteria are based on a volume for a specific water use (e.g., for type A mining and milling licences or for power licences), but for other licence categories the direct water use criteria are simply based broadly on water use volumes rather than a specified water use (e.g., industrial or miscellaneous⁷ licences). In such cases, the LWBs consider the cumulative direct water uses for all project activities to determine whether a licence is required, and whether the licence will be a type A or B licence. This may consist of several below-threshold water uses that, in total, exceed the licensing criteria because the focus is on total water use – not a specific use.

In general, once a project exceeds licensing criteria, the LWBs' understanding is that below-threshold water uses are to be considered in the preliminary screening and in the licence conditions (including any limitations on water use volumes or rates). The LWBs do not separate out and exclude below-threshold water uses for a project, because the legislation indicates that, once a licence is required, it will include any of the water uses and deposits of waste listed in the Schedules (as relevant to the project).⁸ This approach is consistent with screening the project as a whole and developing conditions accordingly. Further, the [Water Use Fee Policy](#) and [Calculator](#) also indicates that fees are to be paid for below-threshold water uses, and these fees are based directly on the water use volumes authorized in a licence.

2.3 Exceptions in Licensing Criteria

In addition to the statutory licensing exceptions in subsection 10(2) of the [Waters Act](#) and subsection 72(2) of the [MVRMA](#), the Schedules in the Regulations describe some below-threshold water uses and/or waste deposits that do not, on their own, require a licence. Below-threshold activities that are applicable to only one type of project are listed only in the relevant Schedule. Below-threshold water uses/waste deposits that are applicable to all licence categories are specifically listed in each Schedule – for example, diversion of a watercourse less than 2 m wide, or off-stream storage of less than 2,500 m³ of water. Regardless, as described above in section 2.2, in order to consider a project as a whole, the LWBs do not

⁶ See paragraphs 26(5)(a) and (b) and subsection 27(2) of the [Waters Act](#); paragraphs 72.03(5)(a) and (b) and subsection 72.04(2) of the [MVRMA](#); and sections 58, 62, and 71, and subsection 60(1) of the [NWNSRTA](#).

⁷ While this category also includes agricultural, recreation, and conservation projects, for the purposes of this document, this category will be referred to as 'miscellaneous.'

⁸ See sections 8 and 7, and Column I of Schedules IV-VIII and D-H, of the [MVFAWR](#) or the [Waters Regulations](#), respectively.

consider these to be exceptions once a project otherwise exceeds licensing criteria.⁹

The other approach to specifying a licensing exception in the Schedules is an asterisk that specifies an exemption for direct water use from an artificial reservoir. The asterisk is included for all categories of licences except power projects and type A mining and milling projects. Further, unlike below-threshold activities, in each Schedule the asterisk is included in, it is specifically included in each column it is meant to apply to (e.g., no licence required, type B, and/or type A criteria).

Based on these deliberate approaches and on the rules of statutory interpretations, the LWBs only apply criteria and exceptions where they are listed. For example, the LWBs do not apply municipal licensing criteria to mining and milling projects, or exclude water use from an artificial reservoir for a power project.

2.3.1 Ice-Bridge Water Use¹⁰

Based on the Regulations and AANDC's letter as described in Section 2.1 above, the LWBs consider water used to form an ice-bridge as a water use under the [MVRMA](#) and [Waters Act](#), because it is not available to other water users during the time it remains incorporated into the ice bridge.

In the Regulations, ice-bridge water use is only referred to in the direct water use criteria for miscellaneous licences, where it is listed as a below-threshold direct water use.¹¹ Accordingly, the LWBs currently consider ice-bridge water use a direct use, not a diversion or 'similar to a diversion' (i.e., an indirect water use), since diversions are listed separately under the indirect water use criteria for all types of projects.¹²

The explicit exception for ice-bridge water use set out in the Schedule for miscellaneous licences is not found anywhere else in the Regulations. For projects other than miscellaneous, ice-bridge water use is not mentioned at all in the licensing criteria, so the LWBs do not consider ice-bridge water use an exception for other types of projects. It must be included in the direct water use total for a project, and depending on the applicable direct use criteria, may contribute to whether a licence is required, and if so, whether the licence is a type A or B.

Further, for miscellaneous projects, although it is listed as a below-threshold use, ice-bridge water use is not also specifically excluded in the type A or B criteria, which is consistent with how other below-threshold activities are listed in the Schedules. The LWBs have not identified any legally-supported reasoning for treating ice-bridge water use differently than other below-threshold water uses, so once a licence is required for a miscellaneous project due to other direct water use(s) that cumulatively exceed 100m³/day, the LWBs treat ice-bridge water use like any other below-threshold water use: it is included

⁹ Notably, subsection 4(2) of the [NWR](#) directly specifies that, "no use of waters without a licence is authorized if a licence is required for another use of waters, or a deposit of waste, in respect of the same undertaking."

¹⁰ No comparison to the [NWR](#) or the Yukon's [Waters Regulations](#) is included here, because there is no reference to ice bridges in the [NWR](#), and while there is a parallel reference to below-threshold ice-bridge water use for miscellaneous licences in the Yukon's [Waters Regulations](#), both the types of projects in this category and the typical means of accessing these projects are not similar to those considered by the LWBs in this category.

¹¹ See Column II, Item 1 of Schedule VIII or H of the [MVFAWR](#) or the [Waters Regulations](#), respectively.

¹² See Item 2(4) in Schedules IV - VIII or D-H of the [MVFAWR](#) or the [Waters Regulations](#), respectively.

in the proposed total water use for the project (see section 2.3 above).¹³ Accordingly, it is included in the determination of whether a type A or B licence is required, in the preliminary screening, and in the licence conditions and water use fees.

The LWBs are aware that miscellaneous projects that do not otherwise exceed licensing criteria for water use do not require a licence for ice-bridge water use, nor are these projects limited to a maximum water use volume for ice bridges. While this may appear incongruent with the interpretation above, LWB staff note that both the number and size of projects of this nature are likely small – for example, community winter access roads. Keeping in mind that ice-bridge water use is not listed as a below-threshold water use for other categories of licences, and that a licence is required for anything more than 100m³/day for miscellaneous projects, most projects that propose a winter road are likely to require a licence for other water uses. For an extensive winter road that might entail large volumes of ice-bridge water use, a water licence is also likely to be required for water used for the on-land portions of the road.

In summary, once a licence is required for any type of project, any water used for ice bridges is considered a water use for the project; however, because direct use criteria are written differently in each category, it may or may not influence the determination of whether of type A or B licence is required. Regardless, water use fees are applicable to this water use.¹⁴

2.4 Categorization of Projects

The questions regarding how ice-bridge water use should be regulated have primarily been raised in relation to mineral exploration and abandoned mine remediation projects, both of which the LWBs currently consider as miscellaneous projects. As part of the review of ice-bridge water use, LWB staff considered whether this is the correct categorization of these projects.

2.4.1 Mineral Exploration Projects

In general, the Regulations do not specify what licence category is intended to apply to mineral exploration in the Mackenzie Valley. It should be noted that the LWBs were previously numbering mineral exploration licences as mining and milling licences, but otherwise categorizing them as industrial licences. The LWBs are only recently classifying mineral exploration projects in the miscellaneous category – the reasoning for this shift is summarized below. Aside from raising the question of ice-bridge water use, this did not otherwise affect the direct use licensing criteria for these projects, because the direct water use thresholds are the same in the industrial and miscellaneous categories.

- Mineral exploration is not mentioned at all in the Schedules (or the Regulations in general), whereas oil and gas exploration is specifically included in the industrial category.¹⁵
- Mineral exploration does not technically fit into the mining and milling category, because it does not

¹³ LWB staff note that treating this water use differently could have implications for other types of below-threshold water uses.

¹⁴ See the Apply for Permit/Licence page on any of the LWBs' websites to access the [Water Use Fee Calculator](#).

¹⁵ See Schedule II or B of the [MVFAWR](#) or the [Waters Regulations](#), respectively.

fall into the definition of a mine in the [NWT Mining Regulations](#).¹⁶

- Mineral exploration does not technically fit into the industrial category, because it is not listed in the description in Schedule II/B.
- Mineral exploration falls within the broad scope of the miscellaneous category, but only by default – the criteria in Schedule VIII/H do not have any specific relevance to mineral exploration.

Given that the correct category for mineral exploration is not clear, additional considerations include:

- In the [NWR](#), mineral exploration is clearly listed as a mining project; however, since both the direct and indirect water use criteria are the same for all Nunavut projects other than power projects, further comparison to the NWR criteria does not appear to be useful.
- The deposit of waste criteria in the industrial and miscellaneous categories are different: all deposits of waste require a type B licence in the industrial category, while the miscellaneous category requires a type B licence for deposits of waste if there is direct or indirect deposit to surface water. This difference could potentially impact whether some mineral exploration projects require a licence for deposit of waste regardless of whether a licence is required for water use.
- In the mining and milling category, the deposit of waste criteria are so specific to milling rates that a licence would not be required for any deposit of waste for mineral exploration projects, so this would be a notable gap in regulating potential deposits of waste associated with these types of projects.
- The water use criteria for type A and B licences in the industrial and miscellaneous categories are the same (100m³ and 300m³ per day, respectively), but a conclusive determination on how the ice bridge water use exception should be interpreted is needed to determine the implications for mineral exploration projects.
- Under the mining and milling class, only a type B licence would be required for a mineral exploration project using more than 100m³/day until they started milling and reached a rate of more than 100 tonnes/day.¹⁷ There is no cap on the water use volume allowed in a type B licence in this case.

2.4.2 Abandoned Mine Remediation Projects

Under the Regulations, a mining project is defined by incorporating an external reference to the definition of a mine in the [Canada Mining Regulations](#);¹⁸ however, these were replaced by the [NWT Mining Regulations](#) in 2014. The definition of ‘mine’ in these two sets of regulations differs in a way that could affect how the LWBs categorize mine remediation projects, because the definition in the more recent NWT Mining Regulations includes mines that are no longer producing.

Canada Mining Regulations:

mine means any work or undertaking in which minerals or ore containing minerals are removed

¹⁶ *Ibid.*

¹⁷ Mineral exploration water use would fit under the last part of the type B direct use criteria in Schedule V/E: “.... use of 100 or more cubic metres (of water) per day for undertakings other than milling or production leaching.”

¹⁸ See Item 2 in Schedule II or Schedule B of the [MVFAWR](#) or the [Waters Regulations](#), respectively.

from the earth or from talus by any method, and includes works, mills, concentrators, machinery, plant and buildings below or above ground belonging to or used in connection with the mine.

NWT Mining Regulations:

***mine** means an undertaking that produces or has produced minerals or processed minerals from lands within the Northwest Territories Mining District, and includes the depreciable assets that are located in the Northwest Territories and used in connection with the undertaking.*

Based on the definition of ‘mine’ in the NWT Mining Regulations, abandoned mine remediation projects could be categorized as mining and milling projects rather than as miscellaneous projects with respect to licensing criteria. The LWBs currently continue to categorize abandoned mine remediation projects as miscellaneous projects.

LWB staff note that the NWR do not rely on an external reference to categorize mine remediation: the mining category specifically includes ‘restoration of the site of a mine.’

3.0 Summary

The LWBs’ current interpretations with respect to water use in general, and specifically in relation to ice-bridge water use, are summarized below.

- Any withdrawal or diversion of water, directly or indirectly, from a water source for any period of time is considered a water use, since the water that is removed is not available to other potential users of the water source during that time.
- Water circulated continuously from a watercourse to prevent freezing of equipment, and water used for the construction and maintenance of ice-bridges are considered direct water uses.
- Once a project requires a licence for water use, all water uses, including below-threshold water uses, are included in the preliminary screening and the licence conditions, and where applicable, contribute to the determination of whether a type A or type B licence is required.
 - Ice-bridge water use is not a below-threshold direct water use for projects in licence categories other than the miscellaneous category. Any water used for ice bridges is considered a water use for a project in any of these categories; however, because direct use criteria are written differently in each category, it may or may not influence the determination of whether of a licence (either type A or B) is required.
 - For miscellaneous projects that otherwise require a licence for direct water use, ice-bridge water use is included in the total direct water use volume, and therefore, in the determination of whether a type A or B licence is required, in the preliminary screening, and in the licence conditions.
- Mineral exploration and mine remediation projects are categorized as miscellaneous projects.



Votre référence - Your file

Notre référence - Our file

Mr. Damien Côté
Executive Director
Nunavut Water Board
PO Box 119
GJOA HAVEN NU X0B 1J0

JAN 27 2014

Dear Mr. Côté:

I am writing in response to your letter dated August 21, 2013, requesting clarification concerning Aboriginal Affairs and Northern Development Canada's interpretation of the term "use" of water pursuant to the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (NWNSRTA).

Your letter specifically identifies a circumstance, whereby, as I understand, water is continuously withdrawn from a source water body, circulated through equipment for the purpose of keeping that equipment from freezing, and then released back into the water body from which it was withdrawn. You have questioned whether this project-related activity constitutes "use" of water, as prescribed by the NWNSRTA.

As you note in your correspondence, the definition of "use" of water is generally identical across the legislation that applies in Canada's three territories (*Northwest Territories Waters Act*, *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and the *Waters Act*). The definition of "use" is also very broad and wide-reaching. In relation to Nunavut, "use" is defined in section 4 of the NWNSRTA as:

"Use", in relation to waters, means a direct or indirect use of any kind, including, but not limited to,

- (a) any use of water power and geothermal resources;
- (b) any diversion or obstruction of waters;
- (c) any alteration of the flow of waters; and
- (d) any alteration of the bed or banks of a river, stream, lake or other body of water whether or not the body of water is seasonal.'

.../2

The removal of a quantity of water from a source means that quantity is not available, if even for a short time, to any other authorized user of the same water body.

With this in mind, the diversion of waters (e.g. withdrawal), regardless of duration, would constitute a "use" of waters. That is to say, water used for the purpose of circulation through equipment, constitutes water use. As such, the water removed for circulation purposes needs to be accounted for in the overall water usage allowance, as water is clearly being diverted, directly or indirectly, from its original source.

The effective management and protection of Nunavut's water resources is dependent upon a clear understanding of the relevant legislation. A common understanding and consistent application of the term "use" of water is essential to securing adherence to water-related legislation, by both regulators and water licence applicants. A cooperative and consistent approach will allow for the conservation and utilization of waters in Nunavut in a manner that will provide the optimum benefit for those waters for the residents of Nunavut, in particular, and Canadians, in general.

I trust this response satisfies your request on the definition of water 'use' and will provide you with the clarification necessary to ensure the correct application of the NWNSRTA and its associated Regulations. To that end, the Field Operations Directorate of the Nunavut office of our Department will initiate discussions with your staff and stakeholders to support a consistent application of the definition.

If you wish further clarification on this issue please do not hesitate to contact me by e-mail at Glen.Stephens@aadnc-aandc.gc.ca or by phone at 819-994-7483.

Sincerely,



Glen Stephens
Director, Land and Water Management
Natural Resources and Environment Branch