




Ministry of Environment and Climate Change Strategy

**Ministry of Forests, Lands, Natural Resource
Operations and Rural Development**

NAME OF POLICY:	Guidance on Implementation of s. 52(6) WSA – Managing Artesian Flow in Exceptional Circumstances
APPLICATION:	To assist government staff in applying s. 52(6) of the <i>Water Sustainability Act</i> (WSA) and Groundwater Protection Regulation (GWPR) to the management of artesian flow where, due to exceptional circumstances the artesian flow cannot be stopped or controlled in accordance with s. 52(1) WSA.
ISSUANCE:	Executive Director, Water Protection and Sustainability Branch, Ministry of Environment and Climate Change Strategy, and Director, Water Management Branch, Ministry of Forests, Lands, Natural Resource Operations and Rural Development
IMPLEMENTATION:	FLNRORD, ENV.
LEGISLATIVE REFERENCES:	<i>Water Sustainability Act</i> (Ch. 15, S.B.C 2014) [WSA] Groundwater Protection Regulation (B.C. Reg 39/2016) [GWPR] Water Sustainability Regulation (B.C. Reg. 36/2016) [WSR]
RELATED POLICIES:	N/A at time of approval.
RELATIONSHIP TO PREVIOUS POLICIES:	This is a new policy.
POLICY AMENDMENT PROCESS:	To amend this policy a request must be made in writing to the Executive Director, Water Protection and Sustainability Branch, Ministry of Environment and Climate Change Strategy and the Director, Water Management Branch, Ministry of Forests, Lands, Natural Resource Operations and Rural Development.



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April 24, 2020

Date



Ted White
Director
Water Management Branch
Ministry of Forests, Lands, Natural
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April 28, 2020

Date

APPROVED AMENDMENTS:

Effective date	Approval date	Description/Summary of Changes:
May 28, 2020	April 28, 2020	New Policy.

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1. POLICY STATEMENT

An uncontrolled flowing artesian well can present significant risks to property, public safety and the environment. These risks include flooding, erosion and land subsidence. The *Water Sustainability Act* (WSA) requires that the well owner, land owner, professional, well driller or another ‘person responsible’ take specified actions to ensure that any artesian flow is stopped or brought under control in accordance with s. 52(1) WSA.

While the majority of flowing artesian wells can be stopped or brought under control in accordance with s. 52(1) WSA, in some exceptional circumstances this may not be practicable. Therefore, s. 52(6) WSA states that “*If the comptroller or a water manager is satisfied, based on the report of a professional, that because of exceptional circumstances it is not practicable to bring artesian flow under control in accordance with subsection (1) (a) or (b) but the artesian flow can be managed in another manner without posing a threat to property, public safety or the environment, the artesian flow may be brought under control in accordance with the directions of the Water Manager.*”

The WSA, *Groundwater Protection Regulation* (GWPR) and this policy do not address the issue of who is financially responsible for the cost of managing artesian flow.

2. REASON FOR POLICY

This document provides guidance and considerations for a water manager related to the application of s. 52(6) WSA including:

- Matters for consideration when a flowing artesian well is identified;
- Situations where bringing artesian flow under control in accordance with s. 52(1) WSA may not be practicable because of “exceptional circumstances,” including what might be considered as qualifying as exceptional circumstances;
- Circumstances in which managing flow in another manner under s. 52(6) WSA may not be appropriate (e.g., threat to property, public safety or the environment);
- Other considerations regarding review of a professional’s report;
- Considerations with respect to whether to issue and possible directions regarding ongoing management of artesian flow under s. 52(6) WSA; and
- Considerations regarding tracking directions regarding management of artesian flow.

The general considerations described in this policy may also be informative to an engineer considering directions under s. 52(7) or orders under s. 93(2)(1) WSA to a person responsible for stopping or controlling artesian flow in accordance with statutory requirements.

3. DEFINITIONS

Relevant terms defined in [s. 1 WSA](#) [*Definitions*]: **alter, applicant, authorization, aquatic ecosystem, aquifer, casing, comptroller, construct, decision maker, decommission, divert, engineer, groundwater, licence, order, stream, wetland, works, well, water use purpose, works.**

Relevant terms defined in [s. 48](#) (1) WSA: **person responsible, professional, qualified, well, well driller, well pump installer.**

[Section 52](#) (1) WSA clarifies the meaning of the phrase “**under control**” with respect to artesian flow from a well:

S. 52(1) For the purposes of this section and section 53, artesian flow of a well is under control when

- (a) the artesian flow
 - (i) is clear of sediment,
 - (ii) is entirely conveyed through the well's production casing to the wellhead, if the well has a production casing,
 - (iii) may be mechanically stopped for an indefinite period in a manner that prevents leakage onto the surface of the ground or into another aquifer penetrated by the well, and
 - (iv) does not pose a threat to property, public safety or the environment, or
- (b) if the artesian flow cannot be controlled in accordance with paragraph (a), the well is decommissioned
 - (i) in accordance with the regulations,
 - (ii) by a person authorized under section 49 [restrictions on constructing or decommissioning wells], and
 - (iii) in a manner that allows no artesian flow at the surface of the ground or leakage into another aquifer penetrated by the well.

The definition provided in the WSA takes precedence over the definition described in this policy should a discrepancy exist.

Relevant terms defined in [s. 1 GWPR](#): **dewatering well, drainage well, flowing artesian well.**

Directions refers to directions issued under s. 52(6) WSA.

E-Licensing in this document refers to the E-Licensing System administered by Water Management Branch, FLNR-RD.

GWELLS refers to the Provincial groundwater wells database.

4. LEGISLATION

Regulatory provisions referred to in this policy are summarized as follows:

Water Sustainability Act (WSA):

s. 1	Definitions of terms in the Act
s. 2	Definitions of water use purposes
s. 12	Application and decision maker initiative procedures
s. 48	Definitions of terms in Division 3, Part 3 [Wells and Groundwater Protection]
s. 52	Requirements for controlling artesian flow during construction
s. 53	Requirements for controlling a flowing artesian well
s. 56	Requirements for decommissioning or deactivating a well
s. 57	Requirements for well reports
s. 93	Powers of engineers and officers in Division 1, Part 4 [Enforcement]
s. 116	Requirements for records and reporting in Part 5

Groundwater Protection Regulation (GWPR):

s. 1	Definitions and interpretations of terms in the regulation
s. 15	Qualifications for activities in relation to artesian flow — well drillers
s. 67	Requirements for reports on artesian flow management
s. 68	Requirements for maintenance of equipment installed to control artesian flow
s. 71	Requirements for decommissioning wells
s. 72	Alternative specifications for decommissioning wells
s. 81	Retention of records
Part 8	Requirements for flowing artesian wells
Part 9	Requirements for deactivation and decommissioning wells
Schedule 1	Information in Artesian Flow Management Reports

Water Sustainability Regulation (WSR)

s. 3	Applications for licences and use approvals
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5. PROCEDURES

5.1 Initial considerations when a flowing artesian well is identified

5.1.1 Determine whether the source is groundwater

S. 52 WSA applies when artesian flow is encountered in well construction, as well as to artesian flow from groundwater wells. Springs (naturally surfacing to flow above ground) are included in the definition of “stream” and are not subject to Division 3, Part 3 WSA. There is no requirement to stop or control a spring under the WSA. In some situations, determining whether a source is a spring or groundwater can be complex. In general, spring water flows to the surface naturally, while groundwater is brought to the surface under pressure (artesian) or some form of human intervention – this may include excavation of land (e.g. dugouts) or drilling of a well. If there is uncertainty about whether the flow is stream water or groundwater, the water manager may wish

to consider seeking advice from a hydrogeologist prior to considering enforcement of the relevant elements of Division 3, Part 3 WSA.

5.1.2 Considerations if the flowing artesian well is under construction (s. 52 WSA)

When uncontrolled artesian flow is encountered during well construction, prompt action is likely to be essential. For example, depending on the characteristics of the site, ground instability from erosion, land subsidence, flooding, or siltation or deterioration of creek beds might otherwise develop. In some cases, this can potentially create a risk to property, public safety, or the environment.

Section. 52 of WSA sets out actions that must be taken if artesian flow is encountered during construction. Where artesian flow is encountered during construction, the well driller or professional must stop or bring the flow under control, as described in s. 52(1) of WSA. If another person encounters artesian conditions while constructing a well (such as an excavated well), that person must notify the well owner. The well owner must then engage a qualified well driller or professional to deal with the artesian flow.

Section 66 GWPR sets out additional requirements related to stopping or controlling artesian flow.

If there are exceptional circumstances that make it not practicable to bring the flow under control in accordance with s. 52(1) WSA, a person responsible for the flowing artesian well should submit a professional's report that meets the requirements of s. 52(6) WSA and S. 67 and Schedule 1 GWPR to manage the flow in another manner.

5.1.3 Person responsible

The definition of 'person responsible' in s. 48(1) WSA and s. 52(2), (3), and (5) WSA are relevant to determining the person responsible for the flowing well. The unique facts of the case will weigh into the determination of person responsible.

When determining who is the person or persons responsible for a flowing artesian well, the approach taken will depend on an assessment of all information available to the water manager at the time, as well as the provisions of the WSA and regulations. Each flowing artesian well has unique circumstances and ultimately the exercise of statutory discretion rests with the statutory decision maker.

Points to note in respect to 'person responsible' include:

- The professional submitting the professional's report required under s. 52(6) WSA may or may not be the person responsible for the well.
- 'Professional', 'well pump installer' and 'well driller' are defined in s. 48(1) WSA. The qualifications defined in s. 48(1), (2) and s. 49 to 50 WSA or prescribed in the GWPR, indicate that terms 'professional', 'well driller' or 'well pump installer' refer to an actual person rather than a corporate entity.
- There may be more than one person responsible. The facts of the case weigh into this determination.

- A person responsible for the work does not necessarily have to be on-site to supervise the work, and their absence from the site does not preclude them from responsibility, particularly if they are responsible for the control and conduct of the activities at the site. Again, the facts of the case weigh into this determination.
- A contract cannot fetter the exercise of statutory discretion by a WSA decision maker.
- A determination of who is ultimately financially responsible for a flowing artesian well will depend on a number of factors and becoming a person responsible does not automatically result in financial responsibility.

5.1.4 Considerations for flowing artesian wells (s. 53 WSA)

Section 53 WSA requires the owner of a flowing artesian well or owner of the land on which a flowing artesian well is located to engage a well driller who is qualified in respect of the activity or a professional to bring the flow of that well under control, as described in s. 52(1) WSA. If there are ‘exceptional circumstances’ the well owner or land owner has the option to submit a professional’s report in accordance with s. 52(6) WSA and s. 67 and Schedule 1 GWPR to request that the artesian flow be managed in another manner. Section 52(7) WSA also applies for the purposes of s. 53 WSA.

Section 53 WSA applies to all flowing artesian wells that are no longer ‘under construction’ including wells that were constructed under the Water Act. In some circumstances there may be simple or low risk actions (such as raising the stick up) that can be taken to stop or control an older flowing artesian well as described in s. 52(1) WSA. However, as a flowing artesian well ages, there may be increased uncertainties regarding the well. For example, materials used to construct the well may have degraded over time or information about the well may be insufficient to determine the best method to stop or control the flow. Further, a well-established flow regime from such a well may be providing significant above ground environmental benefits. Therefore, the age of the well may be a factor in determining whether exceptional circumstances exist that make it impracticable to stop or control the artesian flow in accordance with s. 52(1) WSA (see s. 5.2.3 for examples of possible exceptional circumstances).

5.1.5 Authorizations

If some or all the water is to be used for a water use purpose which requires an authorization, an application should be submitted under s. 12 WSA (see also s. 3 of the Water Sustainability Regulation). An application for an authorization can be undertaken concurrently with the s. 52(6) WSA process.

Artesian flow may be useful for a consumptive or non-consumptive purpose. Non-consumptive licensable water use purposes that might be considered when artesian flow is being managed in another manner include land improvement and conservation purposes:

Land improvement purpose is defined as “the diversion or impounding of water to (a) protect land, (b) facilitate the development of a recreational facility or of a park or other protected area, (c) facilitate the reclamation, drainage or other improvement of land, or (d) carry out a project of a nature similar to a project described in paragraph (b) or (c). Land improvement purpose might be considered where water is being diverted or impounded to prevent flooding or erosion of land.

Conservation purpose is defined as “the diversion, retention or use of water for the purpose of conserving fish and wildlife and includes the construction of works for that purpose”.

Conservation purpose could be used where the artesian flow is providing critical habitat for aquatic species, for example.

Where an authorization application is associated with a flowing artesian well, possible authorization conditions might reflect any directions for the well issued under s. 52(6) WSA. If an authorization is granted, then on later disposition of the land, mine or undertaking to which the authorization is appurtenant or if an application for transfer of appurtenancy transfers the authorization to another appurtenancy (s. 25 and 27 WSA), the new holder of the authorization will be responsible for ongoing compliance with the conditions of the authorization, including any referenced directions. Further, as described in s. 81(4) GWPR, the transferor, at the time of conveyance, disposition or transfer, is required to transfer this information to any new well owner or other person with an interest in the well, and to the future holder of the authorization.

5.2 Assessing the professional’s report

5.2.1 The professional’s report

To request that artesian flow be managed in another manner, the owner of the flowing artesian well or owner of the land on which the well is located or if the well is under construction the person responsible for the well must have a professional submit a report to the comptroller or a water manager, meeting the requirements of s. 52(6) WSA and s. 67 and Schedule 1 of the GWPR. Under s. 67 GWPR a professional completing a report under s. 52(6) must:

- Have competency in the field of hydrogeology or geotechnical engineering; and
- Assess and record the artesian flow conditions of the well.

The report must be submitted as soon as practicable after the assessment of the artesian flow conditions (s. 67(2) GWPR) and must include all the information set out in Schedule 1 GWPR.

5.2.2 Process and considerations for assessing the professional’s report

If the professional’s report meets the prescribed requirements, the comptroller or water manager may then decide whether exceptional circumstances exist that make it not practicable to stop or control the artesian flow (see s. 5.2.3.).

If exceptional circumstances are identified, the water manager may then consider the adequacy of the proposed manner of managing the artesian flow, including the assessment provided in the professional’s report of any risks to property, public safety and the environment that may arise as result of the proposed manner. The water manager may also wish to consider information set out in 5.2.4 below.

If the proposed manner is deemed acceptable (i.e. the artesian flow can be safely managed in another manner) the water manager can consider how the proposed manner will be established and maintained over time.

The water manager may request more information from the professional to support assessment of the professional’s report, including as part of that review, whether the professional should be requested to assess and report on other possible approaches, and to make related recommendations.

The water manager may also reject the request to manage the well in another manner under s. 52(6) and order that the well be stopped or brought under control, as described in s. 52(1) WSA.

A decision on whether to allow artesian flow to be managed in another manner under s. 52(6) WSA or to give related directions is appealable.

5.2.3 Examples of possible exceptional circumstances

The comptroller or water manager receiving a request to manage artesian flow in another manner must determine whether the situation might be considered to be “exceptional circumstances” which makes it “not practicable” for artesian flow to be brought under control, as described in s. 52(1) WSA.

The following, listed in no particular order, may be examples of situations suggesting the possibility of exceptional circumstances to be assessed based on information in the professional’s report or advice from technical, policy or legal staff:

- a) Attempts to stop or bring artesian flow under control are unlikely to be successful.
- b) Attempts to stop or bring artesian flow under control are likely to make conditions worse.
- c) Attempts at stopping or controlling artesian flow as per s. 52(1) WSA are likely to increase threats to property, public safety or the environment.
- d) Significant environmental benefits are anticipated from allowing flow to be managed under s. 52(6) WSA (e.g., providing flow to a stream where flow is critically needed, or contributing to habitat for threatened or at risk species).

The age of the well may also be a factor for consideration when determining whether exceptional circumstances exist making it not practicable to stop or control the flow (see 5.1.2).

5.2.4 Examples where allowing artesian flow to be managed in another manner may not be advisable

The following conditions are potential signals that management of the artesian flow in another manner under s. 52(6) WSA may not be advisable:

- There is no well casing (no borehole control);
- There are signs of subsurface erosion (e.g. the artesian flow has high turbidity or suspended sediment);
- There is likely a risk of ground instability (e.g., sink hole, slope failure);
- Delaying stopping or bringing the artesian flow under control will likely make the situation worse;

- The proposed manner would have a significant impact on the quantity of the groundwater resource in the affected aquifer or flows in a hydraulically connected aquifer or stream;
- The proposed manner would create a flood risk or other hazard;
- The water quality of the artesian flow, if there is on-going flow, would significantly impact the environment (e.g., saline groundwater, contaminated groundwater); or
- The proposed manner would pose another significant risk to property, the environment or public safety (e.g., flooding, erosion, etc.).

5.2.5 Assessing impacts on property, public safety and environment

Depending on site characteristics, potential impacts that could be associated with discharging artesian flows to the receiving environment include:

- Erosion and ground instability issues (e.g. sink holes; subsidence);
- Flooding and changes in flood risk;
- Creation of a hazard (e.g. ice or pooling water);
- Impacts on aquatic ecosystems and/or water quality; or
- Impacts on other well owners and/or authorization holders, including on streams hydraulically connected to the aquifer.

The long-term impact on the aquifer should be considered as part of the assessment of risks to the environment associated with the proposed manner of managing the artesian flow.

If artesian flow is to be conveyed to a stream or other aquifer, consider whether the artesian flow should be tested for contaminants. Also, assess the capability of the stream or other aquifer to manage the additional flow.

5.2.6 Agreements with third parties

If the artesian flow is to be conveyed to or through another person's property on an ongoing basis, the professional's report should identify whether there will be enduring written agreements, such as in the form of a drainage easement or statutory right of way registered against title, allowing water flow to continue to be conveyed to or through that property, potentially on a long-term and continuing basis.

In some circumstances ongoing access will be required to manage artesian flow in another manner. For example, if the well owner is not the owner of the land on which the well is located, an enduring written agreement may also need to be secured to allow ongoing access to maintain the works and monitor conditions and flows, as well as allowing water flow to be conveyed to or through that property.

5.2.7 Notifying third parties and First Nations consultation

In assessing the professional's report, the water manager may seek input from third parties with respect to assessing the threat to property, public safety or the environment. For example; authorization holders on the same aquifer or a hydraulically connected stream or aquifer may be affected, or the owners of neighboring properties may be affected.

The water manager may also initiate referrals to other agencies, such as the Ministry of Transportation and Infrastructure, local authorities, health authorities, Ministry of Environment and Climate Change Strategy, local governments and Department of Fisheries and Oceans to obtain more information about potential risks associated with the proposed manner.

Contemplating a decision to allow a flowing artesian well to be managed in another manner under s. 52(6) may trigger the duty to consult with First Nations. Please review other policies regarding consultation with First Nations.

5.3 Issuing directions

If the comptroller or a water manager accepts the other manner as described in the professional's report, the decision maker may proceed with issuing directions. Directions are issued in the form of an order (s. 93 WSA). This section sets out some matters for consideration by a water manager when reviewing whether directions should be issued under s. 52(6) WSA.

5.3.1 Considerations when drafting directions

It is anticipated that any directions related to flowing wells whose artesian flow is being managed in another manner in accordance with s. 52(6) WSA, would typically be on-going or have long terms. It may be clarified that directions remain in force until the well is decommissioned, the artesian flow is stopped or brought under control in accordance with s. 52(1) WSA, or until new directions are issued, which may require submission of a new professional's report.

In addition to directions related to establishing the proposed manner, the decision maker may wish to consider whether directions should be issued related to the maintenance of the proposed manner over time. This could include monitoring and reporting of any changing conditions and any risks to property, public safety or the environment that may arise over time. The directions may be informed by the professional's evaluation and recommendations of ongoing maintenance and monitoring activities and costs that may be anticipated, see s. 1(c)(i) (J) of Schedule 1 of the GWPR.

Consideration should also be given to how the directions will be communicated to any person engaged to do work in respect to the flowing artesian well and how information regarding any directions will be transferred if the ownership of the well or land on which the well is located changes. Section 81(4) GWPR describes requirements for a well owner or a person with an interest in a well on conveyance, disposition or transfer of that interest to also transfer well related information and records to the new owner or person.

When drafting directions, the following might be considered (but are not limited to these considerations):

- Information on the well and the location of the well;
- Description of the proposed manner;
- Description of works (including related equipment) proposed to manage artesian flow in another manner, including any technical considerations;

- The schedule for carrying out the proposed works;
- Possible directions (including any required professional qualifications) on who designs, constructs or supervises construction of the works;
- Possible directions on maintenance of works (including related equipment);
- Possible directions related to discharges of flows to the receiving environment;
- Possible directions related to monitoring and reporting;
- Possible directions to engage a professional and/or a well driller qualified in respect of the activity in the event of worsening conditions, including how and when to remedy them and/or any risks to property, public safety or the environment that may arise;
- Possible directions related to obtaining or maintaining any authorizations, permits, agreements or other applicable tools associated with the proposed manner;
- Possible directions to maintain the proposed manner until the well is decommissioned, or if the proposed manner can no longer be maintained in that manner, submission of a new professional's report on management of the flow in another alternate manner in accordance with s. 52(6) WSA, or, if no other option available, the engagement of a well driller qualified in respect of the activity or a qualified professional, as may be required to bring the flow under control as described in s. 52(1) WSA;
- Possible directions to require disclosure by the well owner, owner of land on which the well is located or other person responsible for the well of any directions for managing the well in an alternate manner, such as to any professional, well driller, well pump installer or other person described in s. 48(1) WSA who is engaged in respect to the flowing artesian well;
- Possible directions to the well owner or owner of land on which the well is located, on conveyance, disposition or transfer of the well, to transfer well information and records, including any directions, to any new owner of the flowing artesian well or owner of the land on which the well is located.

5.3.2 Possible directions regarding works

Directions regarding management of the artesian flow in another manner in accordance with s. 52(6) WSA might extend to works (including related equipment) proposed by the professional. This might require management considerations such as the following:

- Description of works that may be required to manage artesian flow in another manner, including any technical considerations;
- Schedule for carrying out any such works;
- Possible directions (including any required professional qualifications) on who designs, constructs or supervises construction of the works; and
- Possible directions on maintenance of works (including related equipment).

The owner of a flowing artesian well must maintain equipment installed to control artesian flow, as required under s. 68 GWPR.

5.3.3 Possible directions regarding monitoring and reporting

Over time, materials used in well construction may degrade, artesian conditions may change or other unforeseen factors can arise that could result in the artesian flow presenting risks to property, public safety or the environment. Therefore, depending on the circumstances, the water manager may wish to consider whether to include directions to the well owner with respect to ongoing monitoring and reporting. This can help to identify any maintenance needs, changing or worsening conditions associated with the well, or any other risks to property, public safety or the environment that may arise over time.

Possible directions regarding monitoring and reporting could include:

- Who is responsible for any monitoring and reporting (e.g., the well owner or the landowner if the well owner is not known);
- Who should the reports or information be submitted to in government (e.g. comptroller, water manager, engineer) (do not reference individual staff names);
- What should be monitored – volume of flow, works, receiving environment, groundwater levels etc.;
- The timing and frequency of any monitoring and reporting that may be required, including:
 - Timing and frequency of regular inspection and reporting – e.g. monthly, annually or other time period;
 - Requirement to report if monitored conditions change or worsen and/or actual or potential threats to property, public safety or the environment are identified through monitoring;
- The minimum content requirements for reports;
- Who should be notified if, through monitoring, changes in or worsening of conditions or risks to property, public safety or the environment are identified;
- In addition to directions related to notification, directions regarding the possible engagement of a professional and/or a well driller qualified in respect of the activity, if required to remedy any worsening conditions and/or risks to property, public safety or the environment that may arise, including how and when this is to be done; and
- Possible directions regarding submission of a new professional’s report under s. 52(6) WSA if the flowing well can no longer be managed as before in another manner or the artesian flow is presenting a risk to property, public safety or the environment.

If reporting is required, the directions might specify whether the reports would be submitted to the comptroller and/or water manager or engineer or another WSA official. Do not reference individual staff names.

Worsening Conditions

The following are examples of possible signs of changes in or worsening conditions that may be referenced in possible directions, with a caveat that this is not an exhaustive list:

- Unexpected change in artesian flow rate;
- Increased leakage around the production casing;

- Formation of or increase in annular space around the production casing;
- Presence of sediment content or increased sediment content in the artesian flow;
- Erosion at the land surface potentially associated with artesian conditions;
- Flooding at the land surface potentially associated with artesian conditions;
- Signs of subsidence or slumping, development of cracks in the ground, sinkhole development near the well;
- Inspection noting poor or deteriorating condition of works (including related equipment) with potential to lead to failure of what works were designed to do; and/or
- Formation of ice around the well as a result of freezing conditions (e.g., freezing of water that has flowed from the well) that affects management of the artesian flow and proper operation of the works.

The water manager may wish to consider whether to include a direction to the well owner or land owner to engage a professional if any changes in or worsening conditions, or risks to property public safety or the environment are identified though monitoring and to notify the comptroller or water manager of changes in or worsening conditions as soon as these conditions are identified. The water manager may also consider who else might receive any notification and within what timeframe.

5.3.4 Related authorizations and permits

There may be additional requirements under the WSA or other legislation related to a flowing artesian well, depending on the circumstances (e.g. a WSA authorization, EMA permit or other applicable legislative instrument associated with the proposed manner). Directions may include a statement that acceptance of the proposal to manage the artesian flow in another manner under s. 52(6) WSA, is contingent on the owner of the flowing artesian well, or owner of the land on which the well is located, obtaining and/or continuing to hold any associated authorizations and permits.

5.3.5 Disclosure of directions

The well owner, owner of the land on which the well is located or other person responsible to whom directions are issued under s. 52(6) WSA may be directed to:

- Keep a copy of the directions until the flowing well is decommissioned;
- Disclose directions related to the flowing well to any professional, well driller, well pump installer or other person who is engaged with respect to the well; and
- Transfer well information and records, including any directions, on conveyance, disposition or transfer of the well, to any new owner of the flowing artesian well or owner of the land on which the well is located, as per s.81(4) GWPR.

5.3.6 Notification of decision and directions

Typically, any directions would be provided in writing to:

- The person making a request to manage the artesian flow in another manner;
- The well owner or the land owner (if different from the well owner); or

- Any other person responsible for bringing the artesian flow under control under s. 52(6) WSA;

In addition, depending on the circumstances, consideration might be given to whether third parties should also be notified (e.g., Ministry of Transportation and Infrastructure, ENV, local authority, health authority, other property owners, other well owners or holders of authorizations on the affected aquifer or hydraulically connected aquifers or stream, First Nations that were notified or engaged in consultation).

5.4 Related references

In addition to the legislation noted in this policy document, the following resources (available online) are related references.

- [Province of BC webpage – Groundwater Wells and Aquifers](#)
- [Province of BC webpage - Flowing Artesian Wells Advisories](#)
- [Groundwater Protection Regulation Handbook \(resource for well drillers and pump installers produced by BC Ground Water Association\)](#)