



Environmental Appeal Board

Fourth Floor, 747 Fort Street, Victoria BC V8W 3E9

Tel: (250) 387-3464

www.bceab.ca

Fax: (250) 356-9923

Email: info@bceab.ca

DECISION NO. EAB-WSA-21-A005(a)

In the matter of an appeal under section 105 of the *Water Sustainability Act*, S.B.C. 2014, c. 15

BETWEEN:	Judith Goplen	APPELLANT
AND:	Assistant Water Manager	RESPONDENT
AND:	Regional District of North Okanagan/ Greater Vernon Water	THIRD PARTY
BEFORE:	A Panel of the Environmental Appeal Board Brenda L. Edwards, Panel Chair	
DATE:	Conducted by way of written submissions concluding on April 12, 2022	
APPEARING:	For the Appellant: Dr. Craig Goplen, Representative	
	For the Respondent: Livia Meret, Counsel Amanda Macdonald, Counsel Ben Naylor, Counsel	
	For the Third Party: Tricia Brett, Manager, Water Quality	

APPEAL

[1] This is an appeal by Judith Goplen (the “Appellant”) of a decision made March 30, 2021, by Mark Ecker, an Assistant Water Manager (the “Assistant Water Manager”) with the British Columbia Ministry of Forests, Lands, Natural Resource Operation and Rural Development (the “Ministry”), to deny the Appellant’s application for a water licence application to divert water from Kalamalka Lake (the “Decision”).

[2] The Appellant is asking the Environmental Appeal Board (the “Board”) to approve her application, which she describes as authorizing her to use untreated water (i.e., water diverted from Kalamalka Lake) for irrigation purposes on her property, rather than treated water from Greater Vernon Water (“GVW”) services. She asserts that her application would result in a more efficient and cost-effective use of water.

[3] The Assistant Water Manager denied the application on the basis that the Appellant's property is located within the boundaries of the GVW utility, and GVW is able to service the Appellant's property with sufficient water for the volume requested. The Assistant Water Manager concluded that it would be redundant and unnecessary to issue an outdoor watering licence and authorize a private intake for the Appellant's property.

[4] The Board has the authority to hear this appeal under section 93 of the *Environmental Management Act*, SBC 2003, c. 53, and section 105(6) of the *Water Sustainability Act* (the "Act"), SBC 2014, c. 15. On an appeal the Board, or a panel of it, may:

- (a) send the matter back, with directions, to the comptroller, water manager or engineer who made the order being appealed,
- (b) confirm, reverse or vary the order being appealed, or
- (c) make any order that the person whose order is being appealed could have made and that the board considers appropriate in the circumstances.

[5] The Appellant asks that the Board grant her permission to use lake water instead of treated water for irrigation purposes. She submits that there is a precedent for the application, in that a neighbouring property applied for a water licence for the same purpose and received it. She asserts that there will be no net increase in water removed from Kalamalka Lake if her application is granted and that it is more cost effective and efficient to take water directly from the lake rather than pumping it and treating it first. She submits that the application is consistent with the goal of the 2017 Greater Vernon Master Water Plan to desegregate agricultural and domestic water uses.

[6] The Regional District of North Okanagan / Greater Vernon Water ("RDNO") applied to the Board for, and was granted, participant status in the appeal. The Board granted the RDNO the ability to make a written submission to the Board.

BACKGROUND

[7] The Appellant is the registered owner of Lot 3, Plan 38247, District Lot 55, Osoyoos Division of Yale Land District (PID:007 906 528) (the "Property"). The Property is located at 14080 Ponderosa Way, Coldstream, British Columbia. The Property is situated in a subdivision of lakeside residential properties.

[8] On October 25, 2020, the Appellant submitted application No. 100330945 to divert 390 cubic metres per year ("m³/year") of water from Kalamalka Lake for use from May to September for irrigation purpose to water the Property (the "Application") to Front Counter BC. In the Application, the Appellant stated that her irrigation system was fully constructed.

[9] The District of Coldstream holds Right of Way M72699, registered against the Property (and other lands) for the purpose of laying public utilities (including a water line) under the surface of the Property.

[10] The GVW supplies treated water to the Property for domestic use. GVW supplies water to approximately 58,000 people in the City of Vernon, District of Coldstream, Township of Spallumcheen and areas within Electoral Areas B, C, and

D. GVW is the third largest water utility in the province, and distributes water to agricultural, residential, industrial, commercial and institutional customers. The two main sources for GVW's domestic water system are Duteau Creek and Kalamalka Lake. GVW is operated by RDNO and is governed by the RDNO Board of Directors, made up of elected officials.

Technical Review

[11] After receiving the Application, the Assistant Water Manager conducted a technical review of it and prepared Water Licence Technical Report, dated January 14, 2021. During the technical review, the Assistant Water Manager collected information, data, and other material, made referrals to other interested agencies, and made observations with respect to community water supply considerations.

[12] The Water Licence Technical Report indicated that Kalamalka Lake receives some inflows from Wood Lake, to the south. The two lakes are hydraulically connected by the Oyama canal. Inflows to Kalamalka Lake are low relative to the size of the lake, and inflows consist mainly of Upper Vernon Creek, Oyama Creek, Coldstream Creek and various groundwater springs. Kalamalka - Wood Lake is a valley bottom lake that flows via lower Vernon Creek into Okanagan Lake. At its north end, Kalamalka Lake drains into Vernon Creek. Outflow from the lake system is governed by the Kalamalka Lake Dam at the north end of the lake at the District of Coldstream. Water licences for storage (non-power) are held by the RDNO and the District of Lake Country, but the dam was constructed and is maintained and operated by the province. Decisions about dam operation are made by water managers at the Ministry office in Penticton, and actual gate operation is carried out by staff from the Ministry's Vernon office.

[13] As part of the technical review, the Assistant Water Manager reviewed Water Allocation Notations for Kalamalka Lake and related streams. (Water Allocation Notations are a water management tool that indicate a potential lack of water availability on a source.¹) The Water Allocation Notation for Kalamalka - Wood Lake Basin indicates that the source has been considered fully recorded² since 1959. The Notation states that the source is fully recorded for irrigation and large domestic use, and that water licence applications have been refused due to "no water." The Water Allocation Notation for Vernon Creek indicates that it has been considered as fully recorded since 1931 and that water licence applications have been refused due to "no water". While considered "fully recorded," 100 acre-feet has been set aside in Kalamalka Lake for domestic use outside the bounds of an improvement district or municipal water provider. The Water Allocation Notation for Kalamalka Lake recommends limiting the issuance of water licences to new applicants who can demonstrate they do not have access to municipal water or to an alternative source.

[14] The Water Licence Technical Report states that Licence C127474, issued in 2012, is the most recent allocation of water from Kalamalka Lake that is within the

1 What is a Water Allocation Notation? https://www2.gov.bc.ca/assets/gov/environment/air-land-water/water/water-rights/what_is_a_water_allocation_notation

2 A fully recorded notation means there is insufficient unrecorded water in the stream or aquifer for any additional authorizations.

bounds of a water purveyor. There are no current water licences within the immediate area (1 km) of the Property. Further, an application for a water licence to withdraw water from Kalamalka Lake for lawn watering on a property roughly 300 metres north of the Property was refused in 2017. There are 11 existing water licences within the bounds of GVW, all of which predate the *Act*, with some dating back to the 1930s. Those licences have been transferred as land ownership changed, and some have been amended. The Assistant Water Manager stated in the Water Licence Technical Report that he was unaware of any legal mechanism to cancel those licences as long as the holder complied with the conditions of the licence and was making beneficial use of the water.

[15] The Water Licence Technical Report noted that the intended water use purpose in the Application would not be considered an "irrigation" purpose under section 2 of the *Act*. Section 2 defines "irrigation purpose" to mean "the use of water on cultivated land or hay meadows to nourish crops or on pasture to nourish forage".

[16] The Assistant Water Manager referred the Application to the RDNO on January 20, 2021. The Assistant Water Manager sought confirmation that the Appellant's water system was connected to the GVW system.

[17] On February 9, 2021, Tricia Brett, the Manager of Water Quality for the RDNO, replied by email. She confirmed that the Property is serviced by GVW, and that the utility has sufficient capacity to supply both domestic and outside irrigation for a residential property. On March 8, 2021, Ms. Brett provided a more detailed response in which she expressed RDNO's concern with water licences being issued for Kalamalka Lake, especially to customers within GVW's service boundary. She stressed that Kalamalka Lake was of critical importance to the local community and to the entire drinking water system. The RDNO's concerns with the Application included:

- the irrigation system would undermine the RDNO's water conservation goals and fair and equitable strategies to achieve those goals, such as water conservation measures including water metering, a water conservation rate structure, and its water shortage management plan with bylaw enforcement;
- the inequity and precedent that would be created within the customer base as between lakeshore / creekside properties with individual water systems on Kalamalka Lake, as compared to others required to follow GVWU's water restrictions and consumption rules, including those restricting outdoor water use;
- the RDNO's water system was financially self-sustaining, funded by a user-pay model, with a combination of fixed fees and consumption fees, and removing the requested consumption would significantly reduce overall contribution to utility costs without reducing the service to the customer;
- individual water systems on Kalamalka Lake connected to GVW's water system would increase the risks of an inter-connection to the water system, thereby potentially causing a threat to drinking water quality; and
- the RDNO had plans and procedures in place, with trained staff, to operate as a permitted regional water supplier (under a permit issued by the Interior Health Authority), and the RDNO took an active role in watershed and water

source protection. Multiple small intakes were not a sustainable option and would further impact water supply for the region.

[18] The Ministry's Ecosystems section reviewed the Application for potential environmental impacts on Kalamalka Lake and connected streams. The Water Licence Technical Report noted the following concerns with respect to environmental flow needs ("EFNs")³:

- A licence adjudication process in 2001 resulted in the Kalamalka - Wood Lake Basin Licensing Plan⁴. The plan recommended:
 - a minimum of 0.085 m³/s needs to be maintained in Lower Vernon Creek for fish flows. If any additional water is made available, it is recommended that fish flows are increased to 0.234 m³/s;
 - for any additional water sourcing, GVW (RDNO) would consider Okanagan Lake;
 - Kalamalka - Wood Lake were declared fully allocated. 100 acre-feet (123,348 m³) of water were reserved for domestic use for individuals living outside the bounds of an improvement district or municipality.
- The Kalamalka - Wood Lake Basin Licensing Plan provides information to inform decision-making on water licence applications. The plan noted concerns of meeting instream flow requirements on Lower Vernon Creek (Kalamalka Lake flows into Vernon Creek). The plan also discusses revised fish flows, including the upward adjustment requested by the Department of Fisheries and Oceans.
- Under the Okanagan Large Lakes Foreshore Protocol⁵, dated January 2018, waterlines can pose a high risk when trenched or lower risk when directionally drilled. The RDNO has constructed a pump station and intake on the north end of Kalamalka Lake. The works installed by the RDNO provide the applicant with sufficient water, and any impact from installing a private intake is unnecessary.

[19] Between February 9, 2021, and March 30, 2021, when the Decision was made, Dr. Goplen (on behalf of the Appellant) and the Assistant Water Manager corresponded by email regarding the status of the Application. The Assistant Water Manager indicated that applications for lawn and garden watering were typically refused if a water purveyor serviced the property. He inquired why local government water service was not adequate for the Goplens' needs. In response, Dr. Goplen claimed that there was precedent for water licences being issued in the area serviced by GVW and that it would save cost to irrigate with untreated water.

3 Under section 1 of the Act, "environmental flow needs" in relation to a stream, means the volume and timing of water flow required for the proper functioning of the aquatic ecosystem of the stream.

4 The Kalamalka-Wood Lake Licensing Plan was developed with input from various organizations including: the District of Lake Country, City of Vernon, District of Coldstream, North Okanagan Regional District, Okanagan Indian Band, Department of Fisheries and Oceans - Kamloops, Ministry of Water, Land and Air Protection - Penticton

5 https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/best-management-practices/okanagan/okanagan_large_lakes_foreshore_protocol

[20] On March 12, 2021, the Assistant Water Manager replied to Dr. Goplen with information on a restriction on the issuance of new water licences on Kalamalka Lake but for 100 acre-feet of water set aside for domestic use for individuals living outside the GVW service area. The Assistant Water Manager informed Dr. Goplen that most existing licences on the lake pre-dated 1991, and that a water licence application for a nearby area had been refused in 2017. The Assistant Water Manager further informed Dr. Goplen that any other lake intakes in the immediate vicinity would be unauthorized. The Assistant Water Manager noted that the RDNO provides, operates, and maintains infrastructure funded through a user-pay model. He added that the RDNO promotes conservation through their rate structure and outdoor water bylaws. The Assistant Water Manager opined that authorizing a private intake from the lake would undermine the RDNO's efforts and was not in the best interests of the community.

[21] On March 30, 2021, the Assistant Water Manager issued the Decision.

ISSUE

[22] The issue in this appeal is whether the Board should direct the Assistant Water Manager to issue a water licence for the Property.

APPLICABLE LEGISLATION

[23] The following sections of the *Act* are relevant to this appeal:

Water use purposes

2 The following defined purposes are the purposes in respect of which water may be diverted from a stream or aquifer:

"domestic purpose" means the use of water for household purposes by the occupants of, subject to the regulations, one or more private dwellings, other than multi-family apartment buildings, including, without limitation, hotels and strata titled or cooperative buildings, located on a single parcel, including, without limitation, the following uses:

(a) drinking water, food preparation and sanitation;

(b) fire prevention;

(c) providing water to animals or poultry kept

(i) for household use, or

(ii) as pets;

(d) irrigation of a garden not exceeding 1 000 m² that is adjoining and occupied with a dwelling;

"industrial purpose" means a use of water designated by regulation as a use for an industrial purpose, but does not include the use of water for any other water use purpose;

"irrigation purpose" means the use of water on cultivated land or hay meadows to nourish crops or on pasture to nourish forage.

Use of water

- 6** (1) Subject to this section, a person must not divert water from a stream or an aquifer, or use water diverted from a stream or aquifer by the person, unless
- (a) the person holds an authorization authorizing the diversion or use, or
 - (b) the diversion or use is authorized under the regulations.

DISCUSSION AND ANALYSIS*The Appellant's Submissions*

[24] The Appellant filed two "expert" letter reports, both signed by Michael A. Stamhuis, P. Eng. (retired), in support of her submissions: one dated September 20, 2021 and one dated December 21, 2021. The Appellant also provided a curriculum vitae for Mr. Stamhuis.

[25] In his first report, Mr. Stamhuis describes himself as a (former) manager of the now defunct North Okanagan Water Authority, and a former Chief Administrative Officer of the District of Coldstream.

[26] The First Stamhuis report addresses four concerns raised by Ms. Brett on behalf of the RDNO in her March 8, 2021 response to the Assistant Water Manager's referral of the Application.

[27] First, Mr. Stamhuis addresses the RDNO's statement that the proposed irrigation system would undermine provincial and regional water conservation goals. He states that the Appellant did not intend to avoid compliance with seasonal water use restrictions designed to conserve the resource. Mr. Stamhuis recommends that compliance with GVW's seasonal use restrictions be included as a condition of water licence. He opines that this, plus a metered connection, "would ensure that there would not be any net increase in water use by the Appellant." He adds that a Memorandum of Understanding between the Ministry and the RDNO would allow GVW to enforce this licence condition.

[28] Mr. Stamhuis states that it is "simply not true" that the proposed irrigation system would undermine the RDNO's ability to implement fair and equitable strategies to achieve conservation goals. He further states that GVW utility already has hundreds of customers who use their agricultural connections to water their lawns and gardens. Mr. Stamhuis says that this is inherently unfair but is understandable given that separate non-potable distribution lines have long been a key element in GVW's Master Water Plans and would have the same result, i.e., lawns and gardens would no longer be served with costly, treated water.

[29] Second, Mr. Stamhuis agrees with the RDNO's assertion that approving the Application would set a precedent. However, he asserts that the precedent would be a positive one that could serve as a template for future applications.

[30] Third, Mr. Stamhuis claims that the RDNO's statements regarding the financial impact of the proposed irrigation system was "highly misleading." He states that the Greater Vernon Master Water Plans undertaken in 2001 and 2012 established the financial benefits of separating portions of the system to avoid the "costly practice" of irrigating with treated water. He further asserts that over five summer months, a major portion of the GVW supply is treated and then used for

irrigation, the cost of which is borne by domestic use customers. He opines that long term planning shows that separation of systems is the best option but borrowing costs mean that the politically acceptable option has been to incrementally increase treatment capacity and use treated water for irrigation. As domestic growth takes place, increases in the capacity of treatment plants, pumps, pipes and fittings are required, resulting in increased marginal costs associated with increased water supply. Further, Mr. Stamhuis asserts that, contrary to the RDNO's letter, GVW uses an "inclined block" rate system which reflects the reality that marginal supply costs are higher than average costs considering operating, capital and asset depreciation costs.

[31] Mr. Stamhuis contends that the works proposed by the Appellant are consistent with the goals of GVW's future planning, such as to facilitate capital works that separate and retain treated water for domestic purposes. The requested licence would contribute, in a small but direct way, to the goal of reducing the amount of treated water used for irrigation. It would also make a small contribution to improvement in fire protection as the Appellant would not be limited to irrigating during the same periods as one-half of all homes on the GVW system. This would improve the reliability of fire protection due to higher hydrant pressures. Further, the Appellant will still contribute to fire protection costs through property taxes.

[32] Fourth, Mr. Stamhuis opines that there is a remedy to the risk of an interconnection between the proposed irrigation system and the domestic water system, causing a threat to drinking water quality. He asserts that the Appellant plans to physically disconnect the irrigation system and maintain it remotely from the domestic plumbing system. The Appellant also plans to install a backflow preventer, tested annually, next to the GVW meter to ensure that no water or contamination from the Property can find its way back into the utility. Mr. Stamhuis opines that the Property would, then, pose less risk than neighbouring properties which he asserts do not have backflow prevention devices. He recommends that the disconnection and backflow prevention provisions be provided for as conditions of any licence.

[33] Mr. Stamhuis then offers two comments regarding the impact of the proposed works and regarding licensing, in general. First, he opines that the overall impact of constructing the proposed irrigation system would be "a tiny fraction of the typical impact of a dock installation, which is typically routinely approved." The proposed works include the installation of a small diameter pipe (50 mm diameter or less), approximately eight metres beyond the high water mark, into the lake. The remaining works would be on private land, a portion of which would be in the riparian area adjacent to Kalamalka Lake. This would include the shallow burial of a small diameter pipe and installation of a small pump. The remainder of the irrigation system is already installed. Mr. Stamhuis asserts that the Appellant would adhere to practices that would minimize silt runoff in the riparian area.

[34] Mr. Stamhuis then observes that if the Application is granted, the RDNO would be able to increase its water use from Kalamalka Lake in order to circumvent the requirement to maintain total licence allocation. On behalf of the Appellant, he suggests that GVW "adjust" its licensing allocation by the volume granted to the Appellant. He suggests that it could be a condition of the licence that the Appellant relinquish her licence as a pre-condition of any reinstatement of supply from GVW

utility for outdoor water use. Alternatively, the RDNO could be granted an “intake licence” on behalf of the Appellant who would then be subject to GVW conditions. In the latter case, Mr. Stamhuis suggests that the Appellant would need to agree to be responsible for installing and maintaining all works related to the intake and irrigation system.

[35] Mr. Stamhuis expresses concern that the Assistant Water Manager appears to have sought language from the RDNO to assist in denying licence applications. He asserts that the Application could serve as a positive precedent and template for further water licence applications.

The Assistant Water Manager’s submissions

[36] The Assistant Water Manager asks the Board to dismiss the appeal and confirm the Decision.

[37] The Assistant Water Manager submits that, under the *Act*, rights to use and flow of stream water and groundwater in aquifers are vested in the government. Subject to those rights, individuals may apply for an authorization under the *Act* to divert and use water from streams or aquifers⁶. On receipt of such an application, a statutory decision-maker assesses the information submitted in support of the application and may require the applicant to provide further information deemed necessary to consider the application and make an informed decision: sections 12(1)(b)(iii), 12(2), and 14(d) of the *Act*.

[38] The Assistant Water Manager submits that the Board has previously confirmed that an appellant has the burden of proving that the decision under appeal is unreasonable⁷. The Assistant Water Manager states that the decision to refuse the Application was reasonable and properly based on the information provided in the Application, the type of authorization sought, and the source of water in respect of which the diversion and related intake works were proposed (i.e., Kalamalka Lake). The Decision is supportable based on the Board’s reasoning in *Karen Nonis v. Assistant Water Manager*, Decision No. 2017-WAT-010(a), April 19, 2018 [*Nonis*], where the Board concluded that denying the application was consistent with the scheme of the *Act* and the public interest in conserving and managing water in Okanagan Lake. The Board concluded that the City’s water system, and the property’s connection to it, was sufficient to meet the property’s irrigation needs, and there was no need to draw water from the Lake.

[39] The Assistant Water Manager further submits that the Appellant has failed to meet the burden of proving that the Decision is unreasonable. He maintains that there are no exceptional or compelling reasons to revisit the Decision. The Appellant has adequate water service provided by the water purveyor (GVW). GVW has confirmed that it is able to service the Property with sufficient water supply for outdoor watering purposes. Consequently, there is no technical need for the Application; an authorization in the circumstances would be unnecessary and

6 The Assistant Water Manager references sections 5, 7, 8, 9 and 12 of the *Act*.

7 See e.g., *Telegraph Cover Resorts Ltd. v. British Columbia (Ministry of Environment)*, Decision No. 2019-EMA-G01, November 27, 2019; *Wilfred Boardman v. Regional Manager*, Decision No. 2013-WIL-021(a), September 9, 2014; *David Avren et al v. Regional Water Manager*, Decision Nos. 2006-WAT-003(a), 2006-WAT-004(a), 2006-WAT-005(b), June 29, 2007.

unwarranted. If a water licence is issued for the Property, the lot would effectively be double-licensed, a practice that is discouraged in water allocation.

[40] Further, given the complexity of water management in the Okanagan area as identified in the Reimer Report (discussed below), the Assistant Water Manager submits that Mr. Stamhuis' suggestions that the water purveyor give up a portion of its licence for the Appellant, or hold a licence on behalf of the Appellant, are simply not practical, nor are they particularly effective in advancing the fair and consistent application of local watering restrictions. Furthermore, the suggested conditions would undermine local conservation efforts. The Assistant Water Manager submits that it is more effective to apply the same local government bylaw watering restrictions across the service area, because those bylaws are intended to limit outdoor watering throughout the area, which includes all properties in the subdivision where the Property is situated.

[41] Further, by having local governments consistently apply their own restrictions, the Ministry can focus on regulating the diversion and use of water on a basin-wide basis, such as when significant water shortages require temporary protection orders under sections 86 to 88 of the *Act*. When water shortages are extreme, these measures could extend to the potential regulation of GVW's diversion and use of water under licensing intended to supply water to that service area. In such a case, it is likely that only water use required to sustain critical environmental flows and for essential uses would be able to continue. The Assistant Water Manager submits that permitting the Appellant to have a direct intake from Kalamalka Lake for outdoor watering would undermine the provincial, regional, and local water conservation goals and the ability to implement fair and equitable strategies to achieve those goals. The Assistant Water Manager adds that granting the Application would not be in the best interest of the public or the environment as discussed in the Water Licence Technical Report and addressed further in a report prepared by Christian St-Pierre in support of the Assistant Water Manager's submissions (discussed below).

[42] The Assistant Water Manager states that the Mr. Stamhuis' second report outlines the author's understanding that the Appellant now proposes to install a 25 millimetre ("mm") (or possibly 50 mm) diameter pipeline along the underside of an existing dock and then drop the pipe into the water vertically, rather than trenching and burying the intake pipe and building headworks on the foreshore. The Assistant Water Manager submits that the Appellant did not include that information in the Application.

[43] The Assistant Water Manager further submits that Mr. Stamhuis does not have the qualifications of an aquatic ecosystem specialist to determine whether any works undertaken by the Appellant in and about Kalamalka Lake would have an impact on the foreshore, lake habitat or fish habitat. Still further, whatever intake works the Appellant might now be proposing would require assessment for the presence of any aquatic species at risk and the potential impact on them. Any unnecessary negative impacts would not be supportable if there is a reasonable alternative that does not have such impact(s). The Assistant Water Manager stresses that the Appellant currently has an alternative water supply, so any works and activities in and about Kalamalka Lake that would be associated with the proposed licence are unnecessary.

[44] The Assistant Water Manager adds that, in an affidavit filed in support of the Assistant Water Manager's submissions, Mr. St-Pierre addressed Dr. Goplen's description of the Appellant's proposed installation of a water intake. Dr. Goplen described the proposed works in a letter dated February 10, 2022, addressed to the Board. The Assistant Water Manager submits that Mr. St-Pierre notes that, as proposed, the intake pipe would be installed in front of the Property, in the littoral zone of Kalamalka Lake, an area that is used for fish-rearing and possibly fish-spawning. Mr. St-Pierre opines that, to protect fish and fish habitat, any such intake should be directionally drilled and located in the deeper section of the Lake, well away from the higher valued foreshore and littoral zone, so that the intake is less likely to entrain (suck up) eggs and larval fish, particularly if spawning occurs near the proposed location. Further, screening requirements mandated by Fisheries and Oceans Canada only protect fish that are at least 25 mm long. Smaller eggs and larval fish have no, or limited, swimming ability. Consequently, there should be no intake into the littoral zone if these age classes occur in the area. Further, a fish survey would be required to confirm whether Kokanee salmon use the littoral zone in that area for spawning and rearing their young.

[45] The Assistant Water Manager filed three affidavits in support of his submissions:

- an affidavit affirmed by Christian St-Pierre, an Ecosystems Specialist with the Ministry;
- an affidavit affirmed by Shaun Reimer, the Section Head of Public Safety & Inspection with the Ministry; and
- an affidavit affirmed by the Assistant Water Manager, Mark Ecker.

[46] The following documents were attached as exhibits to Mr. St-Pierre's affidavit:

- a letter report prepared by Mr. St-Pierre, dated November 25, 2021 (the "St-Pierre Report"); and
- Mr. St-Pierre's curriculum vitae.

[47] The following documents were attached as exhibits to Mr. Reimer's affidavit:

- a letter report prepared by Mr. Reimer, dated November 23, 2021 (the "Reimer Report"); and
- Mr. Reimer's curriculum vitae.

[48] Numerous documents were attached as exhibits to Mr. Ecker's affidavit, including:

- the Water Licence Technical Report;
- Kalamalka-Wood Lake Basin Licensing Plan, August 2001, version August 31, 2001;
- Okanagan Large Lakes Foreshore Protocol, January 2018;
- an email dated May 4, 2021, from the Assistant Water Manager to Dr. Goplen regarding a telephone call anticipated for May 14, 2021; and

- an email chain dated May 17, 2021, between Dr. Goplen and the Assistant Water Manager regarding the Assistant Water Manager's site visit to the Property on that date.

The St-Pierre Report

[49] In his affidavit, Mr. St-Pierre states that he is a registered Professional Agrologist, employed with the Ministry as an Aquatic Ecosystems Specialist. His curriculum vitae establishes that he has over a decade of experience in dealing with ecosystem related issues, including application referrals and major project reviews. His role is to provide expert technical advice to the Ministry with a particular focus on water quantity for ecosystem function, including instream flow habitat field assessment, assessment of EFNs of streams and their aquatic ecosystems, monitoring and characterization of summer low flows, drought management and regional hydrology and water management.

[50] Mr. St-Pierre described the aquatic ecosystems values that may be affected by granting the Application (authorizing diversion of water from Kalamalka lake and installation of intake works on the foreshore, bank and bed of the Lake in front of the Property). His report also replied to the First Stamhuis Report as it relates to aquatic ecosystem values.

[51] Mr. St-Pierre identified the main environmental issue related to the Application as being whether the proposed licence would have the potential to impact aquatic ecosystems of the Kalamalka Lake basin, including Lower Vernon Creek (or Vernon Creek), which is the stream flowing from the north end of Kalamalka Lake to Okanagan Lake. Mr. St-Pierre opined that there are two main ways in which the environment could be impacted: first, the physical works may have a direct effect during construction or operation; second, the diversion of water may reduce habitat quality and quantity in Kalamalka Lake and downstream. In both cases, the cumulative impact of small projects must be considered.

[52] As to physical works, Mr. St-Pierre noted that installing a trenched waterline is considered "high risk" and is not recommended, because it disturbs lake foreshore habitat and promotes invasive weed colonization of the disturbed substrate. Such a proposal would require investigation by a Qualified Environmental Professional following the Okanagan Large Lakes Foreshore Protocol, and typically involves surveys of Kokanee salmon, mussels, and plants. A lower risk alternative is to directionally drill the waterline and follow best management practices for that activity. In either case, any unnecessary negative impact to aquatic habitat would not be supportable, if there was a reasonable alternative that would have no such impact.

[53] The St-Pierre report indicates that the foreshore, bank, and bed of Kalamalka Lake in the area immediately in front of the Property, is considered rearing habitat for Kokanee salmon. The area has not yet been assessed for species at risk, but the Peach-leaf willow (a Blue-listed species according to the BC Conservation Data Centre) occurs at the south end of the lake and the Rocky Mountain Ridged Mussel (an endangered species according to the Committee on the Status of Endangered Wildlife in Canada) is suspected to be present. Any proposal to carry out work in and about a stream would require an assessment regarding the potential presence of those species and any potential impacts on them.

[54] The St-Pierre report also addresses water quantity, a matter that he says has been an issue in the Kalamalka-Wood Lake Basin since at least the early 1970s. Mr. St-Pierre stated that the summer target of 0.276 cubic metres per second ("m³/s") of water flow for EFNs is only met 36% and 31% of the time for August and September, respectively - months that are critical for fish that also coincide with some of the highest off-stream demand. Since the targeted EFN was recommended in 2001, the monthly flows have been near 50% of the recommended flow for half of the years. Mr. St-Pierre opines that any decision that may reduce the flow in the Kalamalka Lake systems, whether by direct use or by jeopardizing water conservation and management efforts, would have an incremental impact on the aquatic ecosystems. Water is scarce in the entire Okanagan region and target flows are difficult to achieve. Mr. St-Pierre further opined that continued development and climate change could result in further water scarcity.

[55] In light of all the above considerations, Mr. St-Pierre opines that licensing of many small private intakes on Kalamalka Lake could serve to undermine drought management planning and water conservation measures (including monitoring and enforcement schemes) that have been implemented within the GVW service area and would be detrimental to ecosystem protection in the area.

The Reimer Report

[56] In his affidavit, Mr. Reimer states that he is a registered Professional Engineer with the Association of Professional Engineers and Geoscientists of British Columbia. He has been employed with this Ministry as a Section Head, Public Safety & Protection, for 16 years.

[57] His report indicates that it should be considered as supplemental to the Kalamalka-Wood Lake Basin Water Licensing Plan. Mr. Reimer's role with the Ministry is to provide technical advice with a focus on lake and river level management, including operation and maintenance of the Okanagan Lake Regulation System (OLRS) and Kalamalka Like Dam, determination of lake and river levels and flows for OLRs operation. In his role, he uses the Fish Water Management Tool⁸, and liaises with the BC River Forecast Centre, Fisheries and Oceans Canada, Environment and Climate Change Canada, and First Nations groups regarding lake and river level management.

[58] Mr. Reimer provided his opinion and information on Kalamalka Lake / Wood Lake water supply and dam operations with respect to the Decision. Mr. Reimer described the challenges for water management planning, including drought and flood response.

[59] Further challenges include the age of the dam. It was constructed in 1981 and designed to pass 8.5 m³/s at a lake elevation of 391.82 metres. Subsequent testing indicated that the actual flow was lower than designed due to downstream backwater effects and to protect downstream bridge abutments, sewer lines, culverts and other infrastructure, as well as homes and commercial properties. These constraints, in Vernon Creek, have required water managers to reduce outflows, even at problematic lake elevations, to six m³/s or lower. Still further,

⁸ The Fish Water Management Tool is an internet-accessible software program:
<https://www.sylix.org/projects/fish-water-management-tool-emergence-sampling/>

minimum fish flows in lower Vernon Creek have been identified as being 0.085 m³/s. Ministry ecosystems staff have suggested that this number is too low and that a flow of 0.24 m³/s is required for healthy fish stocks.

[60] In sum, Mr. Reimer opined that it is not feasible to increase storage for water supply in Kalamalka/Wood Lakes based on the current target elevations without increasing the risk of flooding around the lakes. Dry years will result in reduced water availability in the lakes system, but wet years may not increase water availability because water managers will attempt to proactively achieve normal target elevations to reduce the flood risk. Further, recent hydrologic changes make the inflow forecasts used by water managers more uncertain. Finally, the condition of the existing outlet control structure and downstream constraints have led to a greater uncertainty in the outcome of operational water management decisions resulting in a more erratic water supply.

[61] Mr. Reimer opined that the challenges for water management planning are made more complex by the presence of many private intakes on Kalamalka Lake.

Assistant Water Manager / Mark Ecker's affidavit evidence

[62] Mr. Ecker states that he has been employed by the Ministry as a Water Authorization Specialist in the Vernon office for five years. Mr. Ecker described the information he considered in reaching his Decision. He notes that he conducted an unaccompanied site visit of the Property on May 17, 2021. He observed that the Property is in a residential subdivision, was well-vegetated, and that the Appellant was irrigating only ornamental plants on the Property.

[63] Further, Mr. Ecker considered that the Application indicates that the Appellant's irrigation system is fully constructed. Given this fact and his observation that the Property was well vegetated with ornamental plants, he anticipated that the Appellant's water system was connected to the GVW system, including for outdoor watering. The RDNO subsequently confirmed that fact, as noted in the Water Licence Technical Report. He also considered the RDNO's concerns with the Application, as provided in Ms. Brett's letter dated March 8, 2021.

[64] Mr. Ecker discussed the Application with Dr. Goplen by email prior to making the Decision. He informed Dr. Goplen of restrictions on issuing new water licences and he inquired why the GVW water service was not adequate for their needs. Dr. Goplen did not answer that inquiry. Mr. Ecker deposed that he further informed Dr. Goplen of an Environmental Appeal Board decision (*Nonis*) with respect to an application that was, in Mr. Ecker's view, similar to the Appellants.

[65] Mr. Ecker confirmed in his affidavit that, as part of the Ministry's review of the Application, he completed the Water Licence Technical Report (the content of which is described in the Background portion of this decision and will not be repeated here).

The RDNO's submissions

[66] The RDNO filed four affidavits (all sworn or affirmed on March 31, 2022) in support of its submissions:

- an affidavit of Derek Pont, Cross Connection, Control Officer, for the RDNO;

- an affidavit of Michael Phillips, an Engineering Technologist and Bylaw Enforcement Officer for the RDNO;
- an affidavit of Tricia Brett, a Professional Agrologist for the RDNO; and
- an affidavit of Zee Marcolin, the General Manager, Utilities, for the RDNO.

[67] The RDNO submits that it is opposed to the Application and supports the Decision for practical reasons. The RDNO points to Ms. Brett's affidavit and her response to the referral of the Application. The RDNO is concerned not only with this particular water licence application, but also with the precedent it would set. The RDNO says that individuals ought not to be treated differently or specially because of their proximity to a body of water.

[68] The RDNO further submits that Ms. Brett's evidence is that Mr. Stamhuis' recommendations are not practical and would put an unfair onus on the Ministry and the RDNO to manage the requested water licence. Further, it would be inequitable to GVW customers who would be asked to fund monitoring and enforcing the terms of that licence, without any remuneration equivalent to the effort involved.

[69] Ms. Brett and Mr. Phillips confirmed in their affidavits that GVW is currently supplying and will continue to supply the Property with adequate water service to meet the Appellant's needs for lawn and garden watering. The RDNO submits that there is no need for a licence to draw water directly from Kalamalka Lake. The RDNO submits that granting the Application would effectively result in a double licence for the Property and run the risk of denying access to potable water to a truly impoverished property.

[70] RDNO staff do not have the authority to relinquish a part of their licensed water volume, as suggested by Mr. Stamhuis and the Appellant; the Board of Directors would need to approve such a proposal. The RDNO submits that, based on historic and recent decisions, such an outcome is unlikely. The RDNO maintains that GVW's system is the most efficient way to deliver water to the community from a climate change, water use, drought management, and health perspective.

[71] The RDNO submits that the Board has previously confirmed that there is an important public interest in the conservation of water in the Southern Interior⁹, and further in the Okanagan Basin. Granting the licence, and others like it, would threaten that public interest.

[72] In her affidavit, Ms. Marcolin attested that Greater Vernon has been a leader in water conservation since the 1990s. She stated that, today, GVW has an up-to-date, comprehensive drought management plan,¹⁰ radio-read water metering tracking real-time water use, water restrictions enforced by bylaw, and staff dedicated to ensuring water efficiency in the region. Further, GVW has an active Lost Water Program to find sources of unaccounted water with goals and programs to identify and quantify approved, unmetered water (e.g., flushing, analyzers,

9 See e.g., Nonis.

10 See Exhibit H to the Marcolin affidavit.

firefighting, operational water use). The RDNO submits that the reduction of lost water will assist in supplying future growth and lessen environmental impacts.

[73] The RDNO submits that the Appellant's proposed diversion will undermine Provincial and RDNO water conservation goals and GVW's ability to implement fair and equitable strategies to achieve those goals within its service area. Ms. Brett attested to how private water intakes, such as the Appellant's propose, make enforcement and education challenging

[74] In response to the Appellant's assertion, the RDNO submits that the presence of unauthorized diversions in Kalamalka Lake is irrelevant to the Application, but the additive impact is important. The RDNO shares the Ministry's concerns regarding the threat to the water system through cross-connection and effective water management within GVW's service area as stated in Mr. Pont's affidavit. The RDNO is aware of unauthorized intakes on Kalamalka Lake. Mr. Pont and Ms. Brett attested in their affidavits to the process to address such intakes. Identified intakes are reported to the Province and dealt with through the bylaw process. Identified properties are isolated from the water distribution system through a device that requires testing and reporting to the RDNO, annually. The RDNO pointed to an unauthorized intake on West Kal Road that has recently been identified. The Cross Connection Control Officer has required backflow protection at the site to protect the public water system. The RDNO submits that the presence of private intakes in areas serviced by GVW adds to the Cross Connection Control program costs, including annual monitoring, property surveys, and customer communication.

[75] The RDNO submits that it would be impractical for it to rely on provincial water licence conditions (as suggested by Mr. Stamhuis) to enforce local bylaws, (if the Province had the authority to do so, which the RDNO says, it does not). Further, there is no mechanism in place that would provide for the RDNO to be involved in decision-making or enforcement of provincial water licences. The RDNO asserts that it would be unrealistic for RDNO to monitor and track such licences.

[76] In further response to the Appellant's and Mr. Stamhuis' assertions, the RDNO agrees that the GVW Master Water Plan contemplates separation of potable and non-potable water. However, as Ms. Marcolin makes clear in her affidavit, the Master Water Plan contemplates separation so that non-potable water would be allowed for agriculture use. Lawn and garden watering is "domestic use" and there are no plans for separation to allow non-potable water for domestic use.

[77] The RDNO speculates that the Appellant's "real reason" for the Application is not to reduce his carbon footprint and act more efficiently and to GVW's benefit. It is to save costs and have the unfettered ability to outdoor water (without actively monitored restrictions) while still maintaining the benefit of a treated water supply for residential use and fire protection at a reduced cost.

[78] Finally, the RDNO submits that the Decision was reasonable, aligns with prior decisions, and is in the public interest. The RDNO asks the Board to dismiss the appeal.

The Appellant's Reply to the Assistant Water Manager's and the RDNO's Submissions

[79] In his second report, Mr. Stamhuis responds to the Assistant Water Manager's expert reports with two comments. First, he asserts that the Appellant's

appeal is based on licensing conditions (as recommended in the First Stamhuis Report) so that there would be no additional water drawn from the system (presumably Kalamalka Lake) by either transferring the requested water volume in the Application from the RDNO or by granting a "secondary usage licence." Second, Mr. Stamhuis opines that the surface bottom of Kalamalka Lake would remain undisturbed but for a small diameter (perhaps only 25 mm) pipe. He asserts that the impact would only be "a tiny fraction of that of a dock, a structure that is routinely approved for construction." He further opines that constructing the pipe along the underside of an existing dock, and then dropping the pipe into the water vertically would not contribute to the cumulative impact of "death by a thousand cuts;" it would not even amount to a scratch.

[80] Mr. Stamhuis then responds to assertions in the RDNO's submission to the Board. He describes his experience in the development of the Greater Vernon Water Policy during and after his former employment with the RDNO. Mr. Stamhuis asserts that if, as he recommends, it is a condition of any water licence granted to the Appellant that she complies with GVW use restrictions and bylaws, the Ministry's Licensing Branch could enforce any breach. He reiterates his recommendation that the Appellant's water use be metered and made available to GVW. He disputes the RDNO's water meter reading cost, which he says is attributable only to regular reading for billing purposes and not occasional reading for enforcement purposes.

[81] Mr. Stamhuis opines that installing non-potable distribution lines has long been a key element of Greater Vernon Master Water Plans. He comments on his understanding of the history of discussions regarding water treatment, the merits of water treatment versus separation of systems and the costs associated with each, and the politics of each option. He maintains that approval of the Application will set a positive precedent. He asserts that:

- the administration costs to the RDNO would be "minimal or zero";
- there would be minimal environmental damage from the installation, and requiring compliance with the RDNO's bylaws would result in consequences for breaching them being greater than those under the GVW enforcement protocols;
- a backflow preventer would ensure that the drinking water system is not at risk and there would be neither the means nor intent to use untreated lake water for consumption in the household;
- emergency response is a non-issue as this would be a separate irrigation system; and
- there would be no health impacts.

[82] Mr. Stamhuis provides a detailed response to the RDNO's assertion that he made incorrect statements in the First Stamhuis Report about the background to the Greater Vernon Master Water Plan. He maintains that the analysis in the plan shows that separating potable and non-potable water supplies provides long-term cost savings. Mr. Stamhuis acknowledges that he is unfamiliar with the 2017 Greater Vernon Master Water Plan. He disagrees with the RDNO's water rate structure, which he asserts is unfair. Mr. Stamhuis reiterates his assertion that the Appellant will continue to contribute to fire protection costs (specifically, hydrant

maintenance) through taxation of the Property. Mr. Stamhuis disputes the RDNO's assertions regarding water flow available for fire protection based on water demand, and he opines that the RDNO's witness, Ms. Marcolin, does not have a good grasp of what happens in the "real world" of fire protection. He adds that the RDNO's argument that removing the Appellant's irrigation demand could contribute to water aging in oversized infrastructure is "specious." Mr. Stamhuis opines that summer flows in the infrastructure are two-to-three times winter flows in residential single-family neighbourhoods, so water aging in pipes is not a problem. He concedes that there may be a problem in the winter, but the Appellant will not be irrigating during winter months, so the Appellant ceasing to irrigate with water supply from GVW would have no impact.

[83] Mr. Stamhuis disagrees with the RDNO's assertion that refusing the Application is in the best interest of the public. He relates his personal experience of swimming along the foreshore of Kalamalka Lake and Okanagan Lake and observing "numerous small diameter pipelines" extending from various homes into the lakes. He speculates that few are authorized or licensed or have been installed with the appropriate isolation and backflow prevention. He opines that these installations have a cumulative impact on the unrecorded water draw on the lakes, and that they pose a health risk to the owners and the GVW system.

[84] Dr. Goplen, on behalf of the Appellant, filed two submissions in final reply. In his initial reply to the Assistant Water Manager's submissions on March 25, 2022, Dr. Goplen identified the following as the "most important points" for the Board's consideration:

1. The proposed system will reduce the amount of water currently used by the Appellant.
2. There will be a significant savings, energy consumption reduction, and reduced carbon footprint, elimination of chemical inputs and reduction in demand on infrastructure, current operating costs and future capital costs;
3. The system is (I assume he means but for the intake) installed with virtually no impact on the foreshore or lakebed. Operating the system will have less impact on the environment as the filtration of the system is much finer than the GVW system.
4. The Okanagan Lake Foreshore Protocol states that after five decades of annual surveys there is no issue with "Shore Spawning Kokanee," nor any other plant or animal species in the area of the Property.
5. The proposed system would be subject to all the same watering restrictions in the area and would be enforced in the same way.
6. Existing systems (presumably private intakes) have been in place on Kalamalka Lake for decades with no problems being noted.

[85] On April 4, 2022, he filed a further response to the RDNO. After reiterating some of the points raised in his first submission, Dr. Goplen adds the following:

1. There will be no connection between the proposed irrigation system and municipal water.

2. Inspections to monitor the system for compliance will not require any discernible increases in monitoring or labour.
3. There may be "a bit of work involved" for the RDNO to change its water licence to accommodate the Appellant's requested licence, but that will be less than the cost of opposing the Application.
4. The Appellant agrees with the evidence deposed to by Messrs. Pont and Phillips.
5. The Application to use untreated water would result in water conservation.
6. The information provided by the Appellant regarding water rates increasing was in the context of her aspiration to contribute to reducing future expenditures on the municipal water system.

[86] The Appellant asks that the Application be approved, which I understand to be a request that the Board order the Assistant Water Manager to issue a water licence to the Appellant on the terms sought.

The Panel's Findings

[87] The Board's role in hearing and deciding an appeal under the *Act* is not limited to reviewing the record of information that was considered by the Assistant Water Manager and deciding whether his decision was "reasonable." The Board typically considers both the record of information that was considered by the person who made the appealed decision, and any new information provided by the parties that is relevant to the appeal. In that regard, section 105(5) of the *Act* empowers the Board to "conduct an appeal by way of a new hearing." This is sometimes called a hearing "de novo." This means that the Board may consider evidence that was not available to the Assistant Water Manager, as I have done in this case.

[88] Further, section 105(6) of the *Act* gives the Board broad remedial powers, including the power to "make any order that the person whose order is being appealed could have made and that the board considers appropriate in the circumstances." In other words, the Board may exercise the same powers as the Assistant Water Manager in deciding whether to grant the licence application.

[89] For all of these reasons, contrary to the Respondent's submissions, the issue before me is not simply whether the Assistant Water Manager's decision was "reasonable;" rather, it is whether a water licence should be granted to allow the Appellant to install an intake and divert water from Kalamalka Lake for use in outdoor watering on the Property, based on the legislation and the relevant evidence before me.

[90] In my analysis, I have determined that it is logical to consider the evidence that the Assistant Water Manager says supports his Decision, first, and then to consider the Appellant's evidence which was presented to challenge the Decision and support the Application.

[91] The starting point for my analysis is a consideration of the Property and the water source that the Appellant seeks to divert. The following evidence in this appeal is uncontroverted. The Property is in a residential subdivision fronting onto Kalamalka Lake. Kalamalka Lake is a fully allocated water source and there is "no water" available for domestic use, other than 100 acre-feet that has been set aside

for domestic use for individuals living outside of the GVW service area. GVW holds a licence as the local water purveyor for the area where the Property is situated. The evidence is that GVW is able to meet the Property's domestic needs (including outdoor watering) now and in the near future.

[92] Further, there is a Water Allocation Notation for Kalamalka Lake that indicates that there is insufficient recorded water in the stream or aquifer for any additional authorizations. There is some evidence that there are a few private water licences on Kalamalka Lake, but that they predate the *Act* and there is no legal mechanism to remove them as long as the licence holder complies with the conditions on the licence (including making beneficial use of the authorization). I find that the existence of such historical licences is of little relevance to this appeal. The fact that those licences were issued in the past does not necessarily mean that a licence should be issued in the present circumstances. Further, there is evidence that water quantity has been identified as an issue in the Kalamalka-Wood Lake Basin since the 1970s. There is evidence that target flows for environmental needs (e.g., for fish flows and to reduce the likelihood of flooding) are already difficult to achieve.

[93] There is no evidence that the Property has "cultivated land" or has "hay meadows," "crops" or "pasture" that require water, as stated in the definition of "irrigation use" in section 2 of the *Act*. Accordingly, in my view, the Assistant Water Manager had a legal basis to conclude that the Property did not require water for an "irrigation purpose" as sought in the Application. The correct purpose and use category would be "industrial purpose": lawn, fairway, and garden watering¹¹.

[94] The remaining evidence in the hearing is disputed by the parties. The Appellant submitted two "expert reports" (the Stamhuis Reports) and provided a curriculum vitae for the author, in accordance with the Board's Rule 25. However, neither report identifies Mr. Stamhuis' areas of expertise, nor does it state the matters on which he was asked to give an expert opinion. Also, Mr. Stamhuis does not state that he understands his role as an independent expert witness, which is to assist the Board by providing evidence that would not be within the knowledge of a lay person. The Board is concerned that Mr. Stamhuis may not have understood that his role as an expert witness was to provide evidence to assist the Board, and not to advocate on behalf of the Appellant.

[95] The Board has previously determined that "(t)he primary role of the expert is to assist the Panel." See e.g., *Burgoon et al v. Regional Water Manager*, Decision Nos. 2005-WAT-024(c), 2005-WAT-025(c) and 2005-WAT-026(c), June 28, 2010, at para. 72 [*Burgoon*]. In *Burgoon*, the Board also found that a report tendered as an expert report was inadequate because the author lacked the qualifications to give opinions on some of the matters addressed in his report, and the report did not set out the assumptions and facts upon which the opinion was based, or any limitations, qualifications, or margins of error related to the opinion (paras. 65 to 72). Also see *Shawnigan Residents Association v. British Columbia (Director, Environmental Management Act)*, 2017 BCSC 107 at para. 107, wherein the BC

11 Section 2 of the *Act* defines "industrial purpose" to mean "a use of water designated by regulation as a use for an industrial purpose", and Item 11 in Schedule A of the Water Sustainability Regulation designates "lawn, fairway and garden" water use as an industrial purpose.

Supreme Court cites the principle in *White Burgess Langille Inman v. Abbott and Haliburton Co.*, 2015 SCC 23 and *Mouvement laïque québécois v. Saguenay (City)*, 2015 SCC 16, that a tribunal may accept opinion evidence from an expert affiliated with a party as long as the tribunal is satisfied that the expert was willing and able to give fair, objective and nonpartisan evidence.

[96] Still further, the Board's Practice and Procedure Manual states on page 45:

... To be "qualified" to give expert opinion evidence on a particular subject matter(s), the Board must be satisfied that the witness has the appropriate experience and training to be an expert in the matters for which he or she is giving expert opinion evidence.

If a person is not qualified to give expert evidence on a particular subject matter, the Board may still receive the witness's evidence. The Board will determine what weight should be given to each witness's testimony. The qualifications and experience of the witness will be a factor in determining the weight to be given to that witness's testimony.

[97] Mr. Stamhuis' curriculum vitae reveals that he is a retired engineer¹² and former manager and administrator for local government. It is unclear to the Board how Mr. Stamhuis' education, training and experience informs the opinions that he offered in his expert reports. In the First Stamhuis Report, he critiques the RDNO's response to the Application as provided to the Assistant Water Manager on March 8, 2021. He does not cite any science, research, technical or financial information, or other source in support of his opinion that the "the reasoning behind the refusal is flawed." Neither does he offer evidence in support of his "comments" regarding water conservation goals, the number of GVW customers using agricultural comments to water lawns and gardens, the Application creating a positive precedent, the financial benefits of separating potable and non-potable water, and the costs of fire prevention. He cites only a vague reference to "the Greater Vernon Master Water Plans." Further, Mr. Stamhuis does not offer any scientific, technical, or financial analysis of the information and data provided by the RDNO.

[98] Mr. Stamhuis makes repeated reference to the Appellant's plans for the proposed irrigation system and the impact it will have on the environment. It is unclear what provides the basis for his conclusions. He does not provide engineered drawings, plans, or descriptors of the works apart from vague information. He suggests that the works will include "the installation of a small diameter pipe (50 mm diameter or less) approximately eight (8) metres beyond the high water mark" and "remaining works" on private land, including "the shallow burial of a small diameter pipe and installation of a small pump." Mr. Stamhuis then recommends conditions for the proposed licence which are not supported by any evidence.

[99] The Second Stamhuis Report responds to the expert witness reports filed by the Assistant Water Manager and the RDNO. In response to the Assistant Water Manger's experts' reports, Mr. Stamhuis opines that the "water use volume" (at the Property) would remain unchanged under his proposed licensing conditions and

¹² Mr. Stamhuis may have been professionally registered when he authored the First Stamhuis Report. His curriculum vitae does not cite his registration status at the time of the reports. The Association of Engineers and Geoscientists of British Columbia notes that he is presently retired.

that, on that basis, the RDNO ought to be amenable to his suggestions. He describes the intake pipe differently than in the First Stamhuis Report. He now describes it as “perhaps only 25 mm.” He asserts that the impact “would not even amount to a scratch.” Mr. Stamhuis offers no evidence or analysis in support of these assertions.

[100] Mr. Stamhuis cites his former experience working with GVW as a basis for disagreeing with Ms. Marcolin’s estimate, on behalf of the RDNO, of the cost of administering the proposed licence conditions (e.g., water meter reading). He opines that the administration costs to the RDNO will be “minimal or zero” and there would be no “operational costs.” Mr. Stamhuis further opines that there will be “minimal environmental damage from a 25 mm. diameter pipe laid on the lake bottom from a few metres from shore.” Mr. Stamhuis adds that Dr. Goplen, “as a professional in the health field” has “the health awareness to know that proper separation (from the domestic water service) is required.” He asserts that the Appellant has “neither the means nor intent to use untreated lake water for consumption within the household.” Mr. Stamhuis further asserts that the Appellant is “providing the capital costs of separation at no charge and would like to obtain the benefits of the Operations and Maintenance savings.” Mr. Stamhuis appended to his report a document entitled “Protective Services Summary of Services 2021 - 2025 Budget” which he states is an excerpt from the District of Coldstream’s budget¹³. He cites this as proof that as a taxpayer, the Appellant will contribute to maintenance of fire hydrants.

[101] Finally, Mr. Stamhuis disagrees with the RDNO and the Assistant Water Manager’s experts’ opinion that refusing the Application is in the best interest of the public. He cites his personal experience swimming in Kalamalka Lake where he observed numerous small diameter pipelines emanating from homes into the lake. He speculates that few are authorized or licensed, and that they pose a health risk to the GVW system.

[102] I have considered the frailties of the Stamhuis Reports as noted above. In particular, I find that those reports include a significant amount of personal opinion and advocacy. They offer some opinions, that appear to be based on either dated information or unstated sources. Still further, I find that the Stamhuis Reports offer opinions on environmental impacts that are beyond the scope of the author’s expertise. I have afforded the Stamhuis Reports little weight for the reasons cited. I find that they are unhelpful to me in deciding this appeal.

[103] The Assistant Water Manager has submitted two expert reports (the Reimer Report and the St-Pierre Report) and further affidavit evidence from the reports’ authors. Based on Mr. Reimer’s curriculum vitae and affidavit, I am satisfied that he has the requisite education, training, experience, and qualifications (including current professional registration) to offer the opinions he did, as described earlier in this decision. Similarly, Mr. St-Pierre’s curriculum vitae and affidavit establish to my satisfaction that he has the necessary education, training, experience, and qualifications (including current professional registration) to offer the stated opinions that I have cited earlier. The Reimer Report and the St-Pierre Report source the scientific research, data, technical information, analysis and current

13 The budget includes a line item for “fire fighting force.”

water management planning on which they rely. I accept both documents as expert reports that are of assistance to me in deciding this appeal.

[104] The Assistant Water Manager's evidence further establishes that the installation and operation of additional lake intakes poses a risk to the aquatic ecosystem of Kalamalka Lake regardless of whether that installation occurs by trenching, directional drilling, or dropping a line from an existing structure into the littoral zone. The Board is mindful that Mr. Stamhuis has suggested details of the proposed installation and operation of an irrigation system that are not in the Application and were not before the Assistant Water Manager. Based on the Assistant Water Manager's evidence, I find that the Appellant's new proposal would require an assessment of possible impacts on the foreshore, lake habitat or fish habitat, which has not been done.

[105] The Assistant Water Manager deposed that when he visited the Property, he observed that it is a residential lot (not cultivated agricultural land) and is well-vegetated with ornamental plants that the Appellant is irrigating. Given that the Application indicates that her irrigation system is "fully constructed," the Assistant Water Manager inferred that the Appellant is currently using water from the GVW system for outdoor watering. The Appellant did not dispute the Assistant Water Manager's conclusion and I find it to have been a logical one in the circumstances.

[106] I also considered that the RDNO offered an expert report (the Marcolin Report) and four affidavits in support of its submission in support of the Decision to refuse the Application. Ms. Marcolin's curriculum vitae and affidavit satisfy me that she has the education, training, experience, and qualifications (including current professional registration) to offer the opinions set out in the report. The Marcolin Report cites a staff report, technical memorandum, RDNO guidelines, correspondence, and the current version of the GVW Management Plan in support of the opinions offered in the report. Further, the four affidavits of the RDNO's staff provide an evidentiary basis for the RDNO's objection to the Application. In particular, the affidavits provide evidence in support of the RDNO's expressed concern that authorizing a private intake on Kalamalka Lake would negatively impact GVW's ability to achieve its water conservation goals and to enforce water restrictions.

[107] Further, the four affidavits provide a basis in evidence for the RDNO's concern that the conditions on licensing suggested in the Stamhuis Report are impractical, would result in increased administration and operating costs for the RDNO, and would restrict RDNO's ability to enforce its water conservation measures and equitably distribute the cost of domestic use supply (including for firefighting purposes). Finally, the RDNO's affidavit evidence establishes that the Application is inconsistent with the current GVW Master Water Plan which does not contemplate the use of non-potable water use for lawn and garden watering.

[108] To the extent that there is any conflict between the evidence offered by the RDNO and the Appellant with respect to the RDNO and GVW's policies, procedures, operating costs and the current GVW Master Water Plan, I prefer the evidence of the RDNO for all the reasons that I stated earlier regarding the reports' strengths and frailties. The only exception being that, to the extent that the Marcolin Report speculates on the Appellant's motivation for the Application, I find that there is insufficient evidence in the report to support the author's opinion that the Appellant

was motivated by an attempt to avoid and externalize costs to other GVW customers.

Conclusion

[109] After considering all of the parties' submissions and evidence, I find that there is insufficient information to justify issuing a water licence for the Property. For the following reasons, I conclude that a water licence should not be issued for the Appellant to install an intake and divert 390 m³/year of water from Kalamalka Lake:

- GVW system supplies sufficient water to the Property for the Appellant's domestic use (including outdoor lawn and garden watering).
- Kalamalka Lake is fully allocated except for 100 acre-feet which is reserved for domestic use by individuals who are not serviced by GVW. Given that the Property is served by the GVW water system, the reserved water is not available to the Appellant.
- There is evidence that there is an insufficient quantity of water in Kalamalka Lake to meet EFNs on a consistent basis.
- There is evidence that granting the proposed licence would undermine provincial and regional water conservation goals, and their ability to implement and enforce fair and equitable strategies to achieve those goals.
- The proposed licence is inconsistent with the current GVW Management Plan which does not contemplate the use of non-potable water lines to individual properties for domestic outdoor watering use.
- The Appellant's description of the currently proposed intake and irrigation system were not included in the Application, and there is inadequate information before the Board to determine the impact of the current proposal.
- There is some evidence that installing the proposed intake and irrigation system has the potential to adversely impact the foreshore, lake habitat, or fish habitat, including potentially entraining eggs and larval fish in the intake. An assessment of the potential aquatic ecosystem impact and a survey of Kokanee salmon presence and use of the area would be required to determine the impact of the current proposal.
- It would be redundant and unnecessary to issue a water licence to the Appellant in the circumstances, given that GVW already supplies water to the Property which is being used to irrigate the Appellant's lawn and garden.

[110] Overall, I am not persuaded by the Appellant that there is sufficient evidence or that there is any practical need to authorize the installation of a private intake and the diversion of water from Kalamalka Lake. I am satisfied that denying the water licence is consistent with the *Act* and is in the best interests of the environment and the public, particularly the public interest in conserving and managing water in Kalamalka Lake and the Kalamalka-Wood Lake Basin.

DECISION

[111] In making my decision, I have carefully considered all relevant documents, evidence and submissions made during the hearing of this appeal, whether or not they are specifically referenced here.

[112] For all the above reasons, I confirm the Decision and I decline to order the Assistant Water Manager to issue a water licence to the Appellant. The appeal is dismissed.

“Brenda L. Edwards”

Brenda L. Edwards, Panel Chair
Environmental Appeal Board

June 7, 2022