

STAFF MEMORANDUM

File No.: 12-04-6500-20-2021 GWSS

DATE OF MEETING: September 10, 2024

TO: Galiano Island Local Trust Committee

FROM: Kim Stockdill, Island Planner

Southern Team

COPY: Robert Kojima, Regional Planning Manager

SUBJECT: Groundwater Sustainability Project - Bylaw Nos. 283 and 284

PURPOSE

The purpose of this memorandum is to summarize comments received from the letter sent in July 2024 to First Nations in regards to Exemption 'p' in proposed Official Community Plan (OCP) Bylaw No. 283 and to provide answers to anticipated questions that may be raised during the Community Information Meeting for the Groundwater Sustainability Project.

BACKGROUND

In February 2021 the Galiano LTC received a report on the preliminary results of mapping and data analysis phases of the Groundwater Sustainability Project and subsequently endorsed the project charter. The draft Bylaw Nos. 283 and 284 were first presented to the Galiano Island LTC in May 2022. Over the course of a year, the draft bylaws were amended further and currently comprise:

1. Bylaw 284 - Amendments to the Land Use Bylaw (LUB)

- New definitions
- Cistern Requirements for all new builds (18,000 litres). Increase in cistern size for secondary suites to 18,000 litres. Captured and stored water is not required to be connected to the dwelling except in the Water Management Areas as per existing regulation 13.23
- References to "rainwater" with respect to cisterns has been changed to "freshwater" to support the capture and retention of groundwater as well as rainwater
- Updates to regulations related to proof of water for subdivision based on provisions developed for the North Pender LUB.

2. Bylaw 283 - General Amendments to Official Community Plan (OCP)

- Minor changes to Official Community Plan (OCP) language
- Updates to relevant policies and objectives to facilitate consistency with revised language, the new Groundwater Recharge Protection DPA, and other proposed changes to the OCP and the LUB
- Replacement of Schedule D Water Resources, with a new Schedule D Groundwater Regions
- Replacement of Schedule G DPA Area 4: Elevated Groundwater Catchment, with a new DPA 4: Groundwater Recharge Protection

3. Bylaw 283- A Groundwater Recharge Protection Development Permit Area

- New Critical Aquifer Recharge Development Permit Area (DPA) guidelines which would amend the
 current Galiano Elevated Groundwater Catchment DPA. Amendments include: reference to 2021
 mapping of recharge areas, additional exemptions (forest fire protection measures and land owned
 by persons with federal Indigenous status), changes consistent with introduction of cistern
 requirements for new builds, and changing the name of the DPA
- The draft Bylaw includes the Schedule map for the 5 hectare critical aquifer coverage option with the parks and protected areas taken out. This is the DPA option that had been endorsed by the previous LTC

At the July 9, 2024 the Galiano Island LTC passed the following resolution:

GL-2024-016

It was Moved and Seconded,

that a Community Information Meeting and Public Hearing for the Groundwater Sustainability Project be scheduled for October 8, 2024. CARRIED

Draft bylaws and background/details related to the bylaws can be found posted on the <u>Galiano projects</u> webpage.

ANALYSIS

The following are anticipated questions that may be raised during the Community Information Meeting scheduled for October 8, 2024:

Question 1 - How many properties will be included in the new DPA?

Answer: 54 parcels will be affected by the adoption of the new DPA as shown on the map attached to proposed OCP Bylaw No. 283. The DPA map will be required to be amended as a Nature Protection zoned property is included on the map. After the map is amended, the number of lots affected by the new DPA will be 53. The amendment of the DPA map can be completed at the October 3, 2024 LTC meeting.

Question 2 – For those properties included in the new DPA, how many are included in which zone?

Answer:

| Zone | # of Lots | % of Lots in DPA |
|---------------------------|-----------|------------------|
| Agriculture (A) | 3 | 5.5 |
| Forest 1 (F1) | 28 | 53 |
| Forest 2 (F2) | 1 | 2 |
| Forest 3 (F3) | 3 | 5.5 |
| Forest Land Reserve (FLR) | 2 | 4 |
| Rural 2 (R2) | 5 | 9.5 |
| Rural Residential (RR) | 3 | 5.5 |
| Split-Zoned | 8 | 15 |
| TOTAL | 53 | 100% |

Question 3— How many lots included in the new DPA have Private Managed Forest Land (PMFL) status?

Answer: 21 of the 53 lots, or 40 percent of the lots, currently have Managed Forest status. Section 21 of the PMFL Act states that a local government (Local Trust Committee) must not issue a permit that may restrict, directly or indirectly, a forest management activity. This means that over 40 percent of the land within the DPA would likely be exempt from requiring a Development Permit (also see exemption 'j' in the DPA).

Question 4 – What triggers the requirement for a Critical Aquifer Recharge Development Permit?

Answer: A development permit is required for the subdivision of land, construction of, addition to or alteration of a building or other structure, or land alteration, including the cutting of trees, unless exempted.

Question 5 – What are the exemptions for the Critical Aquifer Recharge Development Permit?

Answer: See proposed Bylaw No. 283 – Development Permit Exemptions.

Question 6 – Exemption 'p' as stated in the Critical Aquifer Recharge Development Permit Area would exempt land owned by a person with federal Indigenous status living in their traditional territory with proof of Indigenous family lineage. Who determines if the property owner(s) satisfies this exemption?

Answer: It would be up to the land owner to provide documentation to comply with this exemption. Documentation would include a Status Card and reasonable proof of their traditional territory and family lineage. If the property owner provides the appropriate information, an exemption letter could be issued.

Question 7 – What happens if the lot that had an exemption letter issued as the property owners complied with exemption 'p' is sold to a property owner that does not meet the exemption 'p' criteria?

Answer: A retroactive Development Permit would not be required for work completed by the previous land owner that met the exemption 'p' criteria. If the new property owner plans to alter the land or subdivide (activities listed in answer 2), then a Development Permit may be required for those proposed activities.

CONSULTATION

A letter was sent to local First Nations and members of an indigenous family with historical and cultural ties to Galiano Island to provide further comments on the Groundwater Sustainability Project and DPA exemption 'p'. DPA exemption 'p', as currently drafted in proposed Bylaw No. 283, would provide exemption for a Development Permit where: "Land owned by a person with federal Indigenous status living in their traditional territory with proof of Indigenous family lineage". To date the following are responses received from the letter sent to First Nations dated July 25, 2024:

Tsawwassen First Nation: "Tsawwassen First Nation (TFN) has no concerns regarding this file, at this time. However, TFN requests all copies of interim and final environmental and archaeological reports produced for this project."

PUBLIC HEARING

By direction of the Galiano LTC, staff have scheduled a community information meeting and public hearing on October 8, 2024. A community information meeting provides community members an opportunity to ask any

questions regarding the two associated bylaws whereas the public hearing allows those members to publically state their opinion on the record.

Following the close of the public hearing, the LTC may choose to give further readings to a bylaw, defeat a bylaw, or alter a bylaw within certain parameters. The procedural steps following the close of the hearing are as follows:

- 1. Consideration of Second Reading (this may include amendments to alter a bylaw).
- 2. Consideration of Third Reading.
- 3. Forwarding of the bylaw to Executive Committee for approval.
- 4. Forwarding of the bylaw to the Minister's office for approval (OCP amendment bylaws only).
- 5. Reconsideration and adoption.

Following the close of the hearing, the LTC may not hear further submissions without holding a new hearing. The principle is that if new information is considered by the LTC, all other interested parties also need to have the opportunity to consider any new relevant material and to make further representations to the LTC. The courts have clarified that this does not open the door to endless public hearings: a local government body can legitimately decide that after a hearing it wishes to hear further from staff on issues raised at the hearing.

A bylaw may be altered after the hearing, based on information received or heard by the LTC at any point prior to the close of the hearing, provided that the amendments do not alter use or increase density, or decrease density without a landowner's consent.

If the Executive Committee and Minister approve the bylaw, the next step for the LTC would be to adopt the bylaw.

NEXT STEPS

If the recommendations are supported by the LTC staff will:

Continue to receive public submissions for the public hearing scheduled for October 8, 2024

| Submitted By: | Kim Stockdill, Island Planner | August 29, 2024 |
|---------------|--|-----------------|
| Concurrence: | Robert Kojima, Regional Planning Manager | August 30, 2024 |

ATTACHMENTS

- 1. Bylaw 283
- 2. Bylaw 284

PROPOSED

GALIANO ISLAND LOCAL TRUST COMMITTEE BYLAW NO. 283

A BYLAW TO AMEND GALIANO ISLAND OFFICIAL COMMUNITY PLAN BYLAW NO. 108, 1995

The Galiano Island Local Trust Committee in open meeting assembled enacts as follows:

1. CITATION

This Bylaw may be cited for all purposes as "Galiano Island Official Community Plan Bylaw No. 108, 1995, Amendment No. 1, 2022".

2. SCHEDULES

Galiano Island Official Community Plan No. 108, 1995 is amended as shown on Schedule 1, attached to and forming part of this bylaw.

3. SEVERABILITY

If any provision of this Bylaw is for any reason held to be invalid by a decision of any Court of competent jurisdiction, the invalid provision must be severed from the Bylaw and the decision that such provision is invalid must not affect the validity of the remaining provisions of the Bylaw.

| CHAIR | | SECRETARY | | |
|---------------------------------|-------------------|---------------------------|-------|-------|
| | | | | _ |
| ADOPTED THIS | | DAY OF | | 20 |
| APPROVED BY THE MINISTER MUNICP | AL AFFAIRS THIS | DAY OF | | 20 |
| APPROVED BY THE EXECUTIVE COMM | ITTEE OF THE ISLA | ANDS TRUST THIS DAY OF | | 20 |
| READ A THIRD TIME THIS | | DAY OF | | 20 |
| READ A SECOND TIME THIS | | DAY OF | | 20 |
| PUBLIC HEARING HELD THIS | | DAY OF | | 20 |
| READ A FIRST TIME THIS | 14 TH | DAY OF | MARCH | 2023. |

GALIANO ISLAND LOCAL TRUST COMMITTEE BYLAW NO. 283

SCHEDULE 1

The Galiano Island Official Community Plan No. 108, 1995, is amended as follows:

- 1. Table of Contents Section V is amended by deleting "4. Development Permit Area 4 Elevated Groundwater Catchment Areas" and replacing it with "4. Development Permit Area 4 Groundwater Recharge Protection".
- 2. Section II Land Use, Residential Policy "o)" is amended by deleting "Community, Sport and Cultural Development" and replacing it with "Municipal Affairs".
- 3. Section II Land Use, Subsection 5.4 Light Industry, Light Industry Advocacy Policy "m)" is amended by inserting "recharge and" after "groundwater" and before "catchment areas".
- 4. Section III Services, Subsection 2 Water Supply, Water Supply Objectives is amended by deleting Objectives 1-4 in entirety and replacing with:
 - "1) to ensure an adequate supply of potable freshwater to all users now and into the future,
 - 2) to ensure that groundwater use, and alteration to the land does not pollute or otherwise increase the vulnerability of groundwater regions,
 - 3) to protect critical groundwater recharge areas by evaluating land use decision based on available groundwater vulnerability data and applying the precautionary principle to land use decisions, and
 - 4) to consider and address climate change impacts on freshwater supply and quality."
- 5. Section III Services, Subsection 2 Water Supply, Water Supply Policies is amended by deleting policy "a)" in its entirety and replacing it with:
 - "a) Areas identified to be key areas for water supply, fresh water catchment, storage and recharge shall be preserved and protected.
 - Land identified through groundwater recharge mapping to have significant recharge potential shall be designated as a development permit area for the protection of the watershed."

- 6. Section III Water Supply, Water Supply Policy "b) vi)" is amended by deleting "elevated groundwater catchment" and replacing it with "groundwater recharge protection".
- 7. Section III Water Supply, Water Supply Policies is amended by removing policy "c)" in its entirety and replacing it with "c) Regulations may require new developments to provide cisterns."
- 8. Section IV Conservation and Environment is amended by deleting all instances of "Fresh Water" and replacing them with "Freshwater".
- 9. Section IV Conservation and Environment, Freshwater Advocacy Policies is amended by deleting "and the Provincial Ministry of Environment, Ministry of Transportation and Infrastructure, and Ministry of Forests, Lands and Natural Resource Operations" and replacing it with "and relevant Provincial Ministries".
- 10. Section V Development Permit Areas is amended by deleting subsection "4. Development Permit Area 4-Elevated Groundwater Protection" in its entirety and replacing it with:

"4. Development Permit Area 4 – Groundwater Recharge Protection

4.1 Description of Area

Development Permit Area 4 includes critical groundwater recharge areas identified on Schedule G. Critical groundwater recharge areas contain hydrogeological conditions that facilitate aquifer recharge and/or transmit contaminants to an underlying aquifer. Factors considered in the identification of critical aquifer recharge areas include topography, remote sensing, satellite multispectral analysis depth to water table, presence of highly permeable soils, land-cover analysis, structural geology, presence of flat terrain, and the presence of more permeable surficial geology.

4.2 Authority

The Groundwater Recharge Protection Development Permit Area is designated a development permit area pursuant to Section 488(1)(a) of the *Local Government Act* for the protection of the natural environment, its ecosystems and biological diversity and Section 488(1)(i) of the *Local Government Act* for the establishment of objectives to promote water conservation.

4.3 Special Conditions and Objectives that Justify the Designation

It is the Object of the Islands Trust to "Preserve and protect the Trust Area and its unique amenities and environment of the Trust Area for the benefit of the residents of the Trust Area, and of British Columbia generally, in cooperation with municipalities, regional districts, improvement districts, other persons and organizations and the government of British Columbia."

It is Provincial legislation in Section 473(1)(d) of the Local Government Act that an official community plan must include statements and map designations for the area covered by the Plan respecting restrictions on the use of land that is environmentally sensitive to development.

The Islands Trust Council has committed to identifying, protecting and, where possible, restoring or rehabilitating groundwater recharge areas in the Trust Area.

It is policy of the Islands Trust Council that Local Trust Committees address measures that ensure:

- neither the density nor intensity of land use is increased in areas which are known to have a problem with the quality or quantity of the supply of freshwater, and
- the quality and quantity of drinking water sources for current and future Trust Area residents is preserved and protected, and
- the overall health of watersheds and ground water in the Islands Trust Area is protected.

Mapping of recharge and water balance completed in 2021 for Galiano Island identifies that the island has a number of areas of critical concern with respect to groundwater vulnerability.

The Objectives of the development permit area are:

- to protect and sustain access to a reliable and safe supply of drinking water for groundwater wells
- to protect and sustain the quality and supply of surface and groundwater necessary to the provision of ecological services
- to mitigate the impacts of development and climate change on groundwater supplies

4.4 Development Approval Information

The Groundwater Recharge Protection DPA is also designated an area for which development approval information (DAI) may be required according to Section 485(1) of the *Local Government Act*. The designation of these areas for this purpose is based on the special conditions or objectives supporting the designation of the DPA. Development approval information means information on the anticipated impact of the proposed activity or development on the community or the natural environment.

4.5 Applicability

A development permit is required for the subdivision of land, construction of, addition to or alteration of a building or other structure, or land alteration, including the cutting of trees, unless exempted below.

4.6 Development Permit Exemptions

The following activities are exempt from any requirement for a development permit:

a) Development for which Islands Trust has been provided with a written statement from a registered professional hydrogeologist with relevant experience certifying that the proposed would have no impact on critical groundwater recharge.

- b) Repair, maintenance, alteration, additions to, or reconstruction of existing lawful buildings, structures or utilities, including those that are lawfully non-conforming (a building permit may still be required).
- c) Dwellings, cottages, accessory buildings and structures, and associated land alteration that are clustered within a residential home plate not exceeding an area of 1000m², and one access driveway and overhead utility lines and poles outside of the residential home plate
- d) Land that is subject to a conservation covenant under section 219(4) of the Land Title Act in relation to natural, environmental, wildlife or plant life value relating to the land, granted to the Local Trust Committee or a covenantee designated under section 219(3)(c) of the Land Title Act.
- e) Repair and maintenance of existing roads, driveways, paths and trails, provided there is no expansion of the width or length of the road, driveway, path or trail, and no creation of additional impervious surfacing, including paving asphalting or similar surfacing.
- f) Removal of invasive species.
- g) Cutting and removal of up to 5 trees per hectare (with a trunk diameter greater than 20 centimetres measured 1.5 metres above the ground) within a 12-month period on any one lot.
- h) Removal of trees that have been examined by an arborist and certified to pose an immediate threat to life or property.
- i) Farm operations as defined in the *Farm Practices Protection (Right to Farm) Act* and farm uses as defined in Section 2(2), (3), (4) and (5) of the Agricultural Land Reserve Use, Subdivision, and Procedure Regulation.
- j) Forest management activities, as defined in the Private Managed Forest Land Regulation, on land classified as managed forest land under the *Private Managed Forest Land Act*.
- k) The construction of an accessory building or structure with a lot coverage of less than 100m².
- Construction of trails or fences that does not alter contours of the land.
- m) Emergency actions required to prevent, control or reduce an immediate threat to human life, the natural environment or public or private property including:
 - i. Forest fire protection measures;
 - ii. Flood and erosion protection works;
 - iii. Protection, repair or replacement of public facilities;
 - iv. Clearing of an obstruction from a bridge, culvert, dock wharf or stream; or
 - v. Bridge repairs.
- n) Works undertaken by a local government or a body established by a local government.
- o) Works authorized under a provincial statute.

p) Land owned by a person with federal Indigenous status living in their traditional territory with proof of Indigenous family lineage.

4.7 Guidelines

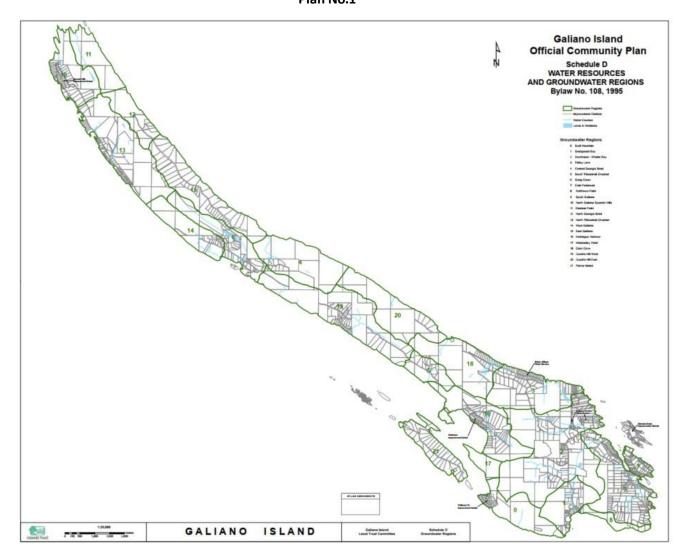
The Local Government Act prohibits construction of buildings and structures and the alteration of land and subdivision in Development Permit Area 4 unless the owner first obtains a development permit. Development permits will be issued in accordance with the following guidelines.

- 1. In general, development should minimize negative impacts on the quality and quantity of subsurface water supplies.
- 2. Where a qualified professional hydrogeologist or engineer has made recommendations for mitigation measures, the permit conditions may include a requirement for security in the form of an irrevocable letter of credit, to ensure the protection of groundwater supply quality or quantity consistent with the measures and recommendations described in the report.
- 3. Where the qualified professional hydrogeologist or engineer's report describes an area as suitable for development with special mitigating measures, the development permit should only allow the development to occur in compliance with the measures described in the report. Monitoring and regular reporting by a hydrogeologist or other professional at the applicant's expense may be required during construction and development phases, as specified in a development permit.
- 4. Where an application involves the subdivision of land, layout of the subdivision should be, to the greatest extent possible, designed to:
 - a) replicate the function of a naturally vegetated watershed;
 - b) maintain the hydraulic regime of surface and groundwater pre-development flow rates;
 - c) minimize interference with groundwater recharge;
 - d) not introduce or remove material where it would cause erosion of or the filling in of natural watercourses or wetlands.
- 5. Where freshwater collection and storage cisterns are required as a condition of the construction of a building, impervious surfaces should be minimized.
- 6. Where freshwater collection cisterns are required as a condition of construction of a building, the LTC may require that all new dwelling units include:
 - i. External equipment for collecting and distributing rainwater from the dwelling unit roof;
 - ii. A pumping system;
 - iii. An overflow handling system.
- 7. The use of impervious paved driveways shall be discouraged.
- 8. Where tree removal is not exempt from the requirement for a permit:

- a. Removal of trees from steep slopes should only be allowed where necessary and where replacement vegetation / erosion control measures are established. Plans delineating extent of vegetation / tree removal and location of proposed construction, excavation and / or blasting, may be required.
- b. All development should be undertaken and completed in such a manner as to prevent the release of sediment to any watercourse. An erosion and sediment control plan, including actions to be taken prior to land clearing and site preparation and the proposed timing of development activities to reduce the risk of erosion, may be required as part of the development permit application.
- c. Existing, native trees should be retained wherever possible and trees to be retained near development should be clearly marked prior to development, and temporary fencing installed at the drip line to protect them during clearing, grading and other development activities.
- d. If the area has been previously cleared of trees, or is cleared during the process of development, replanting requirements may be specified in the development permit. Areas of undisturbed bedrock exposed to the surface or natural sparsely vegetated areas should not require planting.
- e. Tree species used in replanting, restoration or enhancement should be selected to suit the soil, light and groundwater conditions of the site, should preferably be native to the area, and should be selected for erosion control and/or wildlife habitat values as needed. Suitably adapted, non-invasive, non-native trees may also be considered acceptable.
- f. All replanting should be maintained by the property owner for a minimum of 2 years from the date of completion of the planting to ensure survival. This may require removal of invasive, non-native weeds (e.g., Himalayan blackberry, Scotch broom, English ivy) and irrigation. Unhealthy, dying or dead trees should be replaced at the owner's expense in the next regular planting season. Permits may include, as a condition, the provision of security to guarantee the performance of terms of the permit.
- 9. Roads, driveways, trails and pathways should follow the contours of the land and appropriately manage drainage. The construction of roads and utility corridors and other activities involving the disturbance of the soil, must be conducted in such a manner that the productivity of the local groundwater recharge area is not impaired through soil compaction, altered surface drainage patterns, siltation, erosion, or salt water intrusion.
- 10. Parking areas should be located and constructed so as to minimize erosion and water pollution by controlling storm runoff. Structural measures such as catch basins, oil separators, bio- filtration trenches or swales, unpaved or permeable all-weather surfaces should be considered for this purpose.
- 11. Permits may include minor variances to subdivision or building and structure siting or size regulations to meet the objectives of the development permit area."
- 12. Section VI Development Approval Information, Subsection 2. Special Conditions "ii" is amended by deleting "elevated groundwater catchments" and replacing it with

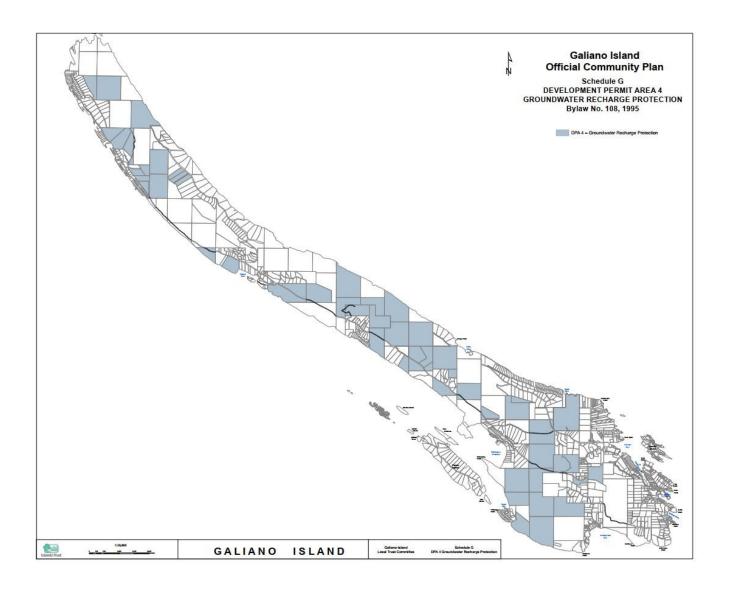
- "groundwater recharge".
- 13. Schedule "D Water Resources" is removed and replaced with Schedule "D Groundwater Regions" as shown on Plan No.1 attached and forming part of this bylaw.
- 14. Schedule "G Development Permit Area 4: Elevated Groundwater Catchment" is removed and replaced with Schedule "G Development Permit Area 4: Groundwater Recharge Protection" as shown on Plan No.2 attached and forming part of this bylaw.

GALIANO ISLAND LOCAL TRUST COMMITTEE BYLAW NO. 283 Plan No.1



GALIANO ISLAND LOCAL TRUST COMMITTEE BYLAW NO. 283 Plan No.2

Schedule G – Development Permit Area 4: Groundwater Recharge Protection



GL-BL-284

PROPOSED

GALIANO ISLAND LOCAL TRUST COMMITTEE BYLAW NO. 284

A BYLAW TO AMEND GALIANO ISLAND LAND USE BYLAW, NO. 127, 1999

The Galiano Island Local Trust Committee, being the Local Trust Committee having jurisdiction in respect of the Galiano Island Local Trust Area under the *Islands Trust Act*, enacts as follows:

1. Citation

This bylaw may be cited for all purposes as "Galiano Island Land Use Bylaw No. 127, 1999, Amendment No. 1, 2022".

- 2. Galiano Island Local Trust Committee Bylaw No. 127, cited as "Galiano Island Land Use Bylaw No. 127, 1999," is amended as follows:
- 2.1 Section 2 General Regulations, Subsection 2.28—Secondary Suites is amended by removing 2.28.6 in entirety and replacing it with "2.28.6 A building permit for a property outside a water service area shall not be issued for a secondary suite unless a freshwater catchment and storage system having a capacity of at least 18,000 litres is installed on the property."
- 2.2 Section 2 General Regulations is amended by inserting "Cistern Requirements" as a new heading under Section 2.28.
- 2.3 Section 2 General Regulations is amended by inserting, under the heading "Cistern Requirements" the following:
 - "2.29 A building permit for a property outside a water service area shall not be issued for a new building to be used as a dwelling, including a cottage, unless a cistern (or combination of cisterns) for the storage of freshwater having a capacity of at least 18,000 litre is installed on the property.
 - 2.30 The floor area occupied by any cistern located in a building and the housing provided for such cistern is excluded from the calculation of the floor area of the building and the lot coverage of the lot on which it is located."
- 2.4 Section 13 Subdivision and Development Regulations 13.23 is amended by removing "16,000" and replacing it with "18,000".
- 2.5 Section 13 Subdivision and Development Regulations is amended by deleting 13.24 through 13.29 in its entirety and replacing it with the following and by making such consequential numbering alterations to effect this change.

"Standards for Potable Water Supply

Information Note: If more than one dwelling unit is connected to the same source of water,

the water system may be subject to the Drinking Water Protection Act, the Water Utility Act or other regulations pertaining to water supply systems.

Information Note: Water obtained from a stream, or non-domestic groundwater use

requires a licence under the Water Sustainability Act.

13.24 Where potable water is proposed to be supplied to lots in a subdivision by an established community water system, the applicant for subdivision must provide written confirmation from the community water system that it is able to supply potable water for the permitted principal use and density to each lot.

- 13.25 Where potable water is proposed to be supplied to lots in a subdivision by creating a community water system, the applicant for subdivision must provide proof of all authorizations required under the *Drinking Water Protection Act*, the *Water Utility Act* or any other enactment pertaining to water supply systems.
- 13.26 Where potable water is proposed to be supplied to lots in a subdivision from a stream, the applicant for subdivision must provide proof of authorization in the form of a water licence confirming that the total volume of water granted to the licence holder is able to supply potable water for domestic uses at the volume specified in Table 1 to each lot.
- 13.27 Where potable water is proposed to be supplied to lots in a subdivision by drilled wells the applicant for subdivision must provide written certification under seal of a hydrogeologist that:
 - a. Each well has been constructed in accordance with the *Groundwater Protection Regulation*;
 - b. Each well has been constructed in accordance with Sections 13.29, 13.30 and 13.31;
 - c. Each well has sufficient available groundwater to provide the daily required volume of potable water for the permitted domestic uses on each lot in accordance with Table 1;
 - d. Each well for which a water licence has not been issued has sufficient available groundwater volume for all permitted non-domestic, non-agricultural, nonpark, non-conservation area principal uses for each lot at the permitted density of use; and
 - e. Includes recommendations for mitigation measures, if applicable, to ensure long-term sustainable yield of the drilled well.

| TABLE 1 DOMESTIC POTABLE WATER SUPPLY STANDARDS FOR SUBDIVISION | | |
|---|----------------------------|--|
| USE | VOLUME (litres per day) | |
| Per lot (including one dwelling) | 2000 | |
| Each additional permitted dwelling and cottage per lot | 2000 | |

- 13.28 Where the potable water is proposed to be supplied to lots in a subdivision by drilled wells, for any well where a water licence has not been issued the applicant for subdivision must also provide written certification under seal of a hydrogeologist:
 - a. Results of a water quality analysis, completed by an accredited laboratory;
 - b. A plan of the proposed subdivision indicating the location where each water sample was taken;
 - c. A statement that the water samples upon which the water quality analysis was performed were unadulterated samples taken from the locations indicated on the plan.
 - d. Confirmation, based on the accredited laboratory water quality analysis, that each proposed water supply source is potable, or can be made potable, with a treatment system; and
 - e. Confirmation, based on the accredited laboratory water quality analysis of chloride concentrations, that each drilled well is not likely to be affected by the intrusion of saline groundwater or sea water in accordance with the Province of British Columbia guidance documents.
- 13.29 Where a water license has not been issued and where potable water is proposed to be supplied to lots in a subdivision by a drilled well, a pumping test shall be carried out on each well in a proposed subdivision by:
 - a. pumping groundwater, at a constant rate, for a minimum period of 12 hours; and
 - b. withdrawing the total daily required volume specified in section 13.27 over a maximum period of 24 hours; and
 - c. monitoring groundwater levels continuously during the pumping test and during the recovery period.
- 13.30 Where potable water is to be supplied by a drilled well a sounding tube or wellhead port must be installed to enable the insertion of water level monitoring equipment.
- 13.31 Drilled wells used for the purposes of subdivision must not be located within 50 metres of the natural boundary of the sea.
- 13.32 If the daily required volume of potable water cannot be supplied in accordance with Section 13.24 or if the certification in Subsections 13.27(c) and 13.27(d) cannot be made, the Approving Officer may nonetheless approve the subdivision provided that the applicant grants a s.219 covenant to the Galiano Island Local Trust Committee and the Capital Regional District that restricts the development of the subdivision to the uses or density of the uses for which a certification has been made under

GL-BL-284

- Sections 13.24 or 13.27.
- 13.33 Where the certification under subsection 13.28(d) states that a water supply is not potable but can be made potable with a treatment system, the Approving Officer may approve subdivision provided that the applicant grants a s. 219 covenant under the *Land Title Act* to the Galiano Island Local Trust Committee and the Capital Regional District that requires on-going treatment of the water to potable water standards recommended by a hydrogeologist.
- 13.34 For the purposes of subdivision, drilled wells impacted by seawater intrusion or whose operation is likely to cause seawater intrusion are not permitted sources of potable water.
- 13.35 For the purposes of subdivision, alternative potable water supplies including, but not limited to, shallow dug wells, rainwater catchment and desalination are not permitted sources of potable water.
- 13.36 The requirements of Sections 13.24-13.35 do not apply where the proposed subdivision is a boundary adjustment that does not result in an increase in the number of lots or permitted dwelling units, provided that all lots in the subdivision are currently serviced by existing wells, community water system connection or water licence.
- 2.6 Section 17 Interpretation, Subsection 17.1 Definitions, is amended by inserting the following in alphabetical order:

"aquifer" means a geological formation; or a group of geological formations, or a part of one or more geological formations that is groundwater bearing and capable of storing, transmitting and yielding groundwater.

"groundwater" means water naturally occurring below the surface of the ground.

"Hydrogeologist" means an engineer or geoscientist with competency in the field of hydrogeology, regulated under the Professional Governance Act, Engineers and Geoscientists Regulation.

"potable" means water that is safe to drink, fit for domestic purposes and meets the Heath Canada Guidelines for Canadian Drinking Water Quality or any guidance documents or legislation which may be enacted in substitution.

"pumping test" means a flow test to determine the long-term sustainable yield of a well, conducted under supervision of a hydrogeologist, and that is consistent with the British Columbia Guide to Conducting Pumping Tests, Guidance for Technical Assessments in Support of an Application for Groundwater Use in British Columbia, other guidance documents which may be issued, applicable legislation, and consists of pumping groundwater from a well typically for 12 to 72 hours depending on aquifer characteristics.

2.7 Section 17 Interpretation, Subsection 17.1 Definitions, is amended by removing the definition of "community water system" in its entirety and replacing it with:

""community water system" means a system of waterworks that serves more than one lot and is owned, operated and maintained by an improvement district, a regional district, a water utility, a society, or a water supplier."

2.8 Section 17 Interpretation, Subsection 17.1 Definitions, is amended by adding the following in alphabetical order:

"aquifer" means a geological formation; or a group of geological formations, or a part of one or more geological formations that is groundwater bearing and capable of storing, transmitting and yielding groundwater.

"groundwater" means water naturally occurring below the surface of the ground.

"Hydrogeologist" means an engineer or geoscientist with competency in the field of hydrogeology, regulated under the *Professional Governance Act*, Engineers and Geoscientists Regulation.

"potable" means water that is safe to drink, fit for domestic purposes and meets the Heath Canada Guidelines for Canadian Drinking Water Quality or any guidance documents or legislation which may be enacted in substitution.

"pumping test" means a flow test to determine the long-term sustainable yield of a well, conducted under supervision of a hydrogeologist, and that is consistent with the British Columbia Guide to Conducting Pumping Tests, Guidance for Technical Assessments in Support of an Application for Groundwater Use in British Columbia, other guidance documents which may be issued, applicable legislation, and consists of pumping groundwater from a well typically for 12 to 72 hours depending on aquifer characteristics.

2.9 Section 17 Interpretation, Subsection 17.1 Definitions, is amended by removing the definition of "community water system" in its entirety and replacing it with:

""community water system" means a system of waterworks that serves more than one lot and is owned, operated and maintained by an improvement district, a regional district, a water utility, a society, or a water supplier."

3. SEVERABILITY

If any provision of this Bylaw is for any reason held to be invalid by a decision of any Court of competent jurisdiction, the invalid provision must be severed from the Bylaw and the decision that such provision is invalid must not affect the validity of the remaining provisions of the Bylaw.

| READ A FIRST TIME THIS | 14 TH | DAY OF | MARCH | 2023. |
|--------------------------------|------------------|--------------|-------|-------|
| PUBLIC HEARING HELD THIS | | DAY OF | | 20 |
| READ A SECOND TIME THIS | | DAY OF | | 20 |
| READ A THIRD TIME THIS | | DAY OF | | 20 |
| APPROVED BY THE EXECUTIVE COMI | MITTEE OF THE I | SLANDS TRUST | THIS | |
| | | DAY OF | | 20 |
| ADOPTED THIS | | DAY OF | | 20 |
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| CHAIR | | SECRETARY | | |