



STAFF REPORT

File No.: 2021 Groundwater
Implementation

DATE OF MEETING: February 7, 2023
TO: Galiano Island Local Trust Committee
FROM: Narissa Chadwick, Island Planner
Southern Team
COPY: Robert Kojima, Regional Planning Manager
Kim Stockdill, Island Planner
SUBJECT: Groundwater Implementation: Bylaws 283 and 284 First Reading

RECOMMENDATION

1. That the Galiano Island Local Trust Committee Bylaw No.283 cited as “Galiano Island Official Community Plan Bylaw No. 108, 1995, Amendment No. 1, 2022” be read for the first time.
2. That the Galiano Island Local Trust Committee Bylaw No. 284 cited as “Galiano Island Land Use Bylaw No. 127, 1999, Amendment No. 1, 2022” be read for the first time.
3. That the Galiano Island Local Trust Committee has reviewed the Islands Trust Policy Statement Directives Only Checklist and determined that Bylaw No.283 cited as “Galiano Island Official Community Plan Bylaw No. 108, 1995, Amendment No. 1, 2022” and Bylaw No. 284 cited as “Galiano Island Land Use Bylaw No. 127, 1999, Amendment No. 1, 2022” are not contrary to or at variance with the Islands Trust Policy Statement.
4. That the Galiano Island Local Trust Committee request staff schedule a public hearing for Bylaws No. 283 and 284 before March 31, 2023.

REPORT SUMMARY

This report presents Bylaw No. 283 and Bylaw No. 284 for first reading.

BACKGROUND

At the December 5, 2022 meeting staff provided the Galiano LTC with background on the Galiano Groundwater Sustainability Implementation Project, an overview of the methodology used to identify the proposed boundaries for a Groundwater Protection DPA and related draft Bylaws that had been endorsed by the previous LTC.

At the December 5, 2022 LTC meeting the LTC supported moving to first reading with the following resolution: *That the Galiano Island Local Trust Committee Bylaw No.283 cited as “Galiano Island Official Community Plan Bylaw No. 108, 1995, Amendment No. 1, 2022” and the Galiano Island Local Trust Committee Bylaw No. 284 cited as “Galiano Island Land Use Bylaw No. 127, 1999, Amendment No. 1, 2022” be brought forward for consideration of first reading and scheduling of a public hearing at the next regular LTC meeting.*

Draft Bylaws No. 283 and No. 284 are attached. The bylaw amendments are comprised of:

1. Bylaw 284 - Amendments to the Land-Use Bylaw (Attachment 2)

- 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 potable or 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 model bylaw for the Southern Gulf Islands. These regulations have been extensively reviewed by provincial staff through a multi-year project of the Salt Spring Islands LTC.

2. Bylaw 283 - General Amendments to OCP (Attachment 1)

- Minor changes to 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 Schedule D – Groundwater Regions.
- Replacement of Schedule G – DPA Area 4: Elevated Groundwater Catchment, with DPA 4: Groundwater Recharge Protection.

3. Bylaw 283- A Groundwater Recharge Protection DPA (Attachment 1)

- New DPA guidelines which would amend the DPA guidelines for Galiano’s Elevated Groundwater Catchment DPA. Amendments include: reference to 2021 mapping of recharge areas, additional exemptions including clustering development and professional reliance, 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.

All related staff reports can be found here: <https://islandstrust.bc.ca/island-planning/galiano/projects/> .

ANALYSIS

Islands Trust Policy Statement:

The proposed amendments are consistent with the Islands Trust Policy Statement.

The Policy Statement Directives Checklist is included as Attachment 3 and will need to be endorsed by the LTC if the LTC gives first reading to the draft bylaws. The checklist will then be forwarded to the Executive Committee with the bylaws after third reading.

Official Community Plan:

The inclusion of a new development permit area for groundwater protection will be the most significant amendment to the OCP. Minor language changes and updates to relevant policies have been made to ensure consistency throughout the OCP.

Land Use Bylaw:

Updates to definitions have been made to support consistency with the amendments related to cisterns, capture and storage of freshwater and proposed proof of water for subdivision regulations.

Islands Trust Conservancy :

The proposed amendments do not impact Islands Trust Conservancy interests.

Consultation

As the project involves an OCP amendment, the LTC is required by the *Local Government Act* to consider opportunities for consultation with persons, organizations and authorities it considers will be affected. The LTC should consider if it wishes to undertake consultation additional to what has been identified above and direct staff accordingly. By resolution the LTC may also refer the draft bylaw to the Advisory Planning Commission.

Agencies

The draft bylaws will be referred to the following agencies:

Ministry of Municipal Affairs	
Ministry of Water Land and Natural Resources – Water Stewardship Branch	Mayne Island Local Trust Committee
CRD - Building Inspection	Salt Spring Island Local Trust Committee
	Thetis Island Local Trust Committee
	Islands Trust – Bylaw Enforcement

First Nations

The draft bylaws will be referred to the following First Nations:

Cowichan Tribes	Semiahmoo First Nation
Halalt First Nation	Snuneymuxw First Nation
Lake Cowichan First Nation	Stz'uminus First Nation
Lyackson First Nation	Tsartlip First Nation
Malahat First Nation	Tsawout First Nation
Musqueam Indian Band	Tsawwassen First Nation
Pauquachin First Nation	Tseycum First Nation
Penelakut Tribe	WSANEC Leadership Council

Rationale for Recommendation

The draft bylaws are designed to support the sustainability of freshwater into the future. The staff recommended DPA boundary based on 5 hectares of critical aquifer recharge area coverage (excluding parks and protected areas that are exempt from the DPA) will provide a substantial amount of protection without burdening small lot property owners with a process that may have limited impact (a number of smaller lots may be in areas that are already disturbed). In addition, including smaller lots will require additional staff time for application processing.

ALTERNATIVES

1. Identify DPA boundaries that are alternative to staff recommendations

The LTC may decide not to support staff recommendation support the DPA boundary which includes lots covered by 5hectares or more of critical aquifer recharge area.

That the Galiano Island Local Trust Committee endorse Bylaw No.283 cited as “Galiano Island Official Community Plan Bylaw No. 108, 1995, Amendment No. 1, 2022” with Schedule G including the Groundwater Recharge Protection Development Permit Area boundaries based on X hectares of lot coverage excluding areas designated as park or conservation.

2. The LTC make changes to the proposed bylaws before first reading

The LTC can make changes to the Bylaws before first reading. The changes will need to be specified in the resolution.

That the Galiano Island Local Trust Committee Draft Bylaw No.283 cited as “Galiano Island Official Community Plan Bylaw No. 108, 1995, Amendment No. 1, 2022” be amended

That the Galiano Island Local Trust Committee Bylaw No.284 cited as “Galiano Island Official Community Plan Bylaw No. 108, 1995, Amendment No. 1, 2022” be amended

3. Request further information prior to first reading

The LTC may request further information before moving to first reading. The LTC needs to specify what they would like further information on.

That the Galiano Island Local Trust Committee request further information related to.....

NEXT STEPS

If the recommendations are supported by the LTC staff will:

- Refer the bylaws to relevant agencies and First Nations
- Schedule Public Hearing
- Provide the LTC with a staff report including all comments received
- Present bylaws to LTC for Second and Third reading

Submitted By:	Narissa Chadwick, RPP Island Planner	January 25, 2023
Concurrence:	Robert Kojima, Regional Planning Manager	January 26, 2023

ATTACHMENTS

1. Draft Bylaw 283 (OCP)
2. Draft Bylaw 284 (LUB)
3. Policy Statement Directives Checklist

DRAFT

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.

READ A FIRST TIME THIS	_____	DAY OF	_____	20__
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 COMMITTEE OF THE ISLANDS TRUST THIS	_____	DAY OF	_____	20__
APPROVED BY THE MINISTER MUNICIPAL AFFAIRS THIS	_____	DAY OF	_____	20__
ADOPTED THIS	_____	DAY OF	_____	20__

CHAIR

SECRETARY

**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 asphaltting 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.
- l) 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, flood and erosion protection works;
 - ii. Protection, repair or replacement of public facilities;
 - iii. Clearing of an obstruction from a bridge, culvert, dock wharf or stream; or
 - iv. Bridge repairs.
- n) Works undertaken by a local government or a body established by a local government.
- o) Works authorized under a provincial statute.

4.7 Guidelines

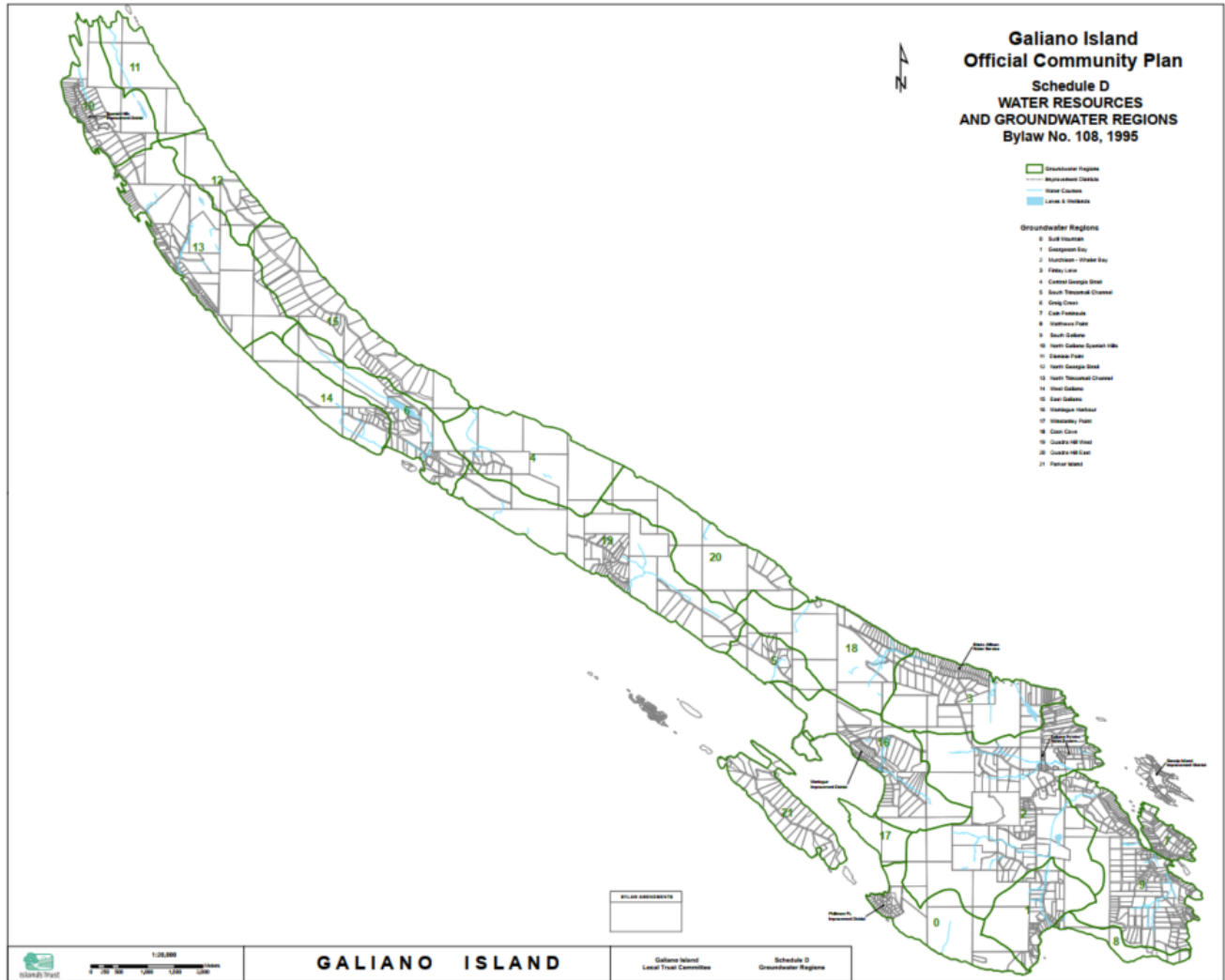
The *Local Government Act* prohibits construction of buildings and structures and the alteration of land and subdivision in Development Permit Area 4 unless the owner first obtains a development permit. Development permits will be issued in accordance with the following guidelines.

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.

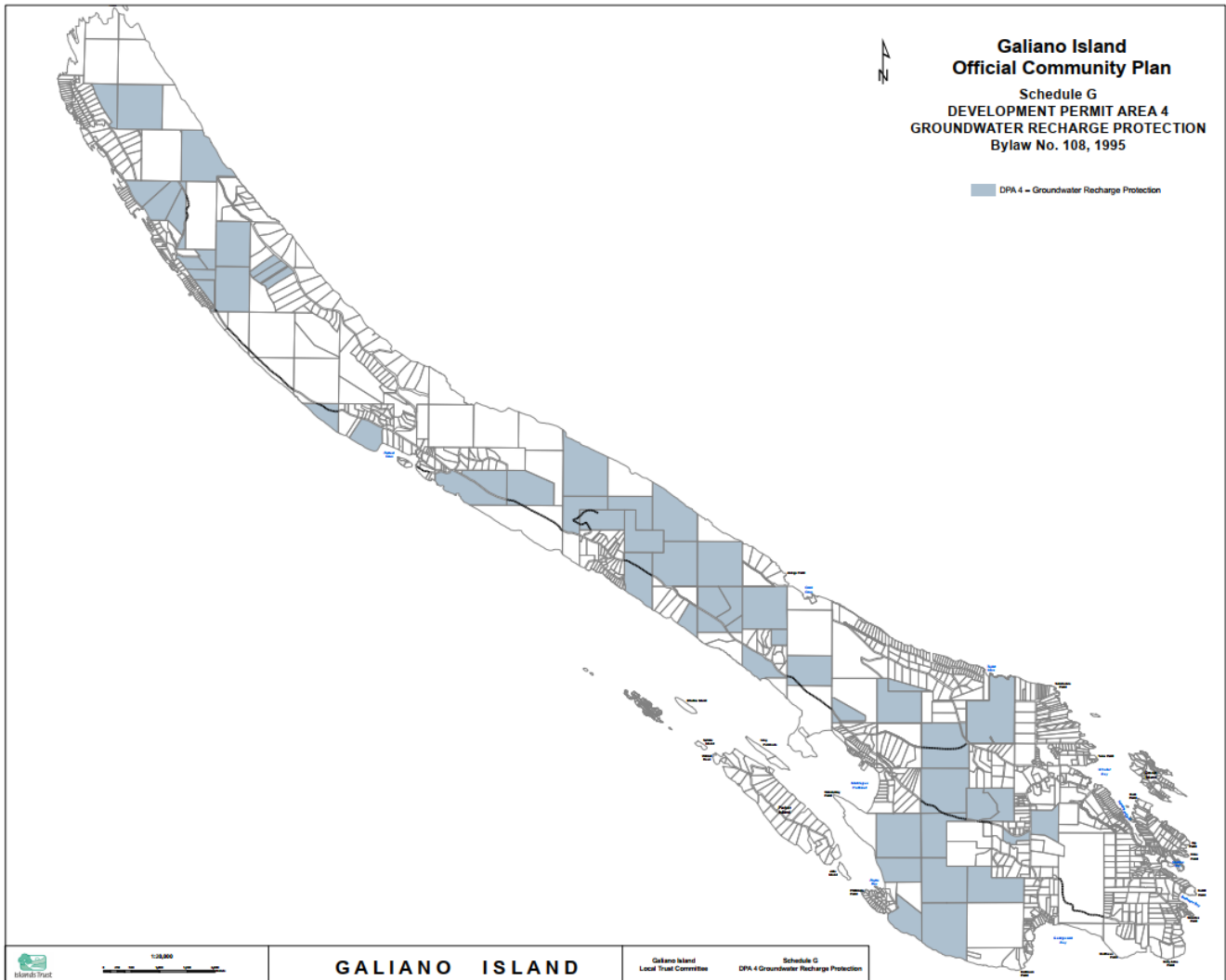
14. Schedule "G – Development Permit Area 4: Elevated Groundwater Catchment" is removed and replaced with Schedule "G – Development Permit Area 4: Groundwater Recharge Protection" as shown on Plan No.2 attached and forming part of this bylaw.

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



DRAFT

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:
- Each well has been constructed in accordance with the *Groundwater Protection Regulation*;
 - Each well has been constructed in accordance with Sections 13.29, 13.30 and 13.31;
 - 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;
 - Each well for which a water licence has not been issued has sufficient available groundwater volume for all permitted non-domestic, non-agricultural, non-park, non-conservation area principal uses for each lot at the permitted density of use; and
 - 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)
<i>Per lot (including one dwelling)</i>	2000

<i>Each additional permitted dwelling and cottage per lot</i>	2000
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- 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 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 Health 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.”

are currently serviced by existing wells, community water system connection or water licence.”

- 2.5 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 Health 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.

- 2.6 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.”



ISLANDS TRUST POLICY STATEMENT DIRECTIVES ONLY CHECKLIST

File Name: 2021 Groundwater
Implementation

PURPOSE

To provide staff with the Directives Only Checklist to highlight issues addressed in staff reports and as a means to ensure Local Trust Committees address certain matters in their official community plans and regulatory bylaws, Island Municipalities address certain matters in their official community plans, and to reference any relevant sections of the Policy Statement.

POLICY STATEMENT

The Policy Statement is comprised of several parts. Parts I and II outline the purpose, the Islands Trust object, and Council's guiding principles. Parts III, IV and V contain the goals and policies relevant to ecosystem preservation and protection, stewardship of resources and sustainable communities.

There are three different kinds of policies within the Policy Statement as follows:

- Commitments of Trust Council which are statements about Council's position or philosophy on various matters;
- Recommendations of Council to other government agencies, non-government organizations, property owners, residents and visitors; and
- Directive Policies which direct Local Trust Committees and Island Municipalities to address certain matters.

DIRECTIVES ONLY CHECKLIST

The Policy Statement Directives Only Checklist is based on the directive policies from the Policy Statement (Consolidated April 2003) which require Local Trust Committees to address certain matters in their official community plans and regulatory bylaws and Island Municipalities to address certain a matters in their official community plans in a way that implements the policy of Trust Council.

Staff will use the Policy Statement Checklist (Directives Only) to review Local Trust Committee and Island Municipality bylaw amendment applications and proposals to ensure consistency with the Policy Statement. Staff will add the appropriate symbol to the table as follows:

- ✓ if the bylaw is consistent with the policy from the Policy Statement, or
- ✗ if the bylaw is inconsistent (contrary or at variance) with a policy from the Policy Statement, or
- N/A if the policy is not applicable.

	4.3	Wildlife and Vegetation
	4.4	Freshwater Resources
✓	4.4.2	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, 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, water quality is maintained, and existing, anticipated and seasonal demands for water are considered and allowed for.
N/A	4.4.3	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address measures that ensure water use is not to the detriment of in-stream uses
	4.5	Coastal Areas and Marine Shorelands
N/A	4.5.8	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the needs and locations for marine dependent land uses.
N/A	4.5.9	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the compatibility of the location, size and nature of marinas with the ecosystems and character of their local planning areas.
N/A	4.5.10	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the location of buildings and structures so as to protect public access to, from and along the marine shoreline and minimize impacts on sensitive coastal environments.
N/A	4.5.11	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address opportunities for the sharing of facilities such as docks, wharves, floats, jetties, boat houses, board walks and causeways.
	4.6	Soils and Other Resources
N/A	4.6.3	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the protection of productive soils.

PART V: POLICIES FOR SUSTAINABLE COMMUNITIES

CONSISTENT	No.	DIRECTIVE POLICY
	5.1	Aesthetic Qualities
N/A	5.1.3	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the protection of views, scenic areas and distinctive features contributing to the overall visual quality and scenic value of the Trust Area.
	5.2	Growth and Development
N/A	5.2.3	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address policies related to the aesthetic, environmental and social impacts of development.
✓	5.2.4	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address any potential growth rate and strategies for growth management that ensure that land use is compatible with preservation and protection of the environment, natural amenities, resources and community character.
N/A	5.2.5	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address means for achieving efficient use of the land base without exceeding any density limits defined in their official community plans.
N/A	5.2.6	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the identification of areas hazardous to development, including areas subject to flooding, erosion or slope instability, and strategies to direct development away from such hazards.
	5.3	Transportation and Utilities
N/A	5.3.4	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the development of a classification system of rural roadways, including scenic or heritage road designations, in recognition of the object of the Islands Trust.
N/A	5.3.5	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the impacts of road location, design, construction and systems.
N/A	5.3.6	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the designation of areas for the landing of emergency helicopters.
N/A	5.3.7	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the development of land use patterns that encourage establishment of bicycle paths and other local and inter-community transportation systems that reduce dependency on private automobile use.
	5.4	Disposal of Waste
N/A	5.4.4	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the identification of acceptable locations for the disposal of solid waste.
CONSISTENT	No.	DIRECTIVE POLICY

	5.5	Recreation
N/A	5.5.3	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the prohibition of destination gaming facilities such as casinos and commercial bingo halls.
N/A	5.5.4	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the location and type of recreational facilities so as not to degrade environmentally sensitive areas, and the designation of locations for marinas, boat launches, docks and anchorages so as not to degrade sensitive marine or coastal areas.
N/A	5.5.5	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the identification of sites providing safe public access to beaches, the identification and designation of areas of recreational significance, and the designation of locations for community and public boat launches, docks and anchorages.
N/A	5.5.6	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the identification and designation of areas for low impact recreational activities and discourage facilities and opportunities for high impact recreational activities.
N/A	5.5.7	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the planning for bicycle, pedestrian and equestrian trail systems.
	5.6	Cultural and Natural Heritage
N/A	5.6.2	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the identification, protection, preservation and enhancement of local heritage.
N/A	5.6.3	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the preservation and protection of the heritage value and character of historic coastal settlement patterns and remains.
	5.7	Economic Opportunities
N/A	5.7.2	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address economic opportunities that are compatible with conservation of resources and protection of community character.
	5.8	Health and Well-being
N/A	5.8.6	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address their community's current and projected housing requirements and the long-term needs for educational, institutional, community and health-related facilities and services, as well as the cultural and recreational facilities and services.

	POLICY STATEMENT COMPLIANCE
✓	<i>In compliance with Trust Policy</i>
	<i>Not in compliance with Trust Policy for the following reasons:</i>