

**REGIONAL DISTRICT OF NANAIMO
BYLAW NO. 1469.02**

**A BYLAW TO AMEND REGIONAL DISTRICT OF NANAIMO
FLOODPLAIN MANAGEMENT BYLAW NO. 1469, 2006**

The Board of the Regional District of Nanaimo, in open meeting assembled, enacts as follows:

- A. This Bylaw may be cited as “Regional District of Nanaimo Floodplain Management Amendment Bylaw No. 1469.02, 2018”.
- B. The “Regional District of Nanaimo Floodplain Management Bylaw No. 1469, 2006” is hereby amended as follows:
 1. Under “WHEREAS Section 910...” delete the words “Section 910” and replace it with the words “Section 524”;
 2. Under “AND WHEREAS the Regional District...” delete the words “Provincial Guidelines” and replace it with the words “Provincial Flood Hazard Area Land Use Management Guidelines, 2004, as amended from time to time.”
 3. Under the heading **Application**, Section 2, replace the words “Section 694” with the words “Section 298”.
 4. Under the heading **Interpretation**, Section 4:
 - a. add the following new paragraph after the last sentence of the definition **Designated Flood Level**:

“In marine coastal areas, the designated flood level includes the appropriate allowance for future sea level rise, tide and the total storm surge expected during the designated storm.”
 - b. add the following new definition after **Designated Flood Level**:

“**Designated Storm** means a storm that occurs in any given year, of such a magnitude as to equal a storm having the designated annual exceedance probability, where the probability of a particular event being equal or exceeded in any one year.”
 - c. add the following new definition after **Regional District**:

“**Sea** means The Strait of Georgia”
 5. Under the heading **Setback Requirements**, Section 13:
 - a. replace the words “Section 910(4)” with the words “Section 524(6)”
 - b. delete Subsection 13.c and replace with the following:

“c. within fifteen (15) metres from the Natural Boundary of the sea;”

- c. delete Subsection 13.d and replace with the following:
 - “d. where a building site is at the top of a bank that is 30 degrees or more from horizontal and where the toe of the bank is subject to erosion and is closer than 15 metres from a Natural Boundary, the Setback shall be a horizontal distance from the top of bank equal to 3 times the height of the bank as measured from the toe of the bank;”
 - d. delete Subsection 13.e and replace with the following:
 - “e. on existing lots where the sea frontage is protected from erosion by a natural bedrock formation, the property owner may apply to modify the setback requirements as recommended by a professional engineer that demonstrates that future coastal influences have been considered, and includes a liability disclaimer. If approved, a restrictive covenant would be registered under Section 219 of the Land Titles Act, which include indemnity in favour of the Regional District;”
6. Under the heading **Flood Construction Level:**
- a. replace the words “Section 910(4)” with the words “Section 524(6)” in Subsection 14;
 - b. delete the words “the sea” from Subsection 14.c;
 - c. add the following new subsection after Subsection 14.c:
 - “d. for all applications for new building and construction within marine coastal areas, within a distance of 100 meters of the sea that are subject to, or likely to be subject to, flooding resulting from high tides, storm surges and wave effects, the property owner is to provide a report from a professional engineer:
 - i. to confirm that the land may be used safely for the intended purpose, where the Flood Construction Level is based on a minimum allowance for future sea level rise to the year 2100, and
 - ii. be prepared in accordance with the Provincial Flood Hazard Area Land Use Management Guidelines and the Engineers and Geoscientists of BC’s Professional Practice Guidelines - Legislated Flood Assessments in a Changing Climate, as amended from time to time.”
 - d. insert the following new section after Section 15:
 - “16. Subject to Section 14, except as permitted in Section 18 of this Bylaw, prior to a Building Permit being issued, a Section 219 covenant may be registered on the title of the property with the professional engineer’s report attached. The covenant shall notify future owners of the property of the susceptibility to flooding, and hold the RDN harmless from future claims and damages.”

7. Insert the following new heading and section before the “**General Flood Construction Level Exemptions**” heading:

“Construction Design and Wetproofing

17. Subject to Section 14 of this Bylaw, general requirements for design considerations in wetproofing are as follows:

- a. For buildings constructed on a designated floodplain, construction of the buildings to flood construction level requirements shall be achieved under the supervision of a professional engineer, and to the satisfaction of the Manager, by:
 - i. the structural elevation of the floor system of the Habitable Area of the building,
 - ii. the use of adequately compacted fill, or
 - iii. a combination of structural elevation of the Habitable Area and compacted fill protected from scour and erosion, and an engineer must certify the suitability of the landfill or structure for the intended use.
- b. No person shall install furnaces, electrical switchgear, electrical panels, fire protection systems or other fixed building services susceptible to flood damage, below the flood construction level, unless such services are protected from flood damage and accessible for servicing during a flood, to the satisfaction of the Manager.”

8. Under the heading **General Flood Construction Level Exemptions** delete Section 16 and replace with the following:

“18. Section 524(6)(a) of the **Local Government Act** and Section 14 of this Bylaw do not apply to:

- a. a renovation of an existing building or structure that does not involve an addition thereto;
- b. minor addition to existing buildings or structures, at the original non-conforming floor elevation, to a maximum of 25 percent of the existing ground floor area that was existing on February 11, 1992, if:
 - i. the number of dwelling units is not increased,
 - ii. there is no further encroachment into the setback area required by this Bylaw, and
 - iii. there is no further reduction in the Flood Construction Level.
- c. a building or that portion of a building to be used for non-habitable uses, including a garage or carport;
- d. a non-residential accessory building or structure, such as wood shed, recreational shelter, and other outdoor recreational facilities not susceptible to flood damage;

- e. on-loading and off-loading facilities associated with water oriented industry and portable sawmills provided the main electrical switchgear is placed above the Flood Construction Level;
- f. that portion of a building used as crawl space (not exceeding 1.5 metres in height);
- g. farm buildings other than dwelling units and closed sided livestock housing;
- h. closed sided livestock housing provided that the underside of the floor system or the top of a slab or Pad of any area to be occupied by livestock is located no lower than 1.0 metre above the natural ground elevation taken at any point on the perimeter of the building, or no lower than the Flood Construction Levels specified in this Bylaw, whichever is the lesser."

9. Under the heading **Site Specific Exemptions Applications:**

- a. replace the words "Section 910(5)" with the words "Section 524(7)" in Section 17 and renumber the section to Section "19".
- b. replace the words "Section 910(4)" with the words "Section 524(6)" in Section 18 and renumber the section to Section "20".
- c. delete Subsection 18.b and replace with the following:
 - "b. a professional engineer or geoscientist with experience in geotechnical engineering certifies that the property can be safely used for the intended use and, certifies protection from a 1 in 200 year flood for riverine systems can be achieved, and where applicable, protection from sea level rise to year 2100;"
- d. delete Subsection 18.c and replace with the following:
 - "c. the professional engineer or geoscientist providing the certification required under Section 20.b. of this Bylaw, provides a completed Flood Hazard and Risk Assurance Statement and information identified in Schedule D; and"

10. Under **Schedule "D", Information Required with a Site Specific Exemption Application:**

- a. delete Section **1. Quality Assurance Statement** and replace with the following:

"1. Quality Assurance Statement

The Professional Engineer should carry out quality assurance/quality control for all phases the investigation in the preparation of a flood hazard assessment report.

- (1) A assessment report is required to confirm that the land may be used safely for the intended use without undue risk of hazards. The professional engineer shall inspect the property, supervise the site investigation and the assessment report shall clearly state all relevant restrictions, conditions and/or limitations to the proposed development of the land.
 - (2) The report is to be prepared in accordance with the BC Provincial Flood Hazard Area Land Use Management Guidelines and the Engineers and Geoscientists of BC Professional Practice Guidelines - Legislated Flood Assessments in a Changing Climate in BC, August 2018, as amended from time to time.
 - (3) The report is to be accompanied with a completed Flood Assurance Statement. The Statement is to be read and completed in conjunction with the Engineers and Geoscientists BC Professional Practice Guidelines – Legislated Flood Assessment in a Changing Climate BC, as amended from time to time.”
- b. insert the following new subsection under the heading **2. General Requirements**, after Subsection (3), and renumber the remaining subsections accordingly:
- “(4) Evaluate the development plans for the property using the relevant Regional District land use and subdivision bylaws and Development Permit guidelines to determine the suitability of the land to accommodate the use intended.”
- c. delete the words “from the natural boundary of watercourses” from Subsection (12);
- d. insert the word “Provincial” before the words “Guidelines have been considered.” to Subsection (14);
- e. insert the word “Provincial” before the words “Guidelines were considered in the process.” to Subsection (18);

Introduced and read two times this 16th day of October 2018.

Read a third time this ____ day of _____ 20XX.

Adopted this ____ day of _____ 20XX.

CHAIR

CORPORATE OFFICER