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Floodplain Report Guide

This document is intended to provide guidance for engineered reports prepared in accordance with the Floodplain Management Bylaw No. 600 and the *Flood Hazard Area Land Use Management Guidelines.* The Comox Valley Regional District (CVRD) as a local government has the ability to designate floodplains, require a professional report in support of proposals to build within floodplains, and approve or deny exemptions to the Floodplain Management Bylaw No. 600 per Section 524 of the *Local Government Act.* When writing an engineered floodplain report, please ensure that all the information below is explicitly referenced.

Summary

- Summary of proposed development.
- Description of the existing state of the property/property characteristics.
- indication that these three documents were referenced in the preparation of the report:
 - o CVRD Floodplain Management Bylaw No. 600, 2020
 - Provincial *Flood Hazard Area Land Use Management Guidelines*
 - EGBC Professional Practice Guidelines <u>Natural Hazards: Legislated Flood</u> <u>Assessments in a Changing Climate in BC</u>
- If the report is in support of an application for exemption from the bylaw.

Flood Construction Level

The prescribed 2100-year Flood Construction Level (FCL) (per provincial guidelines), including all figures used in this calculation (usually shown in a table)

- If using the **combined method**, this will include the higher high water, large tide (HHWLT), regional adjustment (RA) or uplift, storm surge (SS), wave effect (WE), an accounting of sea level rise (SLR) and freeboard (FB) to account for rounding errors.
- If using the **probabilistic method**, this will include an accounting of SLR, RA (or uplift), FB to account for rounding errors, and the annual exceedance probability (AEP) total water level as determined by probabilistic analyses of tides and storm surge, including estimated wave effects.
- Reference to the year the geodetic datum was retrieved (should be 2013).

Floodplain Setback

- The prescribed setback (per provincial guidelines) must be stated and it must be the more restrictive of the two measurements. This means both measurements must be provided:
 - 1. Where the estimated 2100-year future natural boundary (FNB) lies, plus a 15 metre setback to the FNB.
 - 2. Where the 2100-year FCL meets the natural contour of the land.
- If a proposed development cannot meet the prescribed setback, a lesser setback should be recommended, provided mitigation measures are provided to ensure the land is "safe for its intended use."

Mitigation Measures

- Any mitigation measures needed for the land to be "safe for its intended use" must be outlined.
- If there is a reference to level of risk and it is not good (high, very high, unacceptable, intolerable, etc.), there must be a discussion about/reference to how the mitigation measures will bring the level of risk down to an acceptable or tolerable level.
- The requirement to register the report on the property's land title through a restrictive covenant as outlined in Section 219 of the *Land Title Act.*

Appendices

- A site plan must be included that shows the present natural boundary, proposed building location, both setback requirements and elevation.
- Flood Assurance Statement that is properly filled out (list of check boxes), including the box indicating if a registered covenant is required.

What We Do Not Want To See:

- References to the CVRD's <u>online Regulatory Coastal Floodplain mapping</u> that relies on this data to provide figures for the assessment (for example, the report should not prescribe an FCL of 5.7 metres with the rationale that the CVRD's mapping indicates it is 5.7 metres).
- Claims of sterilization. Because there are uses permitted in all zones that do not require a structure, there are uses that can be accomplished safely within the floodplain. As such, it is not possible for a property to be sterilized.