

REGIONAL DISTRICT OF EAST KOOTENAY

BYLAW NO. XXXX

A bylaw to provide floodplain management regulations within portions of Electoral Area A of the Regional District of East Kootenay.

WHEREAS the Board of the Regional District of East Kootenay considers that a floodplain management bylaw will help reduce further exposure to risk and to reduce the amount of damage to structures and property due to flooding;

AND WHEREAS the Board deems it desirable to adopt this bylaw as aforementioned;

NOW THEREFORE, the Board of the Regional District of East Kootenay in open meeting assembled, hereby enacts as follows:

1. TITLE

This Bylaw may be cited as “Regional District of East Kootenay – Elk Valley Floodplain Management Bylaw No. xxxx, 2021.”

2. ADMINISTRATION, ENFORCEMENT AND SEVERABILITY

2.1 The Manager of Development Services, Compliance Officer, and any other person authorized to assist the aforementioned persons, are hereby authorized to administer this Bylaw.

2.2 Any person who contravenes any provision of this Bylaw commits an offence punishable on summary conviction and is liable to a fine not exceeding \$10,000.00 and costs of prosecution.

2.3 If a portion of this bylaw is found invalid by a court, then it will be severed and the remainder of the Bylaw will remain in effect.

2.4 A Compliance Officer may, at all reasonable times, enter on and into Property in the plan area as shown on Schedules B, B1 to B9 to ascertain whether the regulations and requirements of this Bylaw are being observed.

3. INTERPRETATION

3.1 Schedules and Applications

The following schedules are attached to and form part of this Bylaw:

Schedule B, B1 to B9

3.2 Measurements and Calculations

Numerical quantities are written in the International System of Units (metric).

3.3 Definitions

In this Bylaw:

Alluvial Fan means an alluvial deposit of a *watercourse* where it issues from a steep mountain valley or gorge upon a plain or at the junction of a tributary *watercourse* with the main *watercourse*.

Building means a *structure* used or intended for supporting or sheltering any use or occupancy.

Designated Flood means a flood, which may occur in any given year, of such magnitude as to equal a flood having a 200-year recurrence interval, based on a frequency analysis of unregulated historic flood records or by regional analysis where there is inadequate streamflow data available. Where the flow of a large *watercourse* is controlled by a major dam, the *designated flood* shall be set on a site specific basis.

Designated Flood Level means the observed or calculated elevation for the *designated flood*, which is used in the calculation of *flood construction level*.

Dwelling Unit means a *habitable room* or group of *habitable rooms* occupied or designed to be occupied by one or more persons, with facilities for living, sleeping, and cooking.

Flood Construction Level or **Flood Level** means a *designated flood level* plus an allowance for *freeboard*, or where a *designated flood level* cannot be determined, a specified height above an *ordinary high water mark*, *natural ground elevation*, or any obstruction that could cause ponding.

Floodplain means an area, which is susceptible to flooding from a *watercourse*, lake or other body of water and that is designated in section 4.1 of this Bylaw.

Floodplain setback means the required minimum distance from the *ordinary high water mark* of a *watercourse*, lake, or other body of water to any landfill or structural support required to elevate a floor system or *pad* above the *flood construction level*, so as to maintain a floodway and allow for potential land erosion.

Freeboard means a vertical distance added to a *designated flood level*, used to establish a *flood construction level*.

Habitable Area means any space or room, including a *manufactured home*, that is or can be used for dwelling purposes, business, or the storage of goods, which are susceptible to damage by floodwater.

Habitable Room means a room designed for living or sleeping, but does not include a bathroom, kitchen, storage room, laundry room, utility room, or closet.

Manufactured Home means any *structure*, whether ordinarily equipped with wheels or not, that is designed, constructed, or manufactured to be moved from one place to another by being towed or carried on its own chassis, and which contains one *dwelling unit*. A recreational vehicle is not a *manufactured home*.

Natural Ground Elevation means the undisturbed ground elevation prior to site preparation.

Ordinary High Water Mark means the visible high watermark of any lake, river, stream, or other body of water where the presence and action of the water are so common and usual and so long continued in all ordinary years, as to mark upon the soil of the bed of the body of water a character distinct from that of the banks thereof, in respect to vegetation, as well as in respect to the nature of the soil itself.

Pad means a surface on which blocks, posts, runners, or strip footings are placed for the purpose of supporting a *manufactured home* or *habitable area*.

Qualified Professional means a professional engineer or professional geoscientist with experience or training in geotechnical study and geohazard assessments.

Standard Dyke means a dyke built to a minimum crest elevation equal to the *flood construction level* and meeting standards of design and construction approved by the Ministry of Environment and Climate Change Strategy and maintained by an ongoing authority such as a local government body.

Structure means anything built, placed or constructed that is fixed to, sunk into or supported by the soil or another *structure*, excluding *fences*, concrete footings, paved surfaces and retaining walls less than 1.5 m in height.

Watercourse means any natural or man made depression with well defined banks and a bed 0.6 m or more below the surrounding land, serving to give direction to a current of water at least six months of the year, or having a drainage area of 2 km² or more.

4. GENERAL REGULATIONS

4.1 Floodplain Designation

The following land is designated as *floodplain*:

- (1) Land lower than the *flood construction level* specified in section 4.2 (1).
- (2) Land within the *floodplain setbacks* specified in section 4.2 (2).
- (3) Land designated as Floodway or Flood Fringe on Schedules B, B1 to B9, which are attached to and form part of this Bylaw.

4.2 Floodplain Specifications

(1) Flood Construction Levels

The following elevations are specified as *flood construction levels*, except that where more than one *flood construction level* is applicable, the higher elevation shall be the *flood construction level*:

- (a) Elevations indicated on the flood construction level isobars as shown on Schedules B1 to B9, which are attached to and form part of this Bylaw; or
- (b) 3.0 metres above the *ordinary high water mark* of the Elk River, Flathead River, Fording River and Michel Creek; or
- (c) 1.5 metres above the *ordinary high water mark* of a lake, marsh, pond or any other *watercourse*; or
- (d) the *flood construction level* specified in a *qualified professional's* report prepared under Section 56 of the *Community Charter* for those areas specified within the Special Policy Area; or
- (e) 1.0 metre above the *natural ground elevation* or 0.6 metres above any obstruction that could cause ponding.

(2) Floodplain Setbacks

The following distances are specified as *floodplain setbacks*, except that where more than one *floodplain setback* is applicable, the greater distance shall be the *floodplain setback*.

- (a) 60.0 metres from the *ordinary high water mark* of the Elk River; or
- (b) 30.0 metres from the *ordinary high water mark* of Boivin Creek, Brule Creek, Coal Creek, Flathead River, Fording River and Michel Creek; or
- (c) 15.0 metres from the *ordinary high water mark* of any other *watercourse*; or
- (d) 7.5 metres from the *ordinary high water mark* of a lake, marsh, or pond.

5. SPECIAL POLICY AREA

The Special Policy Area is the study area designated within Northwest Hydraulic Consultants Ltd. report completed in September 2020. The study area extends from the District of Sparwood to the community of Morrissey. The Special Policy Area contains the high fan hazards areas, moderate fan hazard areas and Floodway as identified on Schedules B1 – B9.

- (1) Development on land in the Special Policy Area delineated on Schedules B1 to B9 governed by Section 56 of the *Community Charter* is subject to the minimum *flood construction level* and *floodplain setback* requirements identified in section 4.2 (1).
- (2) Development on land in the Special Policy Area delineated on Schedules B1 to B9 governed by Section 56 of the *Community Charter* is subject to the minimum *floodplain setback* requirements identified in section 4.2 (2).
- (3) Special Policy Areas include alluvial fans, debris torrent fans and areas adjacent to watercourses that are subject to high velocity flows and require the assessment of a suitably *qualified professional*.
- (4) General exemptions outlined in Part 7 Schedule A apply to Special Policy Areas.

6. APPLICATION OF FLOODPLAIN SPECIFICATIONS

- 6.1 (1) Pursuant to the specified *flood construction levels* and *floodplain setbacks* of this Bylaw:
 - (a) The underside of any floor system, or the top of any *pad* supporting any space or room, including a *manufactured home*, that is used for dwelling purposes, business, or the storage of goods, which are susceptible to damage by floodwater shall be above the specified level; and

- (b) Any landfill required to support a floor system or *pad* shall not extend within any setback from a *watercourse* or body of water specified by this Bylaw.
- (2) Structural support or compacted landfill or a combination of both may be used to elevate the underside of the floor system or the top of the *pad* above the *flood construction levels* specified in section 4.2 (1). The structural support and landfill shall be protected against scour and erosion from flood flows, wave action, ice and other debris.
- (3) The building inspector, or such person appointed by the Board of the Regional District may require that a British Columbia Land Surveyors certificate be required to verify compliance with the *flood construction levels* and *floodplain setbacks* specified in section 4.2 (1) and 4.2 (2). The cost of verification shall be assumed by the landowner.

7. EXEMPTIONS

7.1 General Exemptions

The general exemptions from the *flood construction levels* and *floodplain setbacks* are outlined in Schedule A of this Bylaw.

7.2 Site Specific Exemptions

An application by a property owner to the Regional District for a site-specific exemption or relaxation shall be completed upon a form provided by the Regional District and submitted in accordance with instructions on the application. Application may be made to vary either the required setback from or elevation above a *watercourse* or body of water.

8. NO REPRESENTATION

By the enactment, administration or enforcement of this Bylaw the Regional District does not represent to any person that any *building* or *structure*, including a *manufactured home*, located, constructed or used in accordance with the provisions of this Bylaw or in accordance with any advice, information, direction or guidance provided by the Regional District in the course of the administration of this Bylaw will not be damaged by flooding.

9. ADOPTION

This Bylaw is in force from the date of adoption.

READ A FIRST TIME THE DAY OF 2021.
READ A SECOND TIME THE DAY OF 2021.
READ A THIRD TIME THE DAY OF 2021.

ADOPTED THE DAY OF 2021.

CHAIR

CORPORATE OFFICER

SCHEDULE A

FLOODPLAIN MANAGEMENT PROVISIONS

GENERAL EXEMPTIONS

- (1) The following types of development are exempt from the *flood construction levels* specified in section 4.2 (1) of this Bylaw.
 - (a) A renovation of an existing *building* or *structure* that does not involve an addition thereto;
 - (b) An addition to a *building* or *structure*, at the original non-conforming floor elevation, that would increase the size of the *building* or *structure* by less than 25 percent of the floor area existing at the date of adoption of this Bylaw, provided an exemption of up to 25 percent of the floor area has not been granted previously by the Minister of Environment, and provided that the degree of nonconformity regarding the setback is not increased;
 - (c) That portion of *building* or *structure* to be used as a carport, garage, or entrance foyer;
 - (d) Farm *buildings* other than *dwelling units* and closed-sided livestock housing;
 - (e) Hot water tanks and furnaces behind *standard dykes*;
 - (f) Closed-sided livestock housing behind *standard dykes*;
 - (g) On-loading and off-loading facilities associated with water-oriented industry and portable sawmills.
- (2) The following types of development are exempt from the *flood construction levels* specified in section 4.2 (1) of this Bylaw, subject to the following conditions:
 - (a) **Farm Dwelling Units:** Farm *dwelling units* on parcel sizes 8.0 ha or greater, located within the Agricultural Land Reserve and zoned for agricultural use, shall be located with the underside of a wooden floor system or the top of the *pad* of any *habitable area* (or in the case of a *manufactured home* the top *pad* or the ground surface on which it 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 section 4.2 (1) of this Bylaw, whichever is lesser.
 - (b) **Closed-sided Livestock Housing:** Closed-sided livestock housing not behind *standard dykes* shall be located with the underside of a wooden floor system or the top of the *pad* (or in the case of a *manufactured home* the top *pad* or the ground surface on which it 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 section 4.2 (1) of this Bylaw, whichever is lesser.
 - (c) **Industrial Uses:** Industrial uses, other than main electrical switchgear, shall be located with the underside of a wooden floor system or the top of the *pad* (or in the case of a *manufactured home* the top *pad* or the ground surface on which it is located) no lower than the *flood construction levels* specified in section 4.2 (1) of this Bylaw, minus *freeboard*. Main electrical switchgear shall be no lower than the *flood construction level*.