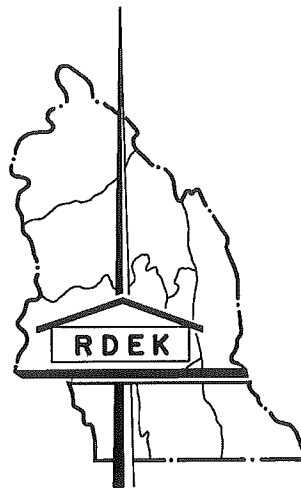


REGIONAL DISTRICT OF EAST KOOTENAY

UPPER COLUMBIA VALLEY
FLOODPLAIN MANAGEMENT
BYLAW 1034, 1993



This is a consolidation of the Upper Columbia Valley Floodplain Management Bylaw and **adopted text amendments**. This consolidated copy is for convenience only and has no legal sanction.

January 9, 2009

Upper Columbia Valley Floodplain Management Bylaw No. 1034 Consolidation

BYLAW AMENDMENTS			
Bylaw	Amend. No. / Yr.	Adopted	Short Citing
1101	01/93	06 May 94	Amendment Bylaw No. 1, 1993 (Canal Flats)
2132	02/09	09 Jan 09	Floodplain Management Amendments / RDEK

REGIONAL DISTRICT OF EAST KOOTENAY

BYLAW NO. 1034

A Bylaw to provide floodplain management regulations under Section 969 of the "Municipal Act", within Electoral Areas "F" and "G" of the Regional District of East Kootenay.

WHEREAS the Board of Directors of the Regional District of East Kootenay, where it considers that flooding may occur on land, may enact a floodplain management bylaw pursuant to Section 969 of the Municipal Act;

AND WHEREAS the Regional District of East Kootenay and the Province of British Columbia consider a floodplain management bylaw will help to reduce future exposure to risk and reduce the amount of damage due to flooding;

AND WHEREAS the Regional District of East Kootenay wishes to update the floodplain management provisions for unincorporated areas of Electoral Areas "F" and "G";

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

PART 1 TITLE

This Bylaw may be cited as "Regional District of East Kootenay - Upper Columbia Valley Floodplain Management Bylaw No. 1034, 1993."

PART 2 ADMINISTRATION AND ENFORCEMENT

ADMINISTRATION

2.01 The Manager of Planning & Development Services, Manager of Building & Protective Services, Bylaw Enforcement Officer, and any other person authorized to assist the aforementioned persons, are hereby authorized to administer this Bylaw.

VIOLATION

2.02 Every person who violates any provision of this Bylaw, or who causes or suffers or permits any act or thing to be done in contravention of, or in violation of, any provision of this Bylaw, or who neglects to do or refrains from doing anything required to be done under provisions of this Bylaw, shall be guilty of an offence of this Bylaw.

PENALTY

2.03 Every person guilty of an offence of this bylaw shall be liable on summary conviction to a penalty not exceeding two thousand dollars (\$2,000.00) for each offence and costs of prosecution.

*Notes in italics are provided for information only and do not form part of this Bylaw.

SEVERABILITY

- 2.04** If any section, subsection, sentence, clause or phrase of this Bylaw is for any reason held to be invalid by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Bylaw.

PART 3 INTERPRETATION**APPLICATION**

- 3.01** The provisions of this Bylaw apply to Electoral Areas "F" and "G" of the Regional District of East Kootenay.

SCHEDULES

- 3.02** The following schedules attached to this Bylaw are incorporated into and form part of this Bylaw:

Schedule "A" – Floodplain of Kootenay River - Columbia Lake at Canal Flats:

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- Schedule "A-1" - Kootenay River - Columbia Lake at Canal Flats - 1 of 8
~~Schedule "A-2" - Kootenay River - Columbia Lake at Canal Flats - 2 of 8~~
~~Schedule "A-3" - Kootenay River - Columbia Lake at Canal Flats - 3 of 8~~
 (Canal Flats)
 Schedule "A-4" - Kootenay River - Columbia Lake at Canal Flats - 4 of 8
 Schedule "A-5" - Kootenay River - Columbia Lake at Canal Flats - 5 of 8
 Schedule "A-6" - Kootenay River - Columbia Lake at Canal Flats - 6 of 8
 Schedule "A-7" - Kootenay River - Columbia Lake at Canal Flats - 7 of 8
 Schedule "A-8" - Kootenay River - Columbia Lake at Canal Flats - 8 of 8

Schedule "B" – Floodplain of Columbia River - Columbia Lake to Windermere Lake (including Dutch Creek):

- Schedule "B-1" - Columbia River - Columbia Lake to Windermere Lake (including Dutch Creek) - 1 of 6 (Dutch Creek)
 Schedule "B-2" - Columbia River - Columbia Lake to Windermere Lake (including Dutch Creek) - 2 of 6 (Dutch Creek - Fairmont)
 Schedule "B-3" - Columbia River - Columbia Lake to Windermere Lake (including Dutch Creek) - 3 of 6 (Fairmont)
 Schedule "B-4" - Columbia River - Columbia Lake to Windermere Lake (including Dutch Creek) - 4 of 6
 Schedule "B-5" - Columbia River - Columbia Lake to Windermere Lake (including Dutch Creek) - 5 of 6
 Schedule "B-6" - Columbia River - Columbia Lake to Windermere Lake (including Dutch Creek) - 6 of 6

Schedule "C" – Floodplain of Columbia River - Windermere Lake to Radium (including Toby Creek)

- Schedule "C-1" - Columbia River - Windermere Lake to Radium (including Toby Creek) - 1 of 9 (Radium)
 Schedule "C-2" - Columbia River - Windermere Lake to Radium (including Toby Creek) - 2 of 9

- Schedule "C-3" - Columbia River - Windermere Lake to Radium (including Toby Creek) - 3 of 9
- Schedule "C-4" - Columbia River - Windermere Lake to Radium (including Toby Creek) - 4 of 9 (Toby Creek)
- Schedule "C-5" - Columbia River - Windermere Lake to Radium (including Toby Creek) - 5 of 9 (Toby Creek - Invermere)
- Schedule "C-6" - Columbia River - Windermere Lake to Radium (including Toby Creek) - 6 of 9
- Schedule "C-7" - Columbia River - Windermere Lake to Radium (including Toby Creek) - 7 of 9 (Windermere)
- Schedule "C-8" - Columbia River - Windermere Lake to Radium (including Toby Creek) - 8 of 9
- Schedule "C-9" - Columbia River - Windermere Lake to Radium (including Toby Creek) - 9 of 9

Schedule "D" – Fairmont Hot Springs Area - Columbia River Setbacks

Schedule "E" – General Exemptions from Floodplain Management Provisions

~~Schedule "F" – Request for Site Specific Exemption from Floodplain Management Provisions- deleted by Bylaw 2132 adopted Jan 9/09~~

UNITS OF MEASURE

- 3.03** Numerical quantities in this Bylaw are written in the International System of Units (i.e. - metric). Approximate imperial units are shown in brackets following the metric measurements; such bracketed figures are included for convenience only and do not form part of this Bylaw.

DEFINITIONS

- 3.04** In this Bylaw:

ALLUVIAL FAN means an alluvial deposit of a stream where it issues from a steep mountain valley or gorge upon a plain or at the junction of a tributary stream with the main stream.

BUILDING means an exterior structure used or intended for supporting or sheltering any use or occupancy.

~~BYLAW ENFORCEMENT OFFICER~~ *deleted by bylaw 2132 adopted Jan 9/09*

~~CHIEF BUILDING INSPECTOR~~ *deleted by bylaw 2132 adopted Jan 9/09*

FLOOD CONSTRUCTION LEVEL or FLOOD LEVEL means a designated flood level plus freeboard, or where a designated flood level cannot be determined, a specified height above a natural boundary, natural ground elevation, or any obstruction that could cause ponding.

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 the flood construction level.

DIRECTOR OF PLANNING means the Director of Planning of the Regional District of East Kootenay.

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DWELLING UNIT means a building or portion thereof containing one or more habitable areas used or intended to be used for living and sleeping purposes, sanitary facilities and not more than one (1) kitchen.

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

FLOODPLAIN means an area which is susceptible to flooding from a watercourse, lake, or other body of water and that which is designated in Section 4.01 of this Bylaw.

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FLOOD CONSTRUCTION LEVEL or FLOOD LEVEL means a designated flood level plus 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 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.

G.S.C. means Geodetic Survey of Canada datum.

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

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KITCHEN means a portion of a room in a dwelling unit which contains one or more of the following cooking appliances: 220 volt stove, gas stove, countertop stove, wall over, wood stove.

MOBILE 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 a dwelling unit.

NATURAL BOUNDARY *deleted by bylaw 2132 adopted Jan 9/09*

NATURAL GROUND ELEVATION means the undisturbed ground elevation prior to site preparation.

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ORDINARY HIGH WATER MARK means the visible high water mark 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 soils of the bed of the lake, river, stream, or other body of water a character distinct from that of the banks, both in vegetation and in the nature of the soil itself.

PAD means a paved surface on which blocks, posts, runners or strip footings are placed for the purpose of supporting a home, or a concrete pad supporting a habitable area.

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, Lands and Parks and maintained by an ongoing authority such as a local government body.

STRUCTURE means any construction which is fixed to, supported by or sunk into land or water, excluding paving or surfacing materials such as asphalt or concrete.

WATERCOURSE means any natural or man made depression with well defined banks and a bed 0.6 metres or more below the surrounding land serving to give direction to a current of water at least six (6) months of the year or having a drainage area of 2 square kilometres (492.4 acres) or more upstream of the point of consideration.

PART 4 FLOODPLAIN MANAGEMENT

FLOODPLAIN DESIGNATION

4.01 The following land is designated as floodplain:

- (1) Land shown as floodplain on Schedule "A" - Floodplain of Kootenay River - Columbia Lake at Canal Flats, attached hereto and forming part of this Bylaw.
- (2) Land shown as floodplain on Schedule "B" - Floodplain of Columbia River - Columbia Lake to Windermere Lake, attached hereto and forming part of this Bylaw.
- (3) Land shown as floodplain on Schedule "C" - Floodplain of Columbia River - Windermere Lake to Radium, attached hereto and forming part of this Bylaw.
- (4) Land lower than the flood construction levels specified in Section 4.02(1).
- (5) Land within the floodplain setbacks specified in Section 4.02(2)

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EXCEPT land within the boundaries of the Dutch Creek Fan as delineated on Schedule "B-1" and Schedule "B-2"; ~~land within the boundaries of Kootenay River Alluvial Fan (Canal Flats) as delineated on Schedule "A-2"; and land within the boundaries of Toby Creek Fan as delineated on Schedule "C-5".~~

FLOODPLAIN SPECIFICATIONS

4.02 (1) Flood Construction Levels:

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

- (a) the flood construction level for a specific property, as determined by interpolation from the flood levels shown on Schedule "A" - Floodplain of Kootenay River - Columbia Lake at Canal Flats;
- (b) the flood construction level for a specific property as determined by interpolation from those flood levels shown on Schedule "B" - Floodplain of Columbia River - Columbia Lake to Windermere Lake;
- (c) the flood construction level for a specific property as determined by interpolation from those flood levels shown on Schedule "C" - Floodplain of Columbia River - Windermere Lake;

or where floodplain mapping is not available,

- (d) 811.0 metres Geodetic Survey of Canada datum for land adjacent to Columbia Lake;
- (e) 802.5 metres Geodetic Survey of Canada datum for land adjacent to Windermere Lake;
- (f) 3 metres (9.8 feet) above the ordinary high water mark of Columbia River, Kootenay River, Palliser River, White River; (*Bylaw 1101 Schedule A shows the area exempt from Section 4.02(1)(f) – adopted May 6, 1994*)
- (g) 1.5 metres (4.9 feet) above the ordinary high water mark of any other watercourse, lake, marsh, or pond.

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(2) Floodplain Setbacks:

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

- (a) 30 metres (98.4 feet) from the ordinary high water mark of Columbia River except the setback within Fairmont Hot Springs and Meadows Subdivision shall be in accordance with the setback lines shown on Schedule "D" - Fairmont Hot Springs Area - Columbia River Setback Requirements;
- (b) 30 metres (98.4 feet) from the ordinary high water mark of Kootenay River, Palliser River, White River;
- (c) 15 metres (49.2 feet) from the ordinary high water mark of any other watercourse;

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- (d) 7.5 metres (24.6 feet) from the ordinary high water mark of a lake, marsh, or pond;
- (e) 7.5 metres (24.6 feet) from any standard dyke right-of-way, or structure for flood protection or seepage control.

PART 5 APPLICATION OF FLOODPLAIN SPECIFICATIONS

5.01 (1) Pursuant to Section 969 (5) of the Municipal Act, after a Bylaw has specified flood construction levels and floodplain setbacks:

- "i) 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 that specified level, and
- ii) 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 the bylaw or the Minister of Environment."

(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 4.02(1). The structural support and/or landfill shall be protected against scour and erosion from flood flows, wave action, ice and other debris.

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(3) The Building Inspector may require that a British Columbia Land Surveyor's certificate be supplied to verify compliance with the flood construction levels and floodplain setbacks specified in Sections 4.02(1) and (2). The cost of verification shall be assumed by the land owner.

PART 6 EXEMPTIONS

GENERAL EXEMPTIONS

6.01 The general exemptions from the flood construction levels are outlined in Schedule "E" of this Bylaw.

SITE-SPECIFIC EXEMPTIONS

6.02 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.

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PART 7 NO REPRESENTATION

7.01 By the enactment, administration or enforcement of this Bylaw the Regional District of East Kootenay does not represent to any person that any building or structure, including a mobile 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.

PART 8 ADOPTION

EFFECTIVE DATE OF BYLAW

8.01 This Bylaw is in force from date of adoption.

READ a first time the 8th day of January, 1993.

READ a second time the 8th day of January, 1993.

READ a third time the 8th day of January, 1993.

APPROVED by the Minister of Environment, Lands and Parks
the 27th day of January 1993.

RECONSIDERED, FINALLY PASSED AND ADOPTED the 5th day of March, 1993.

“Ron Tarr”
CHAIRPERSON

“W. McNamar”
SECRETARY

Schedule "E"
Floodplain Management Provisions
GENERAL EXEMPTIONS

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1. The following types of development are exempt from the flood construction levels specified in Section 4.02(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 that the degree of nonconformity regarding the setback is not increased;
- (c) That portion of a 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) Heavy industry behind standard dykes;
- (h) On-loading and off-loading facilities associated with water-oriented industry and portable sawmills.

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2. The following types of development are exempt from the flood construction levels specified in Section 4.02(1) of this Bylaw, subject to the following conditions:

- (a) Farm Dwelling Units: Farm dwelling units on parcel sizes 8.1 hectares (20.0 acres) or greater, located within the Agricultural Land Reserve, 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 mobile home the top of pad or the ground surface on which it is located) no lower than 1.0 metre (3.3 feet) 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 4.02(1) of this Bylaw, whichever is the lesser.
- (b) Closed-sided Livestock Housing: Closed-sided livestock housing not behind standard dykes shall be located with the underside of the wooden floor system or the top of the pad (or in the case of a mobile home the top of pad or the ground surface on which it is located) no lower than 1.0 metre (3.3 feet) above the natural ground elevation take at any point on the perimeter of the building, or no lower than the flood construction levels specified in Section 4.02(1) of this Bylaw, whichever is the 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 mobile home the top of pad or the ground surface on which it is located) no lower than the flood construction levels specified in Section 4.02(1) of this Bylaw, minus freeboard. Main electrical switchgear shall be no lower than the flood construction level.

As approved by the Minister of Environment, Lands and Parks this 21st day of January 1993.

"J.O'Riordain"

Schedule "F"
Floodplain management Provisions
~~REQUEST FOR SITE-SPECIFIC EXEMPTION~~

Deleted by Bylaw 2132 adopted Jan 9/09