



DISTRICT OF SOOKE

BYLAW No. 561

A bylaw to designate an area as a flood plain,
specify development levels and setback requirements in
a designated area and enforce these conditions.

WHEREAS Section 910 of the *Local Government Act*, authorizes Council to adopt a flood bylaw that designates an area as a flood plain, specify development levels and setback requirements in a designated area and enforce these conditions;

AND WHEREAS Council has considered the Flood Hazard Area Land Use Management Guidelines published by the Province of British Columbia, Ministry of Water, Land and Air Protection in May 2004, under authority of the *Environmental Management Act*,

The Council of the District of Sooke, in open meeting assembled, enacts as follows:

1.0 TITLE

1.1 This Bylaw is cited as the *Flood Regulation Bylaw, 2013*.

2.0 PURPOSE

2.1 The purpose of this bylaw is to designate an area as a flood plain, specify development levels and setback requirements in a designated area and enforce these conditions.

2.2 This Bylaw applies to all persons who construct, reconstruct, move, extend or locate a building, manufactured home or unit, modular home or structure or any part of them on land within the District of Sooke designated as 'Floodplain'.

2.3 Nothing contained in this Bylaw relieves any person from the responsibility to seek and comply with other legislation applicable to their undertaking.

3.0 DEFINITIONS

3.1 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 any structure used or intended for supporting or sheltering any use or occupancy.

BUILDING OFFICIAL includes Building Inspectors, Plan Checkers and Plumbing Inspectors employed by the District of Sooke.

BYLAW ENFORCEMENT OFFICER means a person appointed, employed or contracted from time to time by the District in the capacity of a bylaw enforcement officer and includes all persons authorized by Council to enforce this bylaw.

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 stream flow data available. Where the flow of a large watercourse is controlled by a major dam, the designated flood must 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.

DISTRICT means the District of Sooke.

FLOOD CONSTRUCTION LEVEL means the Designated Flood Level plus the allowance for freeboard and is used to establish the elevation of the underside of a wooden floor system or top of concrete slab for habitable buildings. In the case of a manufactured home, the ground level or top of concrete or asphalt pad on which it is located must be no lower than the above-described elevation. It also establishes the minimum crest level of a Standard Dike. Where the Designated Flood Level can not be determined or where there are overriding factors, an assessed height above the natural boundary of the water body or above the natural ground elevation may be used.

FLOODPLAIN means a lowland area, whether diked, flood-proofed, or not, which, by reasons of land elevation, is susceptible to flooding from an adjoining watercourse, ocean, lake, or other body of water and for administrative purposes is taken to be that area submerged by the Designated Flood plus freeboard.

FLOOD-PROOFING means the alteration of land or structures physically or in use to reduce or eliminate flood damage and includes the use of elevation and/or building setbacks from water bodies to maintain a floodway and to allow for potential erosion. Flood-proofing may be achieved by all or a combination of the following:

- a) Building on fill, provided such fill does not interfere with flood flows of the watercourse and is adequately protected against floodwaters erosion;
- b) Building raised by structural means such as foundation walls, columns, etc.;
- c) A combination of fill and structural means.

FLOODPLAIN SETBACK means the minimum required distance from the natural boundary 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.

FLOODWAY means the channel of the watercourse and those portions of the floodplains which are reasonably required to discharge the flood flow of a designated flood. A minimum required floodway must be equal to the width of the channel within the natural boundary plus a minimum setback of thirty metres from the natural boundary on each side of the channel or channels unless otherwise approved.

FREEBOARD means a vertical distance added to a Designated Flood Level and is used to establish the Flood Construction Level.

HABITABLE AREA means any room or space within a building or structure that is or can be used for human occupancy, commercial sales, or storage of goods, possessions or equipment (including furnaces) which would be subject to damage if flooded.

HYDROSTATIC FORCES means the additional forces that must be considered in the design and construction of a basement area in a building located in a designated Floodplain or Non-Standard Flood and Erosion (NSFEA) area. Hydrostatic forces are imposed by the saturation of the ground and overland flow of water to a depth equal to the Flood Construction Level.

MANUFACTURED HOME means a structure manufactured as a unit, intended to be occupied in a place other than at its manufacturer, and designed as a dwelling unit, and includes mobile homes, and specifically excludes recreational vehicles.

NATURAL BOUNDARY means the visible high watermark of any lake, river, watercourse, 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 lake, river, watercourse, or other 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. In addition, the natural boundary includes the best estimate of the edge of dormant or old side channels and marsh areas.

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

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

PROFESSIONAL ENGINEER means a person who is registered or licensed under the provisions of the *Engineers and Geoscientists Act*.

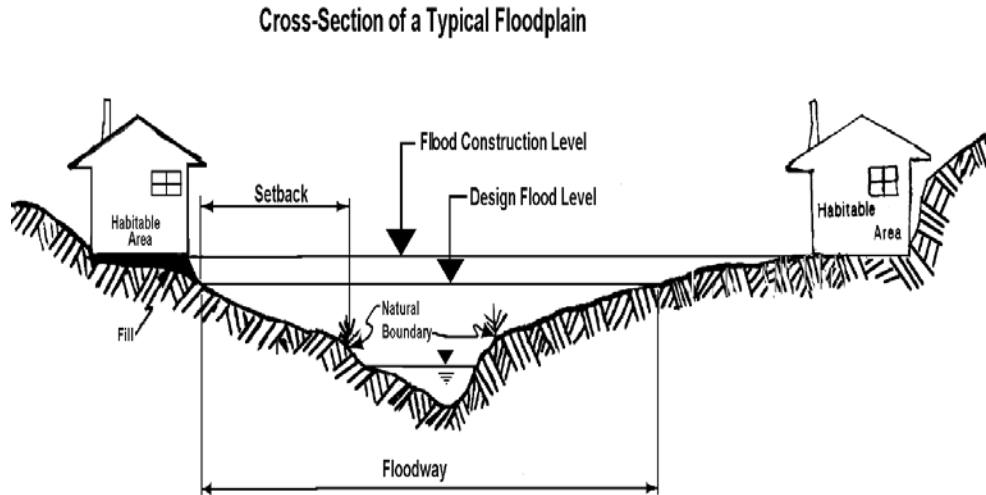
SCOUR PROTECTION or EROSION PROTECTION is defined as protective works constructed along dike slopes, stream banks, lakes and other water bodies to prevent their erosion by surface runoff, stream flows and/or wave action.

STANDARD DIKE means a dike built to a minimum crest elevation equal to the flood construction level and meeting standards of design and construction approved by the Province and maintained by an ongoing authority such as a local government body or a diking authority under the *Dike Maintenance Act* or successor legislation.

STRUCTURE means a construction or portion thereof of any kind, whether fixed to, supported by or sunk into the land or water, specifically including retaining structures of any size directly connected to a building or other structure but specifically excluding landscaping, fences, signs and paving.

WATERCOURSE means any natural or man made depression with well-defined banks and a bed 0.6 metres (2.0 feet) 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 two square kilometres (0.8 square miles) or more upstream of the point of consideration.

Diagram 1



Note: This diagram is provided for illustrative purposes only (source: British Columbia Ministry of Environment)

4.0 APPLICATION AND ADMINISTRATION

- 4.1 This Bylaw applies to all buildings and structures on lands designated as a floodplain.
- 4.2 No building or structure may be constructed, reconstructed, altered, moved or extended by the owner, occupier or other person so that it contravenes the requirements of this Bylaw.
- 4.4 A Building Official or Bylaw Enforcement Officer who observes a contravention of this Bylaw may issue applicable notices and orders to any owner, occupier or other person who appears to have committed or allowed the contravention.
- 4.5 No person may prevent or obstruct a Building Official or Bylaw Enforcement Officer from performing his or her duties under this Bylaw.
- 4.6 By the enactment, administration or enforcement of this Bylaw, the District does not represent to any person that any building or structure, including a manufactured home, located, constructed or used in accordance with the regulations and requirements of this Bylaw or in accordance with any advice, information, direction and guidance provided

by the District in the course of the administration of this Bylaw will not be damaged by flooding or erosion.

5.0 FLOODPLAIN DESIGNATION

5.1 Pursuant to section 910(1.1) of the *Local Government Act*, the floodplain areas of the District designated as floodplain are as follows:

- a. The floodplain of the Sooke River within the District of Sooke in the areas shown on Map Sheets 1 and 2 attached as Schedule "A"; and
- b. Until such time as floodplain mapping is prepared:
 - i. Land lower than the Flood Construction Levels, except where the Flood Construction Level has been determined in response to a site-specific situation; and
 - ii. Land within the Floodplain Setbacks.

5.2 Pursuant to section 910(2) of the *Local Government Act*, the following elevations are specified as Flood Construction Levels, except where more than one Flood Construction Level is applicable, the higher elevation must be the specified Flood Construction Level:

- a. Where Floodplain Mapping is available, the Flood Construction Level ("FCL") for a specific property must be determined by interpolation from the "200 year frequency Flood Level". See Schedule "A" of this bylaw.
- b. Where Floodplain Mapping is not available, the following elevations are specified as Flood Construction Levels:
 - i. 3.0 metres above natural boundary of Ayum Creek, Charters River, DeMamiel Creek, Sooke River, and Veitch Creek;
 - ii. 1.5 metres above natural boundary of the sea, any other watercourse, lake, pond or adjacent swamp or marsh area.

5.3 Pursuant to section 910 (2) of the *Local Government Act*, the following distances are specified as Floodplain Setbacks, except where more than one Floodplain Setback is applicable, the greater distance must be applied:

- a. 30.0 metres from the natural boundary of Ayum Creek, Charters River, DeMamiel Creek, Sooke River, and Veitch Creek;

- b. 15.0 metres from the natural boundary of the sea and all other watercourses;
- c. 7.5 metres from the natural boundary of all lakes, ponds, swamps and marshes; and
- d. A 7.5 metre from any standard dike or structure used for flood protection or seepage control or any easement or right of way for a standard dike or structure used for flood protection.

6.0 FLOODPLAIN REGULATIONS

- 6.1 No building, manufactured home or unit, modular home or structure or any part thereof will be constructed, reconstructed, moved, extended or located with the underside of a wooden floor system or top of concrete slab of any area used for habitation, business, or storage of goods damageable by floodwaters, or in the case of a manufactured home or unit the ground level or top of pad on which it is located, lower than the Flood Construction Level specified in this Bylaw.
- 6.2 No landfill or structural support required to support a floor system or pad, will be constructed, reconstructed, moved, extended or located within any Floodplain Setback specified in this Bylaw.
- 6.3 Unless specifically provided for elsewhere in this Bylaw, no area below the Flood Construction Level will be used for the installation of furnaces, major electrical switchgear, or other fixed equipment susceptible to damage by floodwater.
- 6.4 Structural support or compacted fill 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 Level. The structural support and/or fill must be protected against scour and erosion from flood flows, wave action, ice and other debris.
- 6.5 Unless a building is situated on lands with a natural elevation above that as the specified Flood Construction Level or greater, basements are prohibited and crawl spaces must not exceed 1.2 metres (4 feet) in height to the underside of the floor joists; and
 - a. All entry points for flood or debris flow material, such as windows and doors, must be located above the Flood Construction Level;
 - b. The building foundation must be constructed to withstand the Hydrostatic Forces during inundation up to the Flood Construction Level; and

- c. For buildings located within NSFEAs that all applicable engineering requirements related to an NSFEA rating are deemed satisfied.
- 6.6 When a building permit is applied for on parcels with land abutting the Sooke Harbour, Sooke Basin or the Strait of Juan de Fuca, the Building Official may require a structurally engineered foundation or geotechnical report if any part of a footing up to and including the level of a slab, or portion of the foundation is intended by its design to be submersible or subject to water fluctuation or wave action. A covenant must be placed on Title noting such structure may be subject to damage by water.
- 6.7 The Building Official, or such person appointed by the District of Sooke, may require, at the cost of the landowner, a British Columbia Land Surveyor's certificate to verify compliance with the Flood Construction Levels and Floodplain Setbacks as specified in this Bylaw.

7.0 GENERAL EXEMPTIONS

- 7.1 The following types of developments are exempted from the Flood Construction Levels specified in this bylaw, subject to conditions specified as follows: (Note: these types of developments are not exempted from the Floodplain Setbacks):
- 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 ground floor area (excluding decks, carports or garages) existing at the date of adoption of this bylaw provided that the degree of non-conformity regarding the setback is not increased (i.e. no closer to the water than existing);
 - c. That portion of a building or structure to be used as a carport, garage or entrance foyer, porches, domestic greenhouses;
 - d. Storage buildings not used for the storage of goods damageable by floodwaters.
 - e. Recreation shelters, stands, campsite washhouses and other outdoor facilities susceptible to only marginal damage by floodwaters.
 - f. Farm buildings other than dwelling units, closed-sided livestock housing and buildings containing hazardous commodities such as herbicides, pesticides, fuel and products with similar environmental impacts.

- g. On-loading and off-loading facilities associated with water-oriented industry and portable sawmills. Main electrical switchgear must be placed above the Flood Construction Level.
- h. Farm dwelling units on parcels 8.0 hectares or greater in area, located within the Agricultural Land Reserve, must 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 of the 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 this Bylaw, whichever is the lesser.
- i. Closed-sided livestock housing not behind standard dikes must be located with the underside of a wooden floor system or the top of the pad (or in the case of a mobile unit, the top of 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 this Bylaw, whichever is the lesser.
- j. Industrial uses, other than main electrical switchgear, must 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 unit, the top of pad or the ground surface on which it is located) no lower than the Flood Construction Levels specified in this Bylaw minus Freeboard.
- k. Heavy industrial development located behind a standard dike.

7.2 The following development is exempted from both the Floodplain Setbacks and the Flood Construction Levels specified in this bylaw:

- a. A self-supporting deck or boathouse that is not:
 - i. used for Habitable Area and the land owner has registered a covenant in favour of the District which states that the deck or boathouse will not be used as a Habitable Area;
 - ii. structurally attached to a building, manufactured home or structure; and
 - iii. within 7.5 m of any standard dike, training works or structure used for flood protection or seepage control or any easement or right of way for a standard dike, training works or structure used for flood protection or seepage control.

8.0 SITE SPECIFIC EXEMPTIONS

- 8.1 An application by a property owner to the District for a site specific exemption of Floodplain Specifications must be completed in the form provided by the District and submitted in accordance with the instructions on the application. This provision is not a substitute for any requirements under Section 56 of the *Community Charter*.
- 8.2 As a condition of a site specific exemption, the property owner will be required at his/her own expense to commission a Professional Engineer's Report that addresses exemption precedents in the surrounding area and provide a summary report containing a description of the proposed development, and recommendations for conditions, as applicable.
- 8.3 As a condition of a site specific exemption, the property owner will be required at his/her expense to prepare and register a restrictive covenant under Section 219 of the *Land Title Act* and Section 56 of the *Community Charter* in favor of the District specifying conditions that would enable the land to be safely used for the use intended according to the terms of the Professional Engineer's report which will form part of the restrictive covenant; and acknowledging that no Disaster Financial Assistance Funding is available for the building or its contents; and releasing and indemnifying the District from liability in the event of any damage caused by flooding or erosion.

9.0 PENALTY

- 9.1 Every person who contravenes a provision of this Bylaw, or who consents, allows or permits an act or thing to be done in violation of a provision of this Bylaw, or who neglects or refrains from doing anything required by a provision of this Bylaw, commits an offence punishable upon summary conviction and is liable to a fine not exceeding \$10,000.
- 9.2 Each day that an offence exists or continues under this Bylaw constitutes a separate and distinct offence.
- 9.3 This Bylaw may be enforced by means of a ticket in the form prescribed for the purpose of section 264 of the *Community Charter*.
- 9.4 Building Officials and Bylaw Enforcement Officers are designated to enforce this Bylaw under section 264(1)(b) of the *Community Charter*.
- 9.5 No person may interfere with a Bylaw Enforcement Officer in issuing a ticket or Bylaw notice or otherwise carrying out his or her duties in

accordance with this Bylaw, and it is an offence for any person to interfere with a Bylaw Enforcement Officer in the enforcement of this Bylaw.

9.6 The words or expressions set forth in Column 1 of Schedule B of this Bylaw are authorized pursuant to section 264(1)(c) of the *Community Charter* to designate the offence committed under the Bylaw section number appearing in Column 2 opposite the respective words or expressions.

9.7 The amounts appearing in Column 3 of Schedule B of this Bylaw are the fines established by Council pursuant to sections 265(1)(a) and 265(2)(a) of the *Community Charter* for the corresponding offence designated in Column 1.

10.0 SEVERABILITY

10.1 If any section or subsection of this Bylaw is found to be invalid by a court of competent jurisdiction, the section or subsection may be severed from the Bylaw without affecting the validity of the remainder of the Bylaw.

Introduced and read a first time the 14th day of January, 2013.

Read a second time the 14th day of January, 2013.

Read a third time the 14th day of January, 2013.

Adopted on the 28th day of January, 2013.

Wendal Milne
Mayor

Bonnie Sprinkling
Corporate Officer

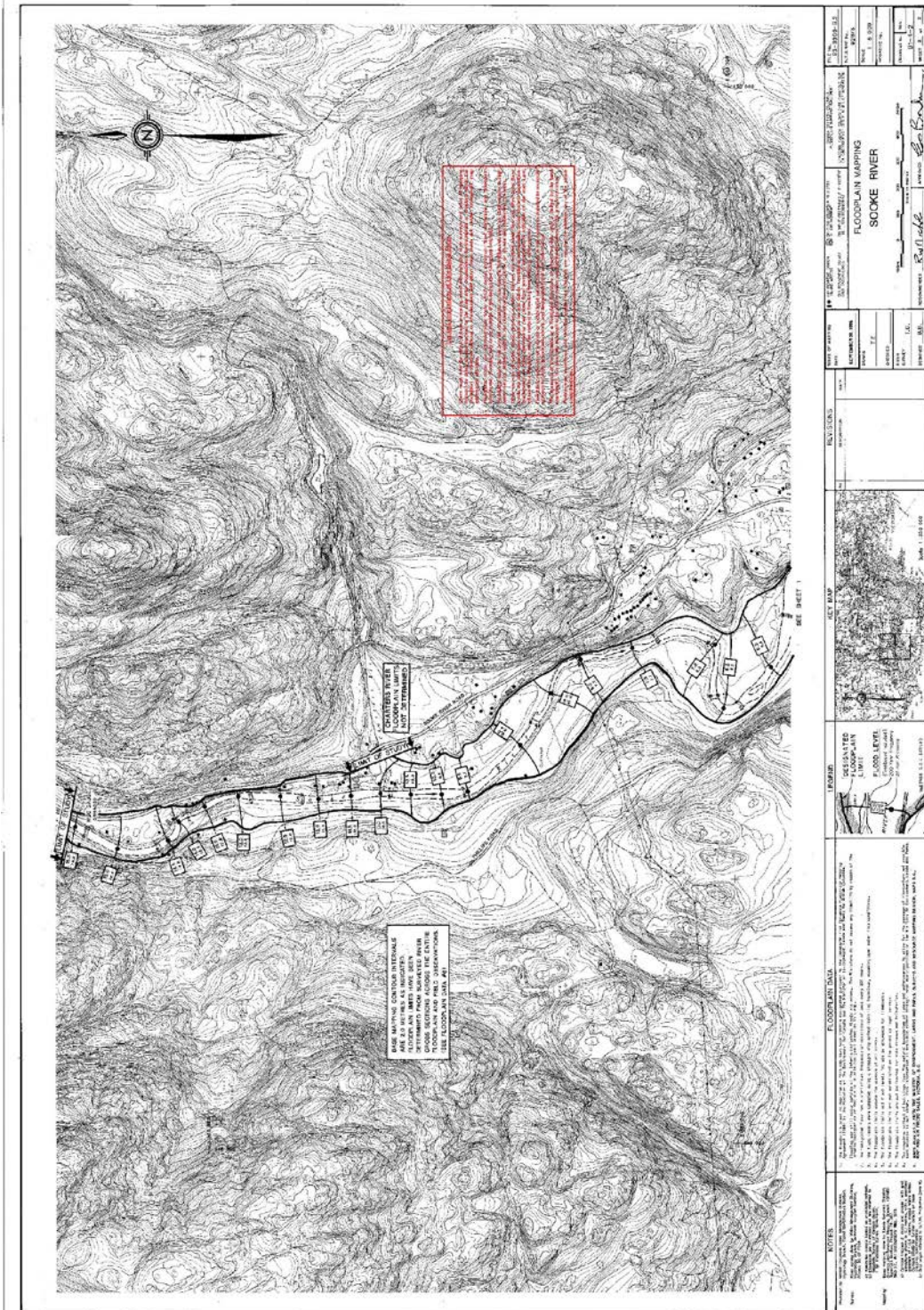
SCHEDULE A:

Map Sheet One



Schedule A continued:

Map Sheet Two



SCHEDULE B

MUNICIPAL TICKET INFORMATION DESIGNATIONS

Offence	Bylaw Section No.	Fine
Habitable space below Flood Construction Level	6.1	\$200
Landfill or support within Floodplain Setback	6.2	\$200
Electrical, furnace below Flood Construction Level	6.3	\$200
Unprotected structural support/fill	6.4	\$200
Entry points below Flood Construction Level	6.5 (a)	\$200
Inadequate building foundation	6.5 (b)	\$200
Failure to produce Engineer Report	6.6	\$200
Failure to provide Surveyor's certificate	6.7	\$200
Increase size more than 25 percent	7.1 (b)	\$200
Boathouse or dock used as Habitable area	7.2 (a) (i)	\$200
Failure to register restrictive Covenant	8.3	\$200