

The following is a consolidated copy of the Flood Hazard Area Land Use Management Bylaw and includes the following bylaws:

Bylaw No.	Bylaw Name	Adopted	Purpose
890	Flood Hazard Area Land Use Management Bylaw No. 890, 2026	March 24, 2026	To regulate the siting and construction of buildings and structures in land designated as floodplain

This bylaw may not be complete due to pending updates or revisions and therefore is provided for reference purposes only. Titles and whereas clauses may be different than in original bylaws to make this consolidated version more clear and identify historical changes and conditions. THIS BYLAW SHOULD NOT BE USED FOR ANY LEGAL PURPOSES. Please contact the corporate legislative officer at the Comox Valley Regional District to view the complete bylaw when required.

COMOX VALLEY REGIONAL DISTRICT

BYLAW NO. 890

A bylaw to regulate the siting and construction of buildings and structures in land designated as floodplain in Electoral Areas A (excluding Denman and Hornby Islands), B and C of the Comox Valley Regional District.

WHEREAS Section 524 of the *Local Government Act* (RSBC, 2015, c. 1) allows a local government to designate land as floodplain, specify the flood construction level for that floodplain, and specify setbacks for landfill or structural supports within floodplain;

AND WHEREAS the Comox Valley Regional District has considered the Provincial Flood Hazard Area Land Use Management Guidelines;

NOW THEREFORE the Board of the Comox Valley Regional District in open meeting assembled, enacts the following:

Application

1. This bylaw shall be applicable to Electoral Areas A (excluding Denman and Hornby Islands), B and C of the Comox Valley Regional District.
2. The following schedules attached hereto and forming an integral part of this bylaw are:
 - a) Schedule A – Floodplain Regulations
 - b) Schedule B – Designated Floodplain Mapping (2021)
 - c) Schedule C – Designated Floodplain Mapping for the Courtenay, Puntledge and Tsolum Rivers (1991)
 - d) Schedule D – Designated Floodplain Mapping for the Oyster River (1984)

Where the designated floodplain boundaries depicted on Schedule C and Schedule D differ from those on Schedule B, the boundaries on Schedule B shall apply.

3. Pursuant to s. 524 of the *Local Government Act* the Comox Valley Regional District designates as floodplain all of the land identified as such on the regional district's floodplain maps, the original and official versions of which are maintained as digital records by the corporate officer of the regional

district and are available for viewing on the Comox Valley Regional District online mapping tool and reduced paper copies of which are included for reference as Schedule B, C and D to this bylaw.

Repeal

4. Bylaw No. 600 being the "Floodplain Management Bylaw No. 600 2020" and all amendments thereto, is hereby repealed.

Citation

5. This Bylaw may be cited for all purposes as Bylaw No. 890 being the "Flood Hazard Area Land Use Management Bylaw No. 890, 2026".

SCHEDULE A

Part 100

Administration

101 Other Legislation

- 1) Nothing contained in this Bylaw shall relieve any person from the responsibility to ascertain whether their proposed development complies with all other applicable enactments.

102 General Prohibitions

- 1) No person shall construct, reconstruct, alter, move or extend any building or structure so that it contravenes the requirements of this Bylaw.

103 Enforcement

- 1) A Bylaw Compliance Officer may administer this Bylaw and may enter at all reasonable times on any property to which this Bylaw applies to inspect and determine whether the regulations, prohibitions and requirements of this bylaw are being met.
- 2) A Bylaw Compliance 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.
- 3) No person shall construct, build, reconstruct, alter, move or extend a building or structure so that it contravenes the requirements of this bylaw.

104 Obstruction

- 1) No person shall prevent or obstruct a Bylaw Compliance Officer from performing their duties under this Bylaw.

105 Offence and Penalty

- 1) Any person who contravenes a provision of this bylaw, or who allows any act or thing to be done in contravention of this bylaw, or who refuses, omits, or neglects to fulfill, observe, carry out or perform any duty or obligation imposed in this bylaw is guilty of an offence and:

- (a) On summary conviction is liable to a fine of not less than \$5,000 and not more than \$50,000; or on conviction of a ticket offence under the ticketing bylaw, is liable for the fine imposed under that bylaw.
- 2) If an offence is a continuing offence, each day that the offence is continued constitutes a separate and distinct offence.

106 Severability

- 1) 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, the invalid portion shall be severed and the decision that it is invalid shall not affect the validity of the remainder.

107 No Representation

- 1) By the enactment, administration or enforcement of this Bylaw, the Comox Valley Regional District does not represent to the owner or any other person that any building or structure, including a manufactured home, located, constructed or used in accordance with the regulations of this Bylaw or in accordance with any advice, information, direction or guidance provided by the Comox Valley Regional District in the course of the administration of this Bylaw will not be damaged by flooding or erosion.

108 Objectives

- 1) To reduce or prevent injury, human trauma, and loss of life, and to minimize property damage during flooding events.

Part 200

Interpretation

201 Definitions

In this bylaw, the words in the left hand column have the meaning set out in the right hand column opposite them, as follows:

Addition	The process or result of increasing the size or floor area of an existing Building or Structure.
Alluvial Fan	The 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.
Artificially Maintained Pond	A small body of water that is manufactured, created, or constructed by human beings, intended for recreational, aesthetic, or irrigation purposes, that poses no flood risk as determined by a Professional Engineer.
Building	A structure wholly or partly covered by a roof or roofs supported by walls or columns which is permanently affixed to the land and is intended for supporting or sheltering any use or occupancy.
Bylaw Compliance Officer	The General Manager of Planning and Development Services and/or the General Manager of Engineering Services or their delegates, including peace officers.
Building Official	The person designated in or appointed to that position by the Comox Valley Regional District, and includes the Manager of Building Services, building inspector, plan checker, plumbing inspector that is designated or appointed by the Comox Valley Regional District, and for certainty, the Building Official is the "building inspector" referred to in the Community Charter and Local Government Act, and a "qualified building official" or "exempt building official", as applicable, under the Building Act.
Carport	A roofed enclosure used for the storage or parking of motor vehicles with less than 60 per cent of the total perimeter enclosed by walls, doors, or windows.

Commercial Use	An occupation, employment, personal service or enterprise that is carried on for gain or monetary profit by any person.
Designated Flood	A flood which may occur in any given year, of such magnitude as to equal a flood having a 1:200 Annual Exceedance Probability (AEP). 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	The observed or calculated elevation for the designated flood, which is used in the calculation of the flood construction level. In coastal areas, the Designated Flood Level includes the appropriate allowance for future sea level rise, tide, storm surge and wave effects.
Dwelling Unit	A self-contained room or suite of rooms within a building that is operated as a housekeeping unit or intended for use as residential premises for one household with sleeping and sanitary facilities and not more than one kitchen facility, but excludes recreational vehicles.
Entryway	An entrance or hallway located at the entrance of a building or structure (up to 12 square metres in size) serving as a space that connects the exterior to the interior.
Farm Building	A building or part thereof which does not contain a residential occupancy and which is associated with and located on land devoted to the practice of agriculture, and used for the housing of equipment or livestock, or the production, storage or processing of agricultural or horticultural produce or feeds.
Flood Construction Level	The Designated Flood Level plus the allowance for freeboard used to establish the elevation of the underside of a wooden floor system or top of concrete slab for habitable area. In the case of a manufactured home, the underside of floor system shall be equal to or higher than the above-described elevation.
Floodplain	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 administration purposes is taken to be that area

submerged by the Designated Flood plus freeboard. In coastal areas, the floodplain includes the area of land that may be subject to future flooding due to sea level rise.

Floodplain Setback	The required minimum distance from the Natural Boundary (or Future Estimated Natural Boundary) of a watercourse, lake, or other body of water to any building or structure or siting of a building or structure, landfill, or structural support required to elevate the underside of a wooden floor system or top of concrete slab above the Flood Construction Level, so as to maintain a floodway and to allow for potential land erosion.
Flood Proofing	The alteration of land or structures either 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.
Freeboard	A vertical distance added to a designated flood level, used to establish a flood construction level.
Garage	A building or structure, or portion of a building or structure, used or intended to be used for parking motor vehicles, including vehicular access points for ingress and egress.
Geodetic Survey Of Canada (G.S.C.) Datum	A vertical distance above Canadian Geodetic Vertical Datum of 2013 (CGVD2013) (mean sea level as determined by Natural Resources Canada), as updated from time to time.
Goods Damageable By Floodwaters	Any goods, possessions or equipment (including mechanical equipment) integral to the function or use of any building or structure on that property.
Habitable Area	Any room or space within a building or structure that is or can be used for human occupancy or commercial use, or is used for the storage of goods damageable by floodwaters.
Human Occupancy	The use of any building or structure primarily for activities that involve the regular presence of people, not including incidental or transient presence.

Lake	A body of standing water surrounded by land, fed by precipitation, groundwater, and/or inflowing rivers and streams, excluding artificially maintained ponds.
Landfill	Land, gravel, earth, rock or any combination thereof placed or deposited by humans to raise the level of the ground, but does not include building or construction debris.
Manufactured Home	Means a structure manufactured as a unit, intended to be occupied in a place other than at its manufacture, and designed as a dwelling unit, and includes modular homes and mobile homes and specifically excludes recreation vehicles.
Natural Boundary	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 its banks, in vegetation, as well as in the nature of the soils itself, as defined in Section 1 of the <i>Land Act</i> . For coastal areas, the natural boundary includes the natural limit of permanent terrestrial vegetation. In addition, the natural boundary includes the best estimate of the edge of dormant or old side channels and marsh areas.
Natural Ground Elevation	The undisturbed ground elevation prior to site preparation.
Pad	A paved surface on which blocks, posts, runners or strip footings are placed for the purpose of supporting a manufactured home or other habitable area
Professional Engineer	A person who is registered or licensed in good standing with the Engineers and Geoscientists of British Columbia.
Reconstruction	The substantial rebuilding of an existing building or structure to an extent that is equal to or greater than 50 per cent of the structural elements above the foundation, including the roof, walls and floors, as existing at the date of the adoption of this bylaw. For clarity, structural alterations to the foundation constitutes new construction.

Renovation	The repair, alteration, or improvement of an existing building or structure that does not involve a reconstruction or an addition thereto and does not result in a change of use or occupancy of the Structure. For clarity, renovation includes minor repairs to the foundation. The Building Official or designate is delegated the authority to determine what constitutes renovation in the case of any uncertainty in the application of the definition.
Regional District Board	The elected board of the Comox Valley Regional District.
Standard Dike	A dike built to a minimum crest elevation equal to the flood construction level and meeting standards of design and construction approved by the Inspector of Dikes and maintained by a diking authority under the <i>Dike Maintenance Act</i> or successor legislation.
Storage Building	Non-habitable accessory building or structure less than 20 m ² in building area, where the only use is for storage of goods not damageable by floodwaters.
Structure	Anything that is constructed or erected, supported by or sunk into land or water, and includes swimming pools, manufactured home pads, and improvements accessory to the principal use of land, but excludes landscaping, paving improvements, signs under 1.0 metre in height, retaining walls under 1.5 metres in height, fencing under 2.5 metres in height.
Suitable Building Envelope	An area on a property large enough for the development or construction of a permitted residential, commercial, or industrial use without requiring encroachment into prescribed setbacks or development permit areas.
Valid hardship	A hardship shall only be recognized where the physical characteristics of the lot (e.g. exposed bedrock, steep slope, the presence of a watercourse, and/or size and/or shape of the lot) are such that development proposals consistent with the current land use zoning cannot occur under the requirements of this Bylaw. The economic circumstances or design and siting

preferences of the applicant shall not be considered as grounds for hardship.

Watercourse

Any natural or human-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, or acting as a retention area for, water at least six months of the year and having a drainage area of 2 square kilometres or more upstream of the point of consideration, excluding roadside ditches in the jurisdiction of the Ministry of Transportation and Transit.

Wetland

Land seasonally or permanently covered by water and dominated by water-tolerant vegetation. Wetlands include swamps, marshes, bogs and fens but not lands periodically flooded for agricultural purposes.

Part 300

Floodplain Regulations

301 Floodplain Designation

- 1) The following land is designated as floodplain:
 - a) Lands shown as floodplain on the following:

Lands identified as such on the regional district's floodplain maps, the original and official versions of which are maintained as digital records by the corporate officer of the regional district and are available for viewing on the CVRD online mapping tool, and reduced paper copies of which are included for reference as Schedule B, C and D to this bylaw.

 - i) Schedule B – Designated Floodplain Mapping (2021)
 - ii) Schedule C– Designated Floodplain Mapping for the Courtenay, Puntledge and Tsolum Rivers (1991)
 - iii) Schedule D – Designated Floodplain Mapping for the Oyster River (1984)
 - iii) Where one area is mapped in Schedule B, Schedule C, and/ or Schedule D, the maps maintained as digital records on the CVRD online mapping tool, shall designate the floodplain.
 - b) Land lower than the flood construction levels specified in Section 302.
 - c) Land within the floodplain setbacks specified in Section 302.
 - d) Land within any alluvial fan.

302 Floodplain Specifications

1) Flood Construction Levels

The following elevations are specified as Flood Construction Levels, except 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 shown or determined by interpolation from those Flood Construction Levels shown on Schedule B, Schedule C and/or Schedule D. Flood Construction Levels should not be determined by interpolating flood levels between coastal zones in Schedule B.

OR

- b. Where the Flood Construction Level is not shown on Schedule B, Schedule C and/or Schedule D, the following shall apply:
- i. 137.5 metres G.S.C. datum surrounding Comox Lake, where the land is within 100 metres of the natural boundary of Comox Lake.
 - ii. 3.0 metres above the natural boundary of Cowie Creek and the Browns, Courtenay, Cruickshank, Oyster, Puntledge, Trent, Tsable and Tsolum Rivers, and any other watercourse where the designated flood, as determined by a Professional Engineer, is greater than 80 cubic metres per second, where the land is within a distance of 200 metres of the natural boundary of that watercourse.
 - iii. 3.0 metres above the natural boundary of any lake over 15 kilometres at its greatest horizontal distance where the land is within a distance of 200 metres of the natural boundary of that lake.
 - iv. 1.5 metres above the natural boundary of any other watercourse, lake, or wetland where the land is within a distance of 100 metres of the natural boundary of that watercourse, lake, or wetland.
 - v. Robinson Lake, legally described as Lot 27, Sections 21 and 22, Township 4, Comox District, Plan 26336, Except That Part in Plan 26755, is exempted from the minimum flood construction levels, as the water source of the lake is from an aquifer and the lake is a closed system.

OR

- c. On alluvial fans, the flood construction level will be determined by a site specific assessment by a Professional Engineer pursuant to the provisions of Section 302 of the *Local Government Act* (RSBC, 2015, c. 1) and Section 56 of the *Community Charter* and in accordance with the *Provincial Flood Hazard Area Land Use Management Guidelines*. Where the alluvial fan is adjacent to the coastline, the Flood Construction Level shall be no lower than the Flood Construction Level shown in Schedule B.

2) **Floodplain Setbacks**

The following distances are specified as Floodplain Setbacks, except that where more than one Floodplain Setback is applicable, the greater setback shall be the Floodplain Setback:

- a. Where the Coastal Floodplain Setback line is shown on Schedule B the distance shall be scaled from the map.

OR

- b. Where the Coastal Floodplain Setback is not shown on Schedule B the following shall apply:
 - i. 60.0 metres from the natural boundary of Oyster River.
 - ii. 30.0 metres from the natural boundary of Cowie Creek, and the Browns, Courtenay, Cruickshank, Puntledge, Trent, Tsable, and Tsolum Rivers, and any other watercourse where the designated flood, as determined by a Professional Engineer, is greater than 80 cubic metres per second.
 - iii. 15.0 metres from the natural boundary of any other watercourse, lake, or wetland.
 - iv. On alluvial fans the floodplain setback will be determined by a site specific assessment by a Professional Engineer pursuant to the provisions of Section 302 of the *Local Government Act* (RSBC, 2015, c. 1), Section 56 of the *Community Charter* and in accordance with the *Provincial Flood Hazard Area Land Use Management Guidelines*. Where the alluvial fan is adjacent to the coastline, the setback shall be no closer to the shore than the setback shown in Schedule B.

303 Application of Floodplain Specifications

- 1) Pursuant to Section 524 of the Local Government Act, after a bylaw has specified Flood Construction Levels and Floodplain Setbacks:
 - a. No Habitable Area shall be constructed, reconstructed, altered, added, moved or extended, such that the underside of any floor system, or the top of any pad supporting habitable area is lower than the Flood Construction Level specified in Section 302 of this bylaw.

- b. No Habitable Area shall be constructed, reconstructed, altered, added, moved or extended within the Floodplain Setback as described in Section 302 of this bylaw.
 - c. Any landfill required to support a floor system or pad shall not extend within any Floodplain Setback from a watercourse, lake, or wetland specified by Section 302 of this bylaw.
 - d. Enclosed underground parking below the Flood Construction Level is not permitted on any property located within the Floodplain as identified on Schedule B and Schedule C.
 - e. Mechanical equipment (eg. furnaces, hot water tanks, major electrical switchgear, or other fixed equipment) not behind standard dikes must meet Flood Construction Levels.
- 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 302. The structural support and/or landfill shall be protected against scour and erosion from flood flows, wave action, ice and other debris.
- 3) Structural support and landfill installed to meet Flood Construction Levels specified in Section 302 shall be installed and compacted under the direction of a Professional Engineer, who shall confirm that the structural support and compacted landfill does not
- a. adversely impact adjacent properties by increasing the surface water elevation or directing flows toward those properties and/ or
 - b. modify site grading or natural drainage in a manner that interferes with overland flow paths, except as mitigated per the recommendations of a Professional Engineer.
- 4) A British Columbia Land Surveyor's certificate shall be required to verify compliance with the Flood Construction Levels and Floodplain Setbacks specified in Section 302.
- 5) A report certified by a Professional Engineer that the land may be used safely for the use intended, pursuant to Section 56 of the Community Charter and Section 302 of the Local Government Act, may be required by the Building Official prior to building permit approval.
- 6) Where there is uncertainty of the applicability of this bylaw, the Comox Valley Regional District may require a landowner to obtain and pay for a

report certified by a Professional Engineer that the land may be used safely for the use intended and to provide information deemed necessary by the Comox Valley Regional District.

- 7) The Comox Valley Regional District may require that any report submitted in accordance with this Bylaw be independently reviewed by a Professional Engineer.

PART 400

EXEMPTIONS

401 General Exemptions

- 1) The following types of development are exempt from the flood construction levels specified in Section 302 of Schedule A of this Bylaw:
 - a) A renovation of an existing building or structure that does not involve an addition or reconstruction thereto, or the creation of new habitable area or dwelling unit(s).
 - b) A building or structure, or portion thereof, to be used as:
 - i) Carport, garage, unenclosed porch, open deck, domestic greenhouse, or storage buildings not used for the storage of goods damageable by floodwaters; or
 - ii) Entryways up to 12 square metres combined, per building or structure.
 - c) Farm buildings and open-sided livestock housing except dwelling units and enclosed livestock housing.
 - d) Onloading and offloading facilities associated with water-oriented industry or portable sawmills provided the main electrical switchgear is placed above the flood construction level.
 - e) Existing mechanical equipment (e.g. furnaces, hot water tanks, major electrical switchgear, or other fixed equipment) replaced as part of a renovation or addition that does not involve the creation of a new dwelling unit(s).
- 2) The following types of development are exempt from floodplain setback requirements specified in Section 302 of this Bylaw provided they do not encroach further into the setback:
 - a) A renovation of an existing building or structure that does not involve an addition or reconstruction thereto, or the creation of new habitable area or dwelling unit(s).
 - b) A building or structure, or portion thereof, to be used as:
 - i) Carport, garage, unenclosed porch, open deck, domestic greenhouse, or storage buildings not used for the storage of goods damageable by floodwaters; or

- ii) Entryways up to 12 square metres combined, per building or structure.
- c) Mechanical equipment (e.g. furnaces, hot water tanks, major electrical switchgear, or other fixed equipment)

402 Conditional Exemptions

1) Flood Construction Levels

The following types of development are exempt from the flood construction levels specified in Section 302 of Schedule A of this Bylaw, subject to the following conditions:

a) Closed-sided Livestock Housing:

Closed-sided livestock housing shall be located with the underside of a wooden floor system or the top of the pad (or in the case of manufactured housing, the top of pad or the ground surface on which it is located) no lower than 1.0 metres above the natural ground elevation taken at any point on the perimeter of the building or structure, or no lower than the flood construction levels specified in Section 302 of Schedule A of this Bylaw, whichever is the lesser.

b) Industrial Uses:

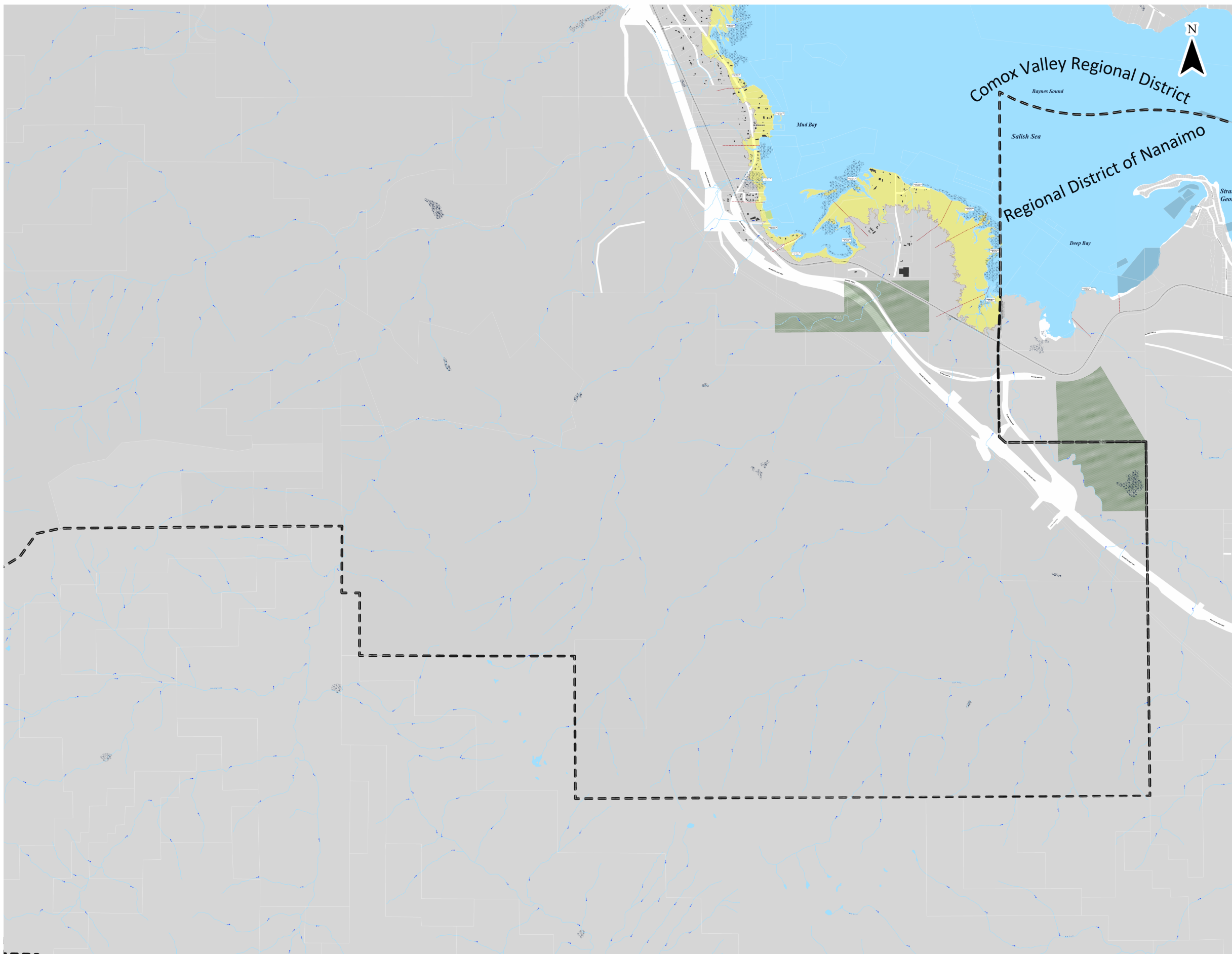
Industrial uses, other than main electrical switchgear, shall be located with the underside of a floor system or the top of the pad (or in the case of a mobile structure, the top of pad or the ground surface in which it is located) no lower than the flood construction levels specified in Section 302 of this bylaw, minus freeboard. Main electrical switchgear shall be no lower than the flood construction level.

403 Site Specific Exemptions to Floodplain Specifications

- 1) Pursuant to Section 524 (7) of the *Local Government Act* (RSBC, 2015, c. 1) a person may make an application to the Comox Valley Regional District to exempt a specific parcel of land or a use, building or other structure on that parcel of land from the flood specifications (flood construction level and/or the floodplain setback specified in S. 302 of this bylaw) where:
 - a) The Comox Valley Regional District Board considers the exemption advisable and

- b) The property owner has provided a report prepared by a Professional Engineer in good standing with the Engineers and Geoscientists of British Columbia that is consistent with the *Provincial Flood Hazard Area Land Use Management Guidelines* and the *Legislated Flood Assessments in a Changing Climate in BC (Engineers and Geoscientists British Columbia)* and
 - (i) Provides a description of the proposed development.
 - (ii) Confirms that the land may be used safely for the use intended and specifies conditions that would enable the land to be used safely for the use intended.
 - (iii) Prescribes the required flood construction level based on minimum allowance for future sea level rise to the year 2100.
 - (iv) Prescribes the required floodplain setback.
 - (v) Demonstrates the existence of a valid hardship and confirms no other practical siting option is available.
 - (vi) Confirms the proposed floodplain setback represents the minimum variation from the requirements of the bylaw and represents no further contravention of the mapped setback given the existing site characteristics, location of the existing infrastructure (if any), and intended use of the land, specifically without regard to the economic circumstances or siting preference of the applicant.
 - (vii) Confirms the proposed construction methods are designed to mitigate flood damage and
 - c) The Professional Engineer has provided a completed Flood Hazard and Risk Assurance Statement(s).
- 2) As a condition of a site-specific exemption the property owner will be required at their expense to prepare and register a restrictive covenant under Section 219 of the *Land Title Act* in favour of the Comox Valley Regional District:
- a) Specifying conditions that would enable the land to be safely used for the use intended according to the terms of the report prepared by a Professional Engineer which will form part of the restrictive covenant.

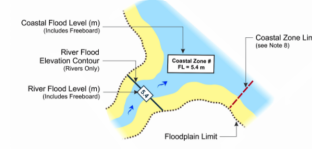
SCHEDULE B
DESIGNATED FLOODPLAIN MAPPING (2021)



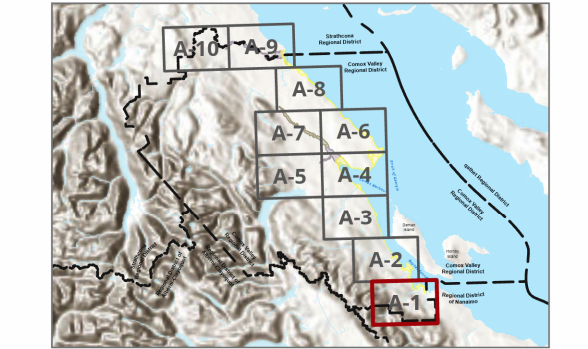
The Comox Valley Regional District lies within the unceded traditional territory of the K'ómoks First Nation

Legend

- Coastal Zone Limit (see Note 8)
- River Flood Elevation Contour (Rivers Only)
- Coastal Floodplain Setback
- Riverine Floodplain (circa 2021)
- Riverine Floodplain (circa 1984/1991)
- Normal Water Surface
- Administrative Boundary
- Park, Ecological Reserve, Protected Area
- Building Footprint (Approximate)



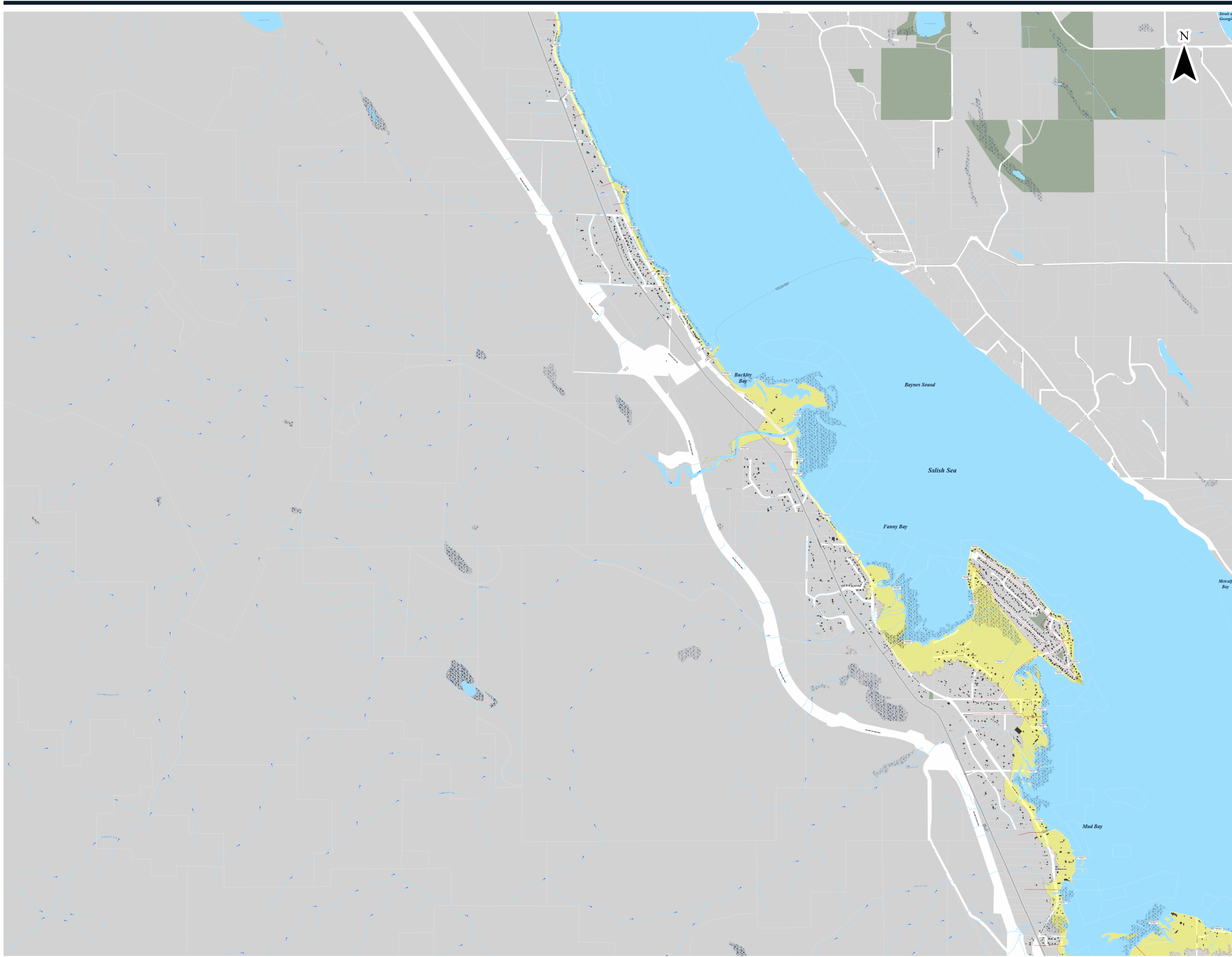
- Notes and Limitations**
1. This map is an administrative tool which depicts the estimated flood levels and floodplain limits for a designated storm and flood events within the map area. Flooding may occur to levels above the estimated flood levels and outside the estimated floodplain limits. The local government does not assume any liability for the accuracy of the estimated flood levels and floodplain limits shown on this map. A site-specific analysis should be conducted to assess the potential for flooding in areas outside/near the mapped floodplain limits.
 2. The flood levels, floodplain limits and setbacks depicted on this map have been developed using a methodology which is consistent with the 2018 BC Flood Hazard Area Land Use Management Guidelines (the "provincial guidelines") for the development of flood construction levels; the 2018 Federal Flood Mapping Framework including relevant guidelines; the 2017 Engineers and Geoscientists BC Flood Mapping Guidelines and the 2004 Fraser Basin Council Floodplain Mapping Guidelines and Specifications.
 3. The flood levels and floodplain limits correspond to the peak calculated values of the flood event and may not be contemporaneous across the mapping, i.e. maximum flood levels may occur in different areas at different times. Refer to the Ken Wood Leidal Associates Ltd. report "Coastal Flood Mapping Project", April 2021 for details regarding how this map was developed.
 4. River flood levels are calculated using industry standard hydraulic modelling practices/software assuming open water flow conditions. The river flooding events depicted on this map have a statistical annual exceedance probability of 0.5% (the flood which is estimated to be equalled or exceeded on average once every 200 years) and occur at an ocean still water level with an annual exceedance probability of 0.5%. River flows have been increased by 15% over current (2020) extreme values to account for projected climate change impacts and ocean still water levels have been increased by 1.0 m over current extreme static water levels to account for the effects of sea level rise. River flood levels and floodplain limits include a freeboard allowance of 0.6 m.
 5. Oyster River flood levels have been modelled for two scenarios: a scenario in which dikes are intact and do not overtop and a scenario in which a hypothetical dike breach occurs. The flood levels and floodplain limits depicted in the mapping are the maximum values of the two scenarios. The location and size of the hypothetical dike breach is based on recommendations provided in the 2004 Fraser Basin Council Floodplain Mapping Guidelines and Specifications. In the no-breach scenario, it is assumed that the Glenmore Dike is sufficient to contain the river flow on the river side of the dike, and also that Glenmore Road Embankment will act as a dike, resulting in maximum flood levels on the river side of the dike and road. In the breach scenario, it is assumed that the Glenmore Dike and Glenmore Road Embankment would prevent flow from returning to the river, resulting in maximum flood levels in the floodplain to the north of the dike and road.
 6. Coastal flood levels have been calculated using the "Probabilistic Method", in accordance with the provincial guidelines. The flood levels are based on a storm event (wind and wave) with an annual exceedance probability of 0.5% occurring simultaneously with a still water level of the same probability. The coastal flood levels include astronomical tides, storm surge, wave effects, allowances for ground subsidence or uplift and a freeboard allowance of 0.6 m. Coastal flood levels have been increased by 1.0 m over current (2020) extreme static water levels to account for the effects of sea level rise.
 7. The setback mapping has been performed entirely as a desktop exercise based on provincial guidelines for setback mapping (FLNR, 2018). No field investigations have been conducted to confirm local site conditions or the adequacy of the setbacks depicted in the mapping; larger setbacks may be needed due to local erosion hazards, terrestrial cliff and slope stability hazards have not been reviewed when preparing the setback mapping. Field investigations by qualified professionals should be conducted to confirm local conditions and setback requirements.
 8. The coastal modelling and mapping have been prepared at a regional scale, and do not resolve small-scale variations in shoreline exposure and topography. Coastal flood levels have been established based on one-dimensional modelling in which the shoreline is divided into "Coastal Zones", and wave effects are calculated at discrete locations (transects) within each Coastal Zone. Flood levels differ between Coastal Zones due to wave exposure and the characteristics of the shoreline. When preparing two-dimensional mapping based on the coastal model results, it is assumed that the results at these transect locations are representative of the adjacent locations and therefore each Coastal Zone has a constant flood level. Flood levels calculated at locations other than the transect locations may differ from those depicted on the map. The coastal modelling and mapping does not account for wave overtopping and the relative conveyance capacity and storage volume of inland water courses and drainage systems. Inland areas are assumed to flood to the flood level of the coastal zone.
 9. The shoreline erodibility assessment which supported the identification of lengths of shoreline which may warrant potential setback increase or reduction was entirely a desktop exercise and relied on the interpretation of orthophotos, mapping and reports by others that provided only partial coverage of the study area. As such, the results should be viewed as indicative only. The assessment is intended to serve as a potential screening tool when making land use planning decisions. Field investigations by qualified professionals should be conducted to confirm local conditions and setback requirements.
 10. The accuracy of the location of the floodplain limit as shown on this map is limited by the accuracy of the base topography and the scale at which the map is produced. The floodplain limits are not established on the ground by legal survey. Existing ground elevations, building and footing elevations should be based on field survey using established benchmarks. The legal boundaries shown on this map are based on cadastral information and are for illustrative only. A site-specific legal survey is required to reconcile property locations.
 11. This flood map does not provide information on the potential for site-specific flood-related hazards such as bank erosion, aggradation, debris accumulation or sudden shifts in river channel alignment. The map does not include all possible flood hazards which may include localized increases in flood levels due to groundwater, tributary streams, storm sewer systems or other phenomena and must be considered together with complementary studies including but not limited to Master Drainage Plans. Flood levels and floodplain limits are not delineated for side streams or tributaries. Flood levels, floodplain limits and setbacks due to tsunamis are not depicted on the map.
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Scale: 0 250 500 Metres
1:43,000










Coordinate System: NAD 1983 UTM Zone 10N
Vertical Datum: Canadian Geodetic Vertical Datum of 2013 (CGVD2013)
Scale Disclaimer: The map scale of 1:43,000 is only valid on a 11"x17" print.
Date: March 2020

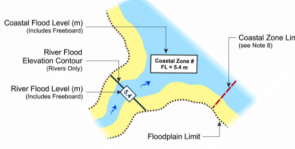
Designated Floodplain Bylaw No. 890
Map A-1 of Schedule B



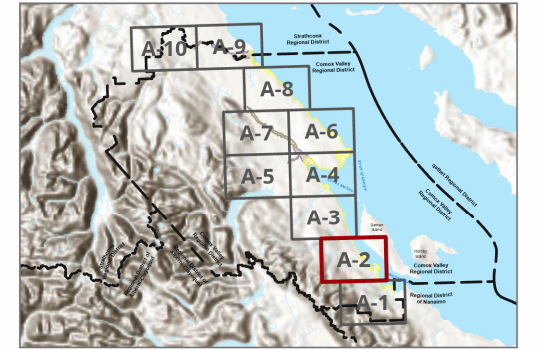
The Comox Valley Regional District lies within the unceded traditional territory of the K'ómoks First Nation

Legend

-  Coastal Zone Limit (see Note 8)
-  River Flood Elevation Contour (Rivers Only)
-  Coastal Floodplain Setback
-  Riverine Floodplain (circa 2021)
-  Riverine Floodplain (circa 1984/1991)
-  Normal Water Surface
-  Administrative Boundary
-  Park, Ecological Reserve, Protected Area
-  Building Footprint (Approximate)



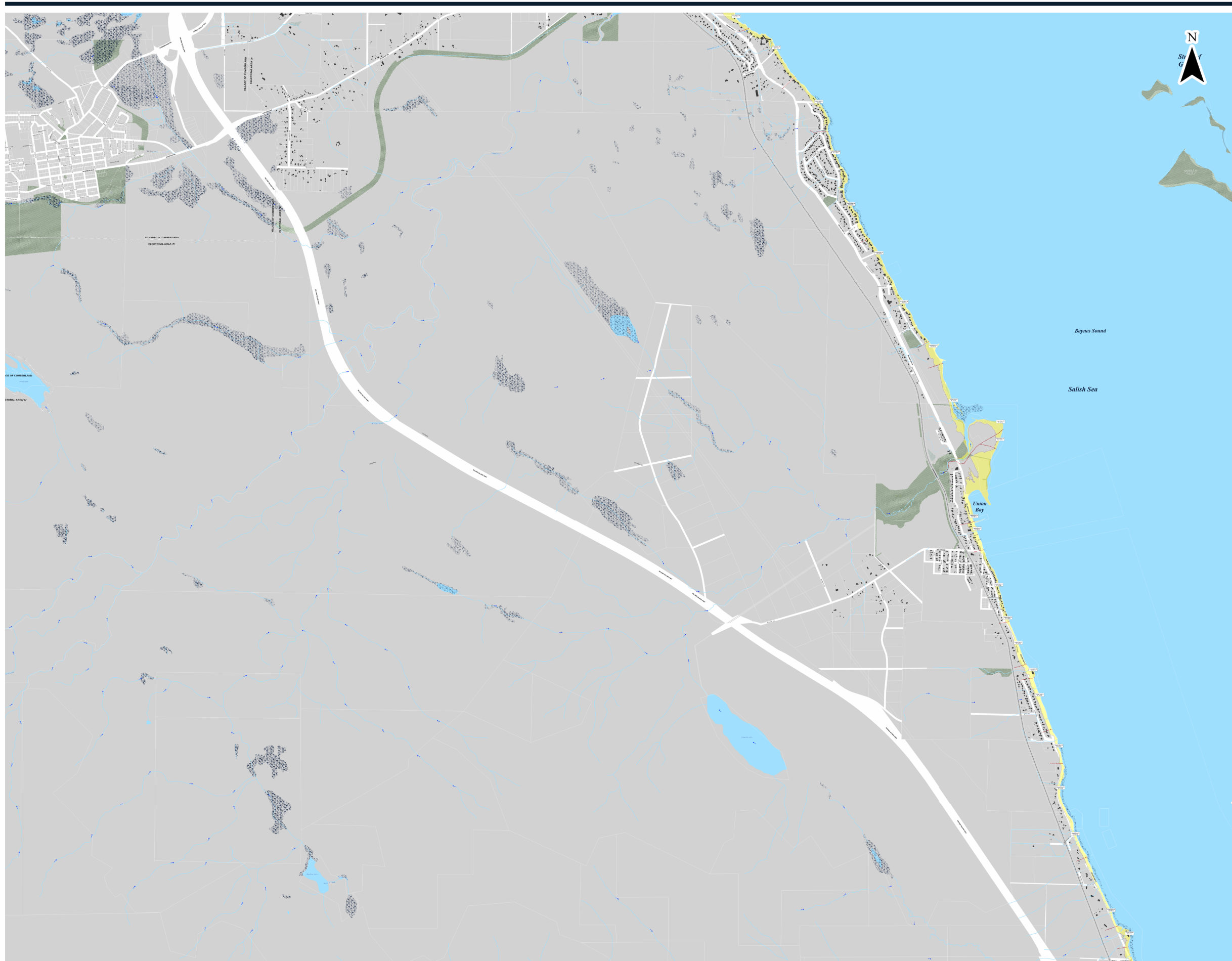
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 3. The flood levels and floodplain limits correspond to the peak calculated values of the flood event and may not be contemporaneous across the mapping, i.e. maximum flood levels may occur in different areas at different times. Refer to the Kern Wood Levelling Associates Ltd. report "Coastal Flood Mapping Project", April 2021 for details regarding how this map was developed.
 4. River flood levels are calculated using industry standard hydraulic modelling practices/software assuming open water flow conditions. The river flooding events depicted on this map have a statistical annual exceedance probability of 0.5% (the flood which is estimated to be equalled or exceeded on average once every 200 years) and occur at an ocean still water level with an annual exceedance probability of 0.5%. River flows have been increased by 15% over current (2020) extreme values to account for projected climate change impacts and ocean still water levels have been increased by 1.0 m over current extreme static water levels to account for the effects of sea level rise. River flood levels and floodplain limits include a freeboard allowance of 0.6 m.
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 6. Coastal flood levels have been calculated using the "Probabilistic Method", in accordance with the provincial guidelines. The flood levels are based on a storm event (wind and wave) with an annual exceedance probability of 0.5% occurring simultaneously with a still water level of the same probability. The coastal flood levels include astronomical tides, storm surge, wave effects, allowances for ground subsidence or uplift and a freeboard allowance of 0.6 m. Coastal flood levels have been increased by 1.0 m over current (2020) extreme static water levels to account for the effects of sea level rise.
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Scale: 0 250 500 Metres
1:43,000

Coordinate System: NAD 1983 UTM Zone 12N
Vertical Datum: Canadian Geodetic Vertical Datum of 2013 (CGVD2013)
Scale Disclaimer: The map scale of 1:43,000 is only valid on a 11x17" print.
Date: March 2020

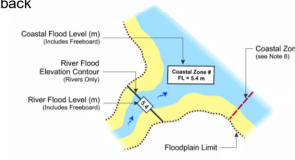
Designated Floodplain Bylaw No. 890
Map A-2 of Schedule B



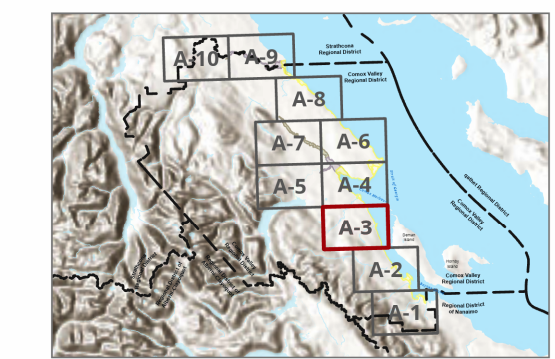
The Comox Valley Regional District lies within the unceded traditional territory of the K'ómoks First Nation

Legend

- Coastal Zone Limit (see Note 8)
- River Flood Elevation Contour (Rivers Only)
- Coastal Floodplain Setback Line
- Coastal Floodplain Setback
- Riverine Floodplain (circa 2021)
- Riverine Floodplain (circa 1984/1991)
- Normal Water Surface
- Administrative Boundary
- Park, Ecological Reserve, Protected Area
- Building Footprint (Approximate)



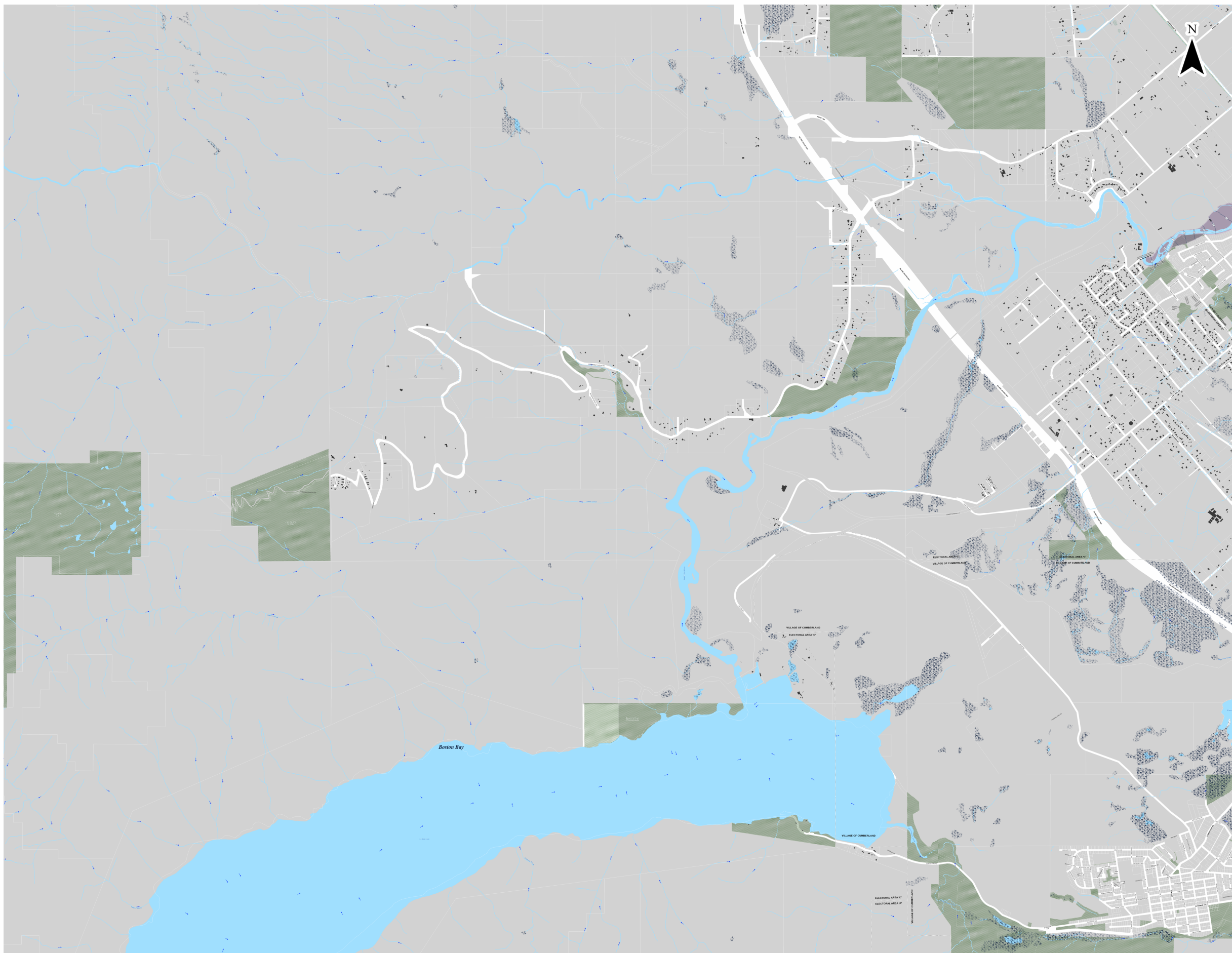
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 - Coastal flood levels have been calculated using the "Probabilistic Method", in accordance with the provincial guidelines. The flood levels are based on a storm event (wind and wave) with an annual exceedance probability of 0.5% occurring simultaneously with a still water level of the same probability. The coastal flood levels include astronomical tides, storm surge, wave effects, allowances for ground subsidence or uplift and a freeboard allowance of 0.6 m. Coastal flood levels have been increased by 1.0 m over current (2020) extreme static water levels to account for the effects of sea level rise.
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Scale: 0 250 500 Metres
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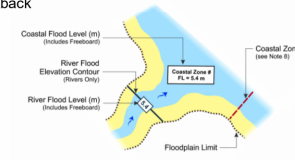
Designated Floodplain Bylaw No. 890
Map A-3 of Schedule B



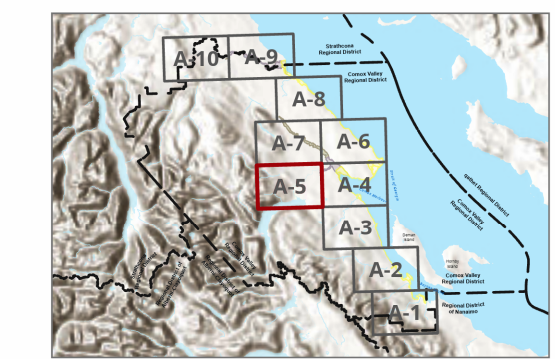
The Comox Valley Regional District lies within the unceded traditional territory of the K'ómoks First Nation

Legend

- Coastal Zone Limit (see Note 8)
- River Flood Elevation Contour (Rivers Only)
- Coastal Floodplain Setback Line
- Coastal Floodplain Setback
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- Riverine Floodplain (circa 1984/1991)
- Normal Water Surface
- Administrative Boundary
- Park, Ecological Reserve, Protected Area
- Building Footprint (Approximate)

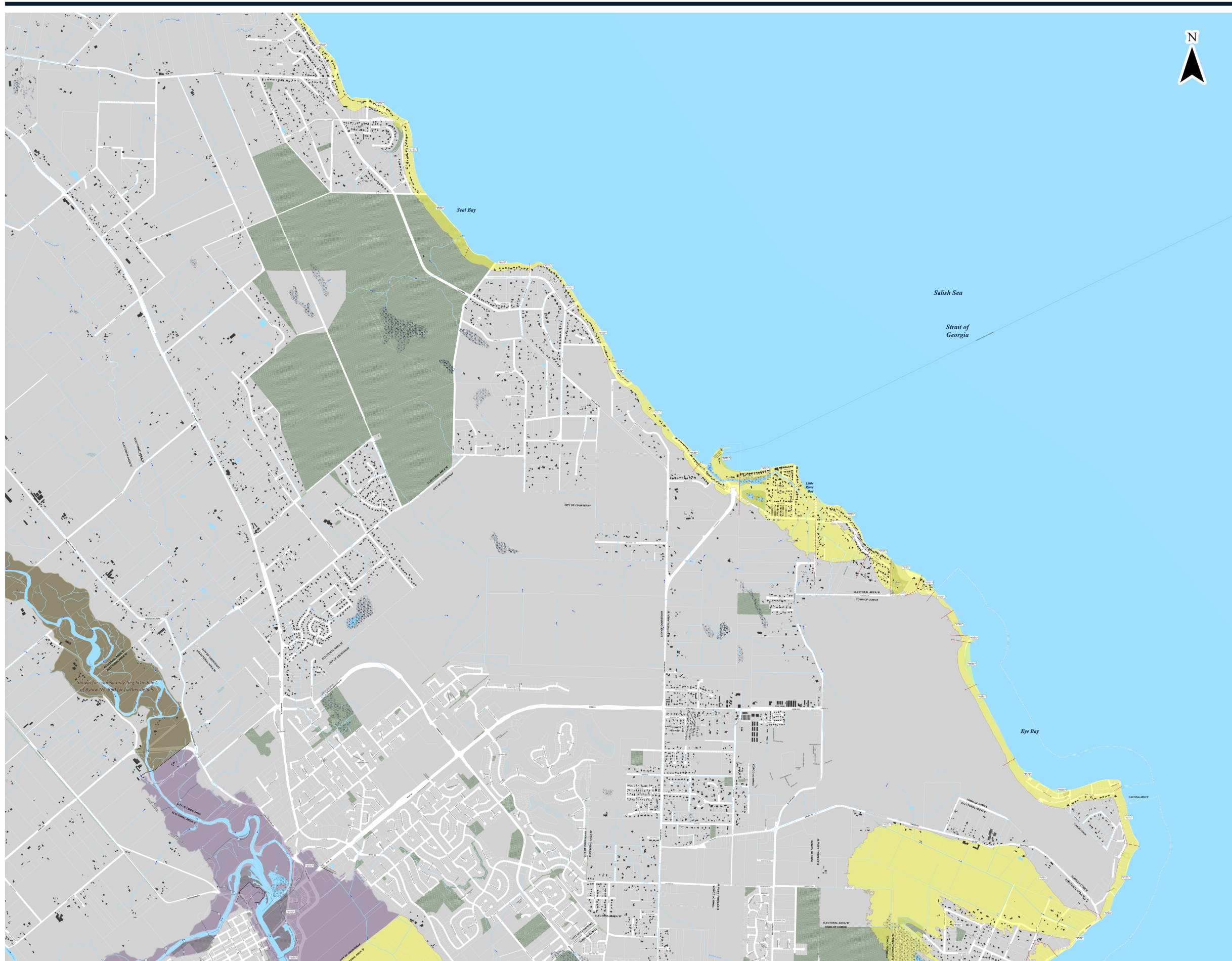


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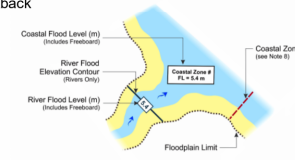
Designated Floodplain Bylaw No. 890
Map A-5 of Schedule B



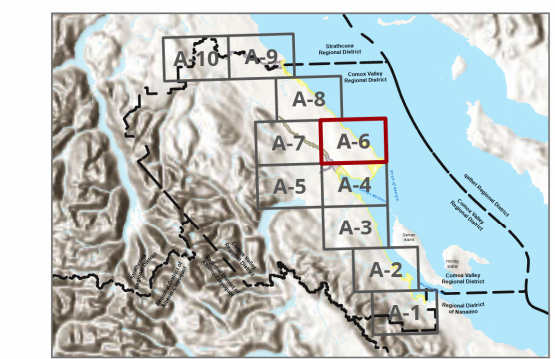
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Legend

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 - The coastal modelling and mapping have been prepared at a regional scale, and do not resolve small-scale variations in shoreline exposure and topography. Coastal flood levels have been established based on one-dimensional modelling in which the shoreline is divided into "Coastal Zones", and wave effects are calculated at discrete locations (transsects) within each Coastal Zone. Flood levels differ between Coastal Zones due to wave exposure and the characteristics of the shoreline. When preparing two-dimensional mapping based on the coastal model results, it is assumed that the results at these transect locations are representative of the adjacent locations and therefore each Coastal Zone has a constant flood level. Flood levels calculated at locations other than the transect locations may differ from those depicted on the map. The coastal modelling and mapping does not account for wave overtopping and the relative conveyance capacity and storage volume of inland water courses and drainage systems. Inland areas are assumed to flood to the flood level of the coastal zone.
 - The shoreline erodibility assessment which supported the identification of lengths of shoreline which may warrant potential setback increase or reduction was entirely a desktop exercise and relied on the interpretation of orthophotos, mapping and reports by others that provided only partial coverage of the study area. As such, the results should be viewed as indicative only. The assessment is intended to serve as a potential screening tool when making land use planning decisions. Field investigations by qualified professionals should be conducted to confirm local conditions and setback requirements.
 - The accuracy of the location of the floodplain limit as shown on this map is limited by the accuracy of the base topography and the scale at which the map is produced. The floodplain limits are not established on the ground by legal survey. Existing ground elevations, building and floodproofing elevations should be based on field survey using established benchmarks. The legal boundaries shown on this map are based on cadastral information and are for illustration only. A site-specific legal survey is required to reconcile property locations.
 - This flood map does not provide information on the potential for site-specific flood-related hazards such as bank erosion, aggradation, debris accumulation or sudden shifts in river channel alignment. The map does not include all possible flood hazards which may include localized increases in flood levels due to groundwater, tributary streams, storm sewer systems or other phenomena and must be considered together with complementary studies including but not limited to Master Drainage Plans. Flood levels and floodplain limits are not delineated for side streams or tributaries. Flood levels, floodplain limits and setbacks due to tsunamis are not depicted on the map.
 - This bylaw shall be applicable to Electoral Areas A (excluding Denman and Hornby Islands), B and C of the Comox Valley Regional District. This map was prepared by the CVRD for planning purposes only and is not a legal document. This map is a composite of different datasets that were developed from different methods and dates. Users should note the dates of base mapping and ground bathymetric surveys as well as the date of map publication. Subsequent developments or geomorphic changes may render map information obsolete. This map should be used with caution. The CVRD is not responsible for any damages resulting from any omissions, deletions or errors.



Scale: 0 250 500 Metres
 1:43,000
 Coordinate System: NAD 1983 UTM Zone 10N
 Vertical Datum: Canadian Geodetic Vertical Datum of 2013 (CGVD2013)
 Scale Disclaimer: The map scale of 1:43,000 is only valid on a 11x17" print.
 Date: March 2020

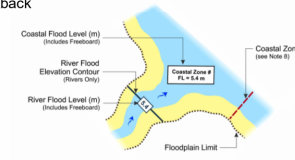
Designated Floodplain Bylaw No. 890 Map A-6 of Schedule B



The Comox Valley Regional District lies within the unceded traditional territory of the K'ómoks First Nation

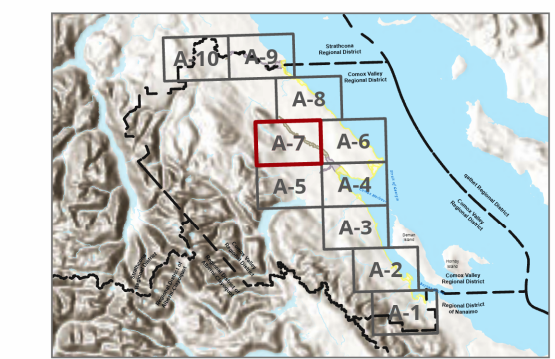
Legend

- Coastal Zone Limit (see Note 8)
- River Flood Elevation Contour (Rivers Only)
- Coastal Floodplain Setback Line
- Coastal Floodplain Setback
- Riverine Floodplain (circa 2021)
- Riverine Floodplain (circa 1984/1991)
- Normal Water Surface
- Administrative Boundary
- Park, Ecological Reserve, Protected Area
- Building Footprint (Approximate)



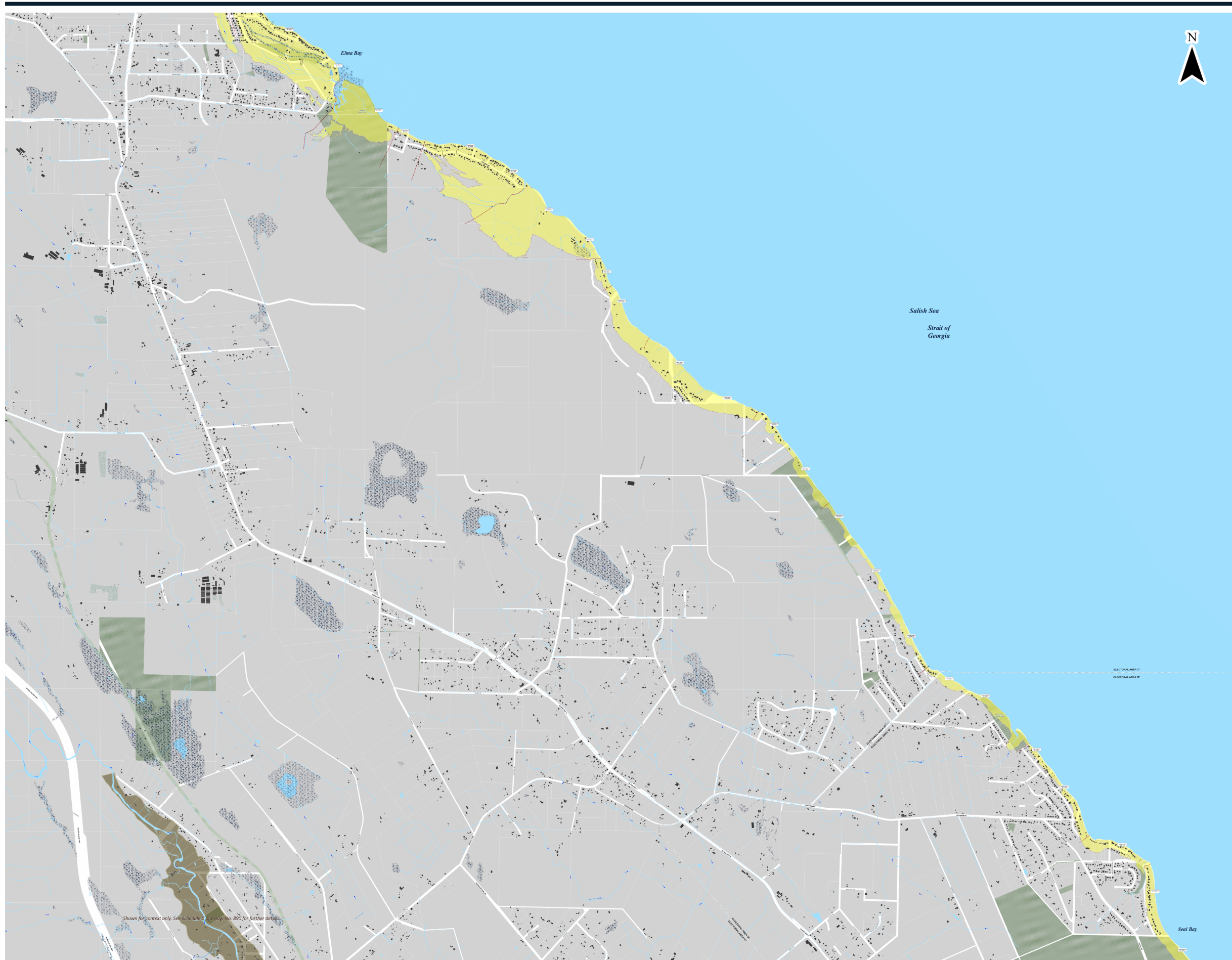
- Notes and Limitations**
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 2. The flood levels, floodplain limits and setbacks depicted on this map have been developed using a methodology which is consistent with the 2018 BC Flood Hazard Area Land Use Management Guidelines (the "provincial guidelines") for the development of flood construction levels; the 2018 Federal Flood Mapping Framework including relevant guidelines, the 2017 Engineers and Geoscientists BC Flood Mapping Guidelines and the 2004 Fraser Basin Council Floodplain Mapping Guidelines and Specifications.
 3. The flood levels and floodplain limits correspond to the peak calculated values of the flood event and may not be contemporaneous across the mapping, i.e. maximum flood levels may occur at different times. Refer to the Ken Wood Levitt Associates Ltd. report "Coastal Flood Mapping Project", April 2021 for details regarding how this map was developed.
 4. River flood levels are calculated using industry standard hydraulic modelling practices/software assuming open water flow conditions. The river flooding events depicted on this map have a statistical annual exceedance probability of 0.5% (the flood which is estimated to be equaled or exceeded on average once every 200 years) and occur at an ocean still water level with an annual exceedance probability of 0.5%. River flows have been increased by 15% over current (2020) extreme values to account for projected climate change impacts and ocean still water levels have been increased by 1.0 m over current extreme static water levels to account for the effects of sea level rise. River flood levels and floodplain limits include a freeboard allowance of 0.6 m.
 5. Oyster River flood levels have been modelled for two scenarios: a scenario in which dikes are intact and do not overtop and a scenario in which a hypothetical dike breach occurs. The flood levels and floodplain limits depicted in the mapping are the maximum values of the two scenarios. The location and size of the hypothetical dike breach is based on recommendations provided in the 2004 Fraser Basin Council Floodplain Mapping Guidelines and Specifications. In the no-breach scenario, it is assumed that the Glenmore Dike is sufficient to contain the river flow on the river side of the dike, and also that Glenmore Road Embankment will act as a dike, resulting in maximum flood levels on the river side of the dike and road. In the breach scenario, it is assumed that the Glenmore Dike and Glenmore Road Embankment would prevent flow from returning to the river, resulting in maximum flood levels in the floodplain to the north of the dike and road.
 6. Coastal flood levels have been calculated using the "Probabilistic Method", in accordance with the provincial guidelines. The flood levels are based on a storm event (wind and wave) with an annual exceedance probability of 0.5% occurring simultaneously with a still water level of the same probability. The coastal flood levels include astronomical tides, storm surge, wave effects, allowances for ground subsidence or uplift and a freeboard allowance of 0.6 m. Coastal flood levels have been increased by 1.0 m over current (2020) extreme static water levels to account for the effects of sea level rise.
 7. The setback mapping has been performed entirely as a desktop exercise based on provincial guidelines for setback mapping (FLNR, 2018). No field investigations have been conducted to confirm local site conditions or the adequacy of the setbacks depicted in the mapping; larger setbacks may be needed due to local erosion hazards. Terrestrial cliff and slope stability hazards have not been reviewed when preparing the setback mapping. Field investigations by qualified professionals should be conducted to confirm local conditions and setback requirements.
 8. The coastal modelling and mapping have been prepared at a regional scale, and do not resolve small-scale variations in shoreline exposure and topography. Coastal flood levels have been established based on one-dimensional modelling in which the shoreline is divided into "Coastal Zones", and wave effects are calculated at discrete locations (transsects) within each Coastal Zone. Flood levels differ between Coastal Zones due to wave exposure and the characteristics of the shoreline. When preparing two-dimensional mapping based on the coastal model results, it is assumed that the results at these transect locations are representative of the adjacent locations and therefore each Coastal Zone has a constant flood level. Flood levels calculated at locations other than the transect locations may differ from those depicted on the map. The coastal modelling and mapping does not account for wave overtopping and the relative conveyance capacity and storage volume of inland water courses and drainage systems. Inland areas are assumed to flood to the flood level of the coastal zone.
 9. The shoreline erodibility assessment which supported the identification of lengths of shoreline which may warrant potential setback increase or reduction was entirely a desktop exercise and relied on the interpretation of orthophotos, mapping and reports by others that provided only partial coverage of the study area. As such, the results should be viewed as indicative only. The assessment is intended to serve as a potential screening tool when making land use planning decisions. Field investigations by qualified professionals should be conducted to confirm local conditions and setback requirements.
 10. The accuracy of the location of the floodplain limit as shown on this map is limited by the accuracy of the base topography and the scale at which the map is produced. The floodplain limits are not established on the ground by legal survey. Existing ground elevations, building and floodproofing elevations should be based on field survey using established benchmarks. The legal boundaries shown on this map are based on coastal information and are for illustrative only. A site-specific legal survey is required to reconcile property locations.
 11. This flood map does not provide information on the potential for site-specific flood-related hazards such as bank erosion, aggradation, debris accumulation or sudden shifts in river channel alignment. The map does not include all possible flood hazards which may include localized increases in flood levels due to groundwater, tributary streams, storm sewer systems or other phenomena and must be considered together with complementary studies including but not limited to Master Drainage Plans. Flood levels and floodplain limits are not delineated for side streams or tributaries. Flood levels, floodplain limits and setbacks due to tsunamis are not depicted on the map.
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Shown for consistency, see Schedule B of Bylaw No. 890 for further details.



Scale: 0 250 500 Metres
Scale: 1:43,000
Coordinate System: NAD 1983 UTM Zone 12N
Vertical Datum: Canadian Geodetic Vertical Datum of 2013 (CGVD2013)
Scale Disclaimer: The map scale of 1:43,000 is only valid on a 11"x17" print.
Date: March 2020

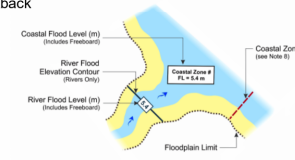
**Designated Floodplain Bylaw No. 890
Map A-7 of Schedule B**



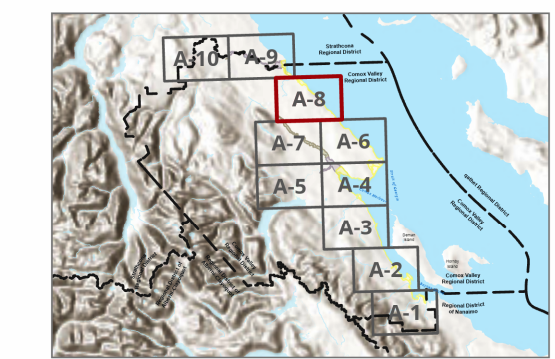
The Comox Valley Regional District lies within the unceded traditional territory of the K'ómoks First Nation

Legend

- Coastal Zone Limit (see Note 8)
- River Flood Elevation Contour (Rivers Only)
- Coastal Floodplain Setback Line
- Coastal Floodplain Setback
- Riverine Floodplain (circa 2021)
- Riverine Floodplain (circa 1984/1991)
- Normal Water Surface
- Administrative Boundary
- Park, Ecological Reserve, Protected Area
- Building Footprint (Approximate)



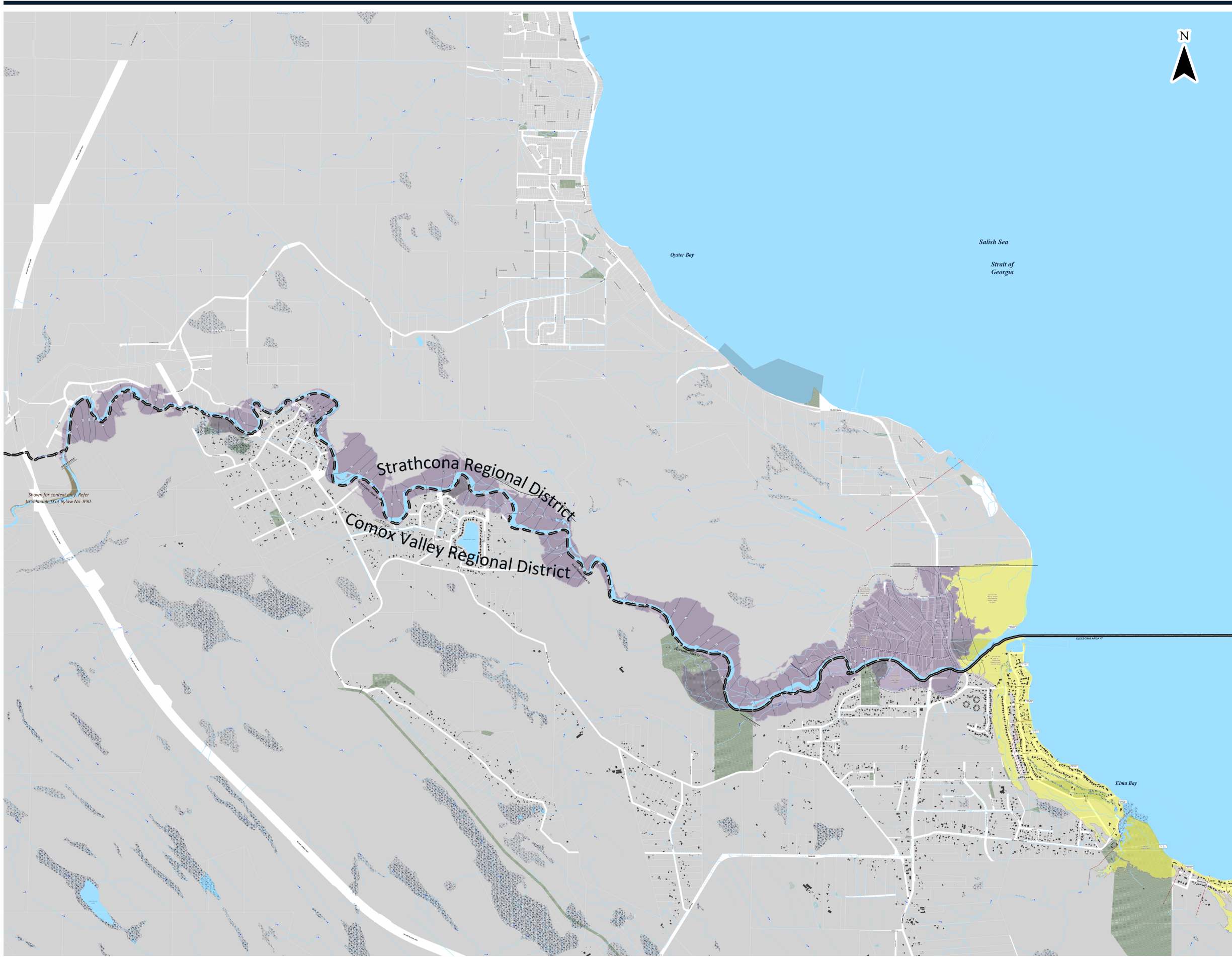
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 - Coastal flood levels have been calculated using the "Probabilistic Method", in accordance with the provincial guidelines. The flood levels are based on a storm event (wind and wave) with an annual exceedance probability of 0.5% occurring simultaneously with a still water level of the same probability. The coastal flood levels include astronomical tides, storm surge, wave effects, allowances for ground subsidence or uplift and a freeboard allowance of 0.6 m. Coastal flood levels have been increased by 1.0 m over current (2020) extreme static water levels to account for the effects of sea level rise.
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 - This flood map does not provide information on the potential for site-specific flood-related hazards such as bank erosion, aggradation, debris accumulation or sudden shifts in river channel alignment. The map does not include all possible flood hazards which may include localized increases in flood levels due to groundwater, tributary streams, storm sewer systems or other phenomena and must be considered together with complementary studies including but not limited to Master Drainage Plans. Flood levels and floodplain limits are not delineated for side streams or tributaries. Flood levels, floodplain limits and setbacks due to tsunamis are not depicted on the map.
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Scale: 0 250 500 Metres
 1:43,000
 Coordinate System: NAD 1983 UTM Zone 10N
 Vertical Datum: Canadian Geodetic Vertical Datum of 2013 (CGVD2013)
 Scale Disclaimer: The map scale of 1:43,000 is only valid on a 11"x17" print.
 Date: March 2020

Designated Floodplain Bylaw No. 890 Map A-8 of Schedule B

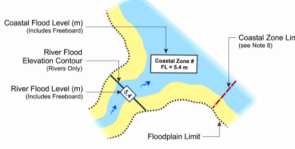
Shown for context only. See Schedule B Bylaw No. 890 for further details.



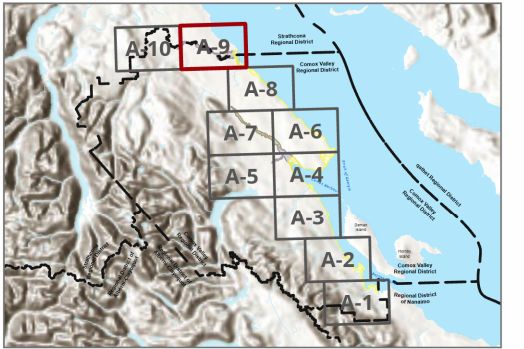
The Comox Valley Regional District lies within the unceded traditional territory of the K'ómoks First Nation

Legend

- Coastal Zone Limit (see Note 8)
- River Flood Elevation Contour (Rivers Only)
- Coastal Floodplain Setback Line
- Coastal Floodplain Setback
- Riverine Floodplain (circa 2021)
- Riverine Floodplain (circa 1984/1991)
- Normal Water Surface
- Administrative Boundary
- Park, Ecological Reserve, Protected Area
- Building Footprint (Approximate)

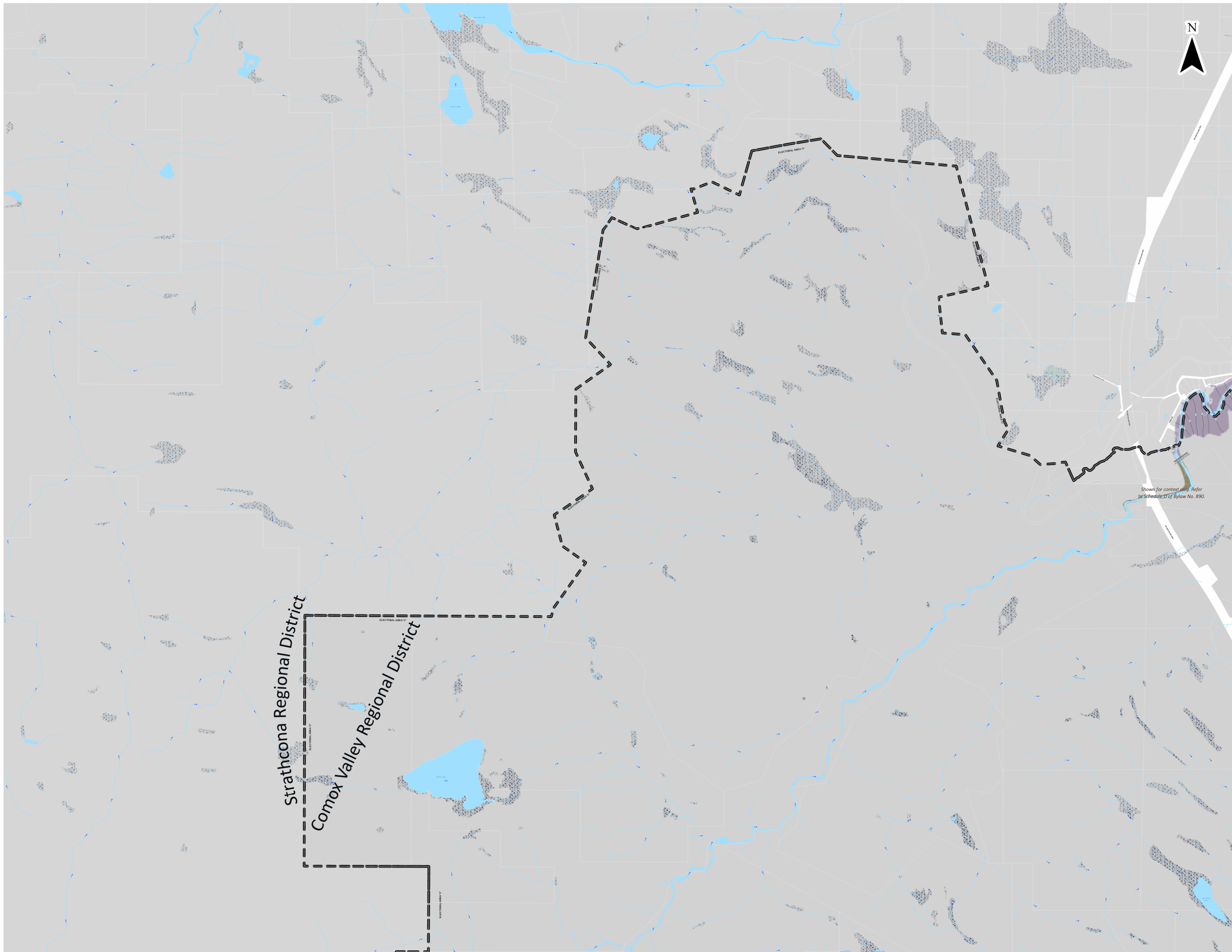


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 2. The flood levels, floodplain limits and setbacks depicted on this map have been developed using a methodology which is consistent with the 2018 BC Flood Hazard Area Land Use Management Guides (the "provincial guidelines") for the development of flood construction levels, the 2018 Federal Flood Mapping Framework including relevant guidelines, the 2017 Engineers and Geoscientists BC Flood Mapping Guidelines and the 2004 Fraser Basin Council Floodplain Mapping Guidelines and Specifications.
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 6. Coastal flood levels have been calculated using the "Probabilistic Method", in accordance with the provincial guidelines. The flood levels are based on a storm event (wind and wave) with an annual exceedance probability of 0.5% occurring simultaneously with a still water level of the same probability. The coastal flood levels include astronomical tides, storm surge, wave effects, allowances for ground subsidence or uplift and a freeboard allowance of 0.6 m. Coastal flood levels have been increased by 1.0 m over current (2020) extreme static water levels to account for the effects of sea level rise.
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 11. This flood map does not provide information on the potential for site-specific flood-related hazards such as bank erosion, aggradation, debris accumulation or sudden shifts in river channel alignment. The map does not include all possible flood hazards which may include localized increases in flood levels due to groundwater, tributary streams, storm sewer systems or other phenomena and must be considered together with complementary studies including but not limited to Master Drainage Plans. Flood levels and floodplain limits are not delineated for side streams or tributaries. Flood levels, floodplain limits and setbacks due to tsunamis are not depicted on the map.
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Date: March 2020

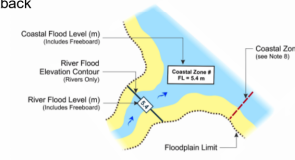
Designated Floodplain Bylaw No. 890
Map A-9 of Schedule B



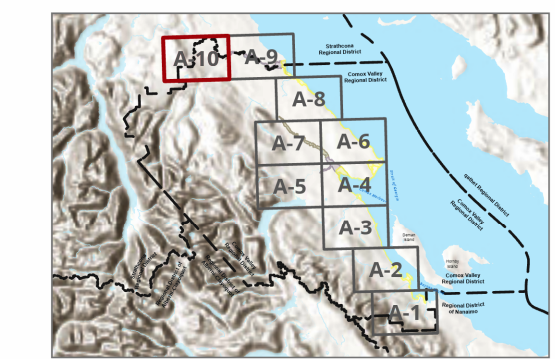
The Comox Valley Regional District lies within the unceded traditional territory of the K'ómoks First Nation

Legend

- Coastal Zone Limit (see Note 8)
- River Flood Elevation Contour (Rivers Only)
- Coastal Floodplain Setback
- Riverine Floodplain (circa 2021)
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 - River flood levels are calculated using industry standard hydraulic modelling practices/software assuming open water flow conditions. The river flooding events depicted on this map have a statistical annual exceedance probability of 0.5% (the flood which is estimated to be equalled or exceeded on average once every 200 years) and occur at an ocean still water level with an annual exceedance probability of 0.5%. River flows have been increased by 15% over current (2020) extreme values to account for projected climate change impacts and ocean still water levels have been increased by 1.0 m over current extreme static water levels to account for the effects of sea level rise. River flood levels and floodplain limits include a freeboard allowance of 0.6 m.
 - Oyster River flood levels have been modelled for two scenarios: a scenario in which dikes are intact and do not overtop and a scenario in which a hypothetical dike breach occurs. The flood levels and floodplain limits depicted in the mapping are the maximum values of the two scenarios. The location and size of the hypothetical dike breach is based on recommendations provided in the 2004 Fraser Basin Council Floodplain Mapping Guidelines and Specifications. In the no-breach scenario, it is assumed that the Glenmore Dike is sufficient to contain the river flow on the river side of the dike, and also that Glenmore Road Embankment will act as a dike, resulting in maximum flood levels on the river side of the dike and road. In the breach scenario, it is assumed that the Glenmore Dike and Glenmore Road Embankment would prevent flow from returning to the river, resulting in maximum flood levels in the floodplain to the north of the dike and road.
 - Coastal flood levels have been calculated using the "Probabilistic Method", in accordance with the provincial guidelines. The flood levels are based on a storm event (wind and wave) with an annual exceedance probability of 0.5% occurring simultaneously with a still water level of the same probability. The coastal flood levels include astronomical tides, storm surge, wave effects, allowances for ground subsidence or uplift and a freeboard allowance of 0.6 m. Coastal flood levels have been increased by 1.0 m over current (2020) extreme static water levels to account for the effects of sea level rise.
 - The setback mapping has been performed entirely as a desktop exercise based on provincial guidelines for setback mapping (FLNR, 2018). No field investigations have been conducted to confirm local site conditions or the adequacy of the setbacks depicted in the mapping; larger setbacks may be needed due to local erosion hazards. Terrestrial cliff and slope stability hazards have not been reviewed when preparing the setback mapping. Field investigations by qualified professionals should be conducted to confirm local conditions and setback requirements.
 - The coastal modelling and mapping have been prepared at a regional scale, and do not resolve small-scale variations in shoreline exposure and topography. Coastal flood levels have been established based on one-dimensional modelling in which the shoreline is divided into "Coastal Zones", and wave effects are calculated at discrete locations (transects) within each Coastal Zone. Flood levels differ between Coastal Zones due to wave exposure and the characteristics of the shoreline. When preparing two-dimensional mapping based on the coastal model results, it is assumed that the results at these transect locations are representative of the adjacent locations and therefore each Coastal Zone has a constant flood level. Flood levels calculated at locations other than the transect locations may differ from those depicted on the map. The coastal modelling and mapping does not account for wave overtopping and the relative conveyance capacity and storage volume of inland water courses and drainage systems. Inland areas are assumed to flood to the flood level of the coastal zone.
 - The shoreline erosion assessment which supported the identification of lengths of shoreline which may warrant potential setback increase or reduction was entirely a desktop exercise and relied on the interpretation of orthophotos, mapping and reports by others that provided only partial coverage of the study area. As such, the results should be viewed as indicative only. The assessment is intended to serve as a potential screening tool when making land use planning decisions. Field investigations by qualified professionals should be conducted to confirm local conditions and setback requirements.
 - The accuracy of the location of the floodplain limit as shown on this map is limited by the accuracy of the base topography and the scale at which the map is produced. The floodplain limits are not established on the ground by legal survey. Existing ground elevations, building and floodproofing elevations should be based on field survey using established benchmarks. The legal boundaries shown on this map are based on cadastral information and are for illustrative purposes only. A site-specific legal survey is required to reconcile property locations.
 - This flood map does not provide information on the potential for site-specific flood-related hazards such as bank erosion, aggradation, debris accumulation or sudden shifts in river channel alignment. The map does not include all possible flood hazards which may include localized increases in flood levels due to groundwater, tributary streams, storm sewer systems or other phenomena and must be considered together with complementary studies including but not limited to Master Drainage Plans. Flood levels and floodplain limits are not delineated for side streams or tributaries. Flood levels, floodplain limits and setbacks due to tsunamis are not depicted on the map.
 - This bylaw shall be applicable to Electoral Areas A (excluding Denman and Hornby Islands), B and C of the Comox Valley Regional District. This map was prepared by the CVRD for planning purposes only and is not a legal document. This map is a composite of different datasets that were developed from different methods and dates. Users should note the dates of base mapping and ground bathymetric surveys as well as the date of map publication. Subsequent developments or geomorphic changes may render map information obsolete. This map should be used with caution. The CVRD is not responsible for any damages resulting from any omissions, deletions or errors.

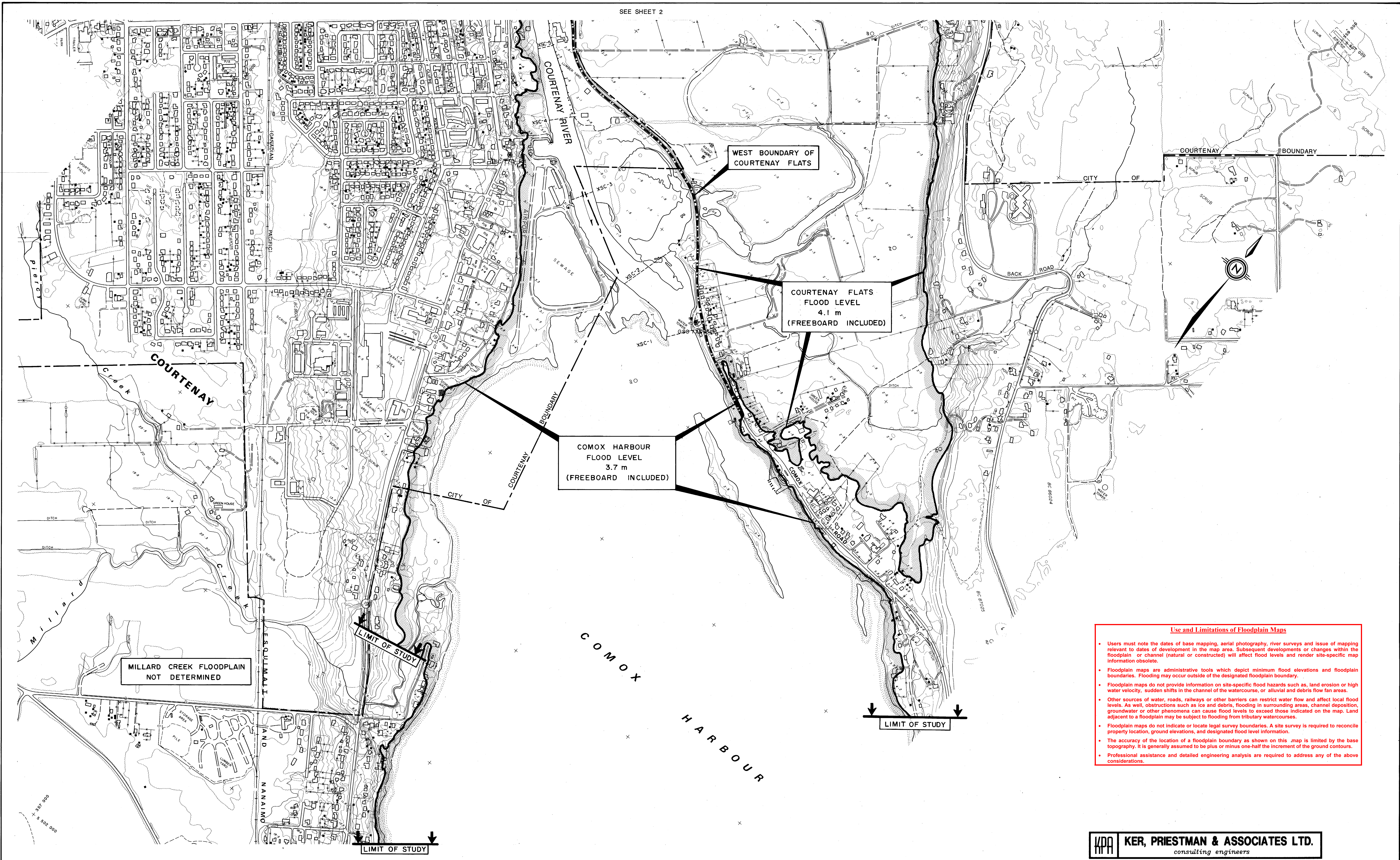


Scale: 1:43,000
 0 250 500 Metres
 Coordinate System: NAD 1983 UTM Zone 12N
 Vertical Datum: Canadian Geodetic Vertical Datum of 2013 (CGVD2013)
 Scale Disclaimer: The map scale of 1:43,000 is only valid on a 11"x17" print.
 Date: March 2020

Designated Floodplain Bylaw No. 890 Map A-10 of Schedule B

SCHEDULE C
DESIGNATED FLOODPLAIN MAPPING FOR THE COURTENAY, PUNTLEDGE AND
TSOLUM RIVERS (1991)

SEE SHEET 2



MILLARD CREEK FLOODPLAIN NOT DETERMINED

WEST BOUNDARY OF COURTENAY FLATS

COURTENAY FLATS FLOOD LEVEL 4.1 m (FREEBOARD INCLUDED)

COMOX HARBOUR FLOOD LEVEL 3.7 m (FREEBOARD INCLUDED)

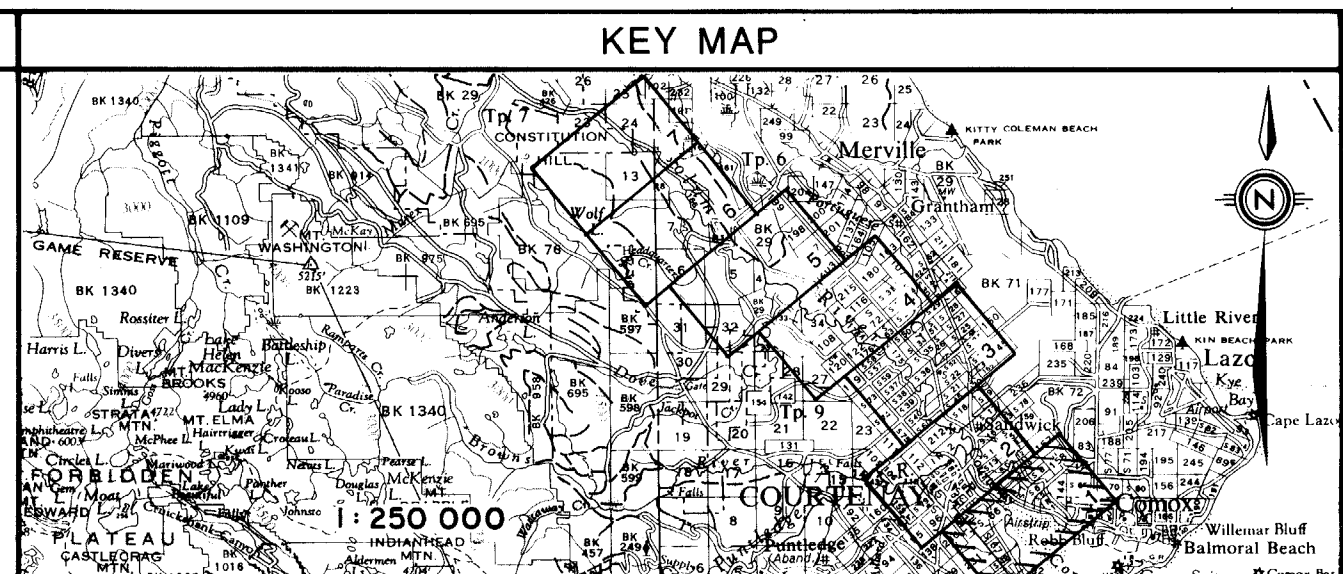
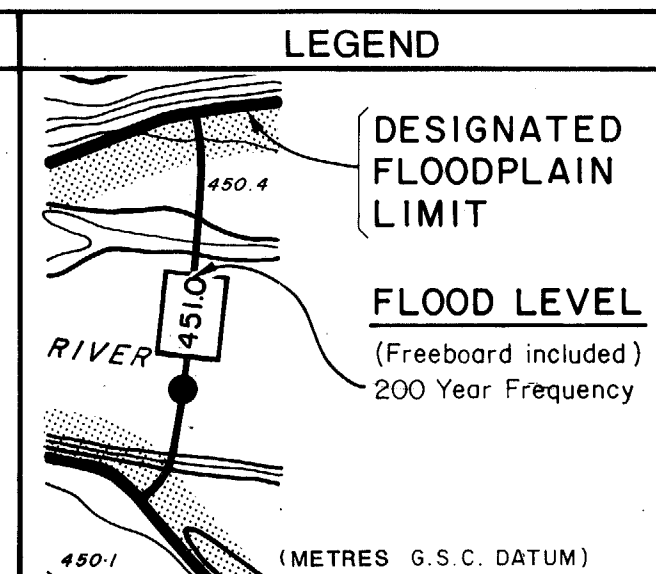
Use and Limitations of Floodplain Maps

- Users must note the dates of base mapping, aerial photography, river surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel (natural or constructed) will affect flood levels and render site-specific map information obsolete.
- Floodplain maps are administrative tools which depict minimum flood elevations and floodplain boundaries. Flooding may occur outside of the designated floodplain boundary.
- Floodplain maps do not provide information on site-specific flood hazards such as, land erosion or high water velocity, sudden shifts in the channel of the watercourse, or alluvial and debris flow fan areas.
- Other sources of water, roads, railways or other barriers can restrict water flow and affect local flood levels. As well, obstructions such as ice and debris, flooding in surrounding areas, channel deposition, groundwater or other phenomena can cause flood levels to exceed those indicated on the map. Land adjacent to a floodplain may be subject to flooding from tributary watercourses.
- Floodplain maps do not indicate or locate legal survey boundaries. A site survey is required to reconcile property location, ground elevations, and designated flood level information.
- The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.
- Professional assistance and detailed engineering analysis are required to address any of the above considerations.

KPA KER, PRIESTMAN & ASSOCIATES LTD.
consulting engineers

NOTES
Produced by: Ker, Priestman & Associates Ltd.
300 - 25th Douglas Street
Victoria, B.C.
Survey: River survey done by Surveys Section Water Management Branch, Project 88-PDC-5, dated Sept. 1988.
a) Horizontal control based on provincial network.
b) Elevations are in metres and are referred to Geodetic Survey of Canada datum. (M) Indicates Survey Monument.
Mapping: Base mapping done by Map Production Division, Surveys and Resource Mapping Branch, Project 88-016, dated Jan. 1989.
a) Contour interval 1 metre and greater; spot elevations shown to 0.1 metres, with accuracy to ± 0.3 metres, except where noted.
b) Grid origin referred to U.T.M. Projection Zone 10.

FLOODPLAIN DATA
1. The floodplain areas as depicted on this map have been designated pursuant to the Canada/British Columbia Floodplain Mapping Agreement (1988) by the Minister of the Environment for Canada and the Minister of Environment for British Columbia.
2. The Designated Flood has a statistical frequency of occurrence of once every 200 years.
3. The flood levels were computed using a standard step method modelling technique, assuming open water flow conditions.
4. The floodplain limits assume the absence of all dykes.
5. The floodplain limits and flood levels include an allowance for freeboard.
6. The floodplain limits are not established on the ground by legal survey.
7. The floodplain limits are not set inland for side streams and tributaries.
8. The required setback of buildings from the natural boundaries of lakes and watercourses to allow for the passage of floodwaters and possible bank erosion is not shown. This information is available either through local municipalities or the Ministry of Environment.
9. MAPS AVAILABLE FROM THE MINISTRY OF CROWN LANDS, SURVEYS AND RESOURCE MAPPING BRANCH, MAPS B.C., MAP AND AIR PHOTO SALES, VICTORIA, B.C.



REVISIONS

No.	DESCRIPTION	DATE
1.	REPLACES DRAWING A5240, SHEETS 1-3, DATED JULY, 1979.	

ISSUE OF MAPPING

DATE	SEPT. 30, 1991
DRAWN	J. J.
CHECKED	Y. S.
RIVER SURVEY	M. P.
DESIGNED	B. B.
ENGINEER	<i>[Signature]</i>

ENVIRONMENT CANADA / ENVIRONNEMENT CANADA / INLAND WATERS / COLONIE-BRITANNIQUE / MINISTÈRE DE L'ENVIRONNEMENT / CANADA / BRITISH COLUMBIA / FLOODPLAIN MAPPING AGREEMENT / L'ACCORD CANADA-COLONIE-BRITANNIQUE SUR LA CARTOGRAPHIE DES PLAINES D'INONDATION

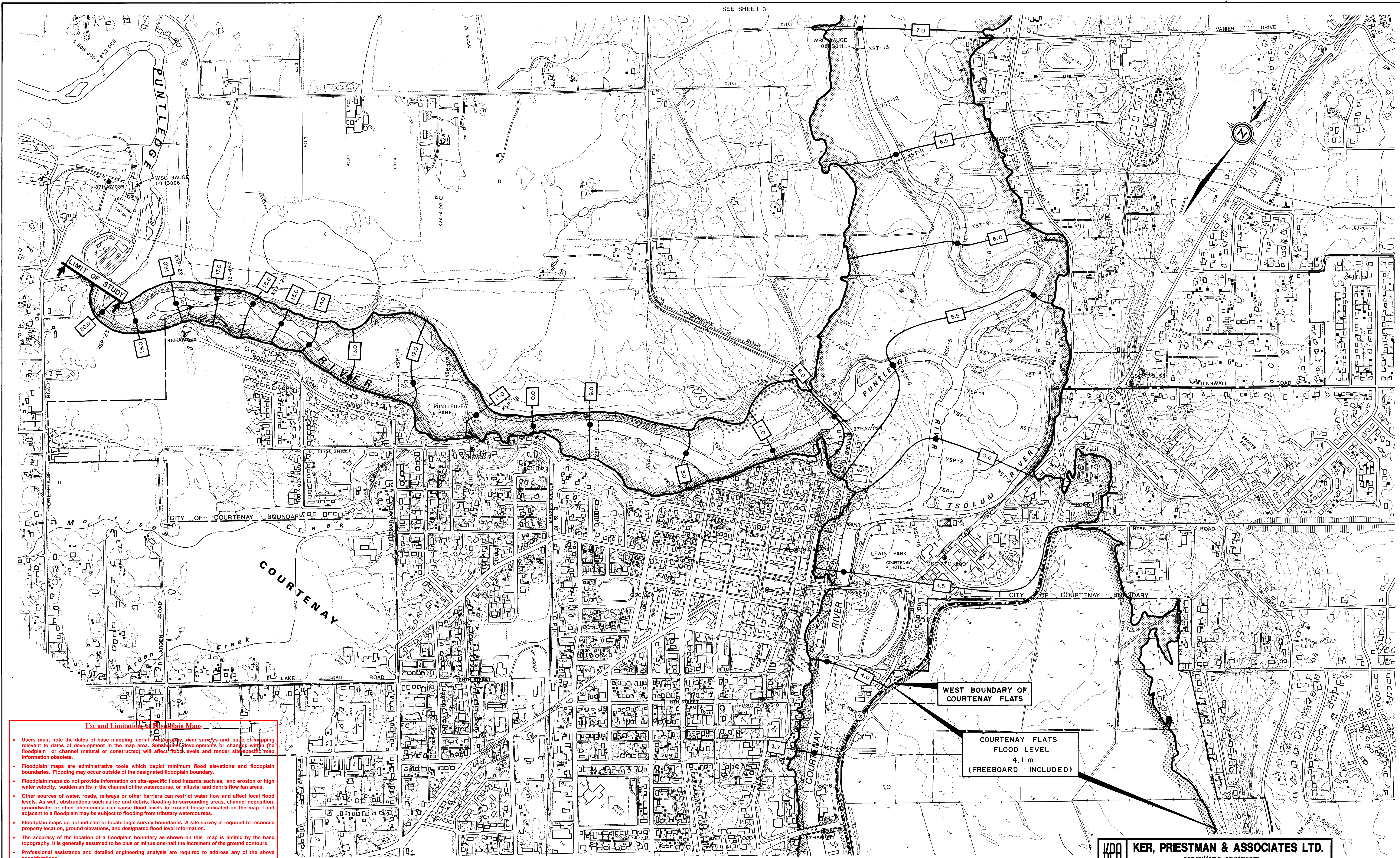
**FLOODPLAIN MAPPING
COURTENAY, PUNTLEDGE
and TSOLUM RIVERS**

Scale in metres: 100m 0 100 200 300 400 500m

ENGINEER: *[Signature]* RECOMMENDED: *[Signature]* APPROVED: *[Signature]*

FILE No.	92-2800-S.1
N.T.S. MAP No.	92F
SCALE	1 : 5 000
NEGATIVE No.	
DRAWING No. REV.	89-13-1
SHEET	1 of 7

SEE SHEET 3



Use and Limitations of Floodplain Maps

- Users must note the dates of base mapping, aerial photography, river surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel (natural or constructed) will affect flood levels and render site-specific map information obsolete.
- Floodplain maps are administrative tools which depict minimum flood elevations and floodplain boundaries. Flooding may occur outside of the designated floodplain boundary.
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- The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.
- Professional assistance and detailed engineering analysis are required to address any of the above considerations.

NOTES

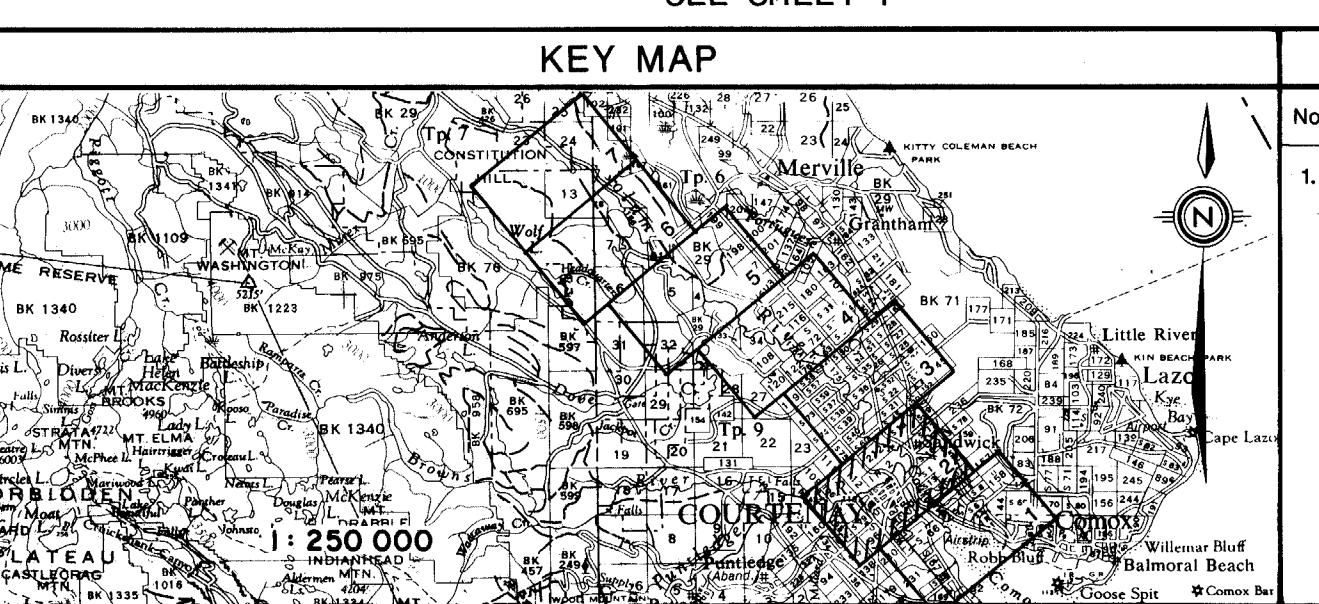
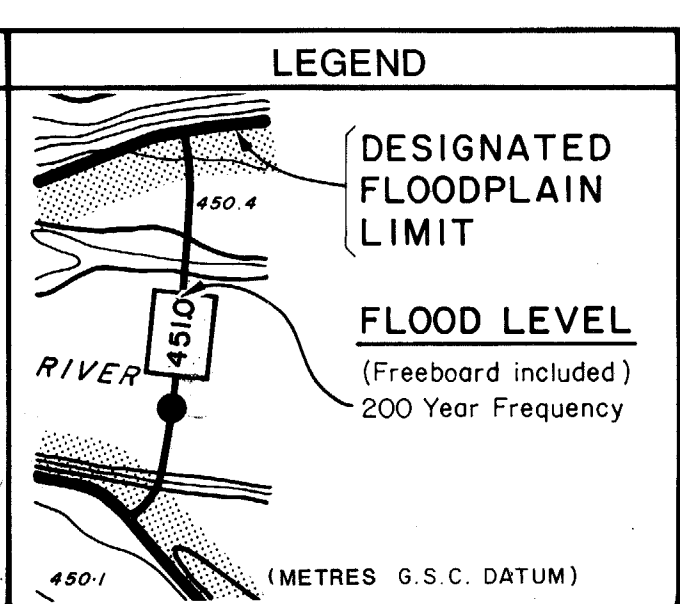
Produced by: Ker, Priestman & Associates Ltd.
300 - 2559 Douglas Street
Victoria, B.C.

Survey: River surveys done by Survey Section Water Management Branch, Project 88-PDC-5, dated Sept. 1988.
a) Not vertical control based on provincial datum.
b) Elevations are in metres and are datum 1985. (1) indicates Survey Monument.

Mapping: Base mapping done by Map Production Division, Survey and Resource Mapping Branch, Project 88-016, dated Jan. 1989.
a) Contour interval 1 metre and greater; spot elevations shown to 0.2 metres, with accuracy to 0.3 metres, except where noted.
b) Grid origin referred to U.T.M. Projection Zone 19.

FLOODPLAIN DATA

- The floodplain areas as depicted on this map have been designated pursuant to the Canada/British Columbia Floodplain Mapping Agreement (1988) by the Minister of the Environment for Canada and the Minister of Environment for British Columbia. Flooding may still occur outside of the designated floodplain areas. The Ministers do not assume any liability by reason of the designation or failure to designate areas on this map.
- The Designated Flood has a statistical frequency of occurrence of once every 200 years.
- The Flood Levels were computed using a standard step method modelling technique, assuming open water flow conditions.
- The Floodplain limits assume the absence of all dykes.
- The Floodplain limits and flood levels include an allowance for freeboard.
- The Floodplain limits are not established on the ground by legal survey.
- The Floodplain limits are not delineated for side streams and tributaries.
- The required setback of buildings from the natural boundaries of lakes and watercourses to allow for the passage of floodwaters and possible bank erosion is not shown. This information is available either through local municipalities or the Ministry of Environment.
- MAPS AND DATA FROM THE MINISTRY OF CROWN LANDS, SURVEYS AND RESOURCE MAPPING BRANCH, M.P.S.B.C., MAP AND AIR PHOTO SALES, VICTORIA, B.C.



REVISIONS

No.	DESCRIPTION	DATE
1.	REPLACES DRAWING AS240, SHEETS 1-3, DATED JULY, 1979.	

ISSUE OF MAPPING

DATE	SEPT. 30, 1991
DRAWN	J.J.
CHECKED	Y.S.
RIVER SURVEY	M. P.
DESIGNED	B. B.
ENGINEER	<i>John Shul</i>

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consulting engineers

FLOODPLAIN MAPPING
COURTENAY, PUNTLEDGE
and TSOLUM RIVERS

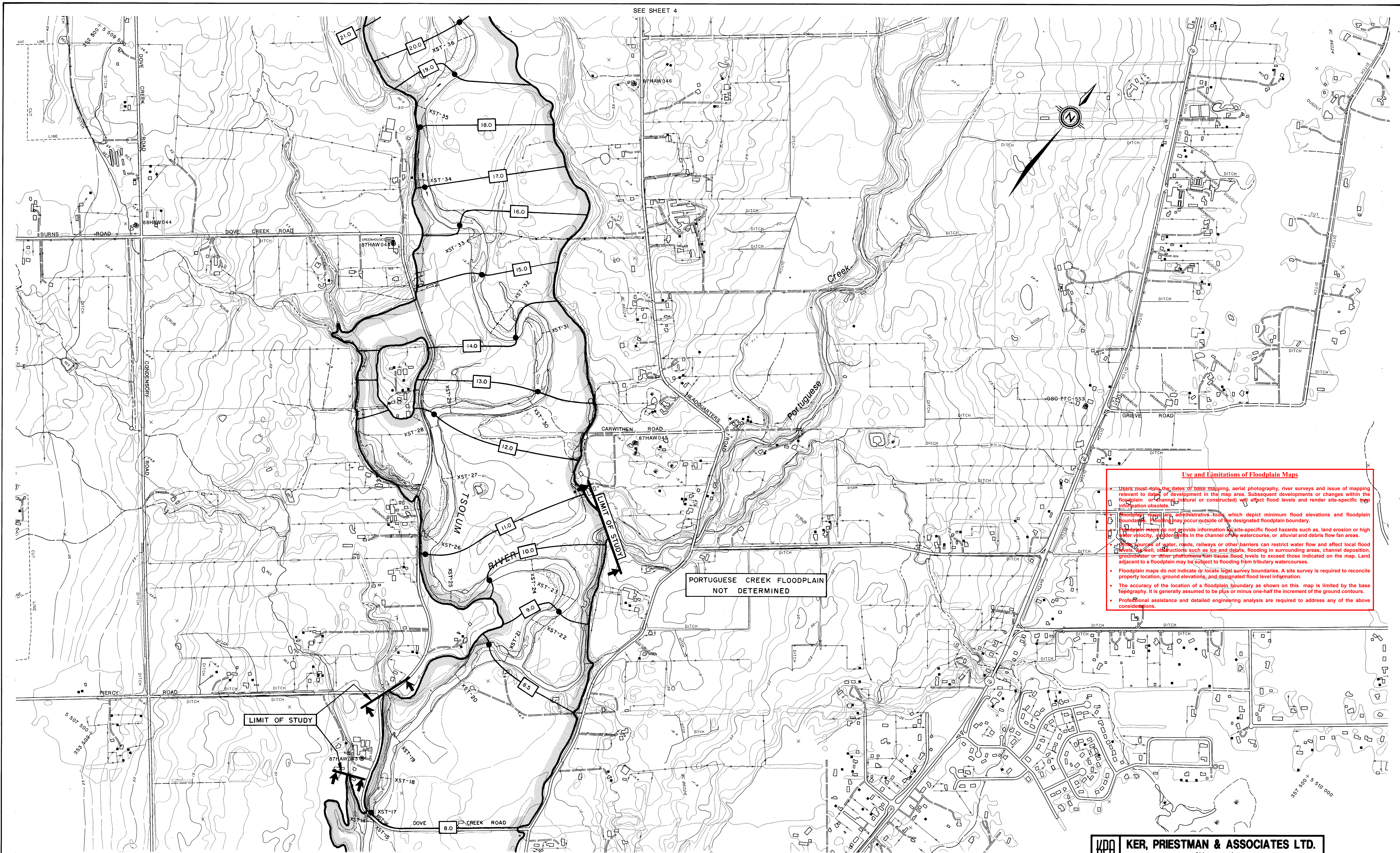
Scale in metres: 0 100 200 300 400 500m

ENVIRONMENT CANADA / ENVIRONNEMENT CANADA
BRITISH COLUMBIA MINISTRY OF ENVIRONMENT / COLOMBIE-BRITANNIQUE MINISTÈRE DE L'ENVIRONNEMENT
CANADA BRITISH COLUMBIA FLOODPLAIN MAPPING AGREEMENT / L'ACCORD CANADA COLOMBIE-BRITANNIQUE SUR LA CARTOGRAPHIE DES PLAINES D'INONDATION

FILE No. 92-2800-S-1
N.T.S. MAP No. 92F
SCALE 1:5 000
NEGATIVE No.
DRAWING No. REV. 89-13-2
SHEET 2 of 7

RECOMMENDED *[Signature]* APPROVED *[Signature]*

SEE SHEET 4



Use and Limitations of Floodplain Maps

- Users must note the dates of base mapping, aerial photography, river surveys and issue of mapping relevant to date of development in the map area. Subsequent developments or changes within the floodplain or channel (natural or constructed) will affect flood levels and render site-specific map information obsolete.
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- The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.
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PORTUGUESE CREEK FLOODPLAIN NOT DETERMINED

LIMIT OF STUDY

SEE SHEET 2

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consulting engineers

NOTES

Produced by: Ker, Priestman & Associates Ltd.
300 - 2500 Douglas Street
Victoria, B.C.

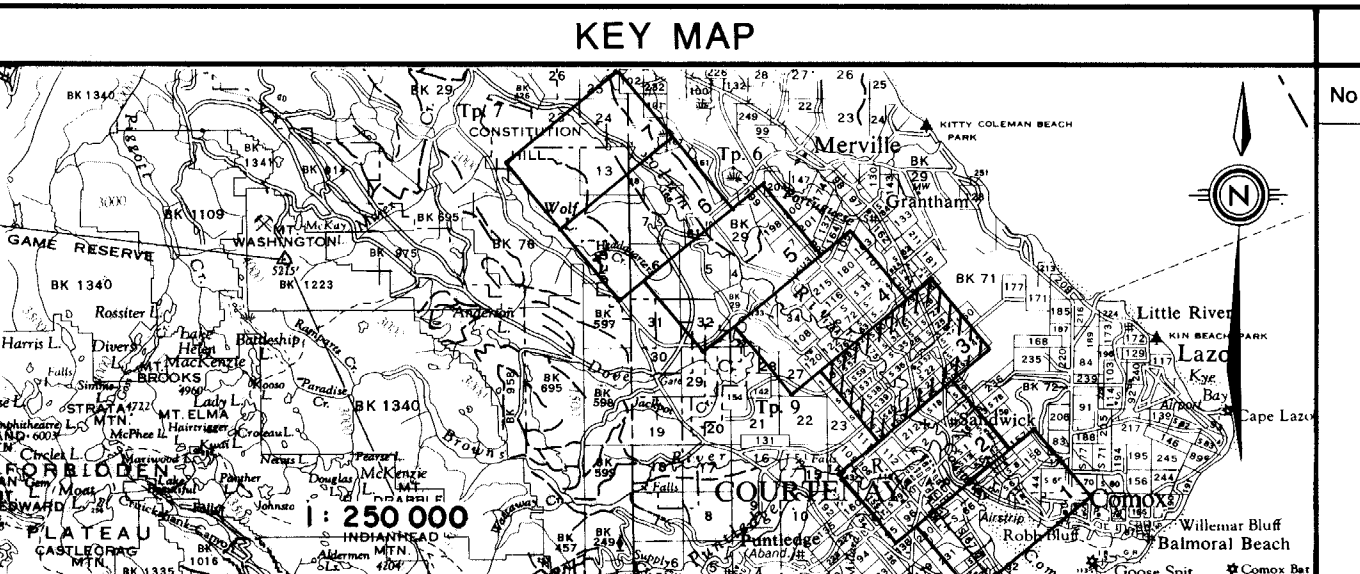
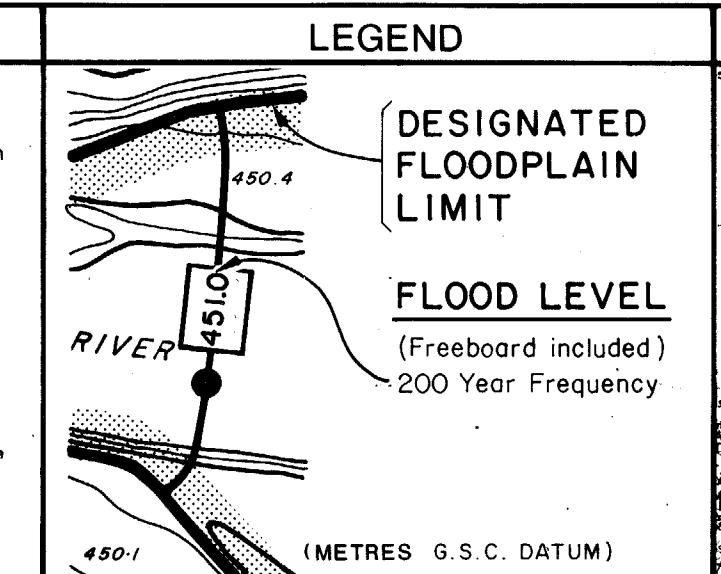
Survey: River survey done by Survey Section
Water Management Branch, Project 88-FDC-5,
dated Sept. 1988.
a) Not a control based on provincial
monuments.
b) Indicates Survey Monument.

Mapping: Base mapping done by Map Production
Division, Survey and Resource Mapping
Branch, Project 88-016, dated Jan. 1989.

a) Contour interval 1 metre and greater;
spot elevations to 0.1 metres,
with accuracy to 0.2 metres, except
where noted.
b) Grid origin referred to U.T.M.
Projection zone 10.

FLOODPLAIN DATA

- The floodplain areas as depicted on this map have been designated pursuant to the Canada/British Columbia Floodplain Mapping Agreement (1988) by the Minister of the Environment for Canada and the Minister of Environment for British Columbia. Flooding may still occur outside of the designated floodplain areas. The Ministers do not assume any liability by reason of the designation or failure to designate areas on this map.
- The Designated Flood has a statistical frequency of occurrence of once every 200 years.
- The flood levels were computed using a standard step method modeling technique, assuming open water flow conditions.
- The floodplain limits assume the absence of all dykes.
- The floodplain limits and flood levels include an allowance for freeboard.
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- MAPS AVAILABLE FROM THE MINISTRY OF CROWN LANDS, SURVEYS AND RESOURCE MAPPING BRANCH, MAPS B.C., MAP AND AIR PHOTO SALES, VICTORIA, B.C.



REVISIONS

No.	DESCRIPTION	DATE

ISSUE OF MAPPING

DATE	SEPT. 30, 1991
DRAWN	J.J.
CHECKED	Y.S.
RIVER SURVEY	M.P.
DESIGNED	B.B.
ENGINEER	Yuhua Shun

ENVIRONMENT CANADA / ENVIRONNEMENT CANADA
INLAND WATERS / EAUX INTERIEURES

CANADA / BRITISH COLUMBIA
FLOODPLAIN MAPPING AGREEMENT

ENVIRONNEMENT CANADA / COLONIE-BRITANNIQUE
DE L'ENVIRONNEMENT

L'ACCORD CANADA-COLONIE-BRITANNIQUE
SUR LA CARTOGRAPHIE DES PLAINES D'INONDATION

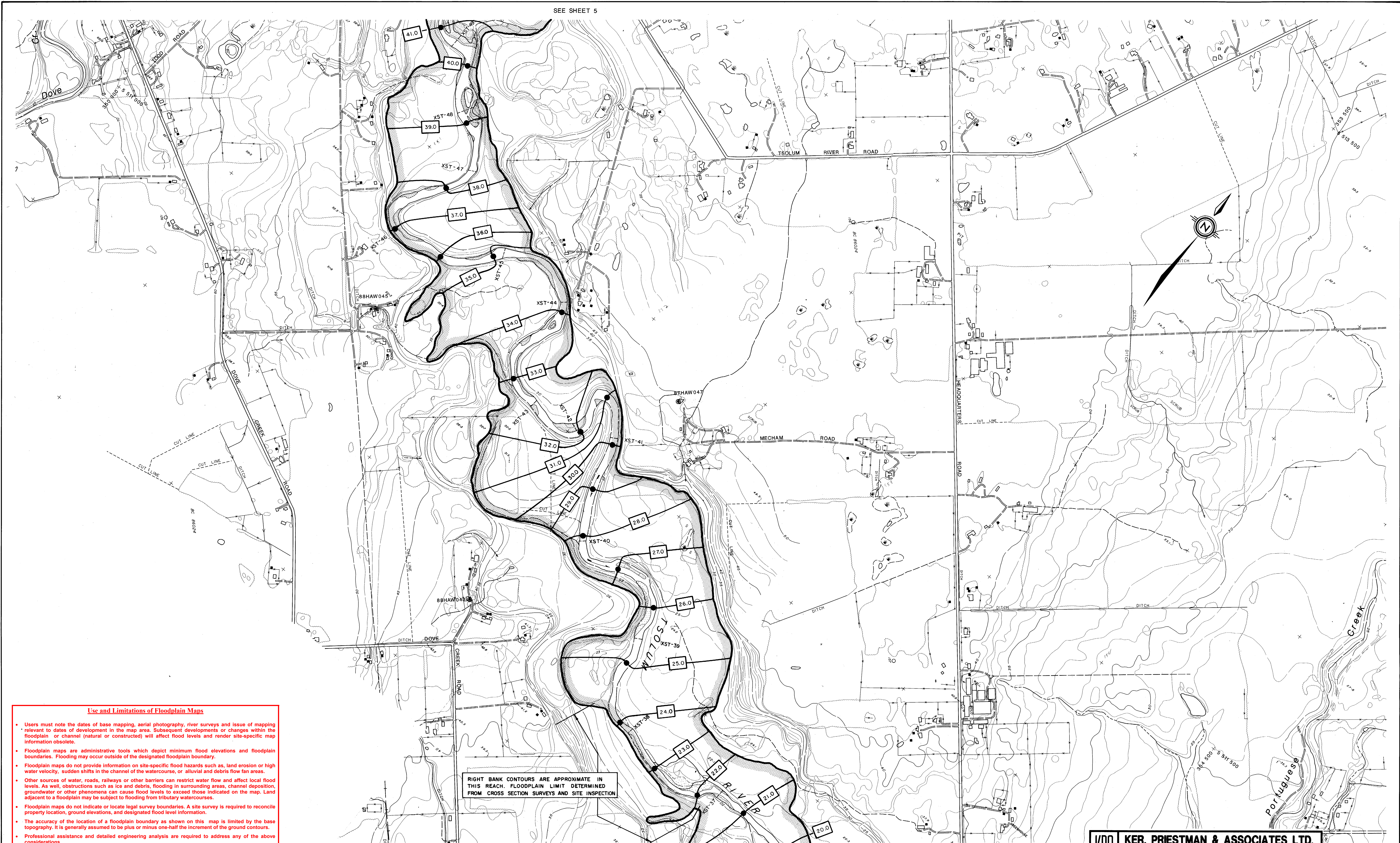
FLOODPLAIN MAPPING
COURTENAY, PUNTLIDGE
and TSOOLUM RIVERS

Scale in metres
100m 0 100 200 300 400 500m

RECOMMENDED: *[Signature]* APPROVED: *[Signature]*

FILE No.	92-2800-S.1
N.T.S. MAP No.	92F
SCALE	1 : 5 000
NEGATIVE No.	
DRAWING No. / REV.	89-13-3
SHEET	3 of 7

SEE SHEET 5



SEE SHEET 3

RIGHT BANK CONTOURS ARE APPROXIMATE IN THIS REACH. FLOODPLAIN LIMIT DETERMINED FROM CROSS SECTION SURVEYS AND SITE INSPECTION

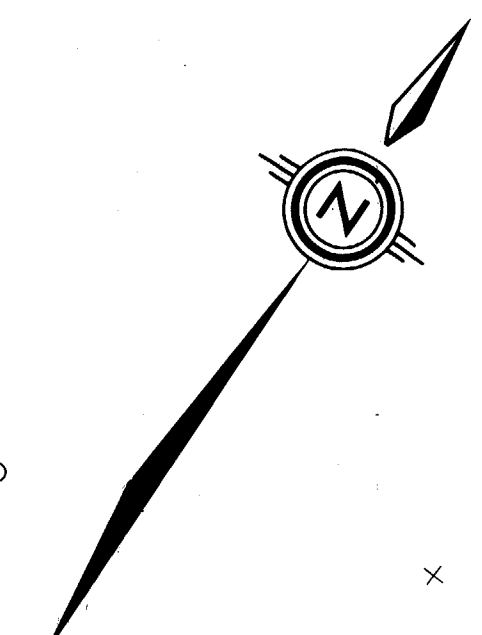
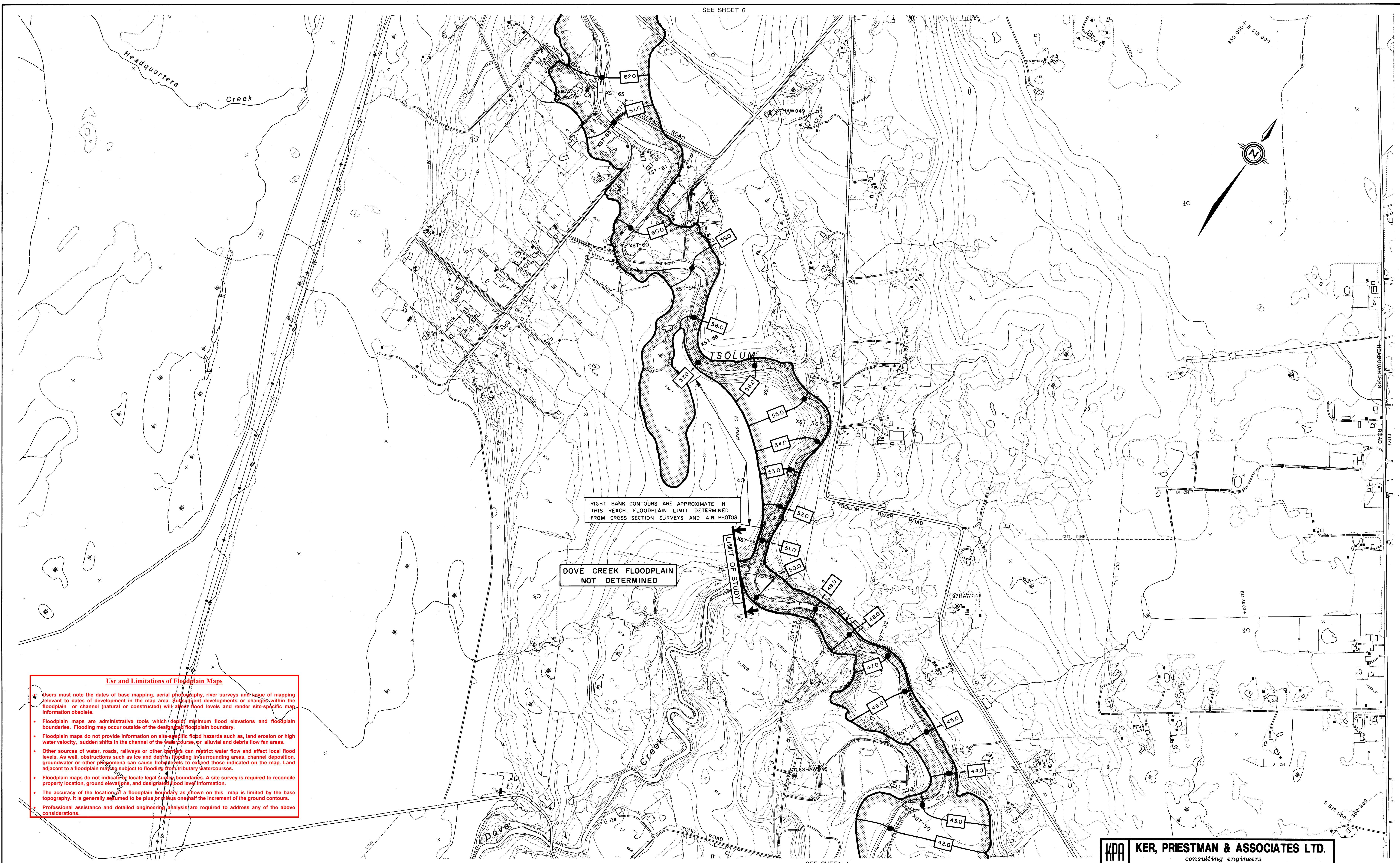
Use and Limitations of Floodplain Maps

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consulting engineers

NOTES	FLOODPLAIN DATA	LEGEND	KEY MAP	REVISIONS	ISSUE OF MAPPING	ENVIRONMENT CANADA / INLAND WATERS	BRITISH COLUMBIA MINISTRY OF ENVIRONMENT	CANADA-BRITISH COLUMBIA FLOODPLAIN MAPPING AGREEMENT	FILE No.						
<p>Produced by: Ker, Priestman & Associates Ltd. 300 - 2559 Douglas Street Victoria, B.C.</p> <p>Survey: River survey done by Surveys Section Water Management Branch, Project 88-PDC-5, dated Sept. 1988. a) National control based on provincial network. b) Elevations are in metres and are referred to Geodetic Survey of Canada datum. () indicates Survey Monument.</p> <p>Mapping: Base mapping done by Map Production Division, Surveys and Resource Mapping Branch, Project 88-016, dated Jan. 1989. a) Contour interval 1 metre and greater; spot elevations shown to 0.3 metres, with accuracy to 0.3 metres, except where noted. b) Grid origin referred to U.T.M. Projection Zone 10.</p>	<ol style="list-style-type: none"> The floodplain areas as depicted on this map have been designated pursuant to the Canada/British Columbia Floodplain Mapping Agreement (1988) by the Minister of the Environment for Canada and the Minister of Environment for British Columbia. Flooding may still occur outside of the designated floodplain areas. The Ministers do not assume any liability by reason of the designation or failure to designate areas on this map. The Designated Flood has a statistical frequency of occurrence of once every 200 years. The flood levels were computed using a standard step method modelling technique, assuming open water flow conditions. The floodplain limits assume the absence of all dikes. The floodplain limits and flood levels include an allowance for freeboard. The floodplain limits are not established on the ground by legal survey. The floodplain limits are not delineated for side streams and tributaries. The required setback of buildings from the natural boundaries of lakes and watercourses to allow for the passage of floodwaters and possible bank erosion is not shown. This information is available either through local municipalities or the Ministry of Environment. MAPS AVAILABLE FROM THE MINISTRY OF CROWN LANDS, SURVEYS AND RESOURCE MAPPING BRANCH, MAPS B.C., MAP AND AIR PHOTO SALES, VICTORIA, B.C. 	<p>DESIGNATED FLOODPLAIN LIMIT</p> <p>FLOOD LEVEL (Freeboard included) 200 Year Frequency</p> <p>(METRES G.S.C. DATUM)</p>	<p>KEY MAP</p>	<table border="1"> <thead> <tr> <th>No.</th> <th>DESCRIPTION</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	No.	DESCRIPTION	DATE				<p>DATE: SEPT. 30, 1991</p> <p>DRAWN: J. J.</p> <p>CHECKED: Y. S.</p> <p>RIVER SURVEY: M. P.</p> <p>DESIGNED: B. B.</p> <p>ENGINEER: <i>[Signature]</i></p>	<p>ENVIRONMENT CANADA / INLAND WATERS</p> <p>ENVIRONNEMENT CANADA / BANQUE INTERIEURES</p>	<p>BRITISH COLUMBIA MINISTRY OF ENVIRONMENT</p> <p>COLOMBIE-BRITANNIQUE / MINISTÈRE DE L'ENVIRONNEMENT</p>	<p>CANADA-BRITISH COLUMBIA FLOODPLAIN MAPPING AGREEMENT</p> <p>L'ACCORD CANADA-COLOMBIE-BRITANNIQUE SUR LA CARTOGRAPHIE DES PLAINES D'INONDATION</p>	<p>FILE No. 92-2800-S.1</p> <p>N.T.S. MAP No. 92F</p> <p>SCALE 1:5 000</p> <p>NEGATIVE No.</p> <p>DRAWING No. REV. 89-13-4</p> <p>SHEET 4 of 7</p>
No.	DESCRIPTION	DATE													

SEE SHEET 6



Use and Limitations of Floodplain Maps

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DOVE CREEK FLOODPLAIN NOT DETERMINED

RIGHT BANK CONTOURS ARE APPROXIMATE IN THIS REACH. FLOODPLAIN LIMIT DETERMINED FROM CROSS SECTION SURVEYS AND AIR PHOTOS.

LIMIT OF STUDY

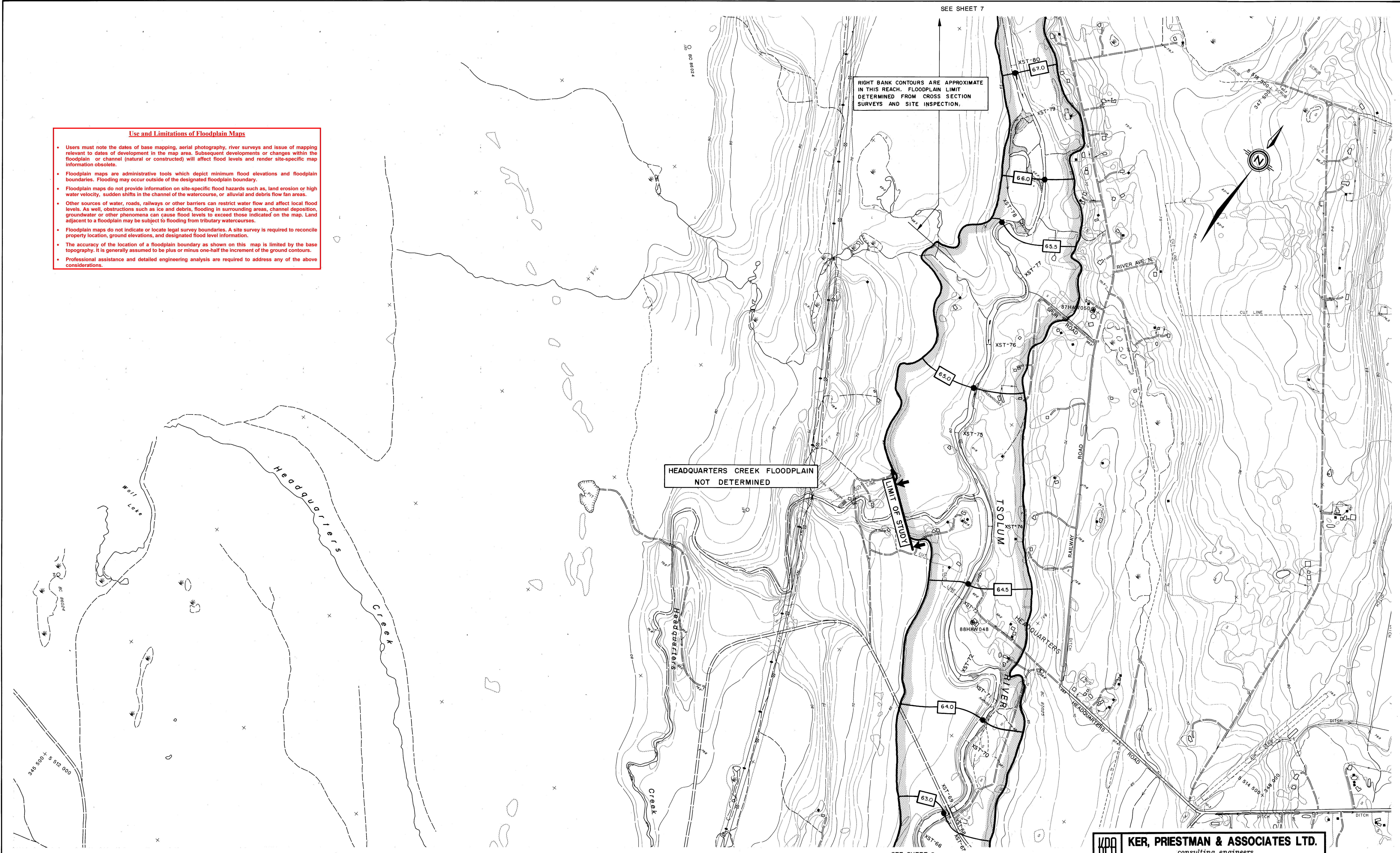
SEE SHEET 4

KPA KER, PRIESTMAN & ASSOCIATES LTD.
consulting engineers

<p>NOTES</p> <p>Produced by: Ker, Priestman & Associates Ltd. 350 Douglas Street Victoria, B.C.</p> <p>Survey: River survey done by Surveys Section Woods Bay Branch, Project 88-PDC-5, dated Sept. 1988. a) Elevation control based on provincial network. b) Elevations are in metres and are referred to Geodetic Survey of Canada datum. (M) indicates Survey Monument).</p> <p>Mapping: Base mapping done by Map Production Division, Surveys and Resource Mapping Branch, Project 88-019, dated Jan. 1989. a) Contour interval 1 metre and greater; spot elevations shown to 0.1 metres, with accuracy to 0.3 metres, except where noted. b) Grid datum referred to U.T.M. Projection Zone 10.</p>	<p>FLOODPLAIN DATA</p> <ol style="list-style-type: none"> The floodplain areas as depicted on this map have been designated pursuant to the Canada/British Columbia Floodplain Mapping Agreement (1988) by the Minister of the Environment for Canada and the Minister of Environment for British Columbia. Flooding may still occur outside of the designated floodplain areas. The Ministers do not assume any liability by reason of the designation or failure to designate areas on this map. The Designated Flood has a statistical frequency of occurrence of once every 200 years. The flood levels were computed using a standard step method modelling technique, assuming open water flow conditions. The floodplain limits assume the absence of all dykes. The floodplain limits and flood levels include an allowance for freeboard. The floodplain limits are not established on the ground by legal survey. The floodplain limits are not delineated for side streams and tributaries. The required setback of buildings from the natural boundaries of lakes and watercourses to allow for the passage of floodwaters and possible bank erosion is not shown. This information is available either through local municipalities or the Ministry of Environment. MAPS AVAILABLE FROM THE MINISTRY OF CROWN LANDS, SURVEYS AND RESOURCE MAPPING BRANCH, MAPS B.C., MAP AND AIR PHOTO SALES, VICTORIA, B.C. 	<p>LEGEND</p> <p>DESIGNATED FLOODPLAIN LIMIT</p> <p>FLOOD LEVEL (Freeboard included) 200 Year Frequency</p> <p>(METRES G.S.C. DATUM)</p>	<p>KEY MAP</p> <p>1:250,000</p>	<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>No.</th> <th>DESCRIPTION</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	No.	DESCRIPTION	DATE				<p>ISSUE OF MAPPING</p> <p>DATE: SEPT. 30, 1991</p> <p>DRAWN: J. J.</p> <p>CHECKED: Y. S.</p> <p>RIVER SURVEY: M. P.</p> <p>DESIGNED: B. B.</p> <p>ENGINEER: <i>Y. S.</i></p> <p>RECOMMENDED: <i>Y. S.</i></p> <p>APPROVED: <i>Y. S.</i></p> <p>FLOODPLAIN MAPPING COURTENAY, PUNTLIDGE and TSOLUM RIVERS</p> <p>Scale in metres 100m 0 100 200 300 400 500m</p> <p>ENVIRONMENT CANADA INLAND WATERS ENvironnement Canada EAUX INTERIEURES</p> <p>B.C. MINISTRY OF ENVIRONMENT COLOMBIE-BRITANNIQUE MINISTRE DE L'ENVIRONNEMENT</p> <p>CANADA BRITISH COLUMBIA FLOODPLAIN MAPPING AGREEMENT</p> <p>FILE No.: 92-2800-S.1 N.T.S. MAP No.: 92F SCALE: 1:5 000 NEGATIVE No.: DRAWING No.: REV. 89-13-5 SHEET 5 of 7</p>
No.	DESCRIPTION	DATE									

Use and Limitations of Floodplain Maps

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HEADQUARTERS CREEK FLOODPLAIN NOT DETERMINED

RIGHT BANK CONTOURS ARE APPROXIMATE IN THIS REACH. FLOODPLAIN LIMIT DETERMINED FROM CROSS SECTION SURVEYS AND SITE INSPECTION.

KPA KER, PRIESTMAN & ASSOCIATES LTD.
consulting engineers

<p>NOTES</p> <p>Produced by: Ker, Priestman & Associates Ltd. 300 - 2500 Douglas Street Victoria, B.C.</p> <p>Survey: River surveys done by Surveys Section Water Management Branch, Project 88-PDC-5, dated April, 1989. a) Horizontal control based on provincial network. b) Elevations are in metres and are referred to Geodetic Survey of Canada datum. (M) indicates Survey Monument.</p> <p>Mapping: Base mapping done by Map Production Division, Surveys and Resource Mapping Branch, Project 88-016, dated Jan. 1989. a) Contour interval 1 metre and greater; spot elevations shown to 0.1 metres, with accuracy to ± 0.3 metres, except where noted. b) Grid origin referred to U.T.M. Projection Zone 10.</p>	<p>FLOODPLAIN DATA</p> <ol style="list-style-type: none"> 1. The floodplain areas as depicted on this map have been designated pursuant to the Canada/British Columbia Floodplain Mapping Agreement (1988) by the Minister of the Environment for Canada and the Minister of Environment for British Columbia. Flooding may still occur outside of the designated floodplain areas. The Ministers do not assume any liability by reason of the designation or failure to designate areas on this map. 2. The designated flood has a statistical frequency of occurrence of once every 200 years. 3. The flood levels were computed using a standard step method modelling technique, assuming open water flow conditions. 4. The floodplain limits assume the absence of all dykes. 5. The floodplain limits and flood levels include an allowance for freeboard. 6. The floodplain limits are not established on the ground by legal survey. 7. The floodplain limits are not delineated for side streams and tributaries. 8. The required setback of buildings from the natural boundaries of lakes and watercourses to allow for the passage of floodwaters and possible bank erosion is not shown. This information is available either through local municipalities or the Ministry of Environment. 9. MAPS AVAILABLE FROM THE MINISTRY OF CROWN LANDS, SURVEYS AND RESOURCE MAPPING BRANCH, MAPS B.C., MAP AND AIR PHOTO SALES, VICTORIA, B.C. 	<p>LEGEND</p> <p>DESIGNATED FLOODPLAIN LIMIT</p> <p>FLOOD LEVEL (Freeboard included) 200 Year Frequency</p> <p>(METRES G.S.C. DATUM)</p>	<p>KEY MAP</p>	<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>No.</th> <th>DESCRIPTION</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	No.	DESCRIPTION	DATE				<p>ISSUE OF MAPPING</p> <p>DATE: SEPT. 30, 1991</p> <p>DRAWN: J. J.</p> <p>CHECKED: Y.S.</p> <p>RIVER SURVEY: M. P.</p> <p>DESIGNED: B. B.</p> <p>ENGINEER: <i>Y. S.</i></p>	<p>ENVIRONMENT CANADA INLAND WATERS L'ENVIRONNEMENT CANADA FAUC INTERIEURES</p> <p>BRITISH COLUMBIA MINISTRY OF ENVIRONMENT COLOMBIE-BRITANNIQUE MINISTÈRE DE L'ENVIRONNEMENT</p> <p>CANADA-BRITISH COLUMBIA FLOODPLAIN MAPPING AGREEMENT L'ACCORD CANADA-COLOMBIE-BRITANNIQUE SUR LA CARTOGRAPHIE DES PLAINES D'INONDATION</p> <p>FLOODPLAIN MAPPING COURTENAY, PUNTLEDGE and TSOLUM RIVERS</p> <p>Scale in metres: 0 100 200 300 400 500m</p> <p>ENGINEER: <i>Y. S.</i> RECOMMENDED: <i>P. H.</i> APPROVED: <i>E. B.</i></p>	<p>FILE NO. 92-2800-S.1</p> <p>N.T.S. MAP No. 92F</p> <p>SCALE 1 : 5 000</p> <p>NEGATIVE No.</p> <p>DRAWING No. REV. 89-13-6</p> <p>SHEET 6 of 7</p>
No.	DESCRIPTION	DATE											



Use and Limitations of Floodplain Maps

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RIGHT BANK CONTOURS ARE APPROXIMATE IN THIS REACH. FLOODPLAIN LIMIT DETERMINED FROM CROSS SECTION SURVEYS AND SITE INSPECTION.

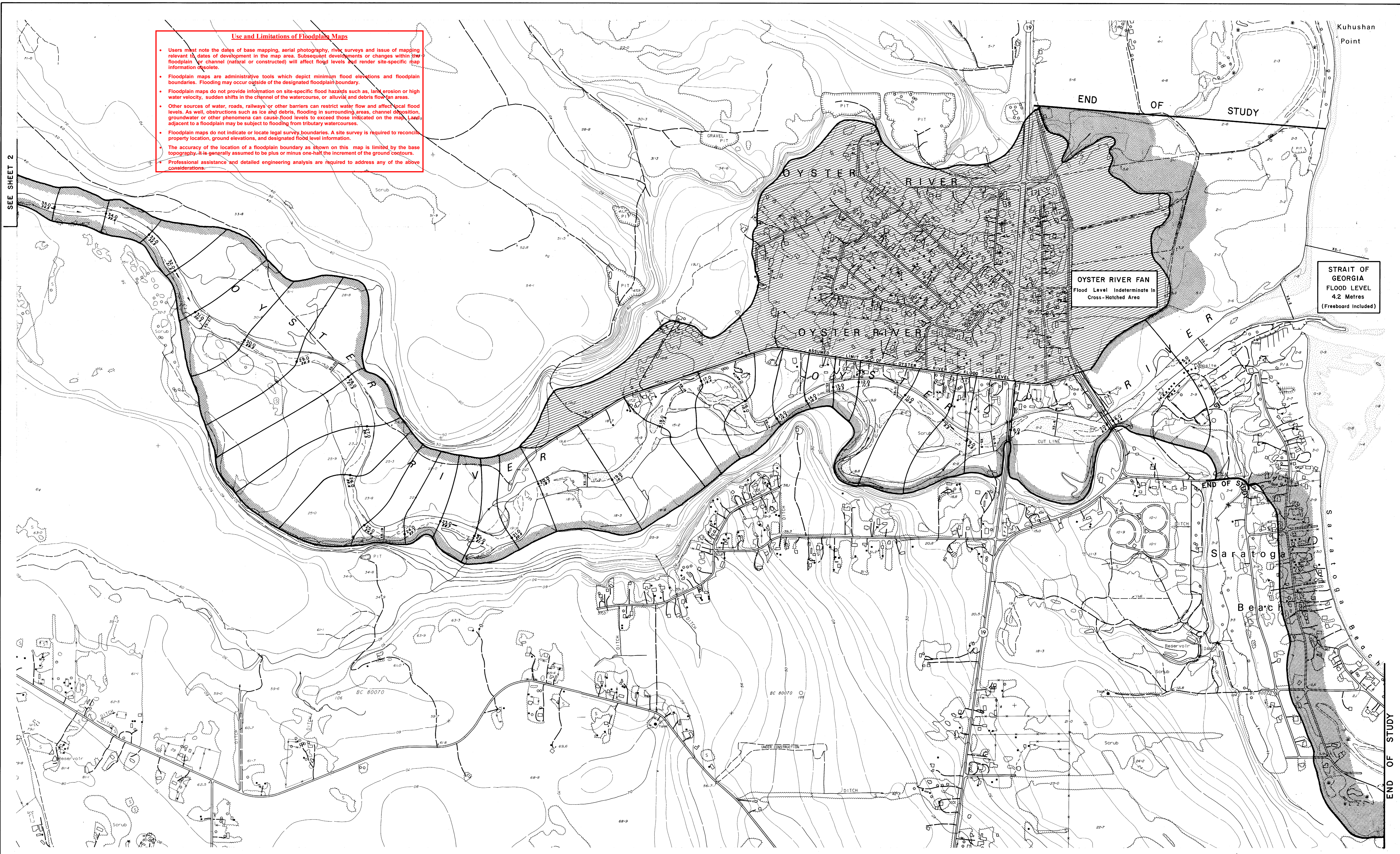
KPA KER, PRIESTMAN & ASSOCIATES LTD.
consulting engineers

<p>NOTES</p> <p>Produced by: Ker, Priestman & Associates Ltd. 300 - 555 Douglas Street Victoria, B.C.</p> <p>Survey: River survey done by Survey Section, Water Management Branch, Project 88-PDC-5, dated Sept. 1988. a) Horizontal control based on provincial datum, 1988. b) Elevations are in metres and are referred to Geodetic Survey of Canada datum, 1988. (1) indicates Survey Monument).</p> <p>Mapping: Base mapping done by Map Production Division, Survey and Resource Mapping Branch, Project 88-016, dated Jan. 1989. a) Contour interval 3 metres and greater; spot elevations shown to 0.1 metres, with accuracy to ± 0.3 metres, except where noted. b) Grid origin referred to U.T.M. Projection Zone 19.</p>	<p>FLOODPLAIN DATA</p> <ol style="list-style-type: none"> 1. The floodplain areas as depicted on this map have been designated pursuant to the Canada/British Columbia Floodplain Mapping Agreement (1988) by the Minister of the Environment for Canada and the Minister of Environment for British Columbia. 2. Flooding may still occur outside of the designated floodplain areas. The Ministers do not assume any liability by reason of the designation or failure to designate areas on this map. 3. The Designated Flood has a statistical frequency of occurrence of once every 200 years. 4. The flood levels were computed using a standard step method modelling technique, assuming open water flow conditions. 5. The floodplain limits assume the absence of all dikes. 6. The floodplain limits and flood levels include an allowance for freeboard. 7. The floodplain limits are not established on the ground by legal survey. 8. The floodplain limits are not delineated for side streams and tributaries. 9. The required setback of buildings from the natural boundaries of lakes and watercourses to allow for the passage of floodwaters and possible bank erosion is not shown. This information is available either through local municipalities or the Ministry of Environment. 10. MAPS AVAILABLE FROM THE MINISTRY OF CROWN LANDS, SURVEYS AND RESOURCE MAPPING BRANCH, MAPS B.C., MAP AND AIR PHOTO SALES, VICTORIA, B.C. 	<p>LEGEND</p> <p>DESIGNATED FLOODPLAIN LIMIT</p> <p>FLOOD LEVEL (Freeboard included) 200 Year Frequency</p> <p>(METRES G.S.C. DATUM)</p>	<p>KEY MAP</p>	<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>No.</th> <th>DESCRIPTION</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	No.	DESCRIPTION	DATE				<p>ISSUE OF MAPPING</p> <p>DATE: SEPT. 30, 1991</p> <p>DRAWN: J. J.</p> <p>CHECKED: Y. S.</p> <p>RIVER SURVEY: M. P.</p> <p>DESIGNED: B. B.</p> <p>ENGINEER: <i>[Signature]</i></p> <p>RECOMMENDED: <i>[Signature]</i></p> <p>APPROVED: <i>[Signature]</i></p> <p>FLOODPLAIN MAPPING COURTENAY, PUNTLEDGE and TSOLUM RIVERS</p> <p>Scale in metres: 0 100 200 300 400 500</p> <p>ENVIRONMENT CANADA INLAND WATERS LE MINISTRE DE L'ENVIRONNEMENT COLONIE-BRITANNIQUE LE MINISTRE DE L'ENVIRONNEMENT LE MINISTRE DE L'ENVIRONNEMENT LE MINISTRE DE L'ENVIRONNEMENT</p> <p>FILE No. 92-2800-S.1 N.T.S. MAP No. 92F SCALE 1:5 000 NEGATIVE No. DRAWING No. 89-13-7 REV. SHEET 7 of 7</p>
No.	DESCRIPTION	DATE									

SCHEDULE D
DESIGNATED FLOODPLAIN MAPPING FOR THE OYSTER RIVER (1984)

Use and Limitations of Floodplain Maps

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NOTES

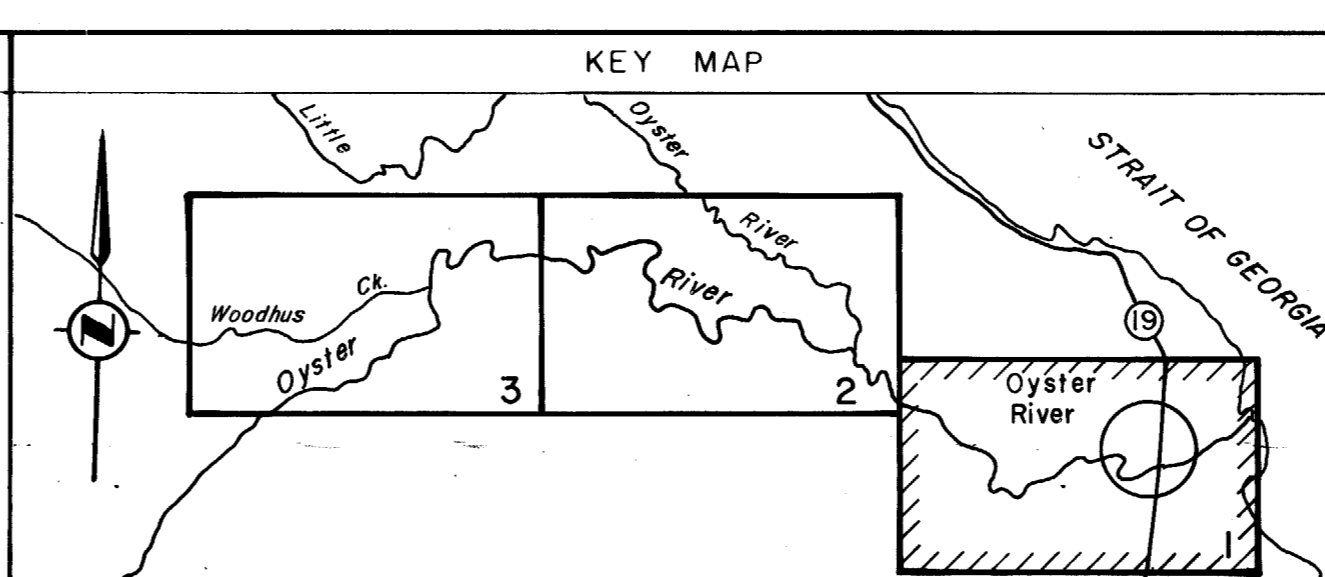
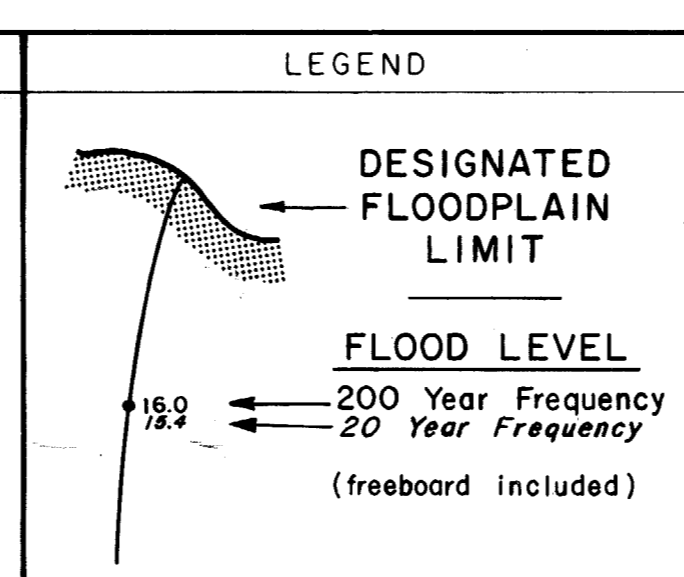
Produced by: British Columbia Water Management Branch
Floodplain Mapping Program.

Survey: River survey done by Planning and Surveys Section, Water Management Branch.
a) Horizontal control based on provincial network.
b) Elevations are in metres and are referred to Geodetic Survey of Canada Datum.

Mapping: Base mapping done by Map Production Division, Surveys and Mapping Branch.
a) Contour interval - 2 metres; spot elevations shown to 0.1 metres, with accuracy to ± 0.5 metres, except where noted.
b) Grid origin referred to U.T.M. Projection Zone 10.
Final Floodplain Mapping produced by Planning Subsection, Water Management Branch.

FLOODPLAIN DATA

a) The Designated Flood has a statistical frequency of occurrence of once every 200 years.
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h) Areas within the floodplain limit having an elevation above the computed flood level are subject to possible flooding from overflow of upstream banks.



REVISIONS

No.	DESCRIPTION	DATE

TOPOGRAPHIC MAPPING

DATE OF PHOTOGRAPHY
JULY 24, 1980

FLOODPLAIN STUDIES

TECHNICIAN
F. W. DANKS

ENGINEER
R. W. NICHOLS

ISSUE OF MAPPING
DATE MAY 1984

Province of British Columbia Ministry of Environment Water Management Branch

PRELIMINARY FLOODPLAIN MAPPING

OYSTER RIVER

FILE No. 0305030-9

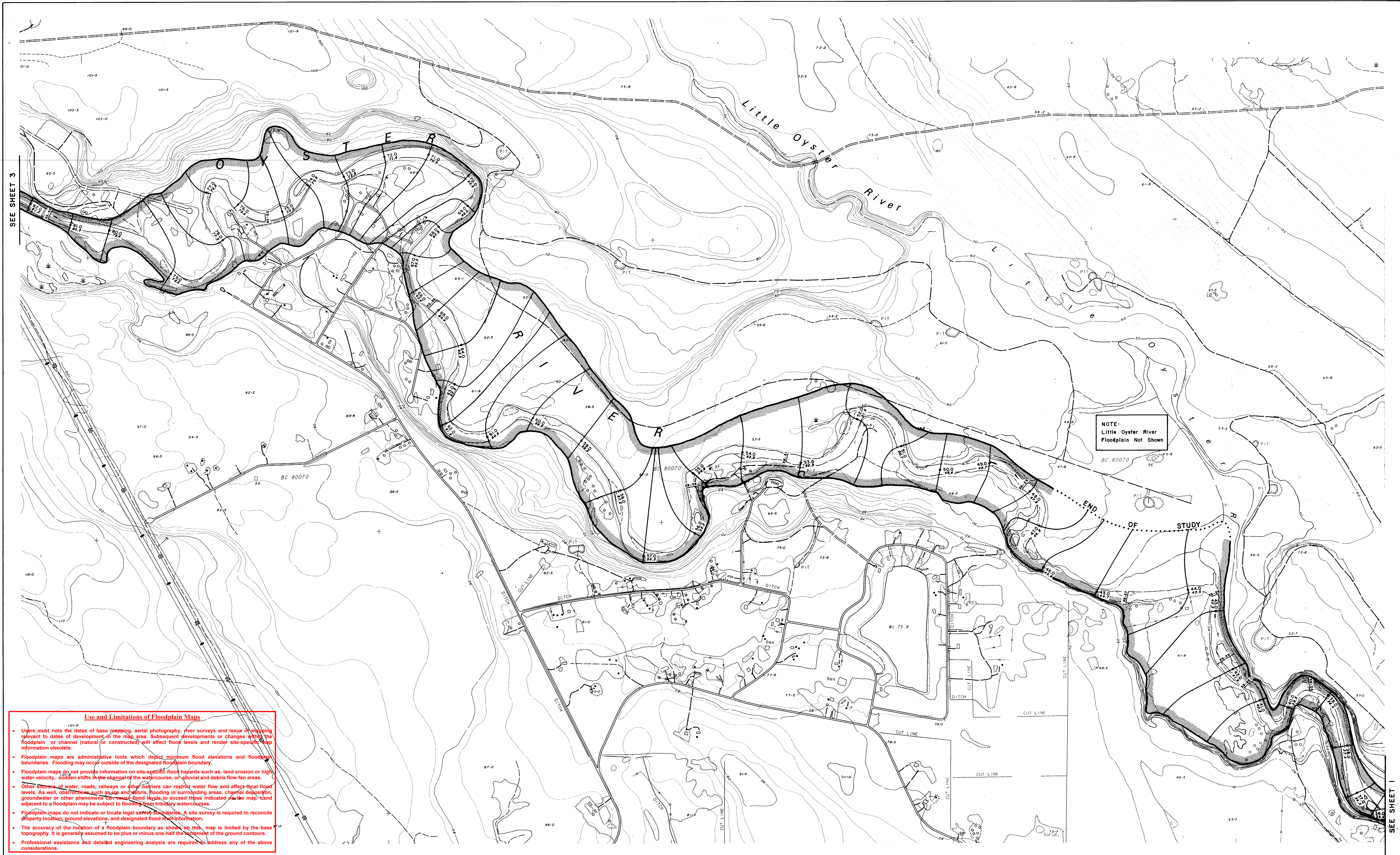
SCALE: 1:5000

NEGATIVE No.

DRAWING No. 5532-1

SHEET 1 of 3

Recommended, Section Head [Signature] Approved, Deputy Minister [Signature]

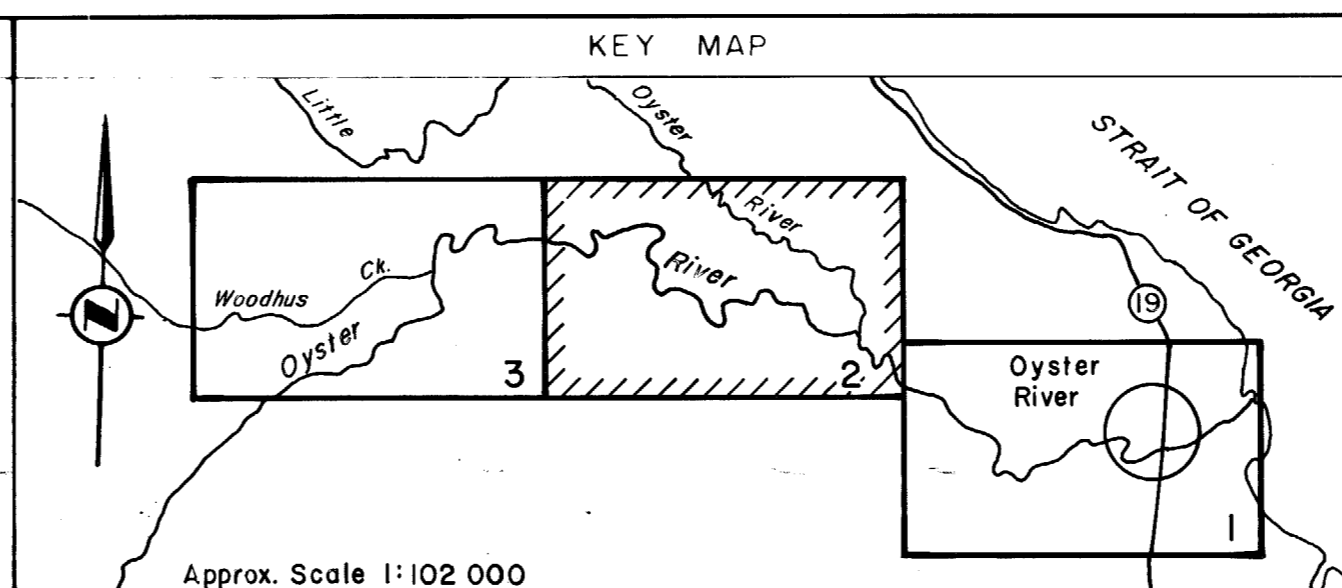
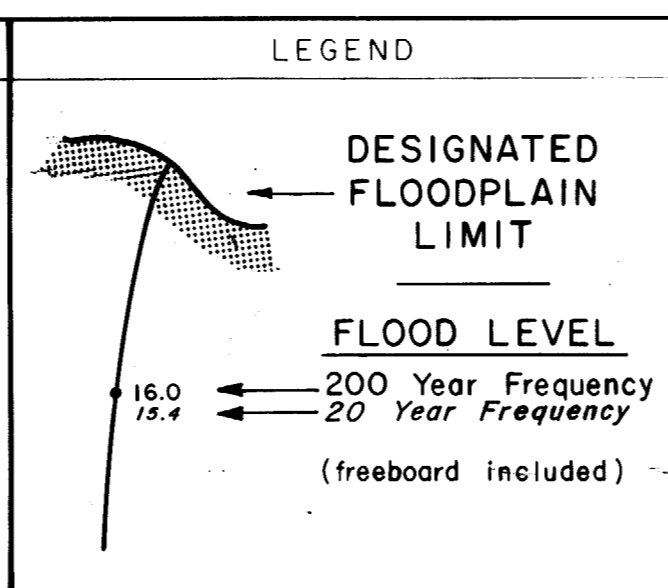


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Survey:	River survey done by Planning and Surveys Section, Water Management Branch. a) Horizontal control based on provincial network. b) Elevations are in metres and are referred to Geodetic Survey of Canada Datum.
Mapping:	Base mapping done by Map Production Division, Surveys and Mapping Branch. a) Contour interval - 2 metres; spot elevations shown to 0.1 metres, with accuracy to ± 0.6 metres, except where noted. b) G.P.D. or origin referred to U.T.M. Projection Zone 10. Final Floodplain Mapping produced by Planning Subsection, Water Management Branch.

FLOODPLAIN DATA	
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REVISIONS		
No.	DESCRIPTION	DATE

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DATE OF PHOTOGRAPHY JULY 24, 1980
FLOODPLAIN STUDIES
TECHNICIAN F. W. DANKS
ENGINEER R. W. NICHOLS
ISSUE OF MAPPING
DATE MAY 1984

Province of British Columbia
Ministry of Environment
Water Management Branch

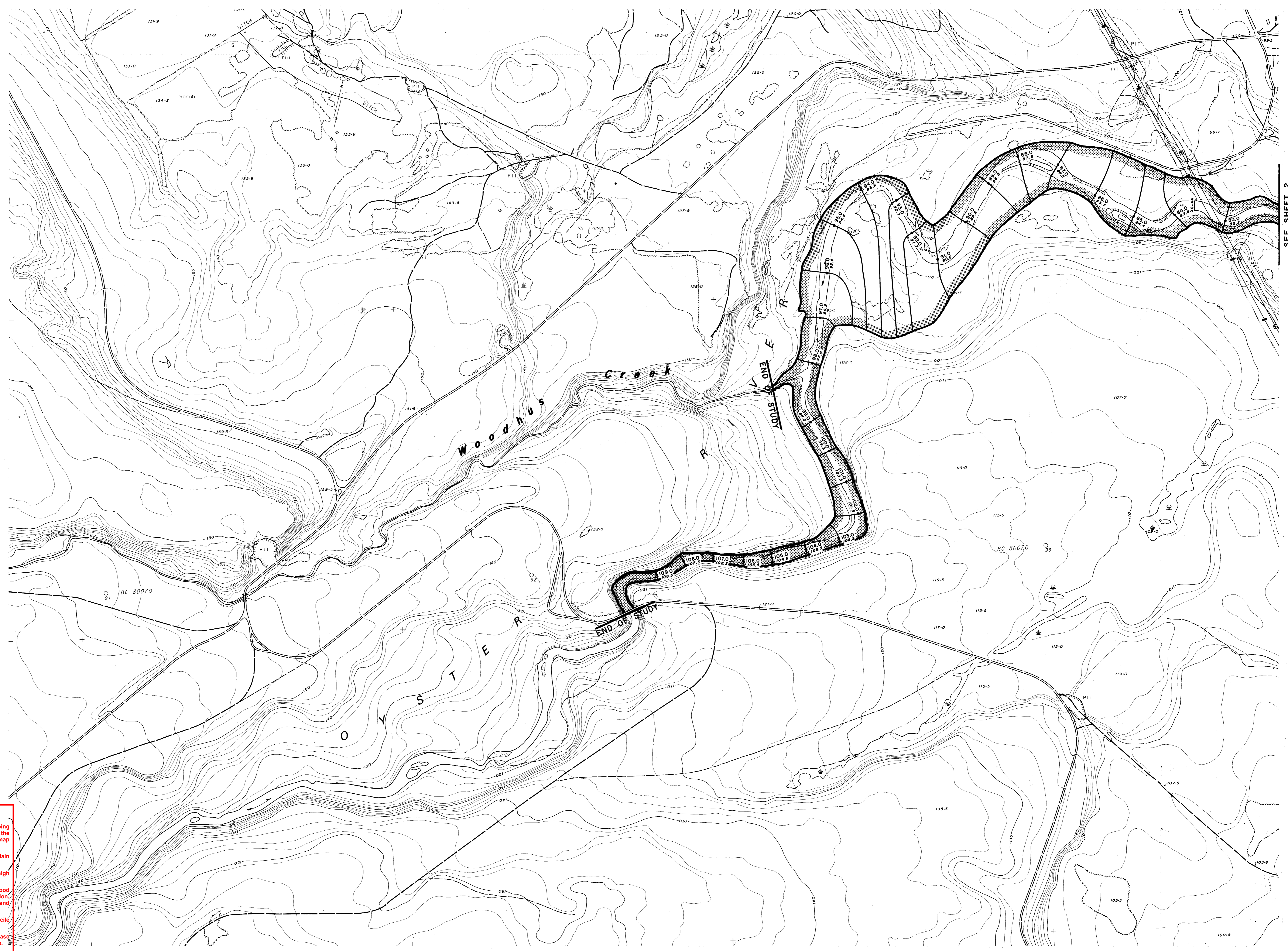
PRELIMINARY FLOODPLAIN MAPPING

OYSTER RIVER

Scale in metres: 0 100 200 300 400 500

Recommended: [Signature] Approved: [Signature]
Section Head Deputy Minister

FILE No. 0305030-9
SCALE 1:5000
NEGATIVE No.
DRAWING No. 5532-2
SHEET 2 of 3



SEE SHEET 2

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Floodplain Mapping Program

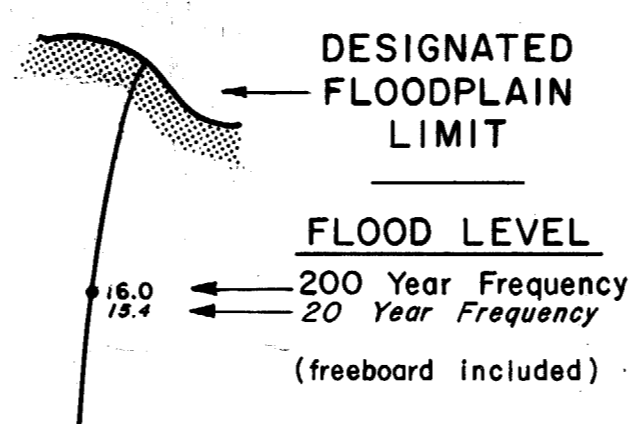
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Final Floodplain Mapping produced by Planning Subsection, Water Management Branch.

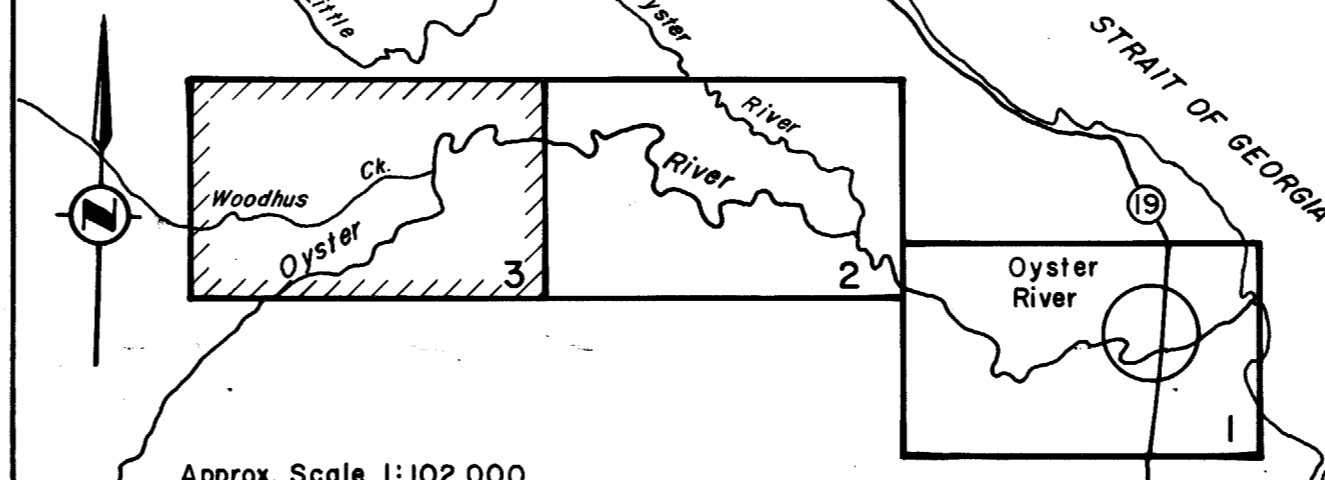
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LEGEND



KEY MAP



REVISIONS

No.	DESCRIPTION	DATE

TOPOGRAPHIC MAPPING

DATE OF PHOTOGRAPHY
JULY 24, 1980

FLOODPLAIN STUDIES
TECHNICIAN
F.W. DANKS
ENGINEER
R.W. NICHOLS

ISSUE OF MAPPING
DATE
MAY 1984

Province of British Columbia Ministry of Environment Water Management Branch

PRELIMINARY FLOODPLAIN MAPPING

OYSTER RIVER

Scale in metres: 0 100 200 300 400 500

Approved: [Signature] Deputy Minister

FILE No.	0305030-9
SCALE	1:5000
NEGATIVE No.	
DRAWING No.	5532-3
SHEET	3 of 3