



To: Rob Buchan
Chief Administrative Officer

Date: November 28, 2018

From: Coralie Breen
Senior Planner

File: 6740-2014

Re: Marine Policy Planning
North Saanich Coastal Mitigation Flooding Bylaw No. 1439 (2018)
North Saanich Official Community Plan Marine Policy Bylaw No. 1442 (2018)
For Information and Decision

RECOMMENDATION:

That Council:

- 1) Receive this staff report (November 28, 2018) for information; AND
 - 2) Give consideration to the Financial and Waste Management Plan; AND
 - 3) Give three readings to North Saanich Coastal Mitigation Flooding Bylaw No. 1439 (2018); AND
 - 4) Give two reading to North Saanich Official Community Plan Marine Policy Bylaw No. 1442 (2018).

OFFICIAL COMMUNITY PLAN & STRATEGIC PLAN IMPLICATIONS:

This matter relates to the Official Community Plan vision:

Protect and Enhance Rural, Agricultural, Heritage, Marine and Environmental Resources

Official Community Plan (OCP) related policies Sections 4.0 Marine Policies, 14.0 Development Permit Areas, 16.0 Regional Context Statement

This matter relates to the following Strategic Plan Goals:

Preserve and Protect Sensitive & Significant Environmental Areas & Ecosystems

Preserve and Protect Sensitive & Marine Inter-Tidal Habitats

Climate Change Impacts Mitigated

This matter relates the following Strategic Plan Projects:

#3 Prepare policies to guide marine and shoreline development (including planning for sea level rise).

#4 Bring forward to Council the Marine Task Force recommendations and work plan.

#5 Review District bylaws and policies that affect waterfront property owners.

And consider in this matter the initial review of the Shoal Harbour Migratory Bird Sanctuary to prepare for:

#2 Staff to prepare a report regarding possible roles for the District in the Shoal Harbour Migratory Bird Sanctuary

SCOPE:

There are approximately 731 waterfront lots in the District of North Saanich.

For 0.5 m sea level rise (SLR) scenario 582 lots are directly affected at the shoreline or within the 15 m setback by wave effects and flooding and 131 lots will be completely inundated or partially inundated by sea level rise.

For the 1.0 m SLR scenario, 550 lots are exposed to some flooding, partial flooding or complete inundation is expected on 163 lots (as outlined in the District of North Saanich Flood Construction Levels for 0.5 m and 1.0 m Report, January, 2017 (the FCL Report pg. iii).

PURPOSE OF THE STAFF REPORT:

The purpose of this staff report is to:

- 1) provide Council with the marine public workshop results (November 7, 2019) and
- 2) seek Council's direction to proceed with the existing approach or the recommended approach on determining flood construction level;
- 3) seek Council's direction on next steps

BACKGROUND:

In 2016, the District of North Saanich completed a study of flood construction levels (FCL) for 0.5 m and 1.0 m Sea Level Rise (SLR) (the FCL Report) which informed the review of the Official Community Plan marine policies. 1.0 m SLR is generally regarded as expected to occur by the year 2100. The District joined twelve other local governments who began undertaking flood plain mapping in the Province since 2016 with six additional local governments now underway.

In 2017, a draft OCP Marine Policy and Guidelines Recommendations Report (the Marine Policy Report) was completed and Council **404** directed staff to complete the work outlined in the staff report (August 16, 2017) including the Report recommendations consistent with the Provincial Guideline Memorandum Amendment – Section 3.5 and 3.6 – Flood Hazard Area Land Use Management Guidelines (FHALUMG) (January 1, 2019). Specifically, S. 3.5.5.1 that "the Year 2100 FCL should be established for specific coastal areas by a suitably qualified Professional Engineer, experienced in coastal engineering". (FHALUMG, pg. 5). Further FHALUMG identified that this work could be completed as part of flood plain mapping, sea level rise planning areas or development approval processes. Initially, Council considered a development permit area. The approach was replaced with a coastal hazard flooding mitigation bylaw and sea level rise planning areas in Tsehum Harbour and Lochside Drive as the two areas at greatest risk for sea level rise and the highest flood construction levels.

In November 2017, Council **583** directed staff to provide an update report on the marine policy planning project specifically with regard to the sea level rise study.

In April, 2019 Council **273** directed staff to proceed with the coastal floodplain approach as outlined in the staff report (April 27, 2019) and **274** to accept the \$50,000 Transport Canada grant.

In June, 2019 Council **414** directed staff to organize and host a public workshop on North Saanich Coastal Flooding Mitigation Bylaw 1439 (2019) and North Saanich Official Community Plan Bylaw 1130 (2007) Amendment Bylaw 1442 Marine Policy (2019).

See **Figure 1.0** for a Timeline of the Province's and District of North Saanich marine policy development.

The current and recommended marine planning work at the District is described below in this context:

Flood Construction Level Determination

Current: Building Inspectors Request Geotechnical Report

In the absence of approved flood plain maps, the District of North Saanich building inspectors currently request a geotechnical report from a coastal engineer¹ for new buildings to determine the flood construction level for new buildings on parcels that are or may be subject to sea level rise (under s. 56 of the *Community Charter*).

Building Inspector requests a report from the applicant under the authority of s. 56 of the *Community Charter*, prepared by a qualified professional engineer, that identifies the coastal flooding hazard for the site and makes recommendations on how the land can be safely developed. Usually the Building Inspector also requires the registration of a s. 219 covenant documenting the hazard and identifying conditions for safe use of the site.

Recommended: Bylaw 1439 Coastal Mitigation Flooding Bylaw

Mapping could be adopted as part of a flood plain bylaw with associated minimum flood construction levels (FCLs) as set out in proposed Bylaw 1439 Coastal Mitigation Flooding Bylaw. The maps provide a very high level of detail about this hazard resulting from a close examination of the terrain as well as currents, tides, wave action and the impact of sea level rise.

Section 524 of the *Local Government Act* confers authority to “designate land as a flood plain”, by bylaw. Enactment of the bylaw is not subject to a public hearing requirement. The bylaw may designate both flood construction levels for new construction and building setbacks in respect of the water body that presents a flood hazard. Section 524 regulations are analogous to zoning regulations in that they establish a rule with which all development must comply unless a site-specific exemption is obtained. In view of the life safety and property damage issues associated with flood hazards, the Act is very particular about how such exemptions are handled. General variance procedures such as board of variance orders and development variance permits cannot be used to vary s. 524 standards. Rather, s. 524(7) enables a local government to “exempt” development from the application of the bylaw if the exemption is consistent with the province’s Flood Hazard Area Land Use Management Guidelines (FHALUMG) or the local government has received a report from a professional engineer that the land may be safely used for the use intended despite non-compliance with the bylaw. The approval of exemptions may be delegated to District staff, however the proposed bylaw does not include this delegation at this time.

Building inspectors would continue to have authority under s. 56 of the *Community Charter* to require further hazard assessments and construction recommendations for particularly

¹ A Coastal Engineer Requires knowledge of: Meteorology, Oceanography, Wave and Current interactions with structures, Marine Environmental processes, Geology, Geotechnical Engineering, Economics, Planning, Risk Assessment. Four universities in Canada currently graduate civil engineers with coastal engineering training or specialty (MSc or PhD): Queen's University in Kingston Ontario, University of Ottawa, University of British Columbia, Laval University

vulnerable sites, and to impose more onerous standards in the event that sea level rise occurs more rapidly than anticipated in the Report. However, this would not be expected that to be the case unless there was sufficient evidence to question the proposed flood plain levels.

The enforceability of the regulations under s.524 is not affected by the *Building Act* provisions dealing with “local building requirements”. Section 5.4 (d) (x) of the District’s building bylaw already requires building permit applicants to provide, as part of a permit application, information on “setback to the natural boundary of any lake, swamp, pond, watercourse, or marine shoreline where the District’s land use regulations establish siting requirements related to flooding”. Section 5.11.1 of the bylaw permits the issuance of a building permit only if the proposed work “substantially conforms with the Building Code, this bylaw and all other relevant bylaws of the District”; this would include a new s. 524 bylaw.

Recommended: Bylaw 1442 Official Community Plan Marine Policy Bylaw

Recommended if Bylaw 1439 Coastal Mitigation Flooding Bylaw is advanced.

The recommended OCP marine policy changes provide recommendations to update the marine policies of the District of North Saanich Official Community Plan (OCP) reflecting the findings of the flood construction level study and ensuring consistency with the proposed Coastal Flood Mitigation Bylaw marine policies, residential policies, roads and servitudes policies and general development are consistent with the proposed Coastal Flood Mitigation Bylaw

Sea Level Rise Planning Areas

Current: There are no identified sea level rise planning areas in the District’s OCP.

Proposed: Two areas of the District of North Saanich are significantly affected by the findings and results of the Flood Construction Level Study (District of North Saanich, January 2017).

The Lochside McTavish Interchange Area and the Tsehum Harbour Area are recommended in the Report to be designated as two new special development areas (in addition to special development areas currently identified in the OCP) to provide protection to areas which include:

1. significant residential, commercial, light industrial, parklands and multi-jurisdictional transportation infrastructure;
2. District infrastructure including utilities, sewer, roads and paths and water supply that are important to the District.

Rezoning applications would be considered in these special designated development areas with protection to development and infrastructure.

Development Permit Area (Previously Considered & Not Recommended)

A development permit area can be designated for the protection of development from a flood hazard. In such circumstances, s. 491(4) of the *Local Government Act* enables the local government to require a permit applicant to provide a report “to assist the local government in determining what conditions or requirements it will impose” when issuing a development permit. Such conditions and requirements may include the specification of areas that must remain free of development except in accordance with conditions specified in the permit. The *Act* requires that the local government specify “guidelines” in accordance with which development permit conditions will be stipulated.

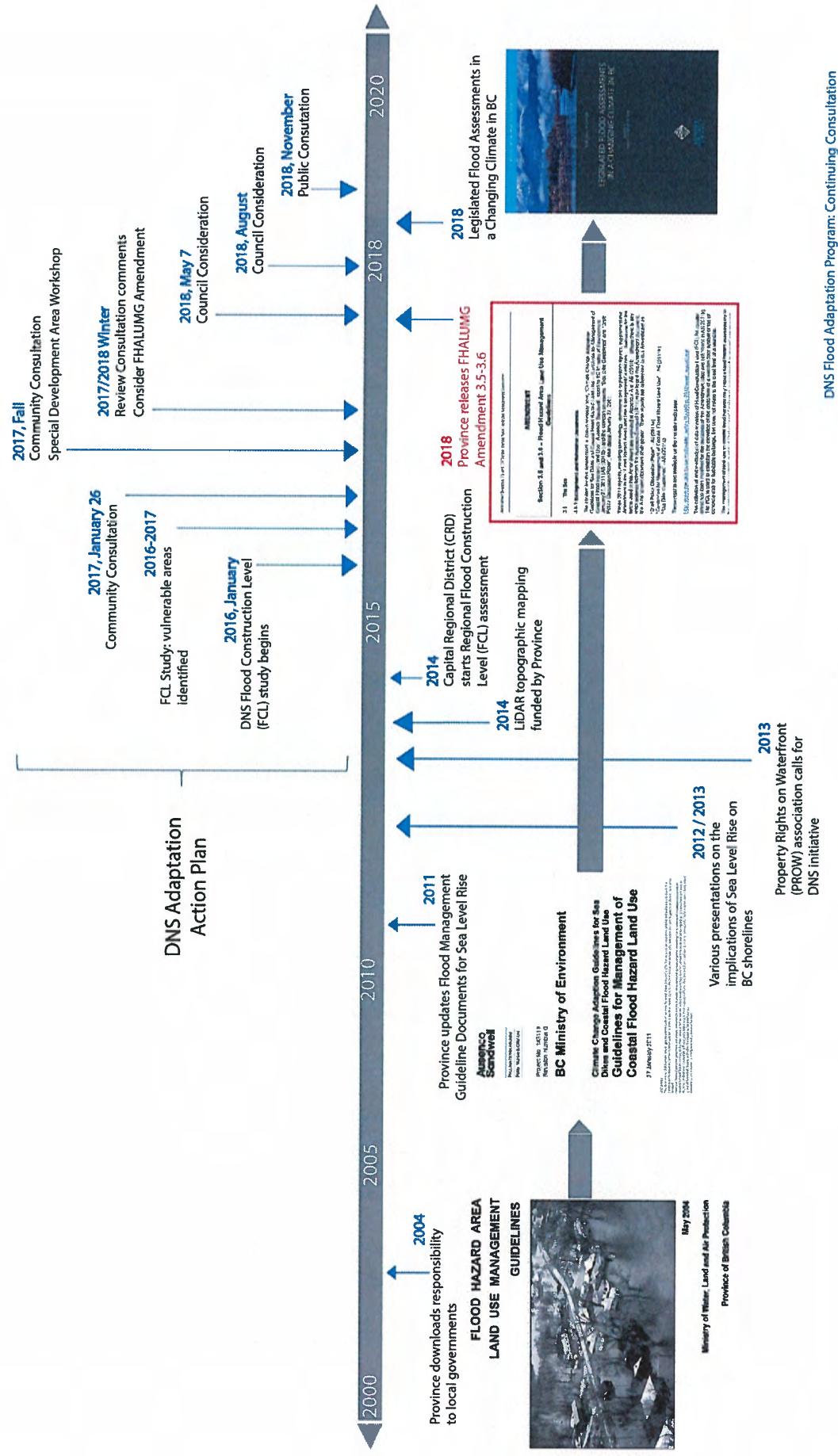
Where flood hazards are concerned, s. 491(4) reports (generally prepared by engineers with experience in flood hazard assessment) typically involve the assessment of the flood hazard to which the particular parcel of land is exposed, and the identification of a recommended flood construction level and minimum building setback from the water body concerned. If the guidelines indicate a minimum flood construction level or setback for the area, they are generally expressed to be subject to any site-specific standards that are identified in an engineer's report.

Where the location or size of the parcel does not allow the construction of a building that complies with those requirements, the report will frequently include recommendations regarding design and construction standards that are intended to facilitate evacuation of the building in the event of flooding, and the minimization of property damage. The use of "guidelines" in issuing development permits enables the local government to tailor development permit conditions to the parcel that is the subject of the application, including (in the case of a flood hazard development permit area) identifying the appropriate flood construction level and building setback for the parcel.

According to s. 489 of the *Local Government Act*, a development permit is required for "construction of, addition to or alteration of a building or other structure", subject to any permit exemptions that the local government specifies. Development permits are not required for interior alterations regardless of the dollar value of the work. Thus, it is possible for significant reinvestment to be made in buildings in a flood hazard development permit area without compliance with the development permit guidelines.

Figure 1.0 Timeline

Timeline



DISCUSSION:

Since 2013, the District has considered marine policy amendments in response to community calls for action and the Province's new Flood Hazard Land Use Management Guidelines. Two detailed reports were prepared by SNC-Lavalin in response, one identified flood construction levels in thirty-nine reaches on the North Saanich shoreline and a second provided OCP marine policy recommendations and amendments consistent with a recommended Coastal Mitigation Flooding Bylaw. Different policy approaches were considered: a) the current approach, building inspectors requesting site by site reports; b) the recommended approach of a Coastal Mitigation Flooding Bylaw and c) a development permit.

Although the development permit approach was initially recommend, the District considered the feedback received during public consultation and surveys and other advice in providing the comments in the Discussion section regarding a preferred development approval process and as a result the Coastal Mitigation Flooding Bylaw was introduced. In May and September 2019, District staff met with PROW representatives to introduce the Coastal Mitigation Flooding Bylaw approach and show the draft maps. At the May 7, 2019 Council, PROW representative addressed Council and expressed support for the proposed approach:

“....I should really first say that PROW does approve of the new bylaw approach... It’s the right way to go we believe but we have not had an opportunity to see this bylaw but we know the bylaw will require a review of the OCP and were hoping that in so doing we just don’t limit it to sea level rise perhaps other issues - marine issues could be taken up at the same time since we would be looking at the OCP and marine policies maybe there are things that aren’t such a huge deal that could be caught up in this new bylaw.”

It is noted that while Bylaw 1439 reflects a “new approach”, the mapping and related information has been in the public realm since 2016 and a matter at the core of the public consultations and initially considered as part of the previously considered development permit.

While there have been several public consultations, the most recent public open house (November 7, 2019) focused specifically on proposed Bylaw 1439 Coastal Mitigation Flooding Bylaw and provided detailed posters of guidelines to interpret the Bylaw 1439. Approximately 90 attendees (68 signed the sign in sheet) were engaged over a two hour event and 19 feedback forms submitted. The feedback generally stated:

- 50% were not concerned with sea level rise impacting property, and 25% were very concerned.
- 40% favored a site-by-site building inspector requirement; and 40% a floodplain bylaw; 20% stated another approach.
- 50% stated the public information session did not meet their expectations; and less than 20% stated the session met or exceed their expectations.

General comments, other than questions, stated:

- Opportunities for group discussion, general questions, consultation and feedback would be appreciated.
- Maps would benefit from landmarks and main street names (added).
- Thanks for having the forum.
- More analysis of consequences of greater set-back and FCL on property value, insurability, non-conforming zoning.
- Concern for already approved housing on lands at risk.
- DNS should focus on allowing/encouraging home owners to protect their foreshore and maintain their property.

The full feedback summary is attached to this staff report (November 28, 2018). Questions are answered in the updated Frequently Asked Questions (December, 2018). With respect to the land below the natural boundary (roughly, high tide line) which is not eligible for flood plain designation, the District will review policies and regulations in the next phase of marine policies and regulations review including regulations of the construction of walls and other structures. An initial response to how a seawall and the natural boundary interact is included in the FAQ.

Staff note the following amendments to Bylaw 1439 based on written and verbal comments:

1. Additions of main roads on the maps for clarity.
2. Deletion of the underlined words:

The Local Government Act authorizes the Council to approve an exemption to the building requirements in the *Act* on the application of an owner, if the exemption is consistent with provincial guidelines published under the *Environmental Management Act* or an engineer or geoscientist experienced in geotechnical engineering certifies that the owner's land may be safely used for the intended use, despite the flooding hazard

When it comes to dealing with exemption applications, assuming the bylaw is adopted, the Ministry of Environment may have made a regulation under s. 524(9) limiting this work to engineers with experience in coastal engineering and if it has not, the District will be able to advise applicants that this is the qualification required for reviewing certifications related to exemptions from the bylaw.

3. Addition of the following exemption:

Replacement of a building on its existing foundation as an exemption, as long as there is no habitable area in the basement (below the applicable FCL) and no increase in the floor area that rests on the foundation.

The FHALUMG states:

"Requirements for flood proofing through the use of elevation may be waived for: A renovation of an existing building or structure that does not involve an addition."

A summary of the consultations and feedback is provided in the Consultation section of this staff report (November 28, 2018).

Review of Approaches

Council now may consider to stay the course with the existing approach or proceed with Bylaw 1439.

The advantages and disadvantages of the current and of the recommended approach are now discussed. The third approach of a development permit was considered and abandoned. There was no support at Council nor from the community for the development permit approach. The advantages and disadvantages of all three approaches are summarized below and in Table 1.0.

I. Advantages

a. Current Approach

No bylaw changes required. Section 219 covenant is required.

b. Recommended Approach

The enactment of the bylaw provides certainty for owners regarding the standards that will apply when they develop their parcel.

Additionally, a s. 524 bylaw would be more straightforward for District officials to administer, in that the construction standards for each parcel would be ascertainable directly from the bylaw versus interpretation of an engineer's report.

Owners who are willing to comply with the regulatory bylaw may simply submit a building permit application supported by drawings that illustrate compliance, rather than first going through a development permit process. An engineer's report addressing the flood hazard on a site-specific basis is only required if the owner seeks an exemption from the bylaw, in respect of the flood construction level or the building setback.

Cost savings as there is no technical report required unless an exemption is sought. Building permit time is not delayed due to the preparation of an engineer's report.

II. Disadvantages

a. Current Approach

Building inspectors have discretion under the Community Charter to require an engineer's report for land that the official considers is or might be subject to a coastal flooding hazard. This authority is discretionary but the exercise of discretion is governed by negligence law principles. Given the amount of work that has been done to this point, there may be duty for a North Saanich building inspector to not issue a building permit for a residential building on a coastal lot, especially the lower ones, without requiring an engineer's certification that the land can be safely used if the building is constructed at the level that the owner proposes. If the building inspector has reasons to doubt the reliability of an engineer's report, the building inspector may require a peer review of the report at the owner's expense. In North Saanich, given the extensive technical information available to building inspectors and in the public realm, if a technical report was received that had a large discrepancy with the SNC-Lavalin report recommendations which are the foundation of data for the recommended FCLs in the 39 reaches in North Saanich and the building inspector refused the building permit, the applicant could apply to Council for permit issuance. This would require a review of technical material which may be costly for the District.

Adjacent lots are not required to be considered in the technical report. Costs for technical reports can range from \$3 - \$7,500 if the owner's engineer largely considers work from the FCL report. If the owner's engineer chooses to completely reanalyze the FCL the costs could be considerably more.

b. Recommended Approach

Bylaw standards for FCL and setbacks must be amended if flood hazard data proves incorrect (e.g. if sea level rise occurs earlier than assumed)

Table 1.0 Summary of Legal Authority to Manage Coastal Flood Hazard

	Site by Site Building Inspector/Subdivision Approving Officer Requirements CURRENT	Development Permit Area	Flood Plain Bylaw RECOMMENDED
Legislation	s. 56 Community Charter	s. 488 & 489 LGA	s. 524 & 529 LGA
Scope	Lands subject to a flood hazard	Lands subject to any documented natural hazard including adjacent lands	Lands subject to a documented flood hazard including adjacent lands
Reports	Report from coastal engineer - new buildings.	Engineer's report – all new buildings	Engineer's report - exemptions only
Review	Building Inspector	Staff by delegation	Staff by delegation
Costs	Technical Report by request by building inspector	\$1500 DP fee (current) plus cost of engineer's report	<u>Costs only incurred by owner for report if exemption is requested enabling significant savings. This approach will save owner's the expense currently experienced with having to hire a coastal engineer to identify the flood construction level.</u>
Advantages	No bylaw changes required	Adjacent lots considered; guidelines can indicate flexible FCL and setback requirements if flood hazard data is incorrect	Exemptions only require reports Building Permit processing time is reduced compared with development permit approach
Disadvantages/Risks	Adjacent lots not considered. While reports are discretionary, the exercise of discretion is governed by negligence law. Given amount of work conducted by District, duty of building inspector to request report especially on lower lots.	Costs of DP and engineer's report and adds time to obtain building permit	Bylaw standards for FCL and setbacks must be amended if flood hazard data proves incorrect (e.g. if sea level rise occurs earlier than assumed)

Summary

Staff are recommending that a “Coastal Flood Mitigation Bylaw” be used for an s. 524 bylaw because it more accurately describes the nature of the hazard for which the bylaw is being enacted, building permit processing time is reduced and costs are only incurred by the owner for reports if exemptions are requested. This approach will save owner’s the expense currently experienced with having to hire a coastal engineer to identify the flood construction level.

Where a local government has detailed information regarding the existence and extent of a flood hazard and it wishes to manage development in a manner that involves least cost and delay to owners seeking to develop their land, a regulatory bylaw under s. 524 offers significant advantages over the current approach of building inspectors requesting site by site technical reports

The use of a floodplain bylaw is appropriate where the degree of hazard is well-documented and a generic approach to hazard mitigation is possible.

LEGAL ASPECTS:

Local Government Act

S. 524 Requirements in relation to flood plain areas

(2) If a local government considers that flooding may occur on land, the local government may, by bylaw, designate the land as a flood plain.

(3) If land is designated as a flood plain under subsection (2), the local government may, by bylaw, specify

(a) The flood level for the flood plain, and

(b) The setback from a watercourse, body of water or dike of any landfill or structural support required to elevate a floor system or pad above the flood level

(4) In making bylaws under this section, a local government must

(a) consider the Provincial guidelines, and

(b) comply with the Provincial regulations and a plan or program the local government has developed under those regulations.

CONSULTATIONS:

Public consultations were held November 7, 2018, November 16, 2017, October 19, 2017, January 26, 2017, November 17, 2016 and June 7, 2016.

The most recent public consultation –open house- was held on November 7, 2019 at the District of North Saanich Council Chambers had approximately 90 attendees; 68 signed the registration sheet. Feedback forms were available at the workshop and on the District of North Saanich website. A summary is attached to this staff report (November 28, 2018). Also attached is an updated FAQ that provides responses to questions received on the feedback forms and also highlights where any new questions from the open house in the FAQ.

Table 2.0 Summary of Public Consultations/Council reports

Date	*Consultation
November 7, 2018	Guidelines to Bylaws 1439 & 1442 Workshop – Poster Display
November 16, 2017	Marine Policy review
October 19, 2017	OCP Marine Policy & Fieldtrip
January 26, 2017	FCL & Marine Policy Presentation & Q & A
November 17, 2016	Consultation on the FCL Study and SLR Presentation & Q & A
June 7, 2016	Presentation of FCL Study & Q & A

*Attendance ranged from approximately 30 to approximately 100 at each meeting.

OPTIONS:

Council can:

1. Receive the staff report for information; AND
2. Proceed with Bylaw 1439 Coastal Flooding Mitigation Bylaw; AND
3. Proceed with Bylaw 1442 OCP Marine Policy Bylaw; OR
4. Continue with the existing approach;
5. Other.

NEXT STEPS:

1. If Council determines to proceed with the existing approach (site by site technical reports to determine FCL on waterfront lots or some adjacent lots) then Council may proceed with additional review of the marine policies and the initiation of the zoning bylaw marine regulation review, Bylaw 1442 OCP marine Policy Bylaw would require amending to not consider Bylaw 1439 Coastal Flooding Mitigation Bylaw.
2. If Council determines to proceed with the recommended approach (Bylaw 1439 “District of North Saanich Coastal Flood Mitigation Bylaw”) then the initiation of the zoning bylaw marine regulations may begin.
3. Study and Recommendations for Tsehum Harbour and the Shoal Harbor Migratory Bird Sanctuary (Current – Spring 2019)

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS:

The staff report has been circulated to the District of North Saanich Directors for review.

RECOMMENDATION(S):

This staff report (November 28, 2018) provides Council with an update on the marine policy planning project specifically with regard to the sea level rise study and recommends the following approach:

1. Proceed with Bylaw 1439 Coastal Flooding Mitigation Bylaw; AND

2. Proceed with Bylaw 1442 Official Community Plan Marine Policy Bylaw.
3. Direct staff to initiate Zoning bylaw marine regulations review.

The coastal flooding hazard in North Saanich, including its sea level rise aspect, has now been thoroughly documented, and mitigation by way of minimum flood construction levels and building setbacks from the sea have been recommended by the District's consulting engineers.

Under a floodplain bylaw approach, property owners would be required to submit only a building permit application, though they would have to instruct their building designer that a floodplain bylaw is in effect in order that the building can be properly sited and designed.

Minor changes to existing buildings can be exempted from the mitigation requirement, and an exemption process is available for situations where an owner wishes to provide a professional opinion that the prescribed mitigation measures are not required for their property. The data that has been acquired in assessing sea level rise would allow the District to avoid the DP approach and thus save property owners time and money in their building projects.

Respectfully submitted,



Coralie Breen
Senior Planner

Concurrence,



Rob Buchan
Chief Administrative Officer

Concurrence,



Anne Berry, Director of Planning and Community Services

Eymond Toupin, Director of Infrastructure Services

Stephanie Munro, Director of Financial Services

Curt Kingsley, Director of Corporate Services

John Telford, Director of Emergency Services

Attachments:

Bylaw 1439 "District of North Saanich Coastal Flood Mitigation Bylaw" amended with an appendix and street names on the maps
Bylaw 1442 "District of North Saanich OCP Marine Policy Bylaw" amended with street names on the maps
Summary of Workshop Feedback Forms
Updated FAQ – December, 2019



DISTRICT OF NORTH SAANICH

B Y L A W N O. 1439

A BYLAW TO MITIGATE COASTAL FLOODING HAZARDS

WHEREAS:

- A. If a flood plain has been designated in a District bylaw, the *Local Government Act* requires that the underside of any floor system or the top of any pad supporting any habitable floor area be above the flood level specified in the bylaw, and that any landfill required to support a floor system or pad not extend within any applicable setback specified in the bylaw; and
- B. Parcels of land in the District that abut the sea are subject to the coastal flooding hazard, exacerbated by sea level rise, indicated generally on the Flood Hazard Key Map and Flood Hazard Maps 1 through 10 attached to and forming part of this Bylaw; and
- C. The Council has considered Sections 3.5 and 3.6 of the Province of British Columbia Flood Hazard Area Land Use Management Guidelines, as amended, which deal with coastal flooding and sea level rise; and
- D. *The Local Government Act* authorizes the Council to approve an exemption to the building requirements in the *Act* on the application of an owner, if the exemption is consistent with provincial guidelines published under the *Environmental Management Act* or an engineer certifies that the owner's land may be safely used for the intended use, despite the flooding hazard.

THE MUNICIPAL COUNCIL of the District of North Saanich, in open meeting assembled, enacts as follows pursuant to s. 524 of the *Local Government Act*:

APPLICATION

1. This Bylaw does not apply to the replacement of a building on its existing foundation, as long as the building including its basement contains no habitable floor area below the applicable flood level specified on Map 11 and the floor area that rests directly upon the foundation is not increased. For certainty, if any portion of an existing foundation is also being replaced, the provisions of this Bylaw respecting new principal buildings apply.

2. This Bylaw does not apply to any construction if the scope of work authorized by the building permit is limited to an addition of habitable floor area to an existing building that does not comply with s. 524(6) of the *Local Government Act* and this Bylaw, provided that:
 - a. the addition comprises not more than 25% of the total floor area of the existing building, calculated in accordance with the Zoning Bylaw, considered either independently or in combination with any other floor area added to the building after the date of first reading of this Bylaw;
 - b. no additional habitable floor area is constructed below the lowest elevation of existing habitable floor area in the building; and
 - c. no portion of any additional building area is nearer to the natural boundary of the sea than any portion of the existing building.

FLOOD CONSTRUCTION LEVEL AND SETBACK

3. For the purposes of Sections 2 and 4, a parcel is deemed to abut the natural boundary of the sea if its location is such that any portion of the parcel would be inundated to any degree by a coastal flood that reaches the flood construction level indicated in respect of the parcel on Map 11 or Map 12 attached to and forming part of this Bylaw, as applicable to the parcel according to Section 6.
4. The flood level specified for the flood plain for any particular parcel of land, for the purposes of s. 524(6)(a) of the *Local Government Act*, is the level specified in respect of the relevant reach of the sea on Map 11 or Map 12 that the parcel abuts, depending on the type of building permit application that has been made for the parcel, and for that purpose the reach demarcation lines indicated on the map are determinative of the applicable flood level, despite any indication to the contrary on the map legend. If Map 11 or Map 12 specifies a flood level in respect of a portion of a parcel, the portion to which the flood level applies shall be located by scaling from the map.
5. If a parcel abuts, or is deemed to abut, 2 or more reaches of the sea indicated on Map 11 or Map 12, the applicable flood level is the highest level indicated in respect of any portion of the parcel.
6. For the purposes of this Bylaw:
 - a. Map 11 applies in respect of all buildings and structures for which a building permit is required under the Building Bylaw, other than buildings described in subsection (b); and

- b. Map 12 applies in respect of the construction of new principal buildings as defined in the Zoning Bylaw, whether or not the principal building is replacing a principal building that existed on the date of first reading of this Bylaw.
7. The minimum horizontal setback from the natural boundary of the sea of any landfill required to achieve the building elevation required by Section 6 is 15.0 m.
8. If the location of the natural boundary of the sea in relation to any parcel is such that the setback rule in Section 7 does not permit the construction on the parcel of a building supported by landfill, the flood level may be achieved with another type of structural support provided that the structural support has been authorized by any required development permit and complies with the District's zoning bylaw, or the zoning bylaw as varied to permit the siting of the structural support.

INTERPRETATION

9. Sketches in the Appendix to this Bylaw are intended to illustrate generally the application of the Bylaw and do not modify any regulation contained in the Bylaw.

10. In this Bylaw,

“Building Bylaw” means District of North Saanich Building and Plumbing Bylaw No. 1150, 2007 as amended or replaced from time to time.

“Building permit” means a building permit for which an application is made pursuant to the Building Bylaw.

“Habitable floor area” means any space or room, including a manufactured home, that is used for dwelling purposes, business or the storage of goods that are susceptible to damage by floodwater.

“Natural boundary of the sea” means the estimated natural boundary associated with the sea level rise scenario depicted on Map 11 or Map 12 that is applicable to the parcel according to Section 6, determined in accordance with the Flood Hazard Area Land Use Management Guidelines as published and amended from time to time by the Province of British Columbia.

“Zoning Bylaw” means District of North Saanich Zoning Bylaw No. 1255 as amended or replaced from time to time.

CITATION

11. This Bylaw may be cited for all purposes as "North Saanich Coastal Flooding Mitigation Bylaw No. 1439 (2018)".

READ A FIRST TIME the xxx day of xxx, 2018.

READ A SECOND TIME the xxx day of xxx, 2018.

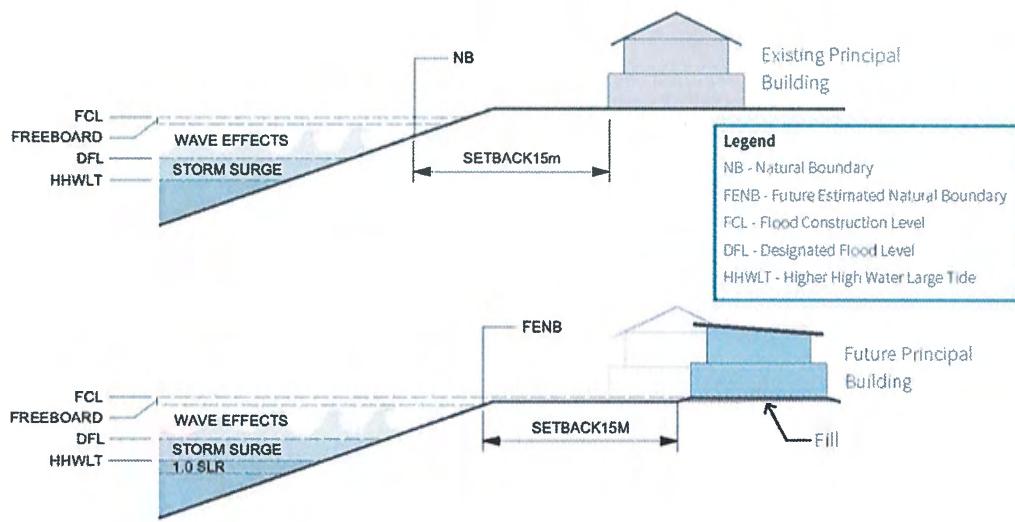
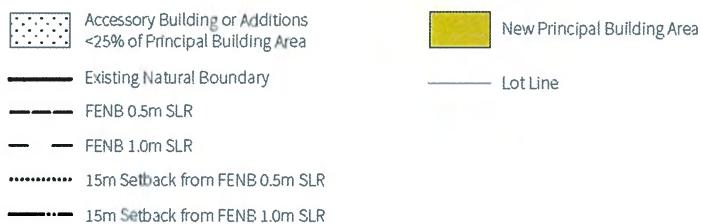
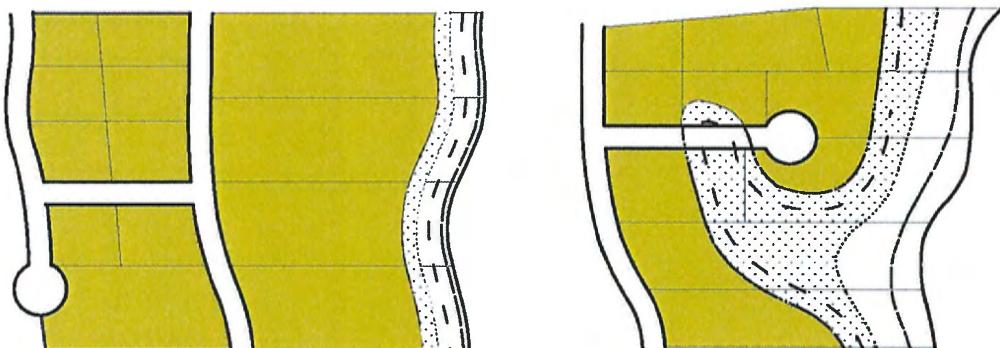
READ A THIRD TIME the xxx day of xxx, 2018.

FINALLY PASSED AND ADOPTED the xxx day of xxx, 2018.

MAYOR

CORPORATE OFFICER

APPENDIX



Glossary for Appendix

Higher High Water Large Tide (HHWLT) is an existing high water level that often occurs during ‘winter spring tides’. These tides happen several times a month, and are associated with the occurrence of a full moon or a new moon, approximately every two weeks.

Storm Surge occurs during a coastal storm as the result of the strong winds and low air pressure, which can bring the water above HHWLT or any other simultaneously occurring tide level.

The Designated Flood Level (DFL) is the anticipated still water level that considers both HHWLT and Storm Surge.

Flood Construction Level (FCL) is the required minimum elevation for the base of a floor structure for habitable floors or for the storage of valuable goods. FCL includes the Designated Flood Level, plus Wave Effects, and a Freeboard allowance.

Freeboard is a vertical distance between the anticipated Wave Effects and the Flood Construction Level. It allows for unknowns including a more rapid SLR than anticipated, specific details of an individual land parcel and particulars of the waters immediately offshore of a property.

Wave Effects considers the actions and effects of waves along the shoreline that causes water to rise above the DFL. These effects vary considerably depending on the shoreline exposure, its character and the presence of coastal structures including seawalls or steep shorelines. These effects drive the spray and debris that may affect a building located close to the shoreline.

Natural Boundary (NB) defines the seaward boundary of a property where the prolonged presence of water creates a change in vegetation and the character of the land itself (see Land Title Act). The foreshore and water seaward of the Natural Boundary are Crown property.

The Future Estimated Natural Boundary (FENB) is the predicted location of the future Natural Boundary as the result of sea level rise. Setbacks for future new buildings should move inland with the Future Estimated Natural Boundary to preserve the protection that exists at the shoreline. Provincial guidelines suggest that calculation of the Future Estimated Natural Boundary can be based on the Flood Construction Level minus the Freeboard allowance.

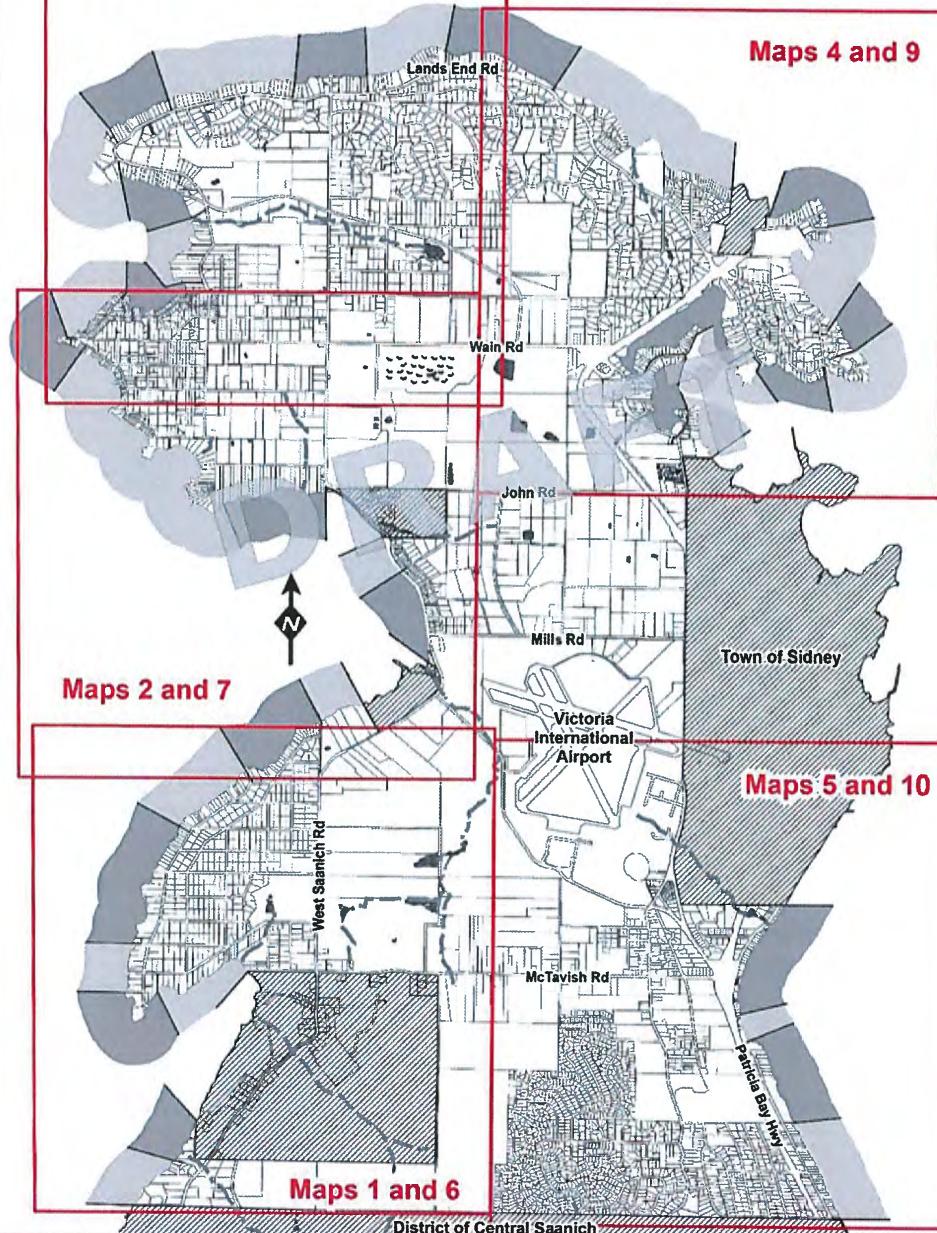
Setback is the required minimum horizontal distance between the Natural Boundary (or Future Estimated Natural Boundary) and any FCL-related structural fill that would be vulnerable to erosion if sited too close to the sea.



Flood Hazard

Key Map

Maps 3 and 8



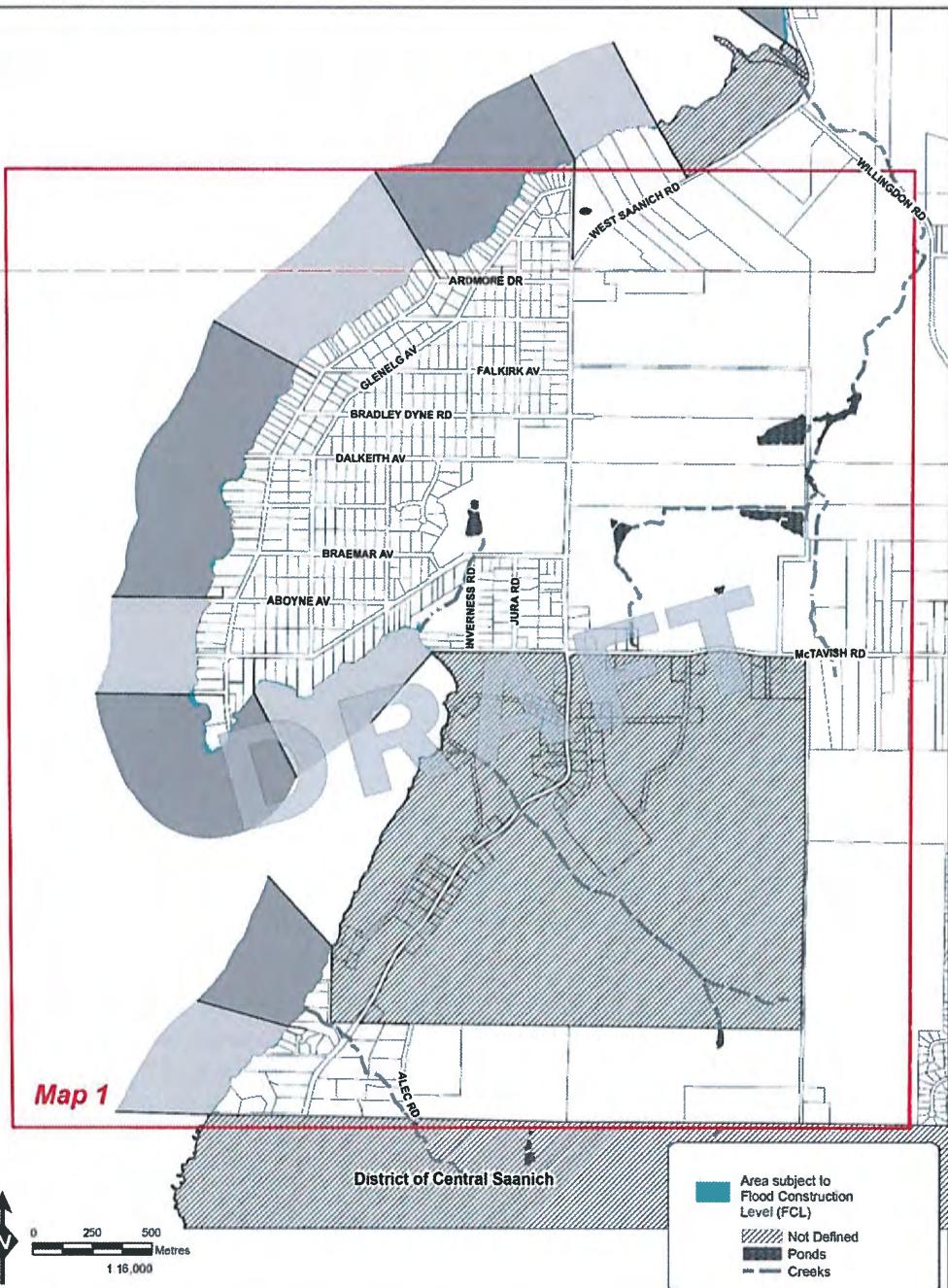
District of Central Saanich

This Map provides the key to detailed mapping showing the extent of coastal flooding expected over existing ground in the District of North Saanich.

November 14, 2018



Flood Hazard
Map 1
0.5 m Sea Level Rise

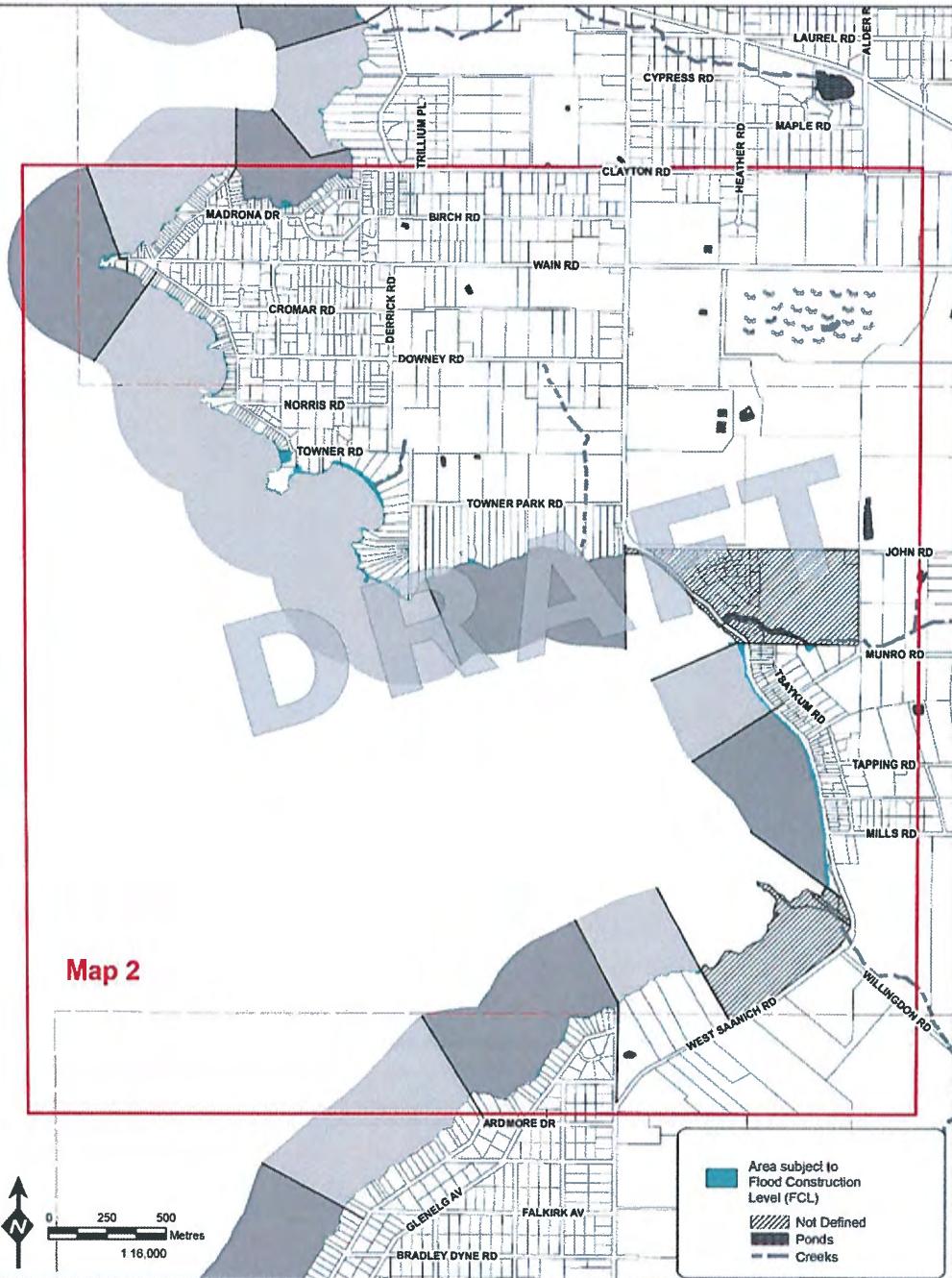


This Map shows the extent of coastal flooding expected over existing ground in the District of North Saanich.

November 14, 2018



Flood Hazard
Map 2
0.5 m Sea Level Rise



Map 2

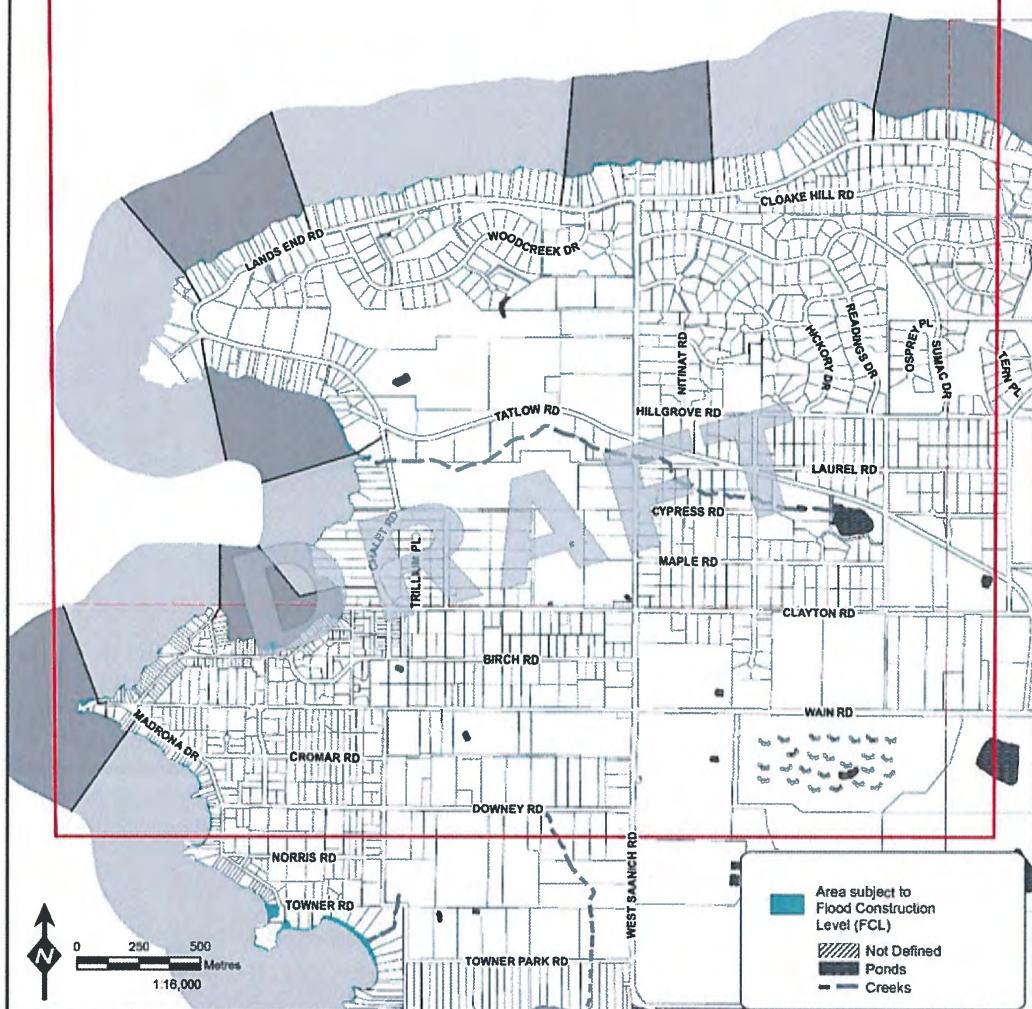
This Map shows the extent of coastal flooding expected over existing ground in the District of North Saanich.

November 14, 2018



Flood Hazard
Map 3
0.5 m Sea Level Rise

Map 3



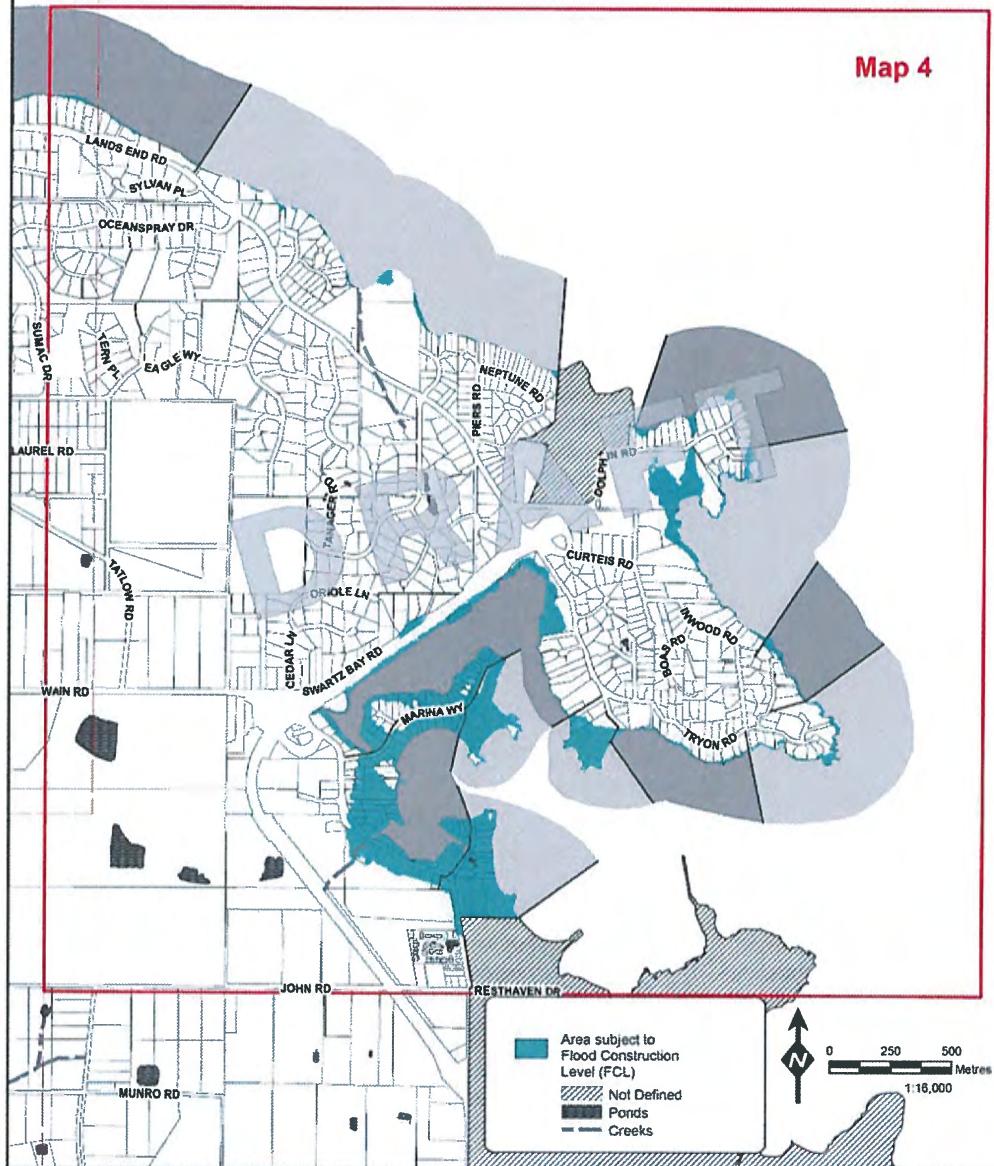
This Map shows the extent of coastal flooding expected over existing ground in the District of North Saanich.

November 14, 2018



Flood Hazard
Map 4
0.5 m Sea Level Rise

Map 4

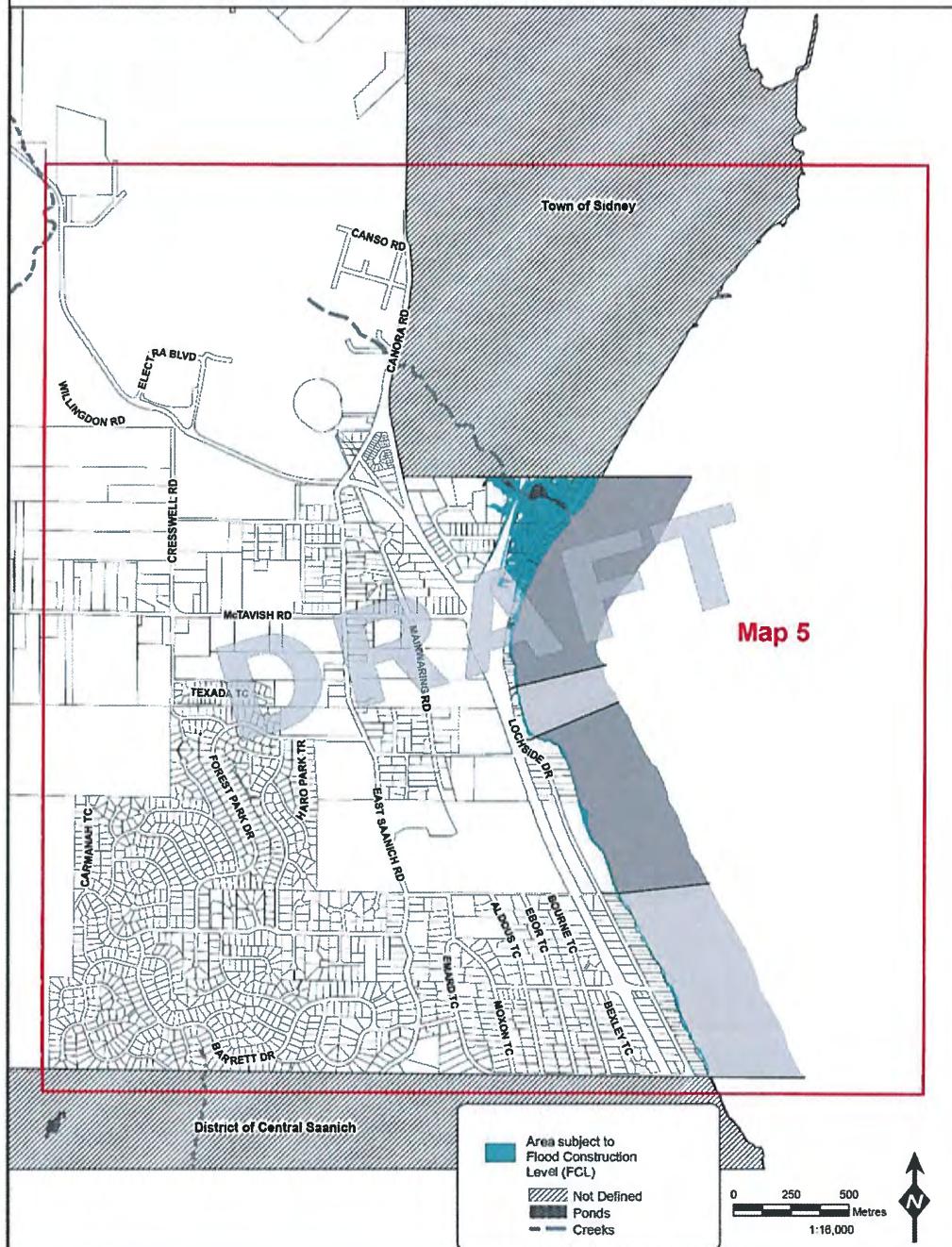


This Map shows the extent of coastal flooding expected over existing ground in the District of North Saanich.

November 14, 2018



Flood Hazard
Map 5
0.5 m Sea Level Rise

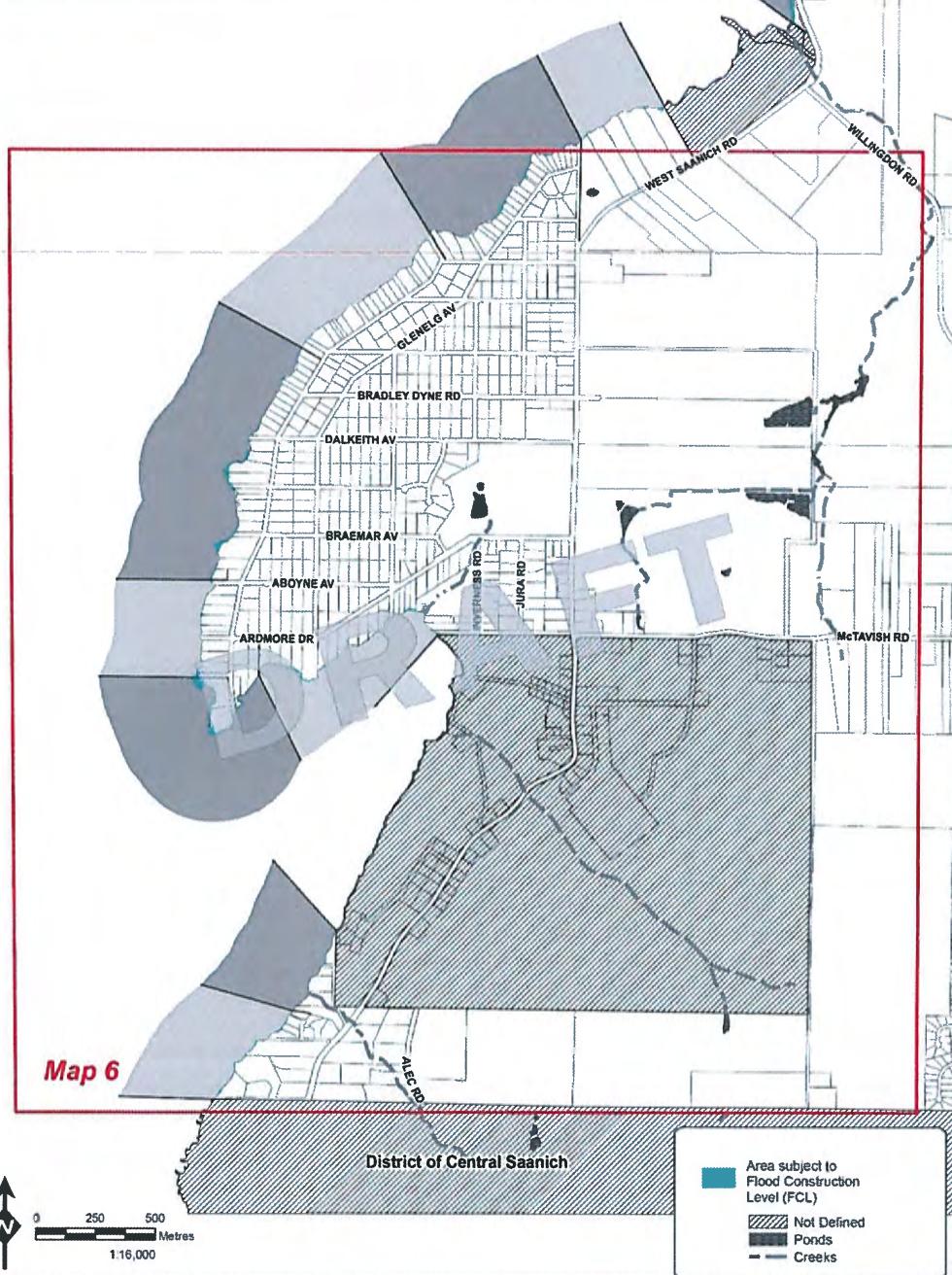


This Map shows the extent of coastal flooding expected over existing ground in the District of North Saanich.

November 14, 2018



Flood Hazard
Map 6
1.0 m Sea Level Rise

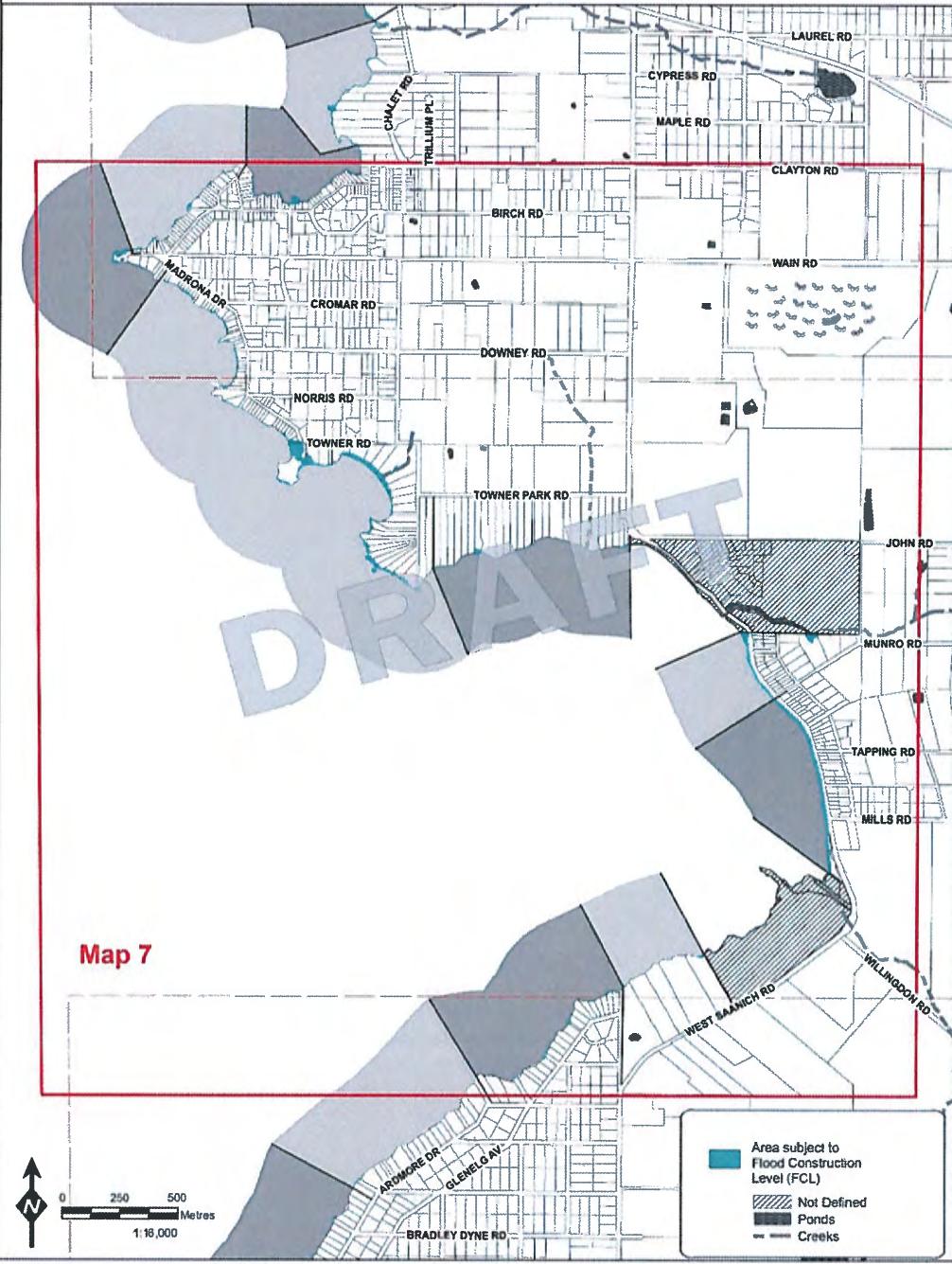


This Map shows the extent of coastal flooding expected over existing ground in the District of North Saanich.

November 14, 2018



Flood Hazard
Map 7
1.0 m Sea Level Rise



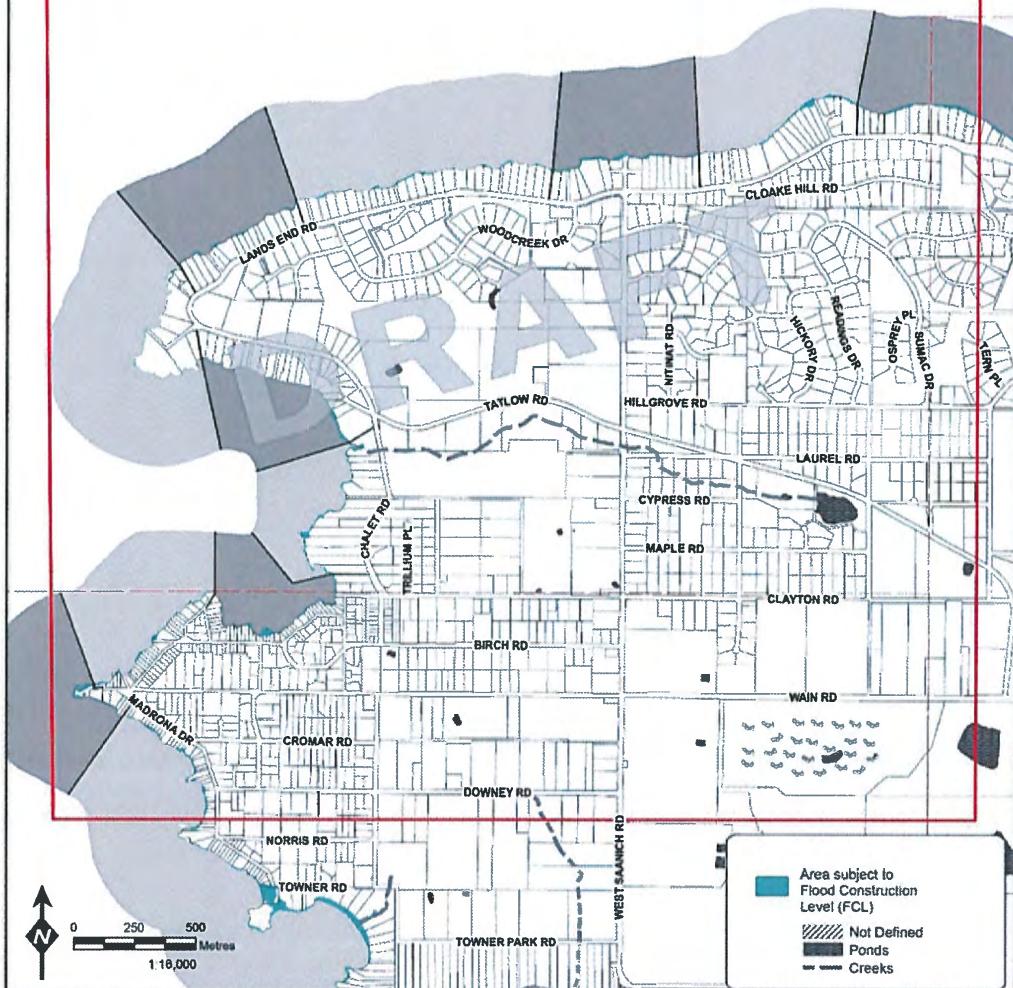
This Map shows the extent of coastal flooding expected over existing ground in the District of North Saanich.

November 14, 2018



Flood Hazard
Map 8
1.0 m Sea Level Rise

Map 8



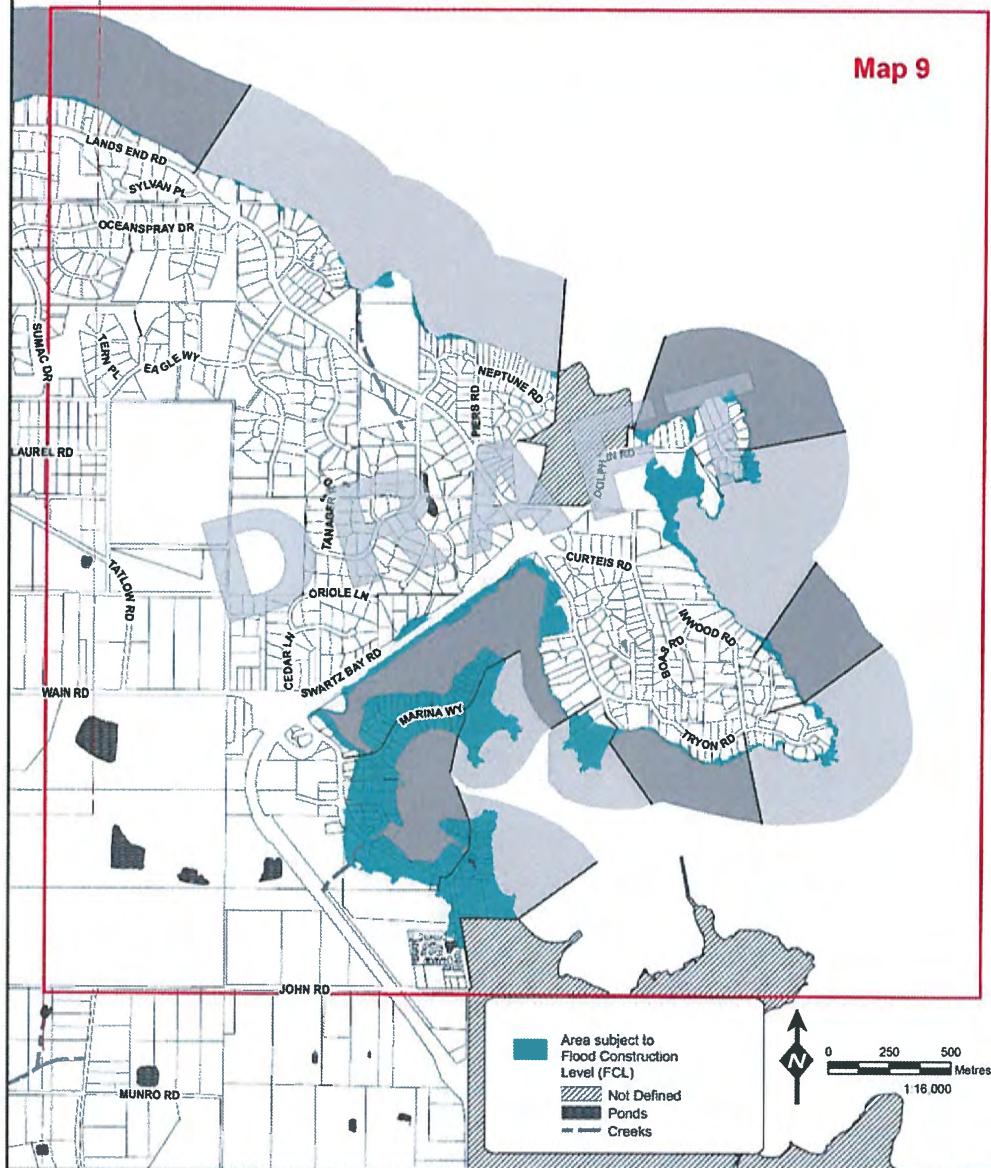
This Map shows the extent of coastal flooding expected over existing ground in the District of North Saanich.

November 14, 2018



Flood Hazard
Map 9
1.0 m Sea Level Rise

Map 9

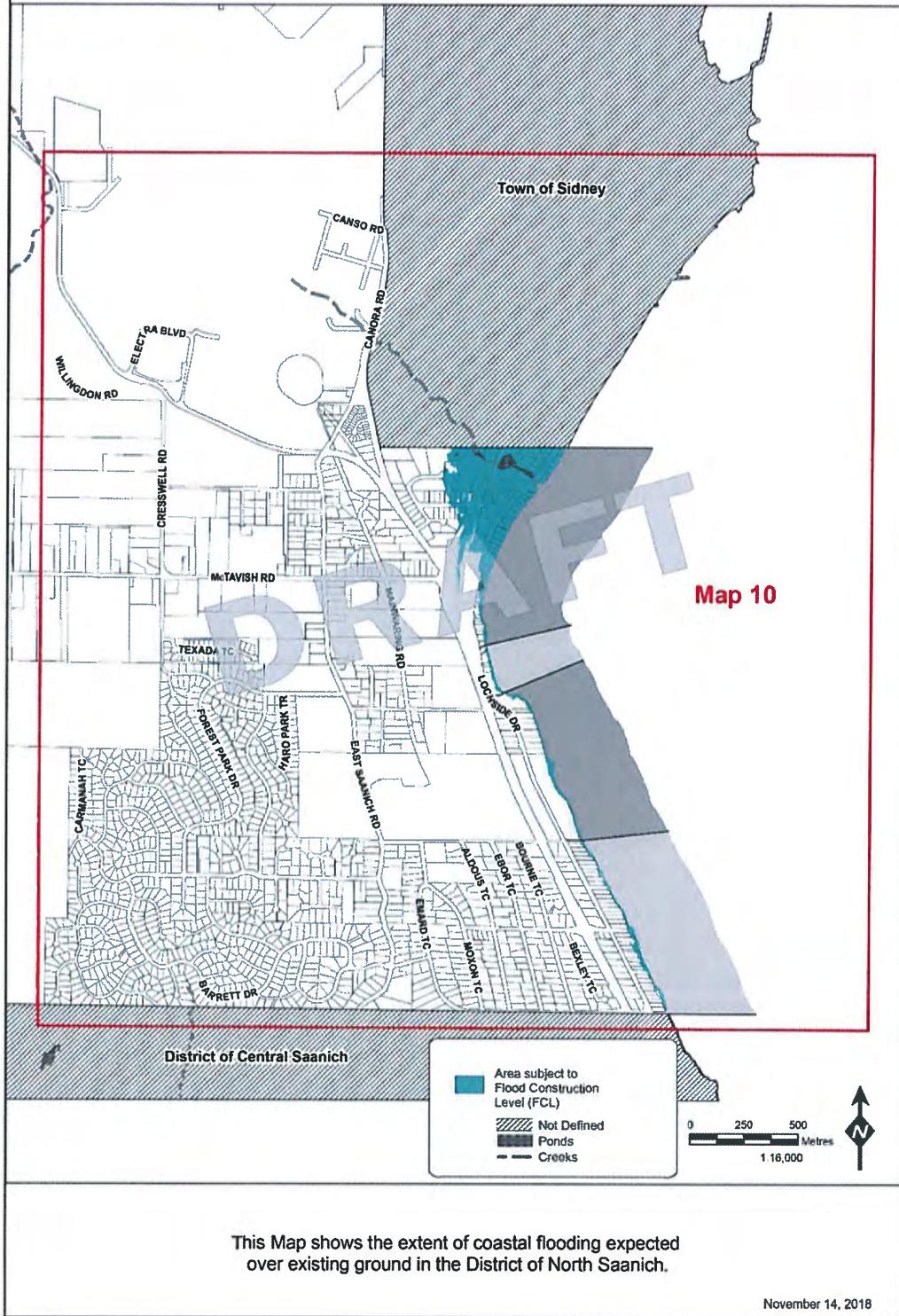


This Map shows the extent of coastal flooding expected over existing ground in the District of North Saanich.

November 14, 2018



Flood Hazard
Map 10
1.0 m Sea Level Rise



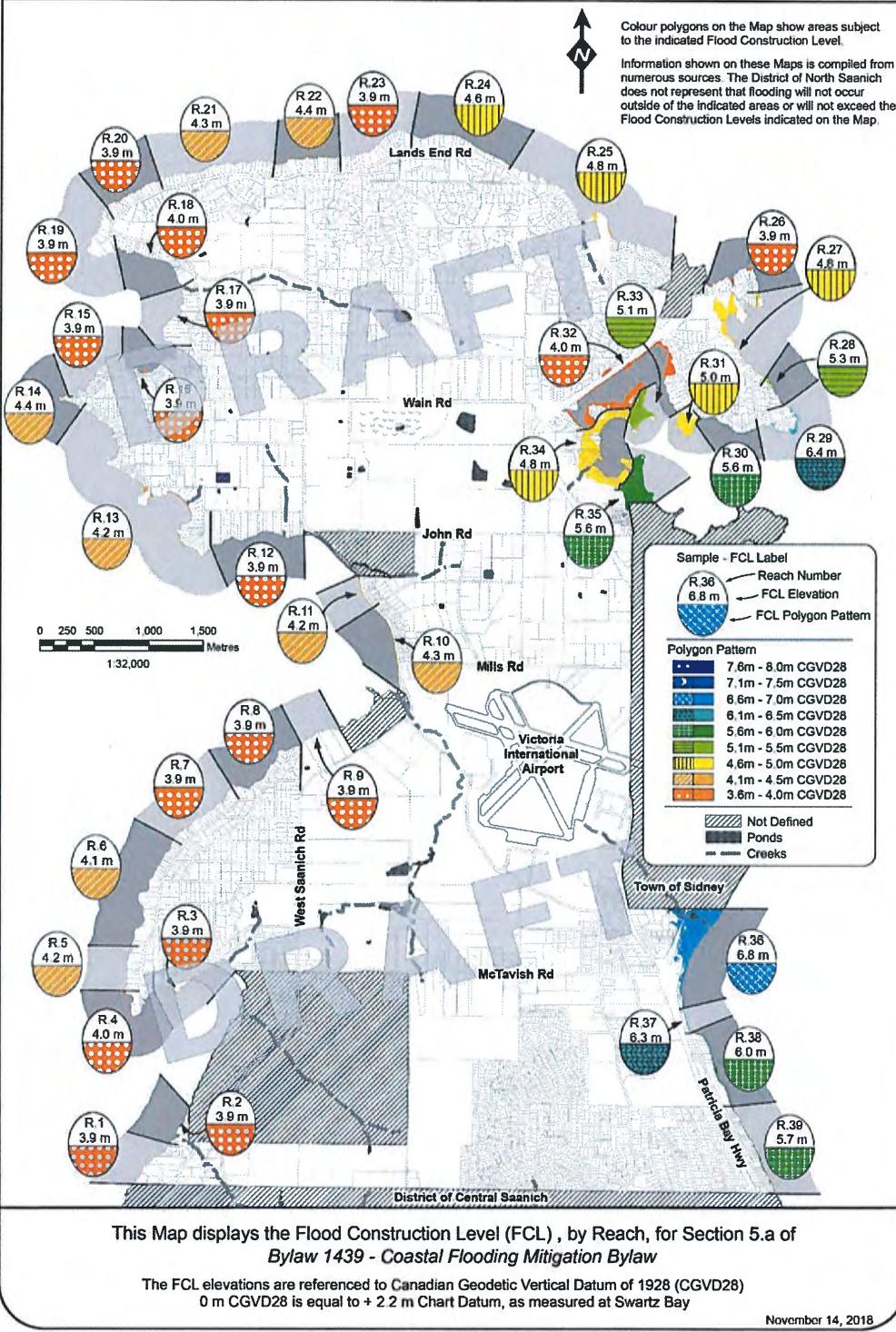
BYLAW 1439 - COASTAL FLOODING MITIGATION BYLAW



MAP 11

FLOOD CONSTRUCTION LEVEL

0.5 m SEA LEVEL RISE



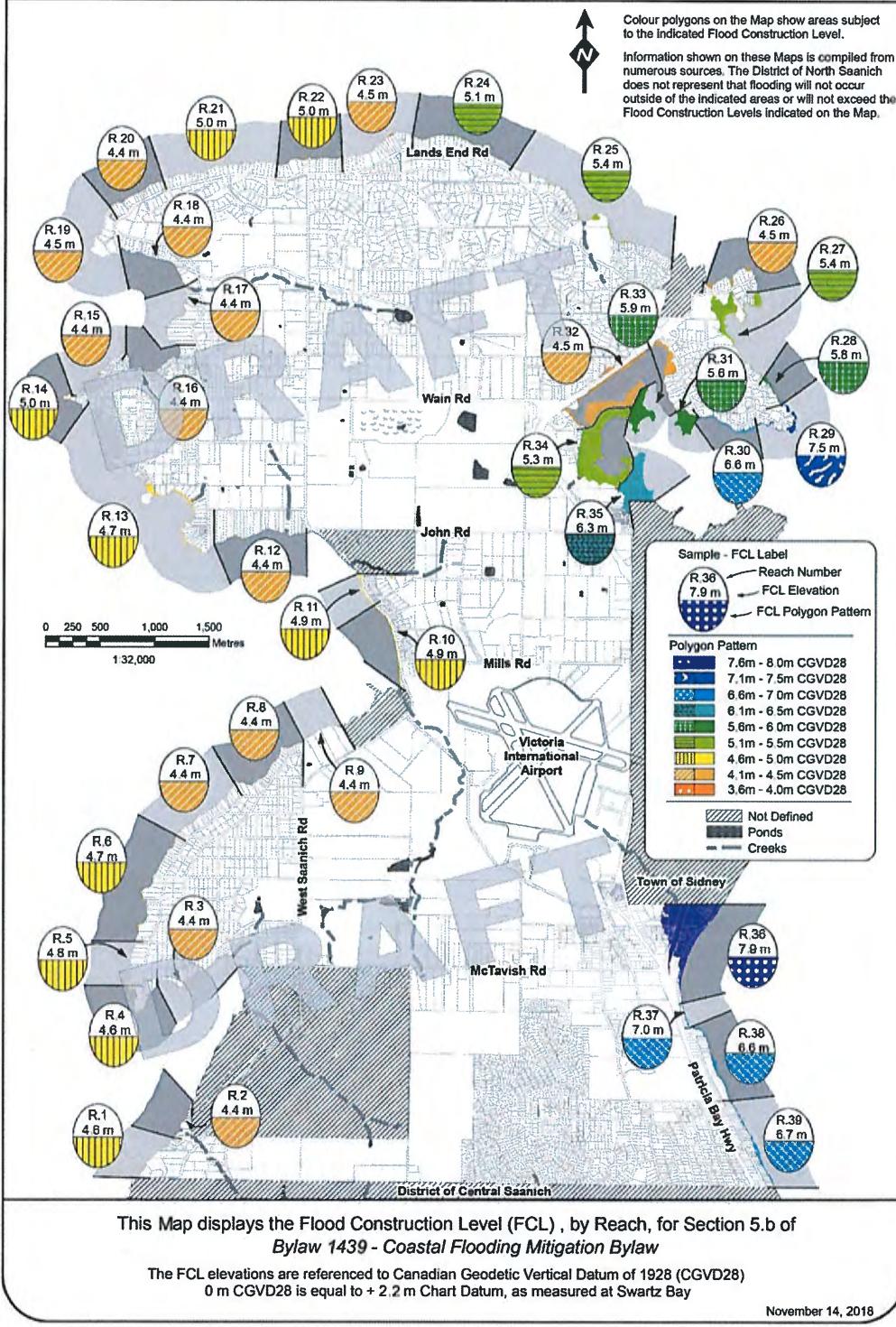
BYLAW 1439 - COASTAL FLOODING MITIGATION BYLAW



MAP 12

FLOOD CONSTRUCTION LEVEL

1.0 m SEA LEVEL RISE





DISTRICT OF NORTH SAANICH

B Y L A W N O . 1442

A BYLAW TO AMEND THE “DISTRICT OF NORTH SAANICH OFFICIAL COMMUNITY PLAN BYLAW NO. 1130 (2007)”

The Municipal Council of the District of North Saanich, in open meeting assembled, enacts as follows:

TEXT AMENDMENTS

1. The text of Schedule ‘A’ of the District of North Saanich Official Community Plan Bylaw No. 1130 (2007) is hereby amended as follows:

- (a) Section 3.1 is replaced with:

Recognize ecologically sensitive areas by identifying and conserving special wildlife, plant and marine shore environments (such as pocket beaches or the Shoal Harbour Migratory Bird Sanctuary) in their natural state. Environmentally Sensitive Areas are mapped on Schedule G and identified through the various development permit requirements. Modifications to Environmentally Sensitive Areas that assist in building resilience to the effects of sea level rise will be permitted.

- (b) Section 4.0 is amended by the addition of the following text:

Coastal Flooding Hazard

Nearly the entire shoreline of the District is exposed to a growing flood hazard related to the expected effects of climate change-related sea level rise. The flood hazard occurs primarily to private properties and differs considerably in character around the shoreline. The most exposed areas of the shoreline are located in the Tsehum Harbour area and along Lochside Drive near the McTavish interchange. In many locations the future flood hazard is concentrated at the toe of steep cliffs and bluffs and in locations where the cliffs or bluffs are grounded on outcropping bedrock. In these latter situations it will be some time before a flooding related hazard materializes. In many other locations, the hazard is concentrated at the toe of existing seawalls and the consequences will be manifested either at or adjacent to the seawall base, on publicly owned foreshore, or at the top of the seawall where overtopping wave action will create an increasing problem either from the flooding by the overtopping volume of water during storms, or from erosion and unravelling of the seawall or from erosion of the land immediately behind the seawall. If structures are located close to the seawall there may be a threat to the safety and security of personnel or to the structure during a coastal storm. The extent of the coastal flooding hazard for 0.5 m and 1.0 m sea level rise scenarios associated with the years 2050 and 2100, which is the planning framework recommended in the Ministry of Environment’s FHALUMG, is indicated in Schedule J. A flood hazard mitigation bylaw should be adopted for the protection of development from the growing flood hazard related to sea level rise.

- (c) Section 4.2.1 is replaced with:

To preserve the natural appearance of the rocky shoreline, no buildings or structures, or soil removal or deposit should be permitted within 15 metres of the estimated future natural boundary, except where it can be demonstrated to the District's satisfaction that a lesser distance is acceptable, or where works are intended and designed to both preserve the shoreline character and limit coastal flood-related effects.

- (d) Section 4.2.4 is replaced with:

Due to active erosion of Class 2 and 3 beaches, building prohibitions and soil deposit and removal restrictions should be placed over lands within 15 metres of the estimated future natural boundary adjoining beach shores, except where it can be demonstrated to the District's satisfaction that a lesser distance is acceptable, or where works are intended and designed to preserve the shoreline character and limit coastal flood-related effects.

- (e) Section 4.2.6 is replaced with:

Building prohibitions and soil removal and fill restrictions should be placed on lands within 15 metres of the estimated future natural boundary adjacent to Class 2 or Pocket Beaches except where it can be demonstrated to the District's satisfaction that a lesser distance is acceptable, or where works are intended and designed to preserve the shoreline character and limit coastal flood-related effects.

- (f) Section 4.2.9 is replaced with:

Development immediately adjacent to a mudflat, marsh or delta area is discouraged. Consideration will be given to developments than enhance ecological values or include measures to limit or reduce coastal flood-related effects while preserving the shoreline character.

- (g) Section 6.2 is replaced with:

To ensure that residential developments are compatible with the physical site conditions of slope, soil types and drainage patterns, and that natural features such as views, tree cover and variety in terrain are retained and enhanced, buildings, roads and utilities should be sited in a manner which does not negatively affect sensitive natural areas of the site and preserves the natural landscape. An exception for slope alteration will be considered if it is designed to help reduce effects of coastal flooding.

- (h) Section 6.7 is replaced with:

To encourage innovative housing and subdivision designs such as detached clustered residential developments, particularly for sloped upland areas, the District will provide flexibility in regulatory bylaws. Amenity bonusing, in compliance with Section 482 of the Local Government Act, will be enacted in certain areas if site conditions warrant, in order to, amongst other things,

preserve open space, natural tree cover and environmentally sensitive areas, leaving slopes unaltered.

- (i) Sections 7.9 and 7.15 are replaced with:

Buildings or structures used for commercial use must be buffered from adjacent rural and residential uses and should preserve access and views from adjacent rural and residential uses.

- (j) Section 8.5 is replaced with:

Buildings or structures used for industrial use must be buffered from adjacent rural and residential uses and should preserve access and views from adjacent rural and residential uses.

- (k) Section 11.1 is replaced with:

At the date of adoption of this plan, no new major roads are planned for the District with the exception of those shown on Schedule D. No phasing of any major roads is planned. The location and construction of new roads should take into consideration expected sea level rise.

- (l) Section 11.3 is replaced with:

Serviced areas are identified on Schedule E. No major expansions of municipal services are planned. There will be no expansion of services outside the North Saanich Servicing Area except for health, fire safety, agricultural support, or sea level rise adaptation reasons.

- (m) Section 12.1 is replaced with:

Development must be consistent with the goals and objectives of the Plan. Development shall consider expected coastal flooding, incorporate appropriate adaptation measures and conform with any applicable flood hazard mitigation bylaw.

- (n) Section 12.3 is replaced with:

Development should be consistent with the retention of the visual landscape of natural areas, especially on or near the waterfront, hilltops and ridges. This principle will be applied flexibly to development that incorporates adaptation measures that reduce the risk or damage associated with the effects of coastal flooding.

- (o) Section 12.6 is replaced with:

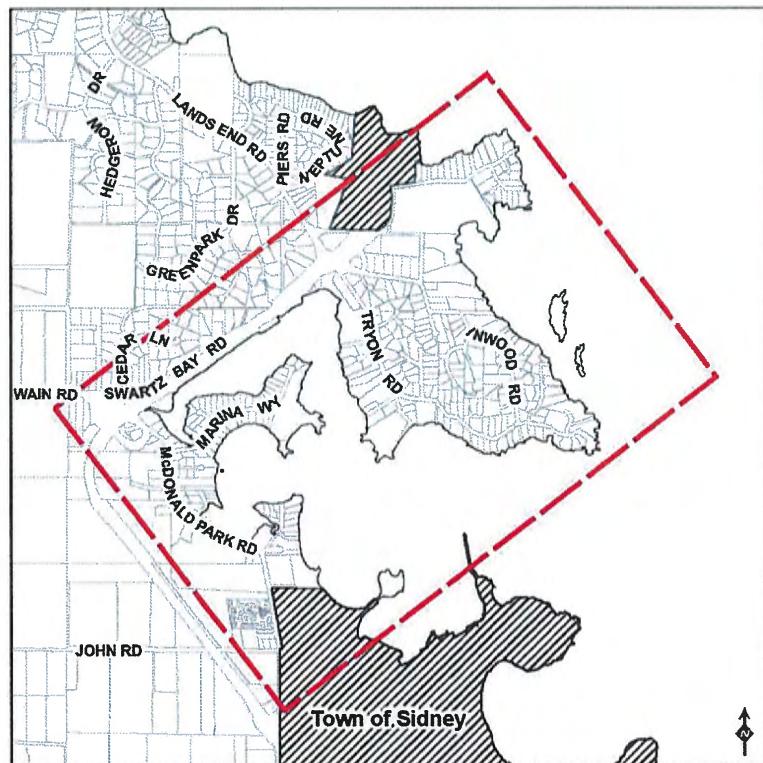
No development or site alteration shall be permitted on a wetland, a riparian area or within the buffer zone or related or a flood hazard mitigation setback, specified in this bylaw for wetlands and riparian areas, except if approved by the District as a sea level rise adaptation measure.

- (p) Add “Section 13.7 Special Development Area Tsehum Harbour

Justification:

The Tsehum Harbour area affected by future sea level rise between the Town of Sidney’s northern boundary and the Swartz Bay Ferry Terminal is designated as a special development area, as mandated by the FHALUMG for the following reasons:

- a) The area contains significant residential, commercial, and light industrial development and parklands.
- b) The area contains significant environmental values to be accommodated in a sensitive manner and which could be protected through innovative design.
- c) The area falls within the scope of recommended provisions related to Sea Level Rise Planning Areas as defined in the FHALUMG.
- d) The area includes important District infrastructure including utilities, sewer, roads and paths and water supply works.
- e) The area forms the boundaries of the Shoal Harbour Migratory Bird Sanctuary, established in 1931 under the *Migratory Birds Convention Act, 1994* (Canada).



Policy Statement:

In designating these parcels of land as a special development area, the following planning principles should be reflected for future development:

- a) Existing land uses should continue to be allowed.
- b) Development should be regulated by a flood hazard mitigation bylaw.
- c) Development on existing lots should conform with FHALUMG.
- d) The District should develop a Long Term Flood Protection Strategy for this Special Development Area as outlined in Appendix 1 of FHALUMG.
- e) The Long Term Flood Protection Strategy should consider the implications of policies applicable to the adjacent parcels in the Town of Sidney.

The Long Term Flood Protection Strategy considers the benefits that might be realized from active stewardship of the Shoal Harbour Migratory Bird Sanctuary that are consistent with the *Canada Wildlife Act* and *Migratory Birds Convention Act, 1994*.”

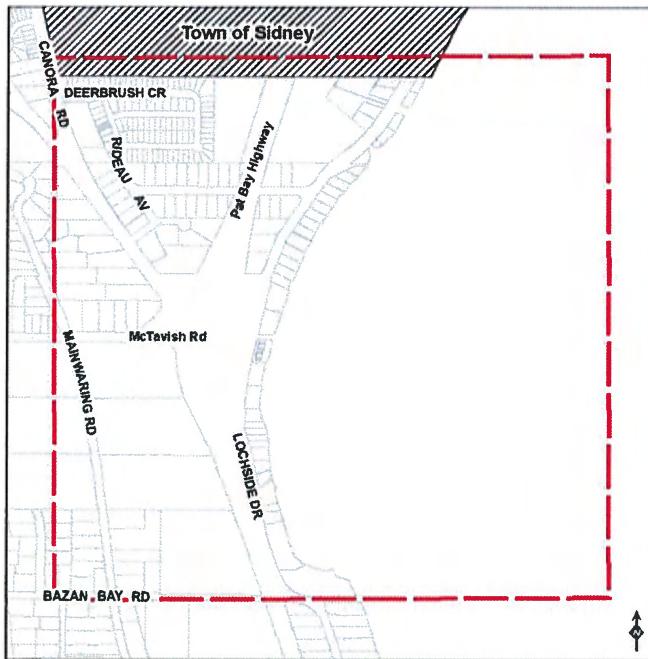
- (q) Add “Section 13.8 Special Development Area Lochside-McTavish Interchange

Justification:

The Lochside McTavish Interchange Area affected by future sea level rise between Bazan Bay Road and the Town of Sidney’s southern boundary is designated as a special development area, as mandated by the FHALUMG:

- a) The area contains significant residential development, parklands and multi-jurisdictional transportation infrastructure.
- b) The affected lands fall within the scope of recommended provisions related to Sea Level Rise Planning Areas as defined in the FHALUMG.

- c) The area includes important District infrastructure including utilities, sewer, roads and paths and water supply works.



Policy Statement:

In designating these parcels of land as a special development area, the following planning principles should be reflected for future development:

- a) Existing land uses should continue to be allowed.
- b) Development should be regulated by a flood hazard mitigation bylaw.
- c) Development on existing lots should conform with FHALUMG.
- d) The District should develop a Long Term Flood Protection Strategy for this Special Development Area as outlined in Appendix 1 of FHALUMG.

The Long Term Flood Protection Strategy should consider the implications of policies applicable to the adjacent parcels in the Town of Sidney.

- (r) Section 14.2.1 (c) is replaced with:

in Development Permit Areas, No. 5 and No. 6, for the construction of fencing and accessory structures less than or equal to 40 m^2 (430.6 ft^2) in area, which are accessory to an existing principal structure.

- (s) Section 14.2.1 (d) is replaced with:

in Development Permit Areas No. 1, 2, 3 and 4, for changes to the height of an existing building, including the addition of another storey, except as permitted by any applicable flood hazard mitigation bylaw;

- (t) Section 14.2.1 (e) is replaced with:
- in Development Permit Areas No. 1, 2, 3 and 4, for structures which are 10 m² (107 ft²) or less in area providing they are sited inland of the estimated future natural boundary;
- (u) Section 14.2.1 (f) is replaced with:
- emergency works including tree cutting or temporary coastal flood-related mitigation measures necessary to remove an immediate danger or hazard;
- (v) Section 14.2.1 (q) is replaced with:
- in Development Permit Area 8, for the construction or alteration of a single family residential dwelling, provided that this exemption does not apply to any parcel having an area equal to or less than five hundred square meters and created by a plan of subdivision registered in the Land Title office after September 8, 2014.
- (w) In Section 14.3 the terms “high water mark” and “natural marine shoreline” are replaced by the term “estimated future natural boundary”.
- (x) Section 14.11 the following definition is added in alphabetical order:
- “FHALUMG” means the Flood Hazard Area Land Use Management Guidelines published by the B.C. Ministry of Environment as amended effective January 1, 2018.
- “Flood hazard mitigation bylaw” means a bylaw adopted under s. 524 of the *Local Government Act*.
- “Future Natural Boundary” means the estimated natural boundary determined in accordance with the FHALUMG.

MAP AMENDMENT

2. The Flood Hazard Key Map and Flood Hazard Maps 1 through 10 attached to and forming part of this bylaw are added to the Official Community Plan as Schedule J.

CITATION

3. This Bylaw may be cited for all purposes as "North Saanich Official Community Plan Bylaw No.1130 (2007) Amendment Bylaw No. 1442 Marine Policy (2018)".

READ A FIRST TIME the day of , 2018

READ A SECOND TIME the day of , 2018

NOTICE OF PUBLIC HEARING published in the and editions of the
Peninsula News Review.

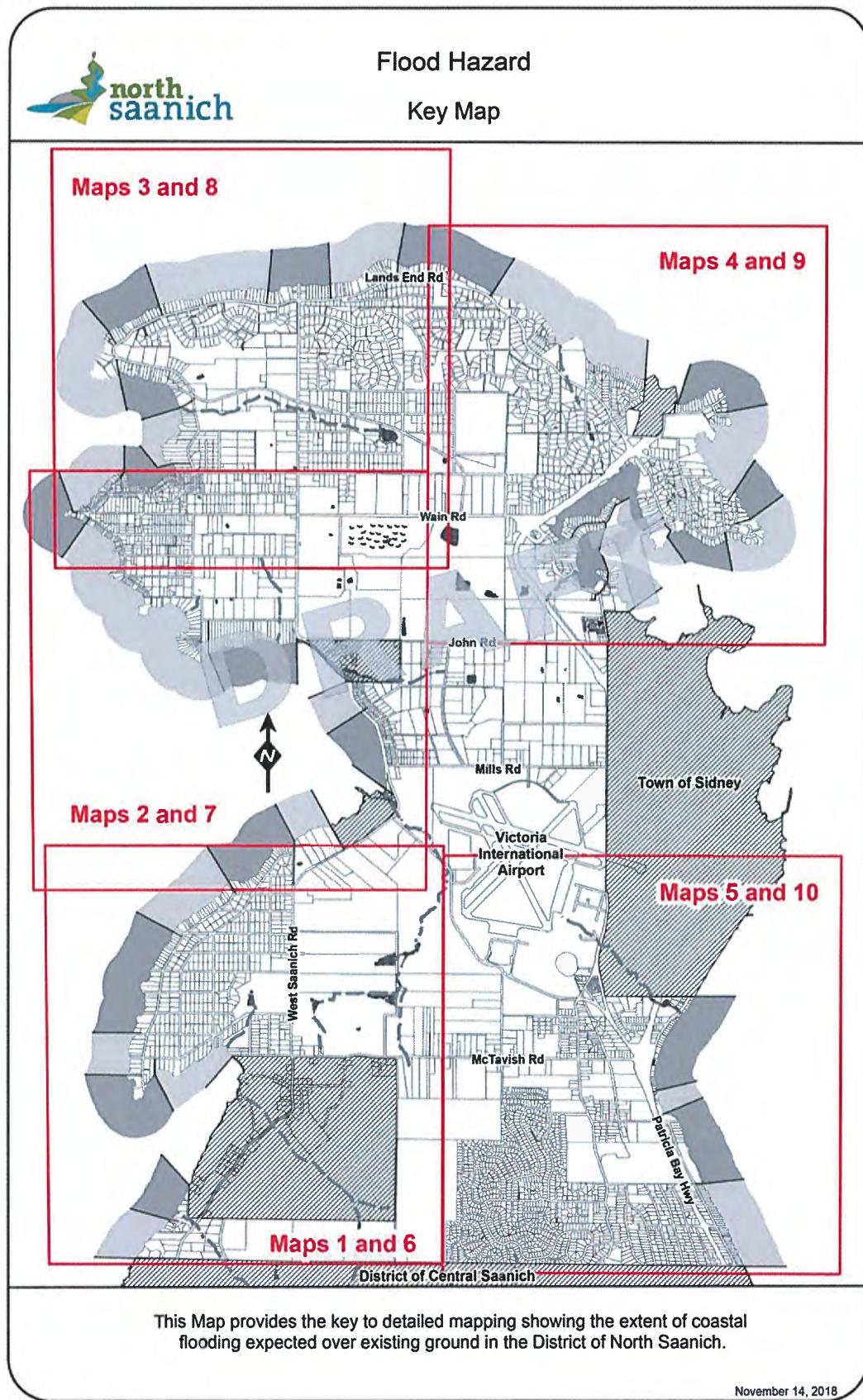
PUBLIC HEARING held pursuant to the provisions of the *Local Government Act* at
the North Saanich Municipal Hall the , 2018

READ A THIRD TIME the day of

ADOPTED the day of , 2018

MAYOR

CORPORATE OFFICER







**District of North Saanich
Coastal Flooding Hazards Mitigation
Public Feedback Responses – 07-16 Nov 2018
19 total responses received**

Section 1: About

Question 1 – Which area(s) best describes where you currently live or own property?

<u>5</u> Deep Cove	<u>4</u> Lands End	<u> </u> Swartz Bay	<u> </u> Curteis Point
<u>1</u> McDonald Park	<u> </u> Sandown	<u>4</u> Bazan Bay	<u> </u> Dean Park
<u> </u> Coles Bay	<u>2</u> Ardmore	<u> </u> Union Bay Indian Reserve	4
<u>4</u> Other (3x Towner Bay, Pat Bay)			

Question 2 – What is the level of concern you have about sea level rise impacting your property or the property where you live?

7 I am not at all concerned
5 I am only slightly concerned
1 I am neutral
1 I am somewhat concerned
4 I am very concerned

1 Form were blank

Section 2: Flooding Hazard Mitigation

Question 3 – Which of the above approaches do you think is best?

6 Site-by-site building inspector requirements (Current approach by property owner)
 Development Permit Area
6 Floodplain Bylaw
2 Other

4 Forms were blank

Comments:

1. “Consult with waterfront owners first.”
2. “Doesn’t save me money as I will get my own professional opinion anyways.”
3. “Blanket approach to our varied shoreline is not practical.”

4. “All three options focus on a property by property approach. DNS needs to take a much broader approach to managing SLR”
5. “Not sure any are required – but if they are the floodplain bylaw is likely the best.”
6. “Instead of piecemeal approach, perhaps take a more inclusive approach whereby areas subject to erosion should all be dealt with at once with seawall protection with financial help through higher levels of government.”
7. “I agree with Flood Plain Bylaw for your two designated zones ie the zones of highest risk in the next 50 years. All other properties should be left to Site-by-Site basis, because I believe you have the right to request engineering reports to support applications as warranted. Phase in moderate and low risk waterfront property zones into the Flood Plain Bylaw as data is revised in years to come.”

Section 3: General Comments

Question 4 – Do you have any questions that remain unanswered? Please list.

Comments:

1. “Lots.”
2. “Can you please clarify the definition of a “new construction”- for example, if you leave the foundation and some of the existing structure, does that make it a “new construction?” To clarify, how much of the existing structure must remain for the building project to be considered a “Reno?”
3. “One: Will people have to fill there (sic) sites similar to Bayfield/McDonald Park way? How is importing all this fill more environmentally sensitive? I’ve cut down all the trees to fill site. Two: Why move “NB” (Natural Boundary)? Allow people to protect what they already own. Riparian Rights.”
4. “One: Are Riparian Rights being protected? Two: Is this consistent with our neighbouring municipalities? Three: Why is this needed? There already is a DP for marine areas.”
5. “I have a sea wall. Why wouldn’t my estimated future natural boundary be the sea wall?”
6. “What is the municipality’s liability with regard to flooding of private property? What is the municipality doing about public property and infrastructure?”
7. “Will homeowners be compensated for loss of property value? Why is DNS not waiting and coordinating with Sidney, Central Saanich, etc. Why is DNS moving forward so early/quickly?”
8. “Will the District of North Saanich pay for shoreline remediation in the development permit areas? I don’t understand why DNS is moving ahead without collaborating with Sidney and Central Saanich and other municipalities. Should this not be an effort coordinated by CRD”
9. “How will these changes affect house values and insurance claims/costs?”

10. "I would like some discussion on what other jurisdictions, e.g. Richmond, Delta, Netherlands, are doing. What about enhancing seawalls and wave break-up devices on the foreshore?"
11. "I have no other questions. Will await further draft By-Laws."

Question 5 – Overall, did this Public Information Session meet your expectations? Why or why not?

- 9 Did not meet my expectations
2 Met my expectations
1 Exceeded my expectations

3 Forms were blank

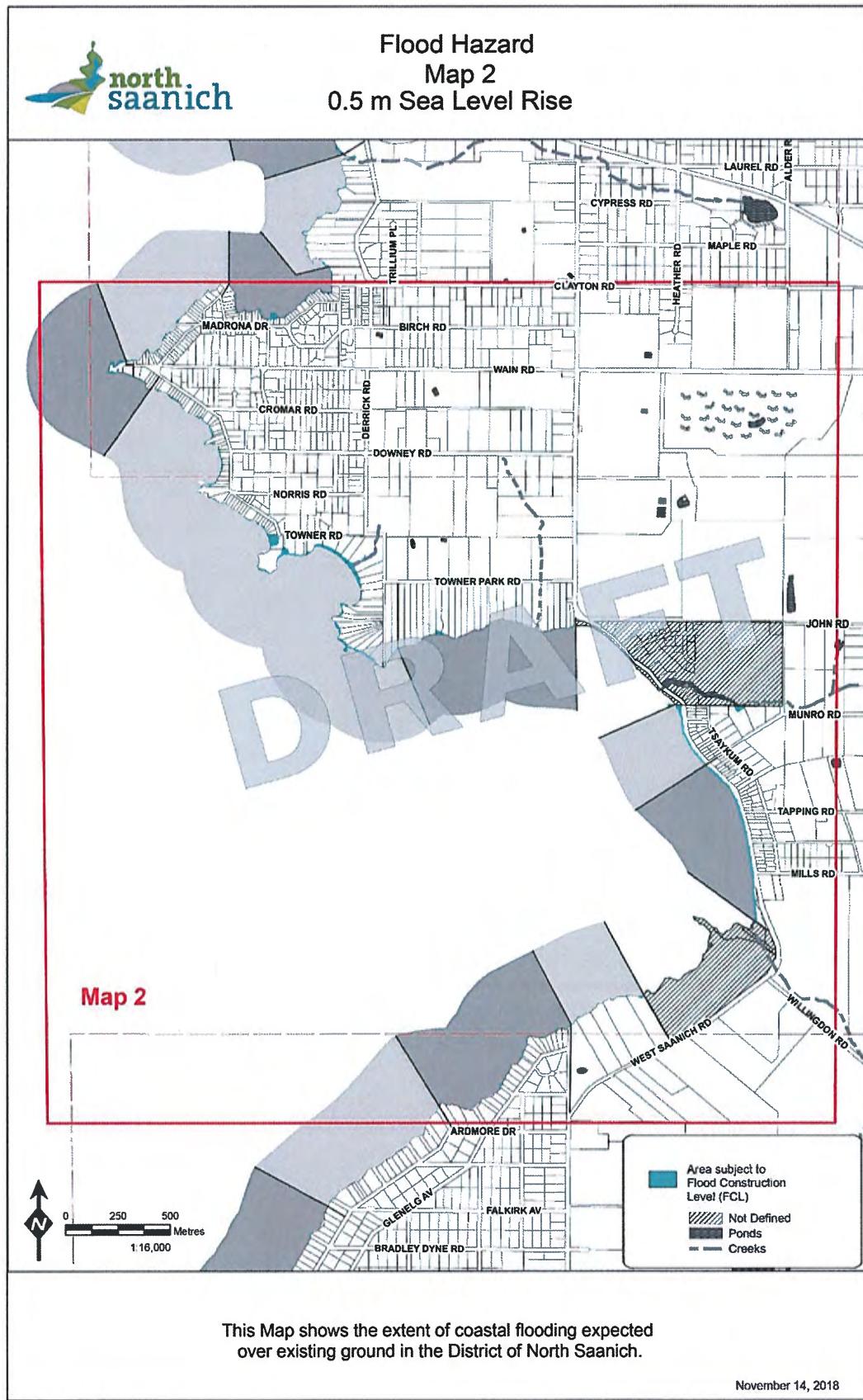
Comments:

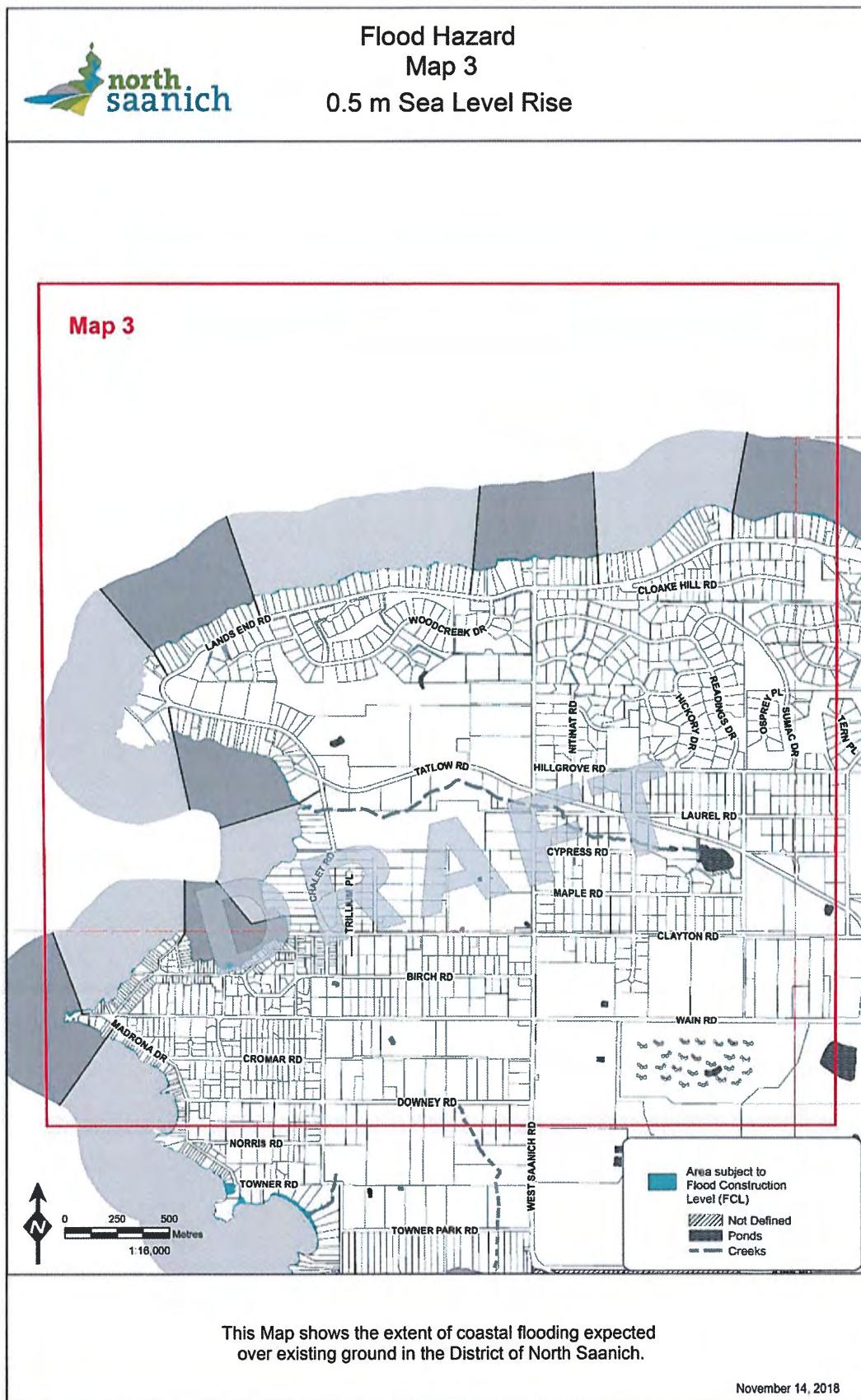
1. "Too much detail over long "proposed" raised ocean."
2. "I don't want to pay for this expensive and ongoing study with all this stuff. We did not ask for this – who decided for us that we should have this study?!"
3. "I expected public discussion, but after hearing the initial complainers I think it was better without."
4. "One session for a complicated matter. Seems like it was an afterthought. Bylaw already written and presented to Council."
5. "This Bylaw appears two faced. Environmental desires of elite scholars wrapped up in a pretend flood construction level bylaw."
6. "This outcome appears to be a foregone conclusion, I.E. Telling us what is happening not asking us should we do this."
7. "No opportunity for general questions, consultation and feedback."
8. "As mentioned when we attended the session, it would be very helpful if the maps provided included some landmarks and/or main street names as it was quite difficult, even with help, to identify our property."
9. "The complete information provided along with knowledgeable staff to answer questions did convey an exceptional level of information."
10. "This was not a workshop. There was no opportunity to raise issues and get considered answers as a group – only 1-on-1 exchanges. Not satisfactory as a public consultation."
11. "A few people tried to initiate group discussion, which would have been valuable, but this was not permitted."
12. "We had hoped for some group discussion rather than waiting around to talk 1 on 1 with Councilors and Staff."
13. "I expected a personal or video presentation outlining the issues. It was congested and difficult to read and absorb all the posters."

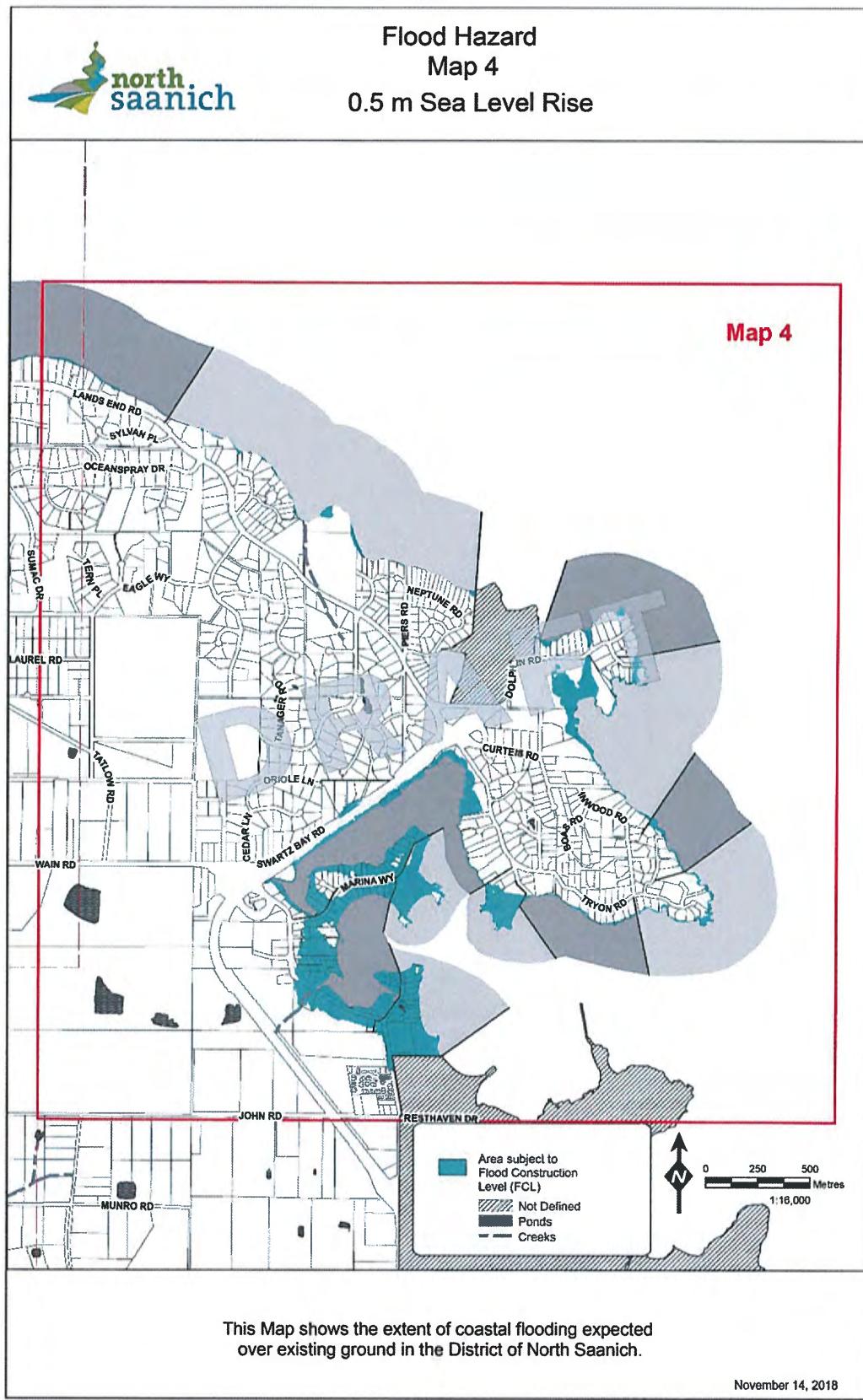
Question 6 – Do you have any additional comments that you wish to share?

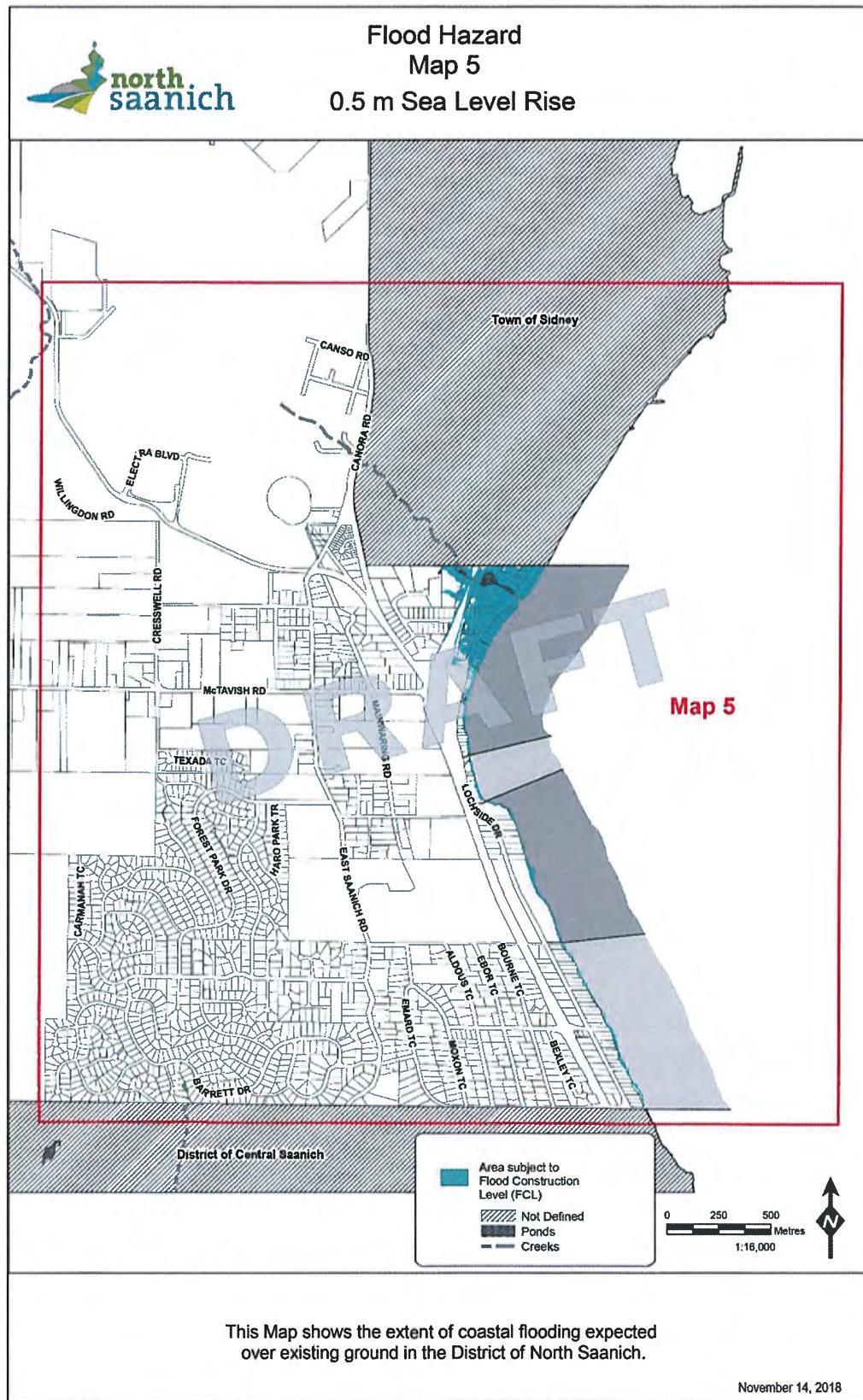
1. “We should be building sea walls to protect our property. You are spending my money on this and it is unnecessary.”
2. “Consult with waterfront owners first.”
3. “DNS should have no legal liability when stubborn homeowners are flooded.”
4. “Thanks for doing this – great forum.”
5. “Only uninhabited buildings should be restricted – other structures might be affected, that should only be owners issue.”
6. “This bylaw is a nanny-state measure, protecting us from low percentage future problems. However, the impact is immediate and devastating, affecting North Saanich’s waterfront value’s negatively, and in some cases, potentially worthless.”
7. “In my view, this forward looking effort by the District fulfills a responsibility to all residents as well as simply assisting these properties effectively.”
8. “If the 15m setback remains, then the “future estimated natural boundary” will only serve to move the setback further and further restrict homeowners use of their property. DNS should be focused more on allowing/encouraging home owners to protect their foreshore and maintain their property.”
9. “I believe in sea-level rise and people need information. I doubt there is a need to disallow small structures that may be in danger in 20 years. Owners can bear that risk.”
10. “Those of us in the Lochside development permit area have a double impact on property, from the special archeological zone restriction.”
11. “I question why North Saanich is the only District taking this course. Does this situation not affect the whole CRD?”
12. “We need analysis on the negative consequences of greater set-backs and FCL on property value, insurability, non-conforming zoning, etc. It is not a good idea to isolate on “every man for himself solutions”. Investigate joint-property measures for multiple properties on the same reach or bay. Focus on mitigation measures that don’t require retreat from current natural boundary. Consider local area initiatives for dikes or other off-shore mitigation. What contribution is the District prepared to make for mitigation measures?”
13. “Frankly, as a tax payer, I'm shocked that this proposed By-Law effort comes so soon after multiple new housing projects have been approved in our District - on the very lands that are "risky" according to your data. Some of the new units are already lived in, others are still under construction. Those residents may call upon the District to protect them from rising sea level damage in the years to come, and that means all tax payers would share the financial burden. That prospect leaves me very upset as to why they were ever approved.
1. “As a property owner where the map shows little to no future impact to my land, I don't want to be burdened by excessive costs for my future building permits, because my property is captured under this headline. Your waterfront citizens happen to hold the

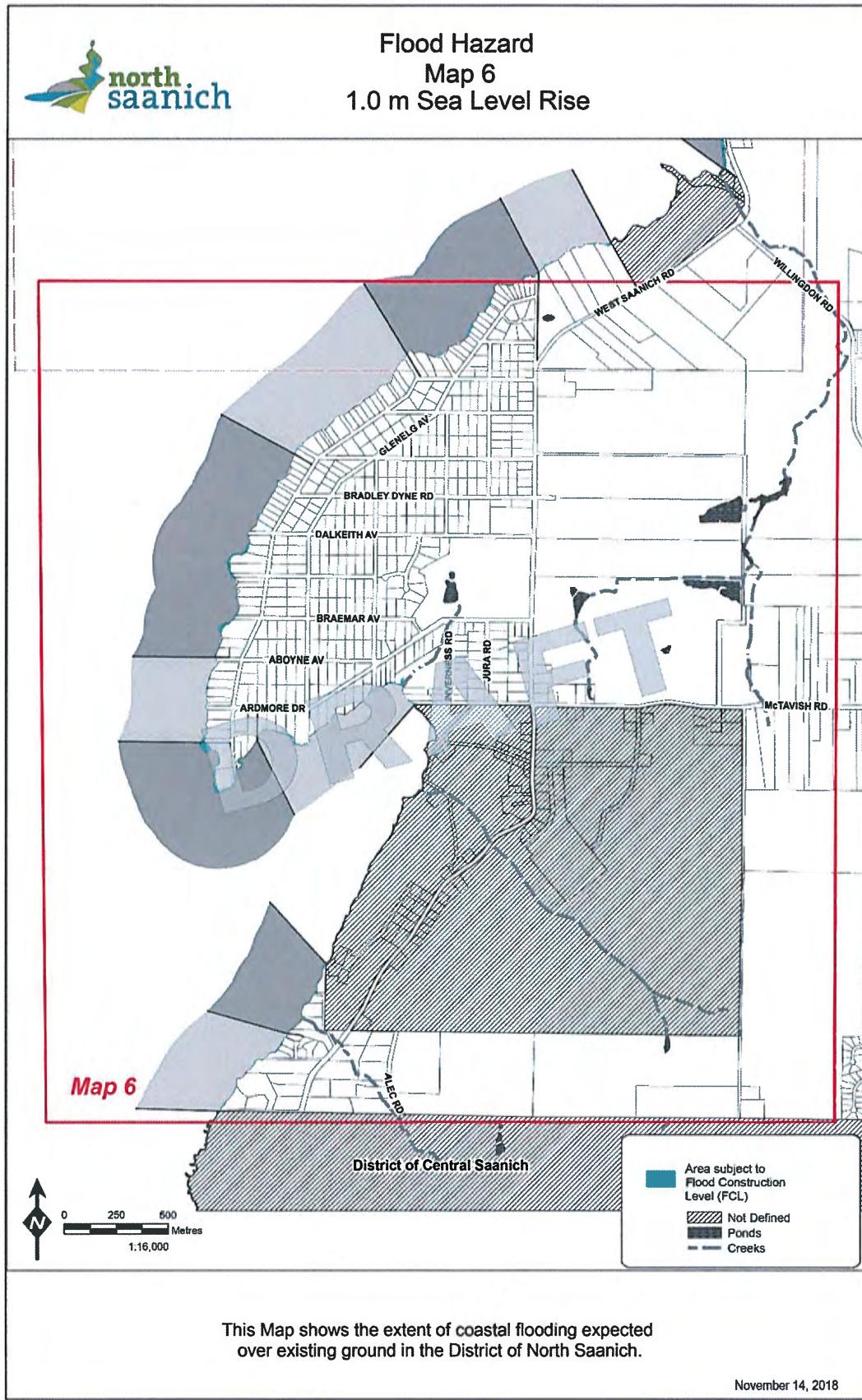
highest Assessments values, and in order to be good custodians we need to follow the rules of the Municipality to maintain the value of the properties. But there would be a definite dis-incentive for waterfront owners to come forward for approvals if Engineering reports were required for each project. If owners are engaging in a tear-down and rebuild scenario the cost would be condensed into one project. But my house is not a tear down, as are many others, - at this stage it requires good maintenance with upgrades for climate change. Therefore, projects may be spread over several years. This explains my suggestion in #3, that designated zones be subject to your new By-Law, but not all waterfront properties at this point in time.”

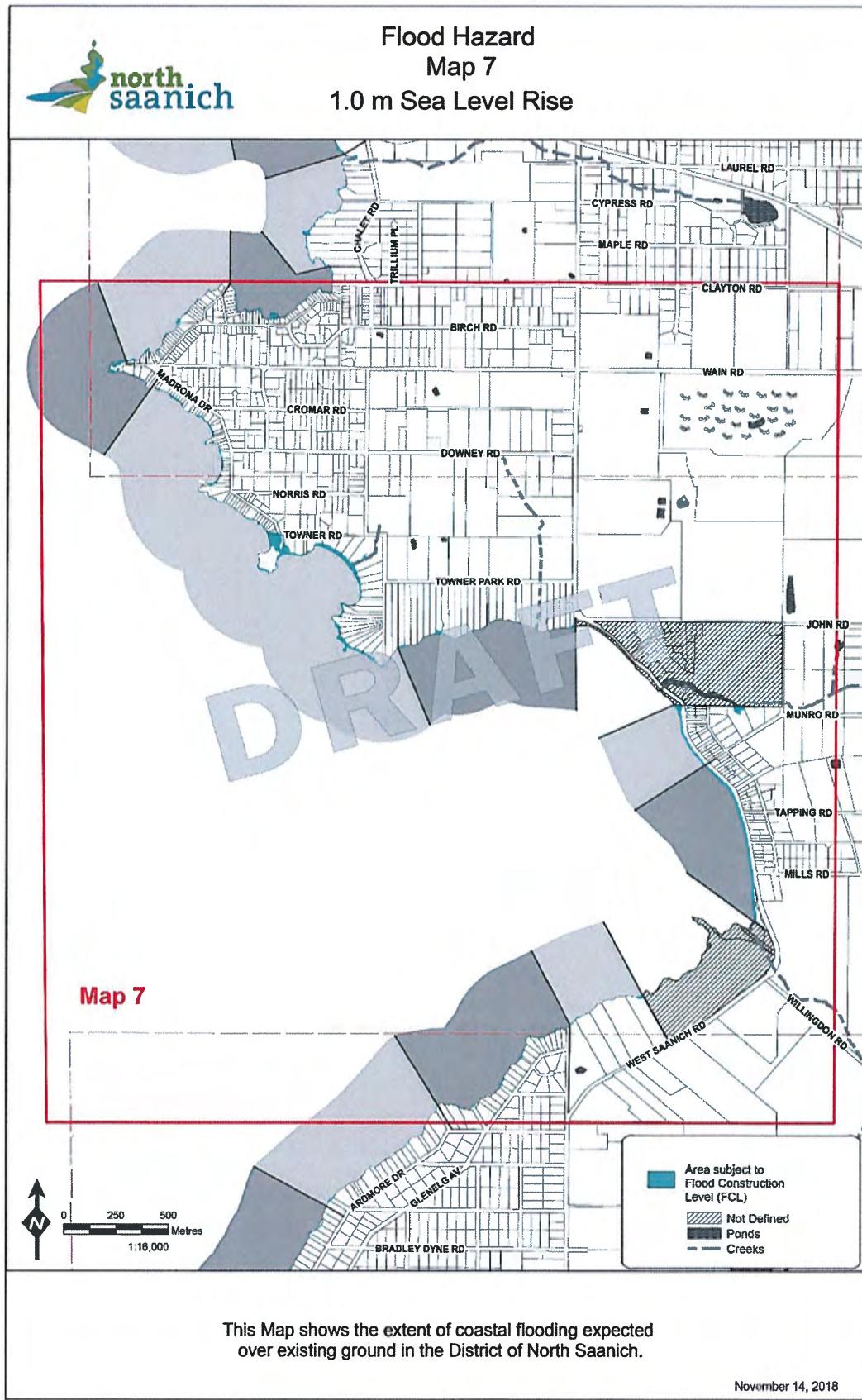


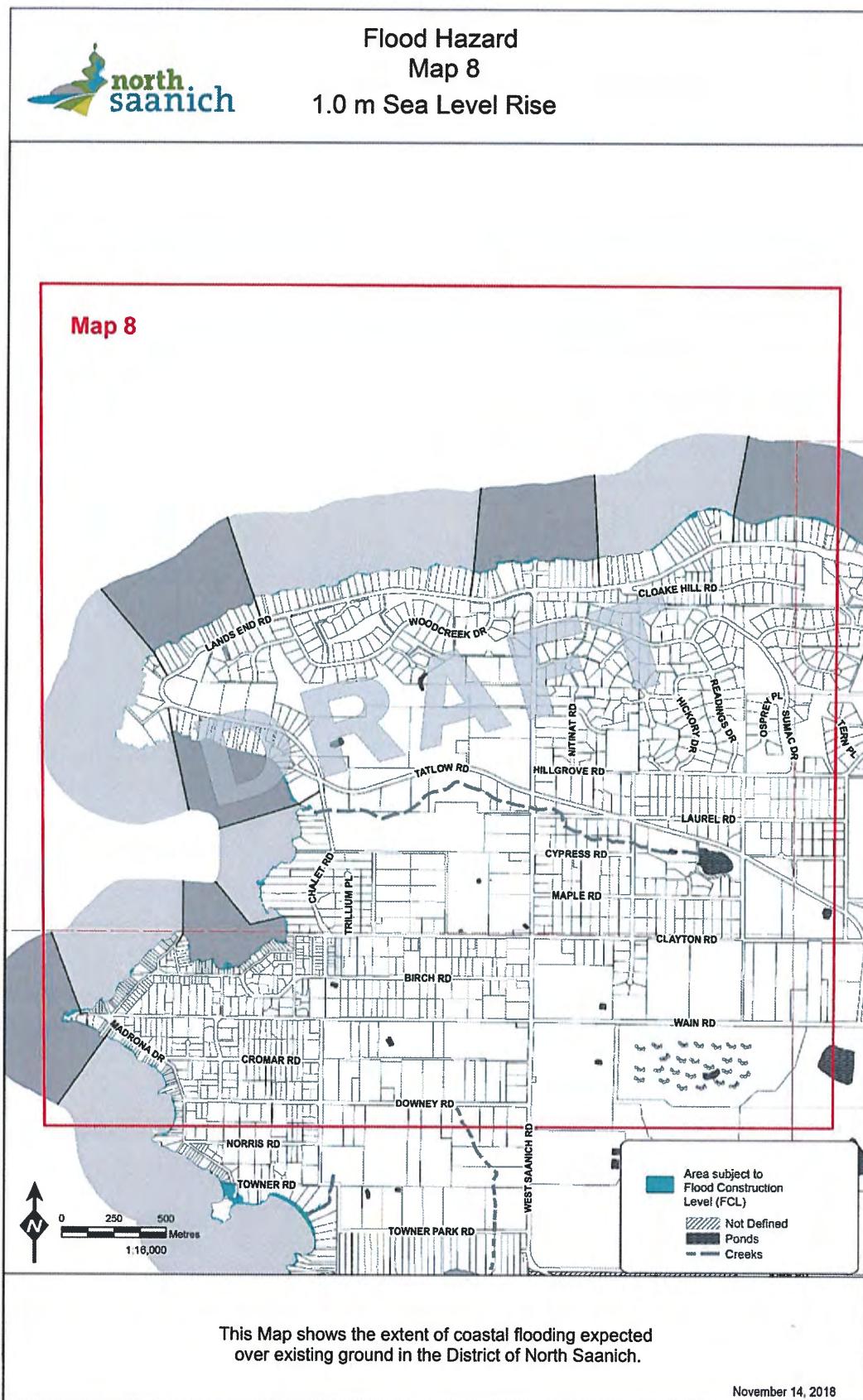


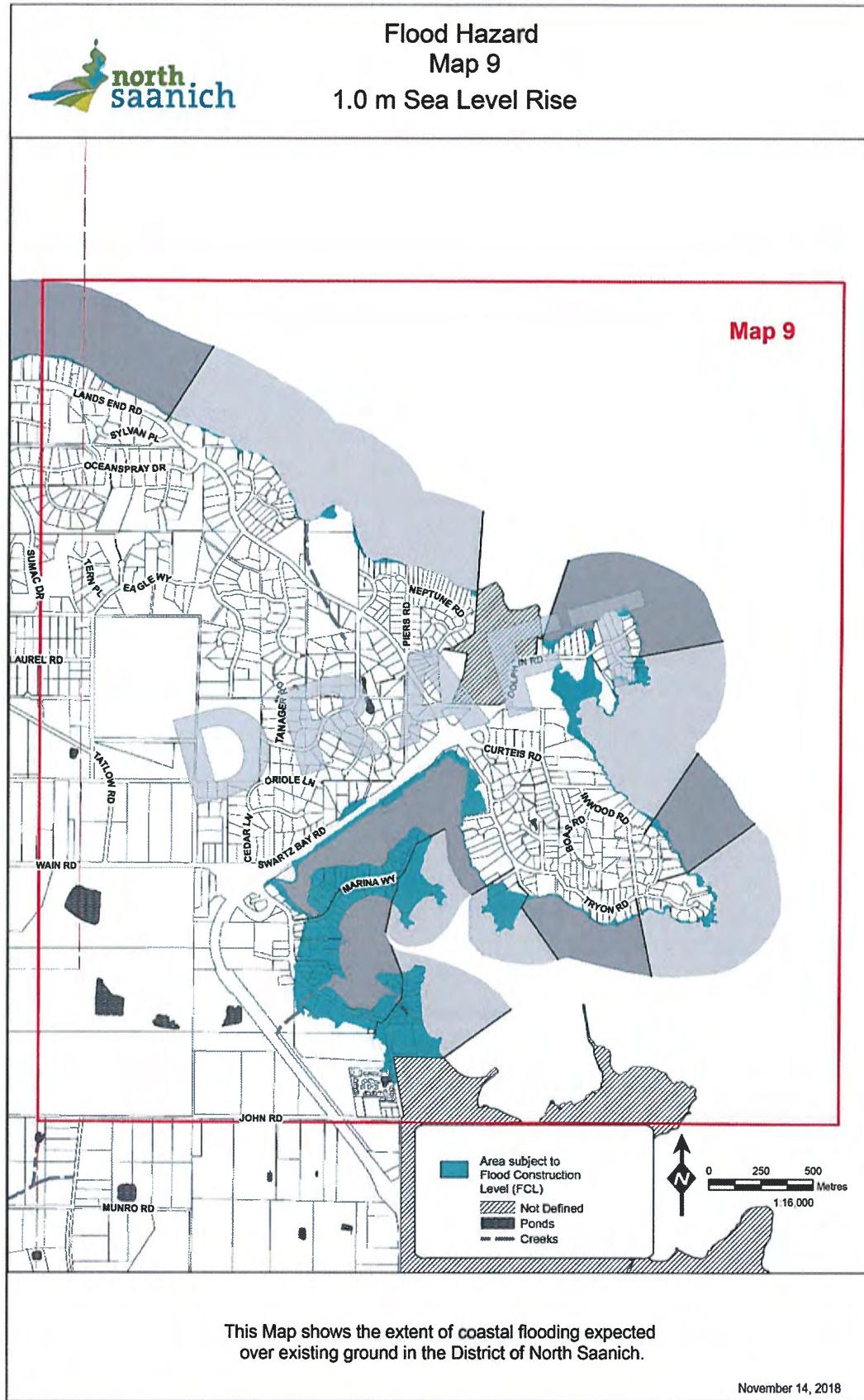


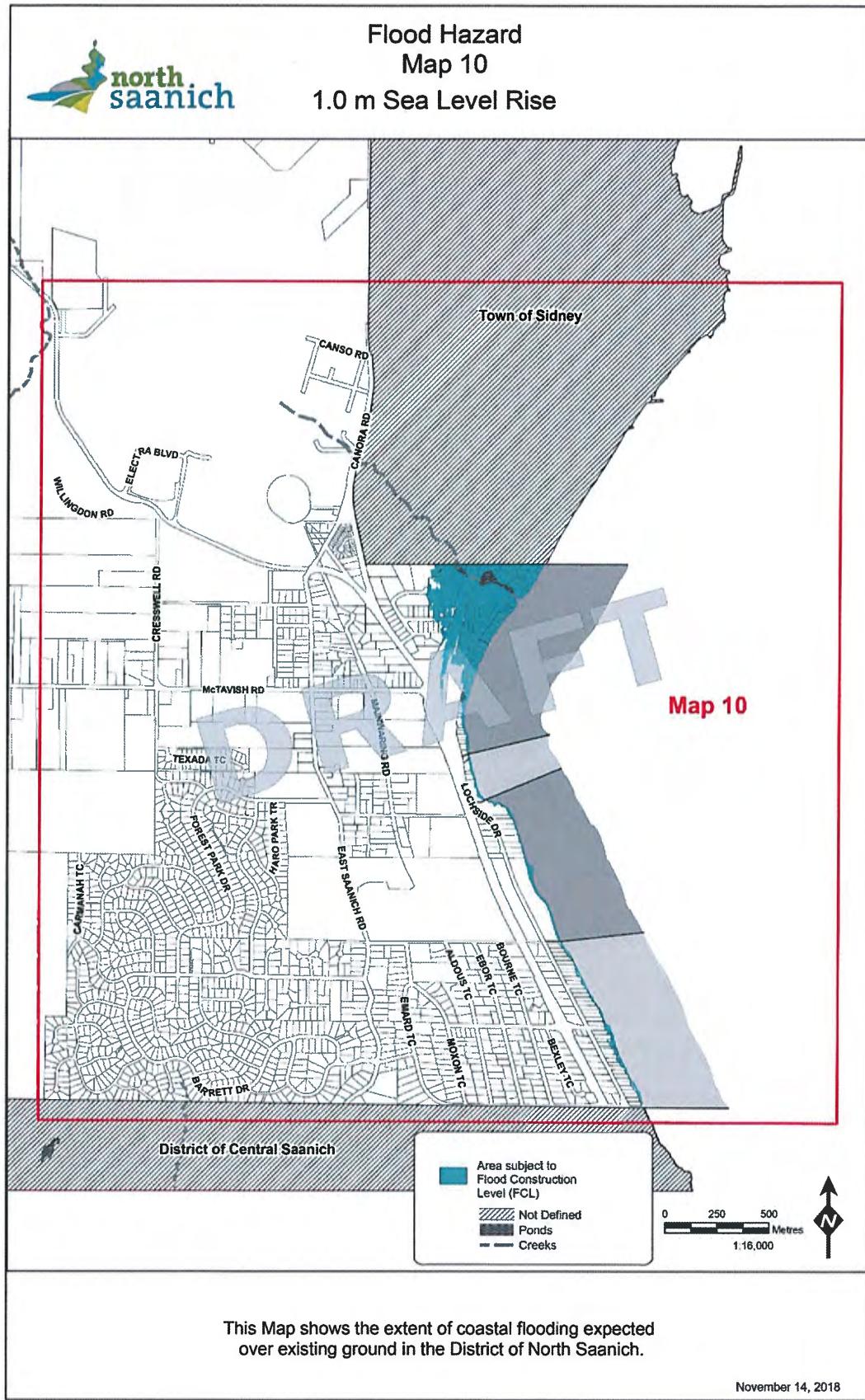














**District of North Saanich
Coastal Flooding Hazards Mitigation
Public Feedback Responses – 07-16 Nov 2018
19 total responses received**

Section 1: About

Question 1 – Which area(s) best describes where you currently live or own property?

<u>5</u> Deep Cove	<u>4</u> Lands End	<u> </u> Swartz Bay	<u> </u> Curteis Point
<u>1</u> McDonald Park	<u> </u> Sandown	<u>4</u> Bazan Bay	<u> </u> Dean Park
<u> </u> Coles Bay	<u>2</u> Ardmore	<u> </u> Union Bay Indian Reserve	4
<u>4</u> Other (3x Towner Bay, Pat Bay)			

Question 2 – What is the level of concern you have about sea level rise impacting your property or the property where you live?

7 I am not at all concerned
5 I am only slightly concerned
1 I am neutral
1 I am somewhat concerned
4 I am very concerned

1 Form were blank

Section 2: Flooding Hazard Mitigation

Question 3 – Which of the above approaches do you think is best?

6 Site-by-site building inspector requirements (Current approach by property owner)
 Development Permit Area
6 Floodplain Bylaw
2 Other

4 Forms were blank

Comments:

1. “Consult with waterfront owners first.”
2. “Doesn’t save me money as I will get my own professional opinion anyways.”
3. “Blanket approach to our varied shoreline is not practical.”

4. “All three options focus on a property by property approach. DNS needs to take a much broader approach to managing SLR”
5. “Not sure any are required – but if they are the floodplain bylaw is likely the best.”
6. “Instead of piecemeal approach, perhaps take a more inclusive approach whereby areas subject to erosion should all be dealt with at once with seawall protection with financial help through higher levels of government.”
7. “I agree with Flood Plain Bylaw for your two designated zones ie the zones of highest risk in the next 50 years. All other properties should be left to Site-by-Site basis, because I believe you have the right to request engineering reports to support applications as warranted. Phase in moderate and low risk waterfront property zones into the Flood Plain Bylaw as data is revised in years to come.”

Section 3: General Comments

Question 4 – Do you have any questions that remain unanswered? Please list.

Comments:

1. “Lots.”
2. “Can you please clarify the definition of a “new construction”- for example, if you leave the foundation and some of the existing structure, does that make it a “new construction?” To clarify, how much of the existing structure must remain for the building project to be considered a “Reno?”
3. “One: Will people have to fill there (sic) sites similar to Bayfield/McDonald Park way? How is importing all this fill more environmentally sensitive? I’ve cut down all the trees to fill site. Two: Why move “NB” (Natural Boundary)? Allow people to protect what they already own. Riparian Rights.”
4. “One: Are Riparian Rights being protected? Two: Is this consistent with our neighbouring municipalities? Three: Why is this needed? There already is a DP for marine areas.”
5. “I have a sea wall. Why wouldn’t my estimated future natural boundary be the sea wall?”
6. “What is the municipality’s liability with regard to flooding of private property? What is the municipality doing about public property and infrastructure?”
7. “Will homeowners be compensated for loss of property value? Why is DNS not waiting and coordinating with Sidney, Central Saanich, etc. Why is DNS moving forward so early/quickly?”
8. “Will the District of North Saanich pay for shoreline remediation in the development permit areas? I don’t understand why DNS is moving ahead without collaborating with Sidney and Central Saanich and other municipalities. Should this not be an effort coordinated by CRD”
9. “How will these changes affect house values and insurance claims/costs?”

10. "I would like some discussion on what other jurisdictions, e.g. Richmond, Delta, Netherlands, are doing. What about enhancing seawalls and wave break-up devices on the foreshore?"
11. "I have no other questions. Will await further draft By-Laws."

Question 5 – Overall, did this Public Information Session meet your expectations? Why or why not?

- 9 Did not meet my expectations
2 Met my expectations
1 Exceeded my expectations

3 Forms were blank

Comments:

1. "Too much detail over long "proposed" raised ocean."
2. "I don't want to pay for this expensive and ongoing study with all this stuff. We did not ask for this – who decided for us that we should have this study?!"
3. "I expected public discussion, but after hearing the initial complainers I think it was better without."
4. "One session for a complicated matter. Seems like it was an afterthought. Bylaw already written and presented to Council."
5. "This Bylaw appears two faced. Environmental desires of elite scholars wrapped up in a pretend flood construction level bylaw."
6. "This outcome appears to be a foregone conclusion, I.E. Telling us what is happening not asking us should we do this."
7. "No opportunity for general questions, consultation and feedback."
8. "As mentioned when we attended the session, it would be very helpful if the maps provided included some landmarks and/or main street names as it was quite difficult, even with help, to identify our property."
9. "The complete information provided along with knowledgeable staff to answer questions did convey an exceptional level of information."
10. "This was not a workshop. There was no opportunity to raise issues and get considered answers as a group – only 1-on-1 exchanges. Not satisfactory as a public consultation."
11. "A few people tried to initiate group discussion, which would have been valuable, but this was not permitted."
12. "We had hoped for some group discussion rather than waiting around to talk 1 on 1 with Councilors and Staff."
13. "I expected a personal or video presentation outlining the issues. It was congested and difficult to read and absorb all the posters."

Question 6 – Do you have any additional comments that you wish to share?

1. “We should be building sea walls to protect our property. You are spending my money on this and it is unnecessary.”
2. “Consult with waterfront owners first.”
3. “DNS should have no legal liability when stubborn homeowners are flooded.”
4. “Thanks for doing this – great forum.”
5. “Only uninhabited buildings should be restricted – other structures might be affected, that should only be owners issue.”
6. “This bylaw is a nanny-state measure, protecting us from low percentage future problems. However, the impact is immediate and devastating, affecting North Saanich’s waterfront value’s negatively, and in some cases, potentially worthless.”
7. “In my view, this forward looking effort by the District fulfills a responsibility to all residents as well as simply assisting these properties effectively.”
8. “If the 15m setback remains, then the “future estimated natural boundary” will only serve to move the setback further and further restrict homeowners use of their property. DNS should be focused more on allowing/encouraging home owners to protect their foreshore and maintain their property.”
9. “I believe in sea-level rise and people need information. I doubt there is a need to disallow small structures that may be in danger in 20 years. Owners can bear that risk.”
10. “Those of us in the Lochside development permit area have a double impact on property, from the special archeological zone restriction.”
11. “I question why North Saanich is the only District taking this course. Does this situation not affect the whole CRD?”
12. “We need analysis on the negative consequences of greater set-backs and FCL on property value, insurability, non-conforming zoning, etc. It is not a good idea to isolate on “every man for himself solutions”. Investigate joint-property measures for multiple properties on the same reach or bay. Focus on mitigation measures that don’t require retreat from current natural boundary. Consider local area initiatives for dikes or other off-shore mitigation. What contribution is the District prepared to make for mitigation measures?”
13. “Frankly, as a tax payer, I'm shocked that this proposed By-Law effort comes so soon after multiple new housing projects have been approved in our District - on the very lands that are "risky" according to your data. Some of the new units are already lived in, others are still under construction. Those residents may call upon the District to protect them from rising sea level damage in the years to come, and that means all tax payers would share the financial burden. That prospect leaves me very upset as to why they were ever approved.
1. “As a property owner where the map shows little to no future impact to my land, I don't want to be burdened by excessive costs for my future building permits, because my property is captured under this headline. Your waterfront citizens happen to hold the

highest Assessments values, and in order to be good custodians we need to follow the rules of the Municipality to maintain the value of the properties. But there would be a definite dis-incentive for waterfront owners to come forward for approvals if Engineering reports were required for each project. If owners are engaging in a tear-down and rebuild scenario the cost would be condensed into one project. But my house is not a tear down, as are many others, - at this stage it requires good maintenance with upgrades for climate change. Therefore, projects may be spread over several years. This explains my suggestion in #3, that designated zones be subject to your new By-Law, but not all waterfront properties at this point in time.”

Frequently Asked Questions

District of North Saanich Flood Mitigation and Official Community Plan Bylaws



December 2018

This document is divided into two parts. Part One provides frequently asked questions related to the proposed Flood Mitigation Bylaw (Bylaw 1439). Part Two provides frequently asked questions related to the proposed Official Community Plan Bylaw (Bylaw 1442).

Part One

Coastal Flood Mitigation Bylaw (Bylaw 1439)

NEW

Overall Questions

Q1. Why introduce a new "Coastal Flood Mitigation Bylaw"?

Section 524 of the "Local Government Act" confers authority to local governments to "designate land as a floodplain" when those lands are exposed to a flood hazard. The provincial government Flood Hazard Area Land Use Management Guidelines (FHALUMG, Section 3.5.4) suggests that land areas exposed to coastal flood hazards, where potential flood levels will be increased by sea level rise, should be designated as a floodplain to reduce the potential for injury and property damage caused by coastal flooding. If the land is so designated, a local government specifies flood construction levels and setbacks to address the coastal flood hazard including the effect of sea level rise. The FCL Study Report has enabled the District to specify these development standards with a high level of precision for various sectors of the marine shoreline.

Q2. When does the Bylaw come into effect?

It would come into effect for new developments and building replacements and major additions should it be enacted by Council.

Q3. Is the Bylaw Retroactive

The Bylaw does not affect any existing buildings unless they are being replaced or substantially renovated with an expansion of the existing floor space. Please refer to the Bylaw for the details.

Q4. Does this Bylaw expropriate any part of an existing land parcel?

No

Q5. Does this Bylaw affect existing Riparian Rights?

No.

Q6. Does this Bylaw apply to existing shoreline protection structures?

No.

Q7. Does this Bylaw affect any new shoreline protection structures?

No. Any new shoreline protection structures will have to conform to the relevant sections of the existing OCP and any amendments. Please refer to the related sections of the OCP Bylaw also being considered in parallel with the Flood Bylaw.

Q8. What are sea levels doing in the North Saanich area?

Recent reviews of both the satellite measurements of sea level rise in those areas of the Pacific Ocean basin adjacent to the North Saanich area, and the recorded water level data in the Strait of Georgia, suggest sea levels in the North Saanich area are currently rising at an annual rate of between 6 mm/yr and 10 mm/yr. Those recent rates are an increase over the historical rates in this area.

Q9. How can I monitor the rise of sea level on my property?

It is very difficult, if not impossible, to visually monitor the rise of sea level without a long term instrumented record. Over the last 25 to 50 years sea levels have been rising on average at approximately 1 to 3 mm per year. At the same time the shoreline has been rising at approximately 1 to 2 mm per year due to tectonic plate effects off the west coast of Vancouver Island. This means it would be virtually impossible to visually discern the relative rise of sea level. As noted above, the instrumented record currently suggest local sea levels are now rising at rates of potentially as high as 6 mm/yr to 10 mm/yr.

Q10. Can I determine a FCL or setback for my own specific property?

Yes, the proposed bylaw has an exemption clause and a property owner can request a property specific alternative based on the specifics of the property.

Q11. If my property has a seawall, where is the Natural Boundary?

If the seawall was originally built at the Natural Boundary without encroaching on Crown foreshore, the present Natural Boundary will generally be on the face of the seawall at the base, or perhaps very slightly above the base in the case of a very old seawall. In the future, as sea levels rise, the Natural Boundary will tend to move landward of the seawall.

Q12. Does the FCL apply to my basement?

The Local Government Act specifies that habitable space, which includes space or rooms used for dwelling purposes, must be above the FCL. A basement that contains mechanical equipment (furnace, hot water heater, etc) storage spaces and a workbench, but no bedrooms, bathrooms, home theatres, etc. is not habitable space. Neither is a space that is used only for motor vehicle parking.

Q13. Does the FCL apply if my project includes re-building entirely on an existing foundation?

The proposed bylaw 1439 has been amended to expressly allow replacement of a building on its existing foundation as an exemption, as long as there is no habitable space in the basement (below the applicable FCL) and no increase in the floor area that rests on the foundation, if from a policy perspective the District thinks the life of the building should be prolonged in this way. Increases in floor area above the foundation may be permitted if the floor area is above the applicable FCL.

Part 2

Official Community Plan Bylaw (Bylaw 1442)

Overall Questions

Q14. Why is this Official Community Plan Bylaw being proposed?

Council has directed staff to review the existing Marine related policies in the Official Community Plan Bylaw 1130 (the OCP) to reflect how rising sea levels might affect existing policies.

Q15. Why are these proposed changes being recommended now in the OCP?

The proposed OCP changes reflect a review of how the policies in the OCP will be affected by rising sea levels over the near future and what changes should be made to make it easier to adapt to rising sea levels and to increase the resilience of the community in general.

Q16. Why are small changes to the text of existing OCP being suggested?

The suggested changes are related only to those sections of the OCP that are affected by the implications of rising sea levels or the suggested changes will have some beneficial effect in building resilience or adopting adaptation measures.

Q17. What is the relationship between the suggested OCP changes and the Flood Construction Level Study Report [Flood Construction Levels for 0.5 m and 1.0 m Sea Level Rise. Issued 4 January 2017]

The suggested changes are directly related to the outcome of the FCL Study and the implications to building resilience or adopting adaptation measures.

Q18. What are sea levels doing in the North Saanich area?

Recent reviews of both the satellite measurements of sea level rise in those areas of the Pacific Ocean basin adjacent to the North Saanich area, and the recorded water level data in the Strait of Georgia, suggest sea levels in the North Saanich area are currently rising at an annual rate of between 6 mm/yr and 10 mm/yr. These recent rates are an increase over the historical rates in this area.

Specific proposed OCP Marine Policy changes, related questions and an explanation of why the proposed change is recommended follows in the rest of this document.

Proposed Change is described in:

*Chapter 3 of the Marine Policy and
Guideline Recommendations report*

Q19. Why are changes recommended to the present definition of Environmentally Sensitive Areas (OCP Section 3.1)

Environmentally sensitive areas, such as tidal marshes or beach areas are increasing recognized as providing valuable services by reducing the wave energy at the shoreline behind these features. Conservation or enhancement of these areas will be beneficial to the provision of community resilience or adaptation opportunities, while at the same time preserving their important natural services.

Q20. Why is the Shoal Harbour Migratory Bird Sanctuary being introduced now into the OCP? (OCP Section 3.1)

The Shoal Harbour Migratory Bird Sanctuary is one of the oldest migratory bird sanctuaries in Canada and is located in one of the most vulnerable areas of the District of North Saanich, which is exposed to a coastal flooding hazard. Specifically including it into the OCP recognizes its importance as an Environmentally Sensitive Area and the role it can play in building community resilience or adaptation opportunities in the Tsehum Harbour area.

Q21. What types of modifications in Environmentally Sensitive Areas could assist in building resilience to the effects of Sea Level Rise?

Enhancing the beaches and tidal marshes in these areas can contribute to the absorption of wave energy during coastal flood events, while still providing valuable marine habitat. These types of works will make the adjacent areas of the District of North Saanich less exposed to the risks of flooding during coastal flood events.

Proposed Change is described in:

*Chapter 3 of the Marine Policy and
Guideline Recommendations report*

Q22. What type of works would be considered on a rocky shore to limit coastal flood effects?

Along many of the rocky shores of the DNS waterfront, shown in Schedule G of the OCP bylaw, the rocky shoreline is low lying and supports an erodible bluff. As sea levels rise the toe of the bluff will be exposed to erosion by wave action, which could threaten the safety of a building close to the top of the bluff.

This proposed change would allow appropriately designed protection works at the toe of the bluff on the rocky shoreline.

Q23. How would this be administered by the District of North Saanich?

This will be addressed in the District of North Saanich Zoning Bylaw 1255 review.

Proposed Change is described in:

Chapter 3 of the Marine Policy And Guideline Recommendations report

Q24. What is a Drift Sector Beach?

A Drift Sector Beach is a beach that is long enough that there is a source of sediment on the beach, a transport pathway for sediments to move due to waves and currents and an area where the transported sediments can accumulate. The beach shoreline in Bazan Bay is an example of a Drift Sector Beach in the District of North Saanich.

Q25. What type of works could preserve the shoreline character and limit coastal flood related effects?

Examples of works that could preserve the shoreline character and limit coastal flooding on a Drift Sector Beach would include: beach nourishment, removal of bulkheads or seawalls to restore upland sediment supply, installation of low beach sill structures, combined with the supply of beach material to maintain a beach crest berm.

Q26. Does the OCP allow property owners to undertake works below the existing Natural Boundary?

Works below the Natural Boundary would have to be reviewed and approved by both Provincial and Federal approval and permitting agencies. This proposed change to the OCP would provide a basis for District of North Saanich support for an application.

Q27. How would work below the Natural Boundary be administered by the District of North Saanich?

Planning staff will work with property owners to ensure Federal and Provincial regulations and District policies are followed.

Proposed Change is described in:

Chapter 3 of the Marine Policy And Guideline Recommendations report

Q28. What is a Pocket Beach?

A Pocket Beach is a beach that is contained between two bedrock headlands or outcrops that essentially functions as a closed system in terms of the transport of beach sediments by waves or currents.

Q29. What type of works could preserve the shoreline character and limit coastal flood related effects?

Examples of works that could preserve the shoreline character and limit coastal flooding on a Pocket Beach would include: beach nourishment, the provision of beach materials to form a beach crest berm or the removal of bulkheads and seawalls to restore upland sediment supply.

Q30. Does the OCP allow property owners to undertake works below the existing Natural Boundary?

Works below the Natural Boundary would have to be reviewed and approved by both Provincial and Federal approval and permitting agencies. This proposed change to the OCP would provide a basis for District of North Saanich support for an application.

Q31. How would work below the Natural Boundary be administered by the District of North Saanich?

Planning staff will work with property owners to ensure Federal and Provincial regulations and District policies are followed.

Proposed Change is described in:

Chapter 3 of the Marine Policy And Guideline Recommendations report

Q32. What are Mudflats, Marshes and Delta Shores?

The sheltered areas of Tsehum Harbour are examples of mudflat and marsh areas in the District of North Saanich. These areas are indicated on Schedule G of the OCP. Delta Shores are located at the mouth of creeks that discharge into the sea and examples can be found at the mouth of Reay Creek and Chalet Creek. These areas are indicated on Schedule G of the OCP.

Q33. What type of works could preserve the shoreline character and limit coastal flood related effects?

Examples of works that could preserve the shoreline character of Mudflats or Marshes would include: restoration of salt marshes, removal or modification of bulkheads or seawalls to minimize wave reflections or the installation of subtidal reefs or berms to reduce erosion of mudflats by waves during storms.

Q34. Does the OCP allow property owners to undertake works below the existing Natural Boundary?

Works below the Natural Boundary would have to be reviewed and approved by both Provincial and Federal approval and permitting agencies. This proposed change to the OCP would provide a basis for District of North Saanich support for an application.

Q35. How would this be administered by the District of North Saanich?

Planning staff will work with property owners to ensure Federal and Provincial regulations and District policies are followed.

Proposed Change is described in: *Chapter 3 of the Marine Policy And Guideline Recommendations report*

Q36. Why are changes to the sensitive natural areas of a residential development now being allowed?

There are many parcels of land around the shoreline of the District of North Saanich where the parcel is exposed to coastal flooding either directly from the parcel shoreline or indirectly from adjacent land parcels. The proposed changes are intended to allow slope adjustments, in particular, to direct flooding away from existing buildings or from adjacent properties.

Q37. What type of changes to existing slopes will be considered to help reduce the effects of coastal flooding?

Changes in slope that direct coastal flooding towards the shoreline of the property might be considered as appropriate. Changes in utility corridors or driveways that assist in minimizing the effects of coastal flooding might be considered as appropriate.

Proposed Change is described in:

Chapter 3 of the Marine Policy And Guideline Recommendations report

Q38. Why should Developments consider sea level rise for the placement and construction of roads on Developments?

Roads provide important connections both to and within Developments during flooding events. These connections should continue to be accessible during future coastal flooding events.

Proposed Change is described in:

Chapter 3 of the Marine Policy And Guideline Recommendations report

Q39. Why should existing services consider sea level rise adaptation measures?

Existing services are presently exposed to the effects of coastal flooding in some locations in the District of North Saanich. This change is intended to make it clear that some expansion outside of the Servicing Area will be considered if the reason is to make those services resilient to the effects of coastal flooding.

Proposed Change is described in:

Chapter 3 of the Marine Policy And Guideline Recommendations report

Q40. Why should General Development Policies consider coastal flooding and incorporate adaptation measures?

These policies are applicable to all land uses in the District of North Saanich and coastal flooding and the adaptation of land use in the District will be an important factor in many aspects of the future development of the District.

Q41. What would be appropriate adaptation measures that might be considered as consistent with these General Policies?

Design and construction of new developments to meet the Flood Construction Levels and setbacks in Bylaw 1439 - Coastal Flood Mitigation Bylaw is an important and effective first step.

Q42. How would these General Development Policies be administered by the District of North Saanich?

These General Policies would become part of a DP application review process if applicable.

Q43. Do these policies apply to existing Developments in the District of North Saanich?

The policies apply to new Developments except when an existing development intends to expand the existing habitable space as described in Bylaw 1439 – Coastal Flood Mitigation Bylaw.

Proposed Change is described in:

Chapter 3 of the Marine Policy And Guideline Recommendations report

Q44. Why are two new Special Development Areas being proposed?

The two proposed areas, Tsehum Harbour area and the Lochside – McTavish area are significantly affected by expected sea level rise effects. Designation as a Special Development Area will allow the future development of these areas to be guided in an innovative manner that can be expected to accommodate sea level rise effects in a manner that benefits the communities in these areas.

Q45. Why should the two new Special Development Areas be created now?

New developments will have a service life that extends well into the time frame when sea level rise related effects will influence the communities. Creation of the Special Development Areas now will allow the development of specific land use policies in these areas that can guide appropriate development.

Q46. What does designation as a Special Development Area imply?

Designation as a Special Development Area will start the beginning of a consultation process for the particular area and that provides the flexibility that best suits the neighbourhood and individual properties in the neighbourhood. Special studies for the specific area will be required.

Q47. How will the Special Development Area be rezoned?

The Special Development areas will be rezoned using a Comprehensive Development Zoning Bylaw upon consideration of each future development application.

Q48. How will the Tsehum Harbour SDA be coordinated with the adjacent areas in the Town of Sidney?

The District of North Saanich will invite the Town of Sidney to participate as a stakeholder in the development of the Tsehum Harbour Special Development Area as will the Shoal Harbour Bird Sanctuary society so that the SDA can be consistent across the municipal boundaries and the existing Shoal Harbour Sanctuary Area

NOTE: *The Sea Level Rise Coastal Flood Hazard Area DPA, which was proposed in the Marine Policy And Guideline Recommendations report prior to January 2017, has been withdrawn.*

Q49. Why was the proposed DPA withdrawn?

The - Sea Level Rise Coastal Flood Hazard Area DPA – will be replaced by a Bylaw to Mitigate Coastal Flood Hazards. Development Permit Areas are guidelines for development and are adopted by local governments when there is no specific information and reports from experts are required. The District of North Saanich has acquired specific FCL information through the FCL Study report. This different approach, which is consistent with the Provincial Guidelines – Flood Hazard Area Land Use Management Guideline (FHALUMG), Amended 1 January 2018, is proposed.

General Exemptions for a Development Permit

OCP 14.0 Development Permit Areas |

Proposed Change is described in:*Chapter 3 of the Marine Policy And Guideline Recommendations report***Q50. Why are small additions to commercial and industrial buildings and garden sheds and tool sheds no longer eligible for exemptions to a DPA**

Small additions to commercial and industrial buildings and garden sheds and tools sheds should not be located in a floodplain because they often contain materials (fuel, fertilizer, paint, plastics, etc) that, in the event of a flood, can contaminate the soil or, due to runoff, the ocean.

Q51. Why should changes in the height of an existing building, even when it is within the existing footprint, give consideration to the implications of future FCL requirements?

Only if a change in height of an existing building, is occurring in connection with an increase in habitable space in excess of 25%, is the building subject to the proposed Bylaw 1439 - Coastal Flood Mitigation Bylaw.

Q52. Why should small structures (less than or equal to 10 m²) be setback so they are inland of the future estimated natural boundary?

These types of small structures should be setback 15 m from the future estimated natural boundary to ensure they are not exposed to a growing risk of coastal flooding. The method for defining the future estimated natural boundary is provided in the proposed Bylaw 1439 - Coastal Flood Mitigation Bylaw.

Q53. What is the future estimated natural boundary?

The future estimated natural boundary is the location to which it is expected the natural boundary will migrate as sea levels rise to a specific level. The method for determining the location of the future estimated natural boundary is provided in the proposed Bylaw 1439 - Coastal Flood Mitigation Bylaw.

Q54. Why should coastal flood-related mitigation measures be eligible for an exemption to a DPA as an emergency work?

As sea levels rise, existing developments will become more exposed to a coastal flooding hazard and it may be necessary to undertake emergency measures to prevent flooding. This change will make emergency measures undertaken for this purpose similar to measures allowed to remove trees where they are an immediate danger or hazard. Emergency measures do not require a development permit.

Q55. Why should the construction of a single family residential dwelling in DPA 8 be subject to the proposed Coastal Flood Mitigation Bylaw?

This development permit area addresses the appearance of intensive residential development rather than the protection of development from the coastal flooding hazard.

End of document