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## 19 DPA NO. 2



# Protection of Development From Hazardous Conditions

## 19.1 Area

All lands located within the inundation area as calculated by the most recent Tsunami modeling program are designated as part of Development Permit Area No. 2 – Protection of Development from Hazardous Conditions.

## 19.2 Designation

Development Permit Area No. 2 is designated for the purpose of establishing objectives for:

- Section 488 (1) (b) protection of development from hazardous conditions.

## 19.3 Justification

The Township is located in one of the most seismically active areas in Canada. As such it is imperative that land use and development decisions take into consideration the potential dangers associated with tsunamis.

*A tsunami is a series of long surge-like waves and is usually caused by an underwater earthquake, landslide, or volcanic eruption. The most dangerous tsunami threat in the Capital Region will follow a major earthquake in the Cascadia subduction zone (CSZ), located about 100 km off Vancouver Island. Such an earthquake will cause ground shaking lasting between one and four minutes and will result in significant damage throughout the region (<https://www.crd.bc.ca/about/news/article/2013/04/19/modelling-tsunami>).*

These guidelines are justified based on the thousands of people across the globe who have been killed due to tsunamis.

## 19.4 Exemptions

There are no exemptions.

## 19.5 Guidelines

1. No building intended for the occupation of people shall be built within an area directly impacted by a tsunami.
2. Tsunami walls, retaining walls, sea walls, and other similar structures located in an area directly impacted by a Tsunami shall be designed to absorb wave energy and deflect residual wave energy away from locations likely to be occupied by people.
3. Use of board form design, landscaping, breaking up large expanses of flat surfaces, and other techniques to add interest in Tsunami walls, sea walls, and other similar structures is encouraged.
4. The use of construction materials that may leach toxic chemicals over time into the land or water should be avoided.
5. Incorporating wildlife habitat such as marine pools, nesting ledges, rough surfaces, sheltered coves, and similar design elements into tsunami walls, retaining walls, and sea walls is encouraged.