

SEA LEVEL RISE

Educating Coastal
Communities About
Sea-level Rise



HOW TO FIND YOUR COMMUNITY ON CAN-EWLAT

The following is a short guide on how to use the Canadian Extreme Water Level Adaptation Tool (CAN-EWLAT), developed by Fisheries and Oceans Canada, to find the Vertical Allowances for sea-level rise planning in Small Craft Harbours in Canada.

Before we get started, here are a few definitions that are important to understand:

- **Small Craft Harbours (SCH):** A program for harbours across Canada run by the Department of Fisheries and Oceans with the objective of keeping harbours in good condition to support coastal industries.
- **Vertical Allowances:** The recommended changes in the elevation of coastal infrastructure in order to maintain the same level of risk under future sea level scenarios.
- **Representative Concentration Pathways (RCPs):** Climate change scenarios based on the outcomes of different levels of green house gas (GHG) emissions.
- **Relative Sea Level Rise (RSLR):** The amount of sea-level change that will be seen in a specific location.

1. First, click the following link to the Government of Canada CAN-EWLAT page:

<http://www.bio.gc.ca/science/data-donnees/can-ewlat/index-en.php>

2. On the left-hand side of the page, select the “Can-EWLAT Application” tab.

3. This page provides us with a map of SCH locations as well as a table that lists every SCH location. To find your community, you have two options:

(a) On the map, zoom in (using the “+” button in the top left corner) and pan (by clicking and dragging on the map with your cursor) until you can clearly see the SCH you are interested in. ***Note:** sea level amounts do not change substantially over short distances, so choose the SCH that is closest to your community* Then, select the orange dot placed on the SCH, and finally, click the SCH name in the pop-up bubble to reach the next page.

(b) Scroll down past the map and click the “SCH Locations” tab. Then select the “Filter Items” field in the top right corner of the table and type the name of the SCH you are interested in to narrow your search. Finally, click the SCH name in the table below to reach the next page.

4. This page contains information about Vertical Allowances and RSLR for the SCH you selected. In the information on this page, two RCP values are used: RCP 4.5 and RCP 8.5. RCP 4.5 is an intermediate GHG emission scenario and RCP 8.5 is a high GHG emission scenario. Smaller emission amounts usually mean smaller Vertical Allowances!

The first graph and table shows projected Vertical Allowances for each decade from 2020 to 2100. We are interested in the values for “Model RCPs”.

The second graph shows projected Relative Sea-Level Rise values for each decade from 2020 to 2100.

5. To explore Vertical Allowances for another location, press your browser’s “Back” button, or scroll back to the top of the page and click the “Can-EWLAT” hyperlink just below the blue title website banner. Repeat Steps 1 to 4 as many times as you wish!