

## NS Soil Erosion Tool Guide Sheet

### Select Location

To use the tool, click on **Select Location** and chose **Atlantic** region. Then zoom in on the map of

the province (Double click or use the zoom tool  ) and select the parcel of land that is of interest. The map shows property boundaries and roads (it may take a few seconds for the property lines to show up). You can also use the **Aerial** button to change the screen to aerial photography. Once you select your property it will be highlighted in green.

Then proceed to the **Soil Erosion Assessment** page.

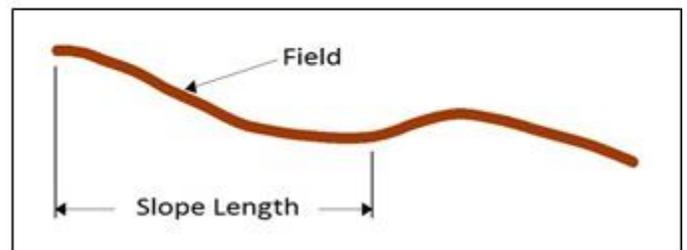
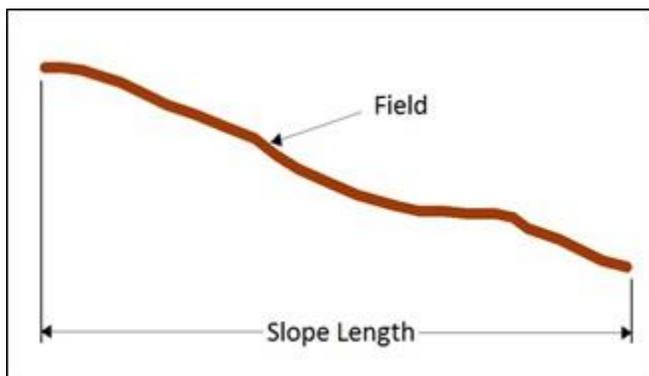
### Soil Erosion Assessment

The **Cropping Practices** table is shown below with numbers in parentheses behind the cropping practices that indicate the percentage of erosion potential. **Lower numbers are in green** indicating lower soil erosion potential. **High soil erosion potential values are in red.** (i.e. *Strip cropping, 3 year rotation (30)* reduces soil erosion by 70 % compared to cropping *Up and down the slope (100)*).

How are your crops planted? *Select one from the list*

- *Up and down slope (100)*
- *Cross slope (75)*
- *Strip cropping, 2 year rotation (50)*
- *Strip cropping, 3 year rotation (30)*

**Slope Length** is the longest continuous section of a field with a slope. What is the slope length of your field? The following diagrams give an example.



Diversion terracing can reduce **Slope Length** and thus soil erosion. Diversion terraces are shallow grassed ditches constructed across the slope to intercept runoff water flowing down the field and remove it before the amount of water is too large or is traveling too fast. See [Diversion Terracing](#) for more information

In the **Crop Rotation** table, select your crop and the management practices used to plant the crop for each year of a three year rotation. In the Management section of the Crop Rotation table, **no-till planting, intercropping, using winter cover crops and leaving higher residue levels on the soil (reduced tillage)** will result in lower soil erosion levels than **conventional tillage** and planting.

Then proceed to the **Results** page.

## Results

Your estimated soil loss will be listed in Tonnes/Hectare/Year. A soil erosion level of 6 *T/Ha/year* is considered sustainable. If your calculated soil erosion rate is too high, you can modify your cropping practices, crops grown or slope length (terracing) on the **Soil Erosion Assessment** page.

### *Summary of soil loss rates*

Soil erosion class	Soil loss (T/Ha/yr)
Tolerable	0 – 6
Low	6 – 11
Moderate	11 – 22
High	22 – 33
Severe	33 +

A summary of soil conservation practices used in Nova Scotia is listed [here](#). Please read to see if these practices can be implemented on your farm.

Proceed to the [Nova Scotia Soil Erosion Tool](#)

This tool was produced with cooperation from Agriculture and Agri-Food Canada, Nova Scotia Federation of Agriculture and Nova Scotia Department of Agriculture. This is part of the [CanPARTAKE](#) suite of tools developed by Agriculture and Agri-Food Canada.