Flood Resilience Plan Impact Reporting Guideline

#FLOODED
Resource
Grade Level: 5 – 12

Depending on the Take Action activity or activities you choose to do, you should be able to calculate how many litres of water diverted, CO_2 removed, or how to divert financial loss.

Litres of Water Diverted

How many barrels would your school need to collect rainwater?

Begin by calculating how many rain barrels will be used in your school, using GreenLearning's tool provided here: http://www.greenlearning.ca/flooded/Rainbarrels.pdf

Food for thought… after completing the calculation, consider the following questions for discussion:

- Where would the most convenient place be to install rain barrels at your school?
- List the steps would you need to take to have rain barrels installed in your school?
- What do you think is the best use for the water from the rain barrels?
- Find a story of a school that has installed rain barrels.

Amount of CO_2 Removed

Thinking of planting trees – what are some of the benefits of planting trees in your school?

Determine how many trees you can plant in your school to reduce the change of floods. Begin by explaining that planting trees can divert rainwater as it is a natural mechanism for increasing the absorption of excessive rainwater, thereby reducing the chances of flash floods.

Go over the following questions with your class:

- Find out how many trees can be planted in your school.
- Once you have determined how many plants can be feasibly planted in your school, continue to calculate how

Find the resource below to complete this analysis:

- https://mytree.itreetools.org/#/
- Notes on how to use this tool: define the tree you are planning to plant and check the amount under "Storm Water Runoff Avoided", which can give you insight on how much water was diverted if you were to plant trees!

An additional benefit of planting trees is absorption of CO_2 from the atmosphere, thereby helping reduce the effects of climate change. Find out how much CO_2 is offset by the trees you have planted using the tools below:

CO_2 absorbed by one tree, here are a few resources:

- https://mytree.itreetools.org/#/
- https://www.ecomatcher.com/how-to-calculate-co2-sequestration/

Calculate the total amount of CO_2 absorbed:

- CO_2 absorbed by one tree x number of trees planted

How to Divert Financial Loss

Do you wonder if you protected your school or organization property by implementing your Flood Resilience Plan? Not sure how to estimate that? Here are some tips!

Make an assessment of all the areas in your school or organizational premises that are most prone to being damaged by flooding. You can do this by creating a list of property items (e.g. experiment lab, number of classrooms, gym, administrative offices etc.)

HINT: a great way to do this project would be to work with your facilities department, ask their expertise to help you with creating a list of all the property items.

Once you have a list ready, work with your facilities team to estimate the market value of that property item – basically if that property item is damaged, how much will it cost you to repair it? If you cannot assign a monetary value to the damage cost, a great start might be to estimate the percentage of property that can be protected with your plan. For instance, while working with your facilities team you estimated that the Plan will protect 80% of the school property from flooding! How awesome is that!

Remember, we are not looking for perfect answers, as an estimation is always just an estimation. But we invite you to challenge yourself to figure out the impact of your amazing Flood Resilience Plan!

Have fun!