

SAVING OUR WATERSHED

**BY THE FSMS YOUNG NATURALIST CLUB-
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DEFINING OUR WATERSHED

A watershed is an “area of land that drains into a specific river, lake, or other body of water.”

Our watershed is called Chesapeake Bay. It is a watershed that spans more than 64,000 square miles.

More than 18 million people live in the Chesapeake Bay watershed.

CONCERN

Our concern is that our school throws around 60-80 water bottles per day, and the total water bottles we get is around 1,500 water bottles a month. This is the baseline data received with the help of our head custodian.

This is a concern because the water bottles that we get in the trash, somehow gets in the water waves which is bad for the environment and the animals.

EXPLAINING THE SOLUTIONS

1. We will request our board of directors to provide reusable water bottles to all students and staff so we can drastically reduce the use of plastic bottles in our public school system.
2. Distributing rain garden infographic (on slide# 8) to the communities near by or at least to the Farmwell station community.
3. Filling Vending Machines with Biodegradable beverage bottles and snack packets.

BUDGET

Our solution to caring for our watershed is two pronged and relies mainly on spreading awareness to the common public:

- ❑ Requesting the LCPS school board to approve budget to provide reusable water bottles to all students and staff of LCPS schools. There are 96 schools in our school district and this move will help with drastic reduction of plastic water bottles across all our schools.
- ❑ Our second approach is to distribute a flyer about the benefits of rain garden to our school community, in the hopes that they may build one in their homes. Rain gardens in our homes and schools will help a great deal with stormwater runoff. To print the posters in color as a brochure and distribute to about 1300 in our school community, we may need about \$400 (just an estimate) in total.

HOW WILL OUR SOLUTION CREATE A POSITIVE IMPACT?

- ❑ Our idea of arranging for reusable water bottles to staff and students will bring in positive impact by reducing the amount of plastic bottles collected in our school building. 1500 bottles a month is about 15000 bottles every school year in just one school. We will also send letters/ emails to loudoun county board members to request providing reusable water bottles for all LCPS staff and students- when this gets implemented it will have a very drastic positive impact on reduced use of plastic water bottles all across the loudoun county public schools (96 schools).
- ❑ Our idea of distributing infographic about rain garden will create awareness among the public to learn more about the importance of rain gardens in helping watershed quality. This may influence the public to build one in their backyards which will eventually help with run offs in our city.

SUSTAINABLE ENVIRONMENTAL **GOALS**

Our SEGs for this project are to have clean water in our watersheds. There cannot be sustainable life in our watershed if we don't take care of it.

If we want to keep life on land good, we need to take care of the life in the water. All the pollution that goes into our watershed harms the organisms, which effects the life outside of water.

VISUALS

**THIS IS A FLYER WE
WILL CIRCULATE
AMONGST THE
SCHOOL
COMMUNITY.**

RAIN GARDENS

What do rain gardens do and how do they help.

Rain gardens soaks in water and runoff from the rain and holds it in temporarily. Run off i collects a bunch of pollutants and dirt and when it goes into a rain the garden it cleans most of it out so it's safer and there's less water pollution.

An example of a rain garden:



Why are rain gardens important?

Rain gardens are important because they help reduce the amount of run off that goes into our water sheds, and they can also help filter the pollutants in the runoff to. To continue, rain gardedns can give the run off to the flowers and trees around it to make them grow stonger. Lastly, with the stronger plants and trees, they can provide shelter to animals like butterflys and song birds!



List of plastic water bottles collected per day from our school - report by our head custodian

A-House "10-12 daily"
B-House "
C-House "
Custodian Room - 6-7 daily
Main office - 3-4 daily
Art - 2 to 3 daily
Cafeteria - 10 daily
Gym - 6-7 daily
Home EC - 1 daily
Teach - 2-3 daily

SOLUTION

- As a first step, we will be sending out emails to the local community businesses to provide us with reusable water bottles.
- We sent out emails to the local conservancy group to see if we could provide them with QR codes to be placed on trees along the trails - codes scanning to sites giving information about ways public can help save the watershed.