

Adopt a Drain

How does pollution reach The Bay? What can we do to prevent pollution?
What kinds of waste are found at storm drains?
How can our school prevent these types of waste?

Objective

This activity allows students to take responsibility for their space and their community. It allows them to share with their classmates what they find and teach them how they can do better.

Preparation

Students should have an understanding of how storm drains are major tributaries to The Bay. Students may have completed the Schoolyard Report Card lesson and/or the Storm Drain Mapping lesson. Baseline knowledge that storm drain around their school/home go straight to the Bay and the water is untreated.

Delivery

Tell students they are going to be Bay Ambassadors. They will be investigating what kinds of garbage is littered at school and ends up in their adopted storm drain. Split students up into groups based on how many storm drains are found on your school yard. Each group will collect all the trash (even the tiny bits) they find at their drain. Students should record everything that they find including number and type of waste. Once they throw it all away return to the classroom to debrief.

Debrief

Ask students to share what they found and record for all to see. Discuss as a class how the types of trash should be categorized (or make up categories to give them). Students can then discuss in small groups what was found most at their drain, and why they think that is. Discuss in small groups and as a class how the students can present this information to the school in hopes of reducing the amount of waste ending up in the storm drains.

Examples: School assembly with class presentation/performance, posters around school, classroom visits

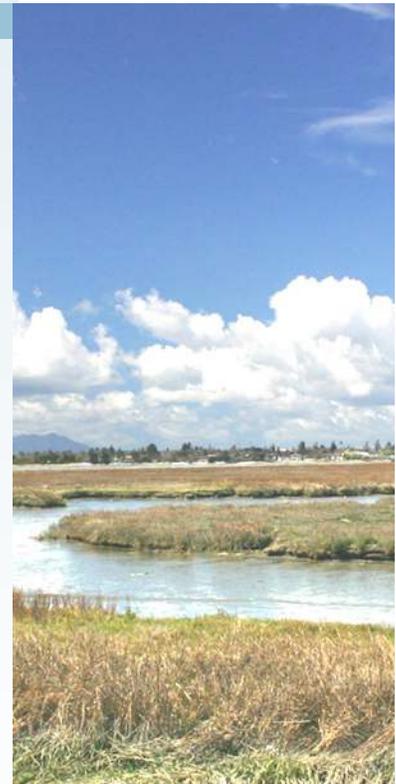
Extension: Students can divide the number of items of waste in each category by the total number of items and present to the class the percentage of different categories found at their drain.

Extension: Civic engagement. San Francisco and Oakland have Adopt a Drain programs <https://www.oaklandca.gov/topics/adopt-a-storm-drain>

<https://adoptadrain.sfwater.org/>

NGSS Engineering Extension: Storm drain water is not treated before it makes its way to the Bay. Design a solution to this problem.

Environmental Principals and Concepts Extension: Write a letter to your local representative telling them what you're doing at your school and ask what they are doing as well.



Theme

Human Impact & Climate Change

Age

All Levels

Duration

45-60 mins

Materials

Garbage bags, gloves, note pad and writing utensil

Poster board, markers, scissors, tape/ glue

Standards

NGSS: 3.5.ETS1-1,2,3

EP&C's: P2-CA,C, D P4-CA, B, C

Spanish Key Words

What words and phrases are of particular focus in this activity?

storm	La tormenta, la tepestad	Storm drain	Collector de aguas pluviales
Garbage/waste	basura	To Adopt	adoptar
Recycling	Reciclaje	Porcentaje	Percentage
Food waste	Desechos		



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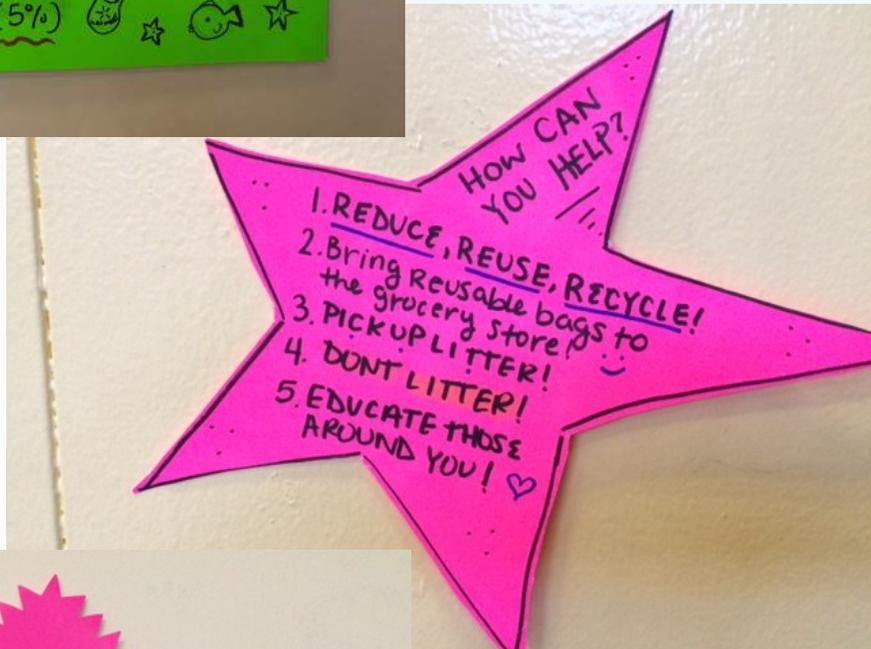
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Monitoring what types of waste was found in the storm drain.

Not just stating the problem but providing solutions and action items!



An example of environmental inspired art to make the viewer feel a certain way and start a conversation. The Earth is cracking and falling apart!