

UPDATED DRAFT VIDEO SCRIPT: Why Stormwater is Important

Scene: Playground at school

Characters: Group of three students $(1^{st} - 4^{th} \text{ grade})$, Rain Drop

Resources: Texas Parks & Wildlife Find Your Watershed Viewer

Vocabulary Bank: Rainwater, stormwater, precipitation, stormdrains, bio-degradable, decomposition, litter, watershed, recycling, runoff

Opening Scene: Students are playing with a ball (soccer/basketball) outside at recess. The ball lands on the curb in the middle of a stormdrain that clogged with trash and leaves. There is a large puddle of water around the stormdrain because the stormdrain is clogged, slowing the flow of water. The students go to carefully retrieve the ball and are greeted by our main character and narrator, Rain Drop.

RAIN DROP: Hi kids! Can you help me out with a problem over here?

KID 1: Who, or what, are you?

RAIN DROP: Oh! My name is Rain Drop and I come from rainwater. Do you know what rainwater is?

KID 2: Yes, we just learned about that in class. Rainwater is water, or precipitation, that has fallen or been obtained from rain.

RAIN DROP: That's right! I come from rain that has fallen on the ground. Once it has fallen on the ground it can then become stormwater.

KID 1: Isn't that the same thing as rainwater?

RAIN DROP: Well not quite. You see **stormwater** IS rainwater but it can also be water that melts from hail and snow. As it collects on the ground, it flows to stormdrains like this one here. **Stormdrains** are designed to carry rainwater, or melting snow and ice, off streets to help prevent flooding.

Cutaway scene: animation of rainwater, melting snow, and melting ice flowing to a stormdrain.

KID 1: Oh I get it now!

KID 3: Hey! Didn't you say that you needed some help. What do you need help with?

RAIN DROP: Yes, I need your help cleaning up this stormdrain. Sometimes they get full of leaves and trash making it hard for them to work like they should. As stormwater moves over the ground, it can pick up anything in its path and carry it to the stormdrain. If the stormdrain gets clogged like this one, it



can cause big problems like flooding in the area around it. Flooding can make streets more dangerous to travel on.

Cutaway scene: water moving over the ground and picking up debris that gets caught in a stormdrain. The stormdrain begins to backup and cause ponding/flooding on the street.

KID 2: But this is mostly leaves which are organic matter from nature. Don't they just decompose and break down into smaller particles and go away down the stormdrain?

RAIN DROP: They *are* organic matter but they don't just go away down the stormdrain. They can get mixed up with other items like litter, which is trash that is left lying on the ground, and all swept together down the stormdrain. Our stormdrains flow to our local water bodies like nearby streams and lakes that are downhill. All the organic matter, along with the trash and litter, can have a big impact on wildlife and our drinking water!

Cutaway scene: animation of water flowing down stormdrain with debris, through a pipe under the street, and out an outfall into a stream or lake with wildlife (fish, frogs, birds, etc.).

KID 3: Wait, I thought you just said that stormwater flows downhill to nearby water bodies like the stream next to our school here. How does that affect our drinking water?

RAIN DROP: For most Texans, their drinking water comes from lakes and reservoirs, after it has been treated of course. But it takes a long journey through the watershed first. Watersheds act sort of like bathtub; they fill up with water from the faucet above and then all that water travels to a low point – down the drain. In watersheds, our water starts off as stormwater that flows untreated through stormdrains directly into nearby streams and rivers that then make their way downhill to our lakes and reservoirs. As stormwater flows across the ground, it can pick up trash and organic matter like these leaves, and they all get washed into our waterbodies. As they break down or decompose, they can use up the oxygen in the water. Aquatic life, such as fish, need oxygen to survive. If the oxygen levels become too low, fish and other aquatic life cannot survive.

Cutaway scene: illustration of rain falling over an elevated landscape, running downhill, and collecting in a lake. Repeat the animation with trash and debris being collected along the way. After repeated scene, show the lake water turning dark to look polluted and fish/turtles swimming away or dying.

KID 1: That is not good! I like watching fish and turtles in the stream and I don't want them to get hurt.

RAIN DROP: No, it is not good. All the litter and trash can also harm wildlife by carrying bacteria to the places where wildlife live. Sometimes wildlife may mistake trash for food and try to eat it which can be very harmful to them.

KID 2: Litter also makes the environment look really bad. But what can we do about it to help?

RAIN DROP: You can help by reminding adults to not put anything down the stormdrain, even organic matter like leaves. You can also help prevent litter from reaching the stormdrain by never throwing trash on the ground and always putting waste in either the trash or recycling bin. If you see litter already on the ground, you can ask an adult to help you pick it up and dispose of it properly. And if you see a



stormdrain like this one here that is clogged with all kinds of trash and organic debris, you can ask an adult to help you clean it up. That way the stormwater can flow down the stormdrain like it should and help prevent flooding.

Cutaway scene: show illustrations of adults starting to put paint/oil/leaves down a stormdrain and a person throwing a bottle or food wrapper on the ground with an X over all the illustrations. Show kids and adults picking up trash and clearing off a clogged stormdrain.