

Wetlands

Take a look around the area where you are standing. What do you notice about the landscape? Are there hills nearby? Low lying areas? Is the ground dry or wet? Right now if you are facing the river you are looking at a wetland. Wetlands are found between permanent waters like lakes and rivers and dry land; typically found in low-lying areas of the landscape where the intermittent flooding changes the soils and supports plants adapted to flooding. When it rains, water is carried down by gravity into the wetland and river in front of you. As rainwater runs off roofs, parking lots and roads, it is collected by drainpipes and delivered to wetlands. Do you see a drainpipe that collects rainwater from the Lamprey River Elementary School and carries it to this wetland? The flowing water picks up and carries soil, minerals, and pollutants such as oil from cars in the parking lot. This is called stormwater. When the stormwater reaches the wetland, it slows and rests. While the water rests, the wetland acts as a sponge and absorbs some of the water and helps pull out pollutants before they reach the Lamprey River. Wetland

soils are very fragile and if we want them to continue filtering pollutants from stormwater it is important not to compress the soil by walking through the wetland.

The dust and dirt carried into a wetland stays there. Dissolved substances - everything from minerals (like potassium) to pesticides - get stored or chemically transformed by microbes [shown as bacteria in the How Wetlands Work diagram to the right] or taken up by plant roots. This is just one of the important functions of wetlands that benefit us – some say wetlands cleanse the water as kidneys cleanse our blood.

Stormwater slowed down by wetlands is rerouted to different parts of the hydrological cycle: some is soaked up and held, some drains into the groundwater, and some continues its journey downstream. In this way wetlands reduce the frequency and severity of floods downstream. What communities are downstream of your school? How might flooding change for them if this wetland were not here?



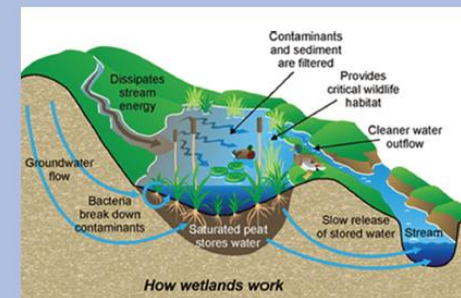
Wetland along the trail. In the distance is the Lamprey River. Credit: Abigail Gronberg

Storm drain found on the Lamprey River Elementary School property. This drain collects stormwater in the parking lot and directs it into the wetland before the Lamprey River through a stormwater pipe.

Credit: Abigail Gronberg



Storm drain pipe emptying into the wetland. Credit: Abigail Gronberg



Credit: US Geological Survey

<http://www.nwrc.usgs.gov/wetlands.htm>