

Water



CONSTRUCTION ACTIVITY POLLUTION PREVENTION

According to the EPA, the three biggest pollutants to water are dirt, bacteria, and nutrients. Dirt was listed as the number one cause of pollution in our rivers and streams. When rain washes dirt into streams and rivers, it harms water life and can kill fish eggs clinging to rocks. Dirt can also clog the gills of fish, thereby suffocating them. Have you ever walked into a pond or lake and noticed your view is clouded at the bottom? What if there was a plant living at the bottom of that water? Just think, chances are, that plant will not survive.

The solution: stopping the dirt from getting into the streams in the first place and disturbing the surrounding land as little as possible. Farmers are using different methods to grow their crops so they leave less earth exposed, and they plant grasses in fields that are not being used. Construction workers at Paradise Elementary put up silt fences and hay bales to trap the dirt and contain it while they built the school.

Stormwater Management

It is very important to manage the flow of water when it rains. Ideally we want the rainwater to seep into the earth, instead of draining into our streams. At Paradise Elementary School we have rain gardens that collect water. There are vegetated swales that slow down the flow of rainwater so that water can saturate into the ground. Keeping rainwater saturated in the ground instead of letting it "run-off," taking dirt and debris with it, is the best form of stormwater management.



Rainwater Harvesting

Stormwater is harvested or collected for non potable or unfiltered water uses. Harvesting stormwater also reduces the quantity of run-off water and reduces water demands. Rainwater is harvested from the roof and directed via rain leaders into an underground cistern for storage. The stored water is used for toilet flushing, reducing the demands for potable water. By reducing potable water use, the local aquifer is conserved as a water resource for future generations.



Water-Efficient Landscaping

By planting water efficient native and indigenous perennials, shrubs, ground cover, grasses, and trees on the school's site, the need for irrigation has been eliminated. As a nation we deplete 25% of our fresh water supply from rivers, streams, and reservoirs. Of that 25%, we are not returning or "recharging" 3,700 billion gallons of water to our aquifers and water sources. Before the Energy Policy Act of 1992 we were depleting even more of our water. So the good news is, with effort, we are getting better at conservation. Reducing water use now helps us save money, protects our watersheds, and uses less energy so that future generations will not have to battle a scarce water supply.