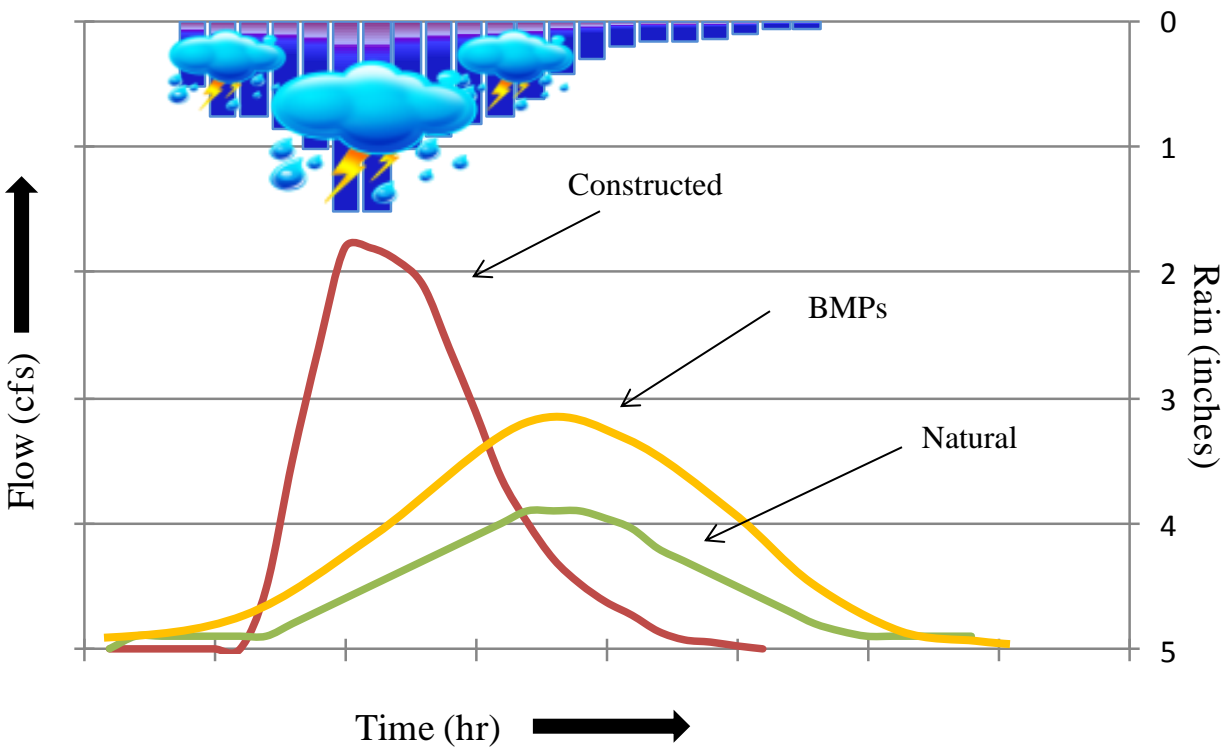


Stormwater 101-The Solutions

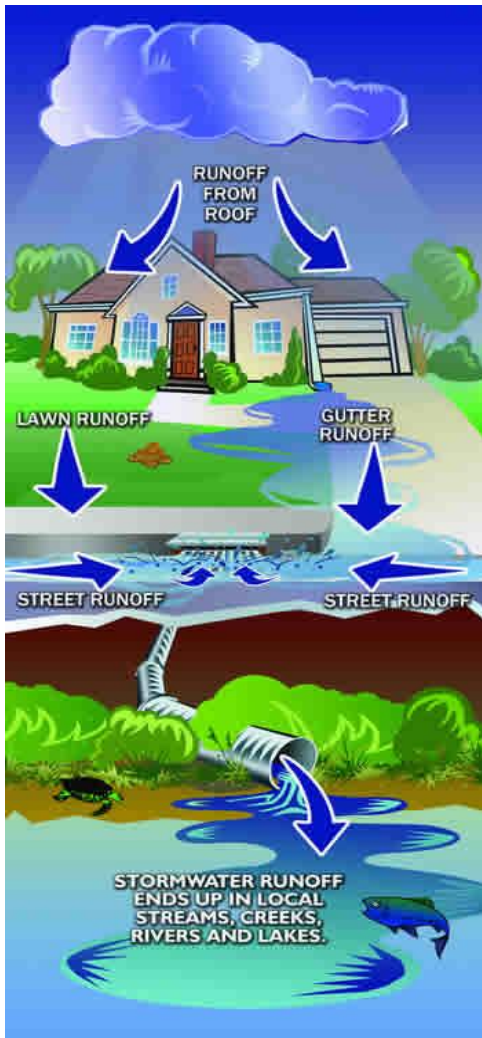
The solution, as we talked about, is to design like nature!

Remember that it is excess runoff that causes the problem, so we need to somehow to minimize the amount of this extra runoff. And in the field of stormwater management and planning called green infrastructure, we use BMPs to minimize runoff.



And of course BMPs are Best Management Practices.

BMPs include, but are not limited to, structural controls, nonstructural controls, operational procedures, and maintenance procedures.

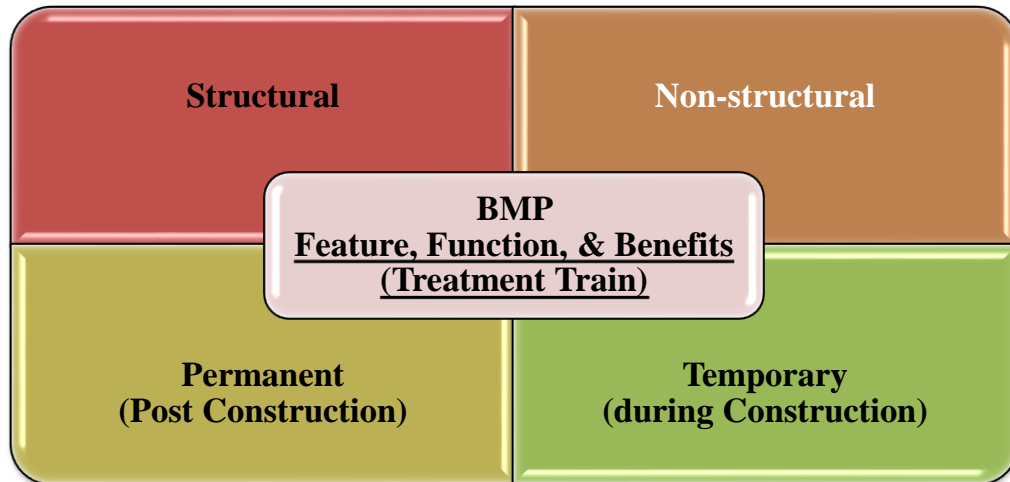


So far, we

- 1) Know the problems related to stormwater, and we know the consequences,
- 2) Know the solution- we need to mimic the natural hydrology of a landscape
- 3) Have the tools- or best management practices that restore the functions of natural drainage systems, or BMPs

But how do we apply these ideas? No single BMP can address all 3 of the problems we face with stormwater- volume, rate and quality. That is why we need a series of BMPs. This series is called a Treatment Train.

And one way to look at these types of practices is by looking at Feature, Function, and The Benefits of the different kinds of practices.



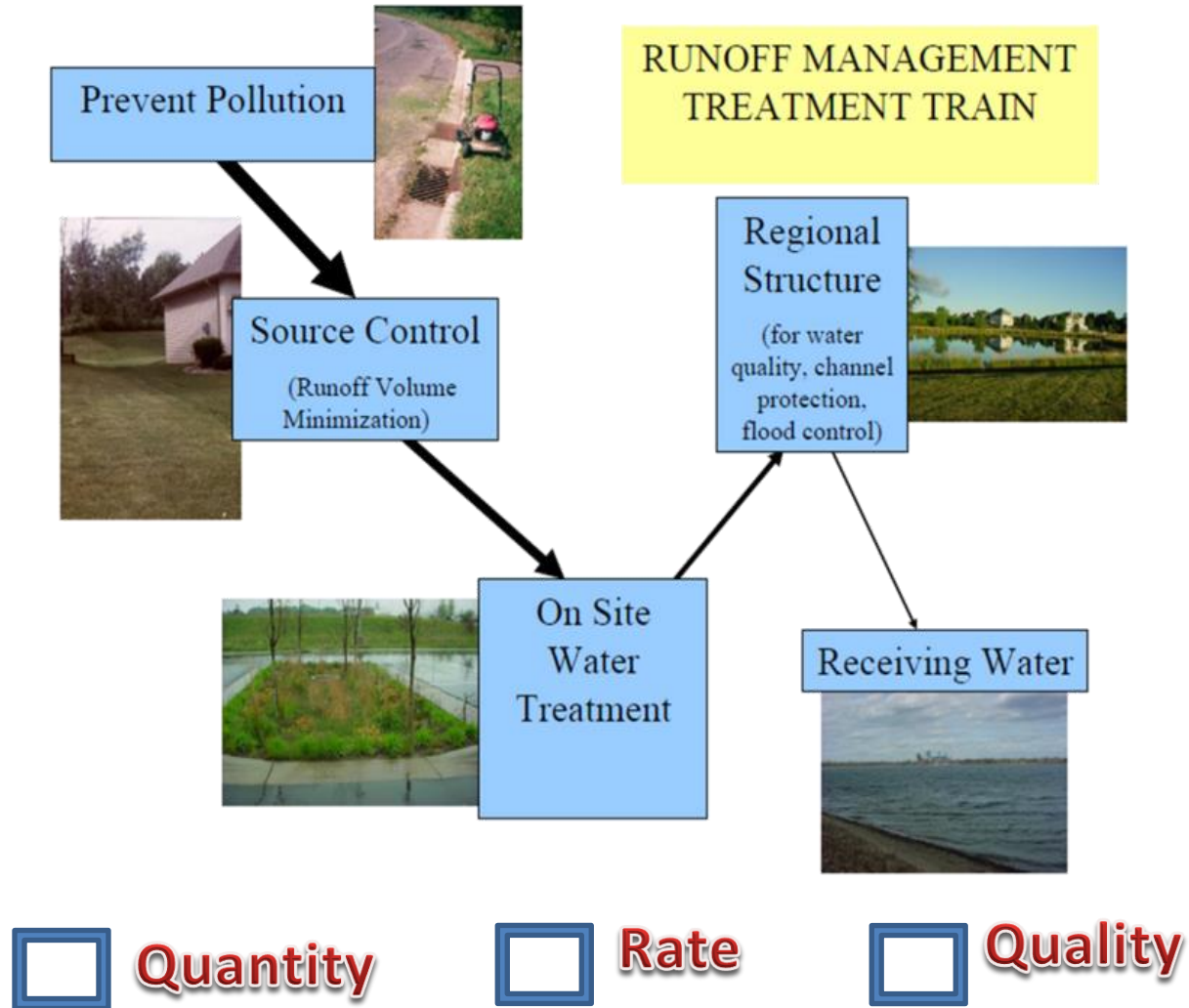
Feature, Function, and The Benefits are the elements that make up a runoff management treatment train. The good news is we have many strategies we can use in a treatment train to manage stormwater:

Residential	Municipal	Industrial
Yard Waste Management	Temporary Construction Sediment Control	
Household Hazardous Waste (HHW) Control	Wind Erosion Control	
Alternative Product Use	Streambank Stabilization	Emission Regulation
Better Car and Equipment Washing	Material Storage Control	Material Storage Control
Better Sidewalk/Driveway Cleaning	Dumpster and Landfill Management	
Better Sidewalk/Driveway Deicing	Better Turf Management	
Proper Pool Discharge	Better Street/Parking Lot Cleaning	Better Impervious Surface Deicing
Exposed Soil Repair	Better Street/Parking Lot Deicing	Proper Vehicle Management
Native Landscaping	Storm Sewer System Maintenance	
Healthy Lawns	Litter and Animal Waste Control	Better Parking Lot Cleaning

Proper Pool Discharge	Proper Vehicle Management	Sanitary Sewer System Maintenance
Staff, Employee, and Volunteer Education Public Education		

How we apply these solutions is as important as which one we use, and there are different methods to how we apply BMPs or Better Site Design or Low Impact Development. In the diagram below, you see the five main categories of treatment train options:

- Prevent pollution
- Source control
- On-site water treatment (including regional structures that flow to receiving waters.)



We'll look at examples of each of these options. Let's start with the BEST one: Pollution prevention. Preventing pollution from entering streams, rivers or lakes is always the best first step. Preventing pollution is always easier and less expensive than cleaning up pollution.

To continue, open the Pollution Prevention document to learn about the range of options we have to intercept pollution before it hits the water.