What is Stormwater?

Stormwater is rain that falls on the landscape, collects in swales, and drains downslope. Some stormwater is collected for our drinking water, some irrigates our agricultural fields and picks up chemicals as it heads downstream, and some flows across paved surfaces, becomes polluted with oils and trash, drains into catch basins and continues in pipes to a River, Bay or the Ocean. Stormwater is divided into the four distinct elements described below because the elements are often managed by different agencies and regulated separately. For additional information on stormwater and how stormwater services are funded, please visit www.cccounty.us/stormwaterinitiative.

Stormwater Quality. In many areas stormwater is polluted and must be cleaned up. Pollutants include chemicals from old industrial sources, nutrients from fertilizing landscaped yards, and oil and grease from vehicles. Advisory notices are posted in many rivers and bays to not eat fish because they contain levels of pollutants that exceed health standards. Beaches are closed for the same reason. We need to provide quality stormwater for aquatic species, drinking water, and food production.

Groundwater Supply/Stormwater Retention. Not enough rainfall soaks into the ground which threatens the health of our watersheds. The ground acts as Nature's water filtration system, cleaning the water as it percolates through the soil on its way to our groundwater basins, creeks, rivers, bays, and the ocean. Poor grazing management compacts the soil reducing its permeability and soil coverings, such as roads, parking lots, roofs, and patios, limits the amount of rainfall soaking into the ground. The result is more water flows out of the watershed faster reducing the amount of water filtering into our groundwater basins. This increased flow also causes streambank erosion and overall degradation of the stream system and riparian habitat. We need to restore watershed function and health, and increase groundwater recharge, through enhanced stormwater retention and infiltration.

Local Stormwater Drainage Infrastructure. Each community has a series of gutters, ditches, and underground pipes to collect stormwater and protect homes, businesses, and properties from flooding along local streets and waterways. Many of these facilities are old and will need to be replaced, presenting an opportunity to incorporate stormwater treatment into the drainage system. "Green Streets" projects that divert stormwater into grassy areas for treatment is one example, as is modifying drainage inlets in streets to capture trash before it enters our creeks. We need to develop and operate local stormwater drainage infrastructure to improve water quality and protect property values.

Regional Flood Protection Infrastructure. The planning necessary to protect communities from watershed-scale flooding requires a regional effort usually performed by a Flood Control District. Large-scale flooding can destroy business districts, schools, and other institutions essential to a community's prosperity and well-being. Flood Control Districts provide regional facilities to protect communities from this kind of large-scale flooding. Many of our iconic rivers and streams include flood protection facilities. Replacing these aging systems will allow modifications to include enhanced habitat value and increased stormwater retention and infiltration. We need to develop and operate regional drainage infrastructure to improve ecosystem health and protect communities from flooding.