Focus on the Bay: First Flush Water Quality Monitoring Rick Starr, Marine Advisor UC Cooperative Extension Sea Grant Program

As winter rains arrive, a group of dedicated people is anxiously awaiting the first big downpour of the season. The first major storm event of the season, in which water flows across streets in sheets, is defined as the "First Flush." At those times, all the oils, sediments, metals, toxic chemicals, detergents, and sediments that have accumulated on roofs, streets, yards, and fields all get washed into gullies, ditches, creeks, and rivers and end up in the ocean. The people waiting for the downpour are volunteers that are organized by cities with an Urban Watch Program and by the Monterey Bay Sanctuary Citizen Watershed Monitoring Network. Their goal is to identify what is getting flushed into the sea so that scientists and water quality managers can determine how best to maintain a high level of water quality in our region.

The First Flush annual monitoring event typically occurs in the late Fall in the cities on the Monterey Bay that currently have an active Urban Watch program. An Urban Watch program consists of volunteers who collect urban runoff water samples from selected storm drains and analyze the samples for contaminants using an Environmental Protection Agency approved pollution-detection kit. The First Flush program draws volunteers from all over Santa Cruz and Monterey Counties for training in water quality sampling during the first big rain of the season. Volunteers learn how to directly measure water temperature, pH, electrical conductivity, and water transparency. They also learn the proper way to collect water samples for lab analysis. Volunteers are "on call" until a monitoring coordinator alerts them to the first large storm of the season.

Volunteer water quality monitoring has been occurring in the Monterey Bay Region for more than 10 years, and the First Flush group has been sampling water quality since 2000. If you would like more information about volunteering, or just want to see the results of their work, visit their web site at: montereybay.noaa.gov/monitoringnetwork/about_us.html#activities