

#### **PROTECTING OUR WATERSHED**

Cathy Lin, Energy Manager and Stormwater Program Administrator

April 5, 2019



- Chesapeake Bay Watershed
- Phase II Small Municipal Separate Storm Sewer System (MS4) Permit
- Stormwater
- Teaching and Learning





# Chesapeake Bay Watershed

- Largest Estuary
- 64,000 Square Miles
- Bay Facts
  - ✓ Holds 18 Trillion Gallons of Water
  - ✓ 51 Billion Gallons of Water Enter Daily
  - Produces 500 Million Pounds of Seafood Annually





#### Phase II MS4 Permit

- MS4: Municipal Separate Storm Sewer System
- Allowable Discharges to Surface Water
- Federal Clean Water Act
- Virginia Stormwater Management Act
- Arlington County Code 26-5 Storm Sewer System





- Precipitation That Flows Across Land or Conveyances To Waterways
- Challenges Impervious Surfaces
  - ✓ Impacts on Water Quality
  - ✓ Quantity of Water
  - ✓ Erosion and Pollutants







#### Arlington Public Schools Urban Runoff

- Nitrogen
- Phosphorus
- Sediment





# Teaching and Learning

- Keep Water Onsite And/Or Reduce Imperviousness
- Litter Prevention
- Native Vegetation for Preventing Soil Erosion







# Unauthorized Discharges

- Bacteria
- Chemicals
- Detergents
- Metals
- Nutrients
- Pesticides
- Petroleum
- Sediment
- Trash











#### What Color Is Our Water







# What Color Is Our Water







# Wash Water Gone Wild





- Algae Blooms
- Fish Kills
- Polluted Waterways







"When the well is dry, we know the worth of water." Benjamin Franklin