



**Virginia Aquarium & Marine Science Center
Journey of Water & *Restless Planet*
Selected Scientific & Interactive Exhibits**

The Virginia Aquarium's new permanent exhibit will feature dozens of new scientific and interactive exhibits in addition to the Aquarium's existing 300-plus interactives. Below is a sampling of some of the new interactives.

WATER/CHEMISTRY KIOSK

Salinity Introduction

Visitors will learn how salinity affects water weight and movement by placing three containers on the balance to discover which is heavier- fresh water, brackish water or salt water.

Go With the Flow

A touch screen enables visitors to adjust wind direction and rainfall in a computer simulation to understand the effects of circulation in the Bay.

SEDIMENT KIOSK

Getting to the Bottom

Because fine sediment grains settle to the bottom more slowly than coarse grains, fine grains also are more easily suspended by waves and currents. Visitors will learn settling velocity by flipping tubes of various sediment to see how quickly each settles.

Clarity is Key

Runoff from rain carries sediments into the Bay from farmland, construction sites, and other disturbed land. When these sediments remain suspended in the water, the Bay looks cloudy or brown. A turn-wheel rotates a tube containing sediment. Once suspended in the water, a light meter is used to measure the water clarity on a graph.

Riparian Buffers

This interactive explores the role of plants in preventing erosion, which greatly affects the Bay's health. Visitors will dial an array of "plants" to see how they trap tiny hollow spheres representing sediment.

LIFE/OYSTERS

Life Oysters Kiosk

This live oyster exhibit features a tank which is fed with water from nearby Owls Creek to simulate the oyster's natural environment. Magnifiers allow an up-close look as the oysters feed by opening their shells and pumping water through their gills.

Life in the Bay

Oysters illustrate the interconnections of Bay life and the contributions even simple organisms make to the balance of nature. This oversized oyster model allows visitors to open up the oyster to see why it's important to the water.

Productivity Game: In or Out of Balance?

This interactive demonstrates the interdependence of many Chesapeake Bay species with the oyster. Sliding panels show visitors what happens to other animals, from apex predators to snails, when oysters disappear from the Bay.

DYNAMICS

Creating a Crater

When a meteor strikes the Earth, it creates a depression called a crater. The crater's size and shape, along with the type of rock evidence left behind, depend on the size of the meteor. Visitors will select various types of meteors and discover their impact on earth.

SCIENCE SHACKS

These mock-ups of field research stations allow visitors to learn about geological changes in the earth over hundreds of millions of years. *Science Shack Alpha* features a geologic timeline overhead with "post-it notes" marking significant geological changes in two of the four features *Restless Planet* habitats. Salt deposition during the Silurian period (represented by the coastal Sahara desert habitat) and an interpretive on producing coal with rock and fossil samples from the Carboniferous period (represented by the peat swamp habitat) will help visitors understand what occurred during those periods that shaped our environment of today.

Science Shack Zulu allows visitors to begin the earthquake process by stretching the land to see how it reacts to stress. This demonstrates the rifting and volcanism of the Precambrian and Triassic periods, represented by the Indonesian Flores Islands exhibit. Visitors can experiment with the sensitivity of earthquake sensors by pushing against the two halves of a granite block. Also, a floor plate invites visitors to jump and measure their impact on a seismometer.