

## It's the Environment!

### The James River

The James River, ESC's hometown river, is often a reference point that we compare to other waterways. The James is culturally important and central to Richmond's daily life whether walking on Belle Isle, tubing, eagle watching, or fishing; it makes us think about our local health, environment, and economy. The local park system along our river is packed. It is - - like our thriving Carytown - -where a Richmonder goes to be in public, to be seen, to be part of the masses, and to enjoy oneself. At ESC, we hold a unique perspective of the James, and, like it or not, our thoughts often turn to environmental concerns while enjoying the river. But the mind wonders about the PCB and mercury levels in those fish being eaten. Why has the suspended load (of fine particles) been so high this spring? Did the recent flood event disturb the Kepone deposits below Richmond?

As a working river, the James has had its fair share of contamination and overfishing along its 340+ mile length. Different industries shared the James, but tobacco was definitely king, starting with the arrival of the Europeans. In the 1970's, the pesticide Kepone was produced to control the insects that attack tobacco plants, and it is no longer manufactured or used in the United States due, mainly, to its potent neurological impacts. The manufacturing of Kepone in Hopewell, VA, and its use throughout the James River basin, contaminated at least 30 miles of the James River and its tributaries. Kepone is still present in the sediment and fish of the James, and is monitored by state and federal agencies along with monitoring for Mercury, PCBs, and other fecal and bacterial contaminants.

The James is the inspiration for environmental curiosity and passion of many Richmonders, and is the place from which the ESC team empathizes about our client's respective rivers and communities. Once barren for large sections below Richmond and Lynchburg due to indiscriminant dumping of sewage and chemicals, citizen and government action has restored much of the river's life and beauty. The return of bald eagles and the resurgent spawning of Atlantic sturgeon are both emblematic of our River's return to environmental health. Because of its natural beauty, there are numerous parks and events located all along the length of the James River and tributaries. One such event, the Annual James River Batteau Festival, hearkens back to a slower pace of life upon and along the river, as recreationists spend seven days journeying on their own hand-hewn, flat-bottomed boats.



History is a constant presence in Virginia, and the James River has quite a storied past. Some early firsts along the James are the first permanent English colony (Jamestown), first colonial capital (Williamsburg), and first American municipal water plant in 1832 (Richmond). In the mid-1800's, the James River and Kanawha Canal was built to encourage passenger and freight traffic between Virginia and Ohio. By the time the rise of rail halted construction, the canal stretched from Richmond to Buchanan, two-thirds of the river's length. Today, it is known as the largest river contained within a single state, and it stretches from its headwaters in the Alleghany Mountains to the mouth of the Chesapeake Bay, as it cuts through the northern and western heart of the state.

The James is another of our rivers that is a study in contrasts: the most successful sturgeon spawning in the Mid-Atlantic area is in the lower James; the PCB levels in fish are too high for safe unlimited consumption; sport fishing is famous on the James; the invasive blue catfish is decimating populations of species that need restoration; Virginia is developing comprehensive PCB controls under the TMDL program, and the list goes on.

Each of us spends time along the James River and its related streams and creeks. Whether we are kayaking, camping, hiking, or the like, our lives are graced by the rich history and diverse life along its banks. We use the time there to recharge, but it also reminds us of the trust and passion that fuel our professional lives. We want our families, present and future, to enjoy this lush waterway into the distant future, just as our friends and clients wish for their own.

“We must begin thinking like a river if we are to leave a legacy of beauty and life for future generations.” –David Brower, environmentalist

This installment written by the entire team at ESC, LLC:

Jeff Anderson  
Leslie Shafer

Shana Moore  
Laura Williams

Peter L. deFur, Ph.D.

Henrico, VA  
August 16, 2013