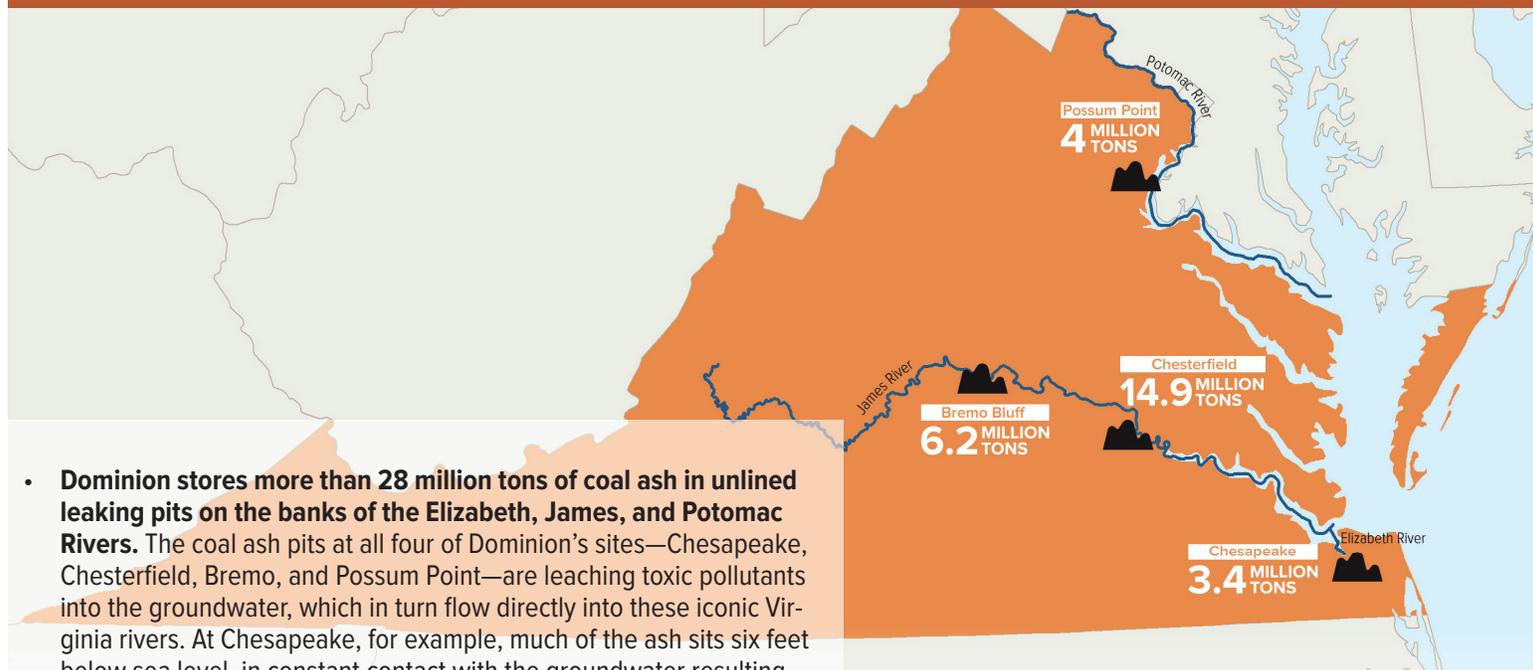


# CLOSING COAL ASH PONDS IN PLACE

A SHORT-SIGHTED STRATEGY THAT POLLUTES RIVERS AND PUTS COMMUNITIES AT RISK



- **Dominion stores more than 28 million tons of coal ash in unlined leaking pits on the banks of the Elizabeth, James, and Potomac Rivers.** The coal ash pits at all four of Dominion’s sites—Chesapeake, Chesterfield, Bremo, and Possum Point—are leaching toxic pollutants into the groundwater, which in turn flow directly into these iconic Virginia rivers. At Chesapeake, for example, much of the ash sits six feet below sea level, in constant contact with the groundwater resulting in decades of documented arsenic contamination. Ash at the other sites also is in contact with groundwater, resulting in exceedances of groundwater protection standards for pollutants such as arsenic, cobalt, lithium, and radium, as Dominion recently was required to disclose.
- **Dominion’s coal ash pollution puts communities’ health at risk.** For example, Dutch Gap is a public park located on the James River right next to Dominion’s leaking ash ponds at its Chesterfield site. A human health expert has concluded that visitors to Dutch Gap who interact with these contaminated areas may be facing increased risk of adverse health effects, including an estimated cancer risk 7 to 10 times greater than the limit EPA deems acceptable for cleaning up Superfund sites. At Possum Point, nearby homeowners are concerned that Dominion’s ash ponds have contaminated their drinking water wells; at Bremo, cancer-causing hexavalent chromium was detected in a nearby residential well.
- **Leaving the coal ash in place—as originally planned by Dominion—will not stop the ongoing pollution and leaves communities vulnerable.** Initially, Dominion asserted that the coal ash pollution could be stopped simply by placing a cover on top followed by a layer of soil. Dominion is now acknowledging, however, that leaving the ash in these unlined or poorly contained ponds will not be so simple. Additional risky and expensive engineering projects would also be needed, measures that require perpetual operation and maintenance. These projects would drive up the price—\$1.86 billion according to Dominion’s own estimates—with no guarantee of success. Moreover, leaving the ash on the banks of rivers ensures communities will remain at perpetual risk during major storms like Hurricane Florence, which resulted in reported breaches and flooding of several coal ash ponds in North Carolina. In Virginia, Chesapeake in particular is highly vulnerable to sea level rise and hurricanes; current estimates predict nearly 7 feet of relative sea level rise in the area by 2100 under a median scenario. Much of the ash in Chesterfield sits in the original channel of the James River, and is also vulnerable to flooding.



Top, Chesapeake site; middle, Chesterfield site; bottom, flooding and breaches at Duke site on Cape Fear river during Hurricane Florence.

# RESPONSIBLE CLEANUP

## GOOD FOR THE ENVIRONMENT, GOOD FOR THE ECONOMY

- **All across the Southeast, utilities are excavating coal ash and recycling or properly landfilling it—except in Virginia.** Every single ash pond in South Carolina—approximately 25 million tons—is being dug up and either placed into a modern landfill or recycled for use in concrete and cement. In fact, Dominion recently acquired a South Carolina utility that is digging up all of its ponded ash. While Duke is fighting against responsible cleanup at some of its North Carolina sites, it has committed to excavating about 43 million tons, with 22 million tons already out of the ground and three recycling facilities under construction. In Georgia, the utility there is digging up about 29 million tons of coal ash, including Plant Bowen—a huge 21 million-ton pond. With nearly 100 million tons of ash slated for excavation in our region, surely Dominion can clean up the 28 million tons of ash it stores in leaking pits in the Chesapeake Bay watershed.
- **Digging up the ash solves the pollution problem, and eliminates storm and hurricane risk.** In South Carolina, arsenic levels in the groundwater at one site being excavated plummeted by as much as 90 percent even before excavation had been completed. Moving the ash away from rivers also eliminates the worst risks from hurricanes and storm surges, a particular concern at Dominion sites such as Chesapeake. During Hurricane Florence, for example, Santee Cooper in South Carolina avoided catastrophe at one pond since the pond had been completely excavated before flood waters inundated the site.
- **Recycling is cost effective.** Dominion’s own recycling plan shows that nearly half of the ash can be recycled in 15 years, with the rest landfilled at a cost only slightly higher than cap-in-place costs with the necessary remediation. In fact, the actual cost of responsible cleanup and recycling will likely come down even further. Santee Cooper, for example, is excavating and recycling or landfilling about 12 million tons at a cost of only \$35 per ton, while Dominion’s recycling plan reports costs of about \$75 per ton all the way up to \$200 per ton.
- **Recycling helps local manufacturers.** Cement and concrete manufacturers no longer have a steady ash supply in Virginia. Local manufacturers are actually forced to import ash into Virginia from out of state. Reusing the ash not only protects the environment, but can help local companies build better, more durable roads, bridges, and other projects.
- **Responsible closure provides numerous other benefits, and can be accomplished in ways that minimize community impacts.** Responsible cleanup—excavating the ash and putting it into a landfill or recycling it for use in concrete—will create more and longer-lasting cleanup jobs, improve nearby property values, help drive economic development, and generate tax revenue. Every single site has a rail line, which could potentially be brought back online to transport ash offsite if necessary to minimize community impacts during cleanup.

“Reusing the ash also benefits our customers and our state, often lowering the total cost of basin closure when compared to excavation and transportation to a new location...”

—Brian Weisker, Duke VP of coal combustion productions, operations and maintenance

“It’s good for the environment, it’s good for our customers and it’s good for the economy because it’s providing and sustaining jobs.”

—Mollie Gore, Santee Cooper spokeswoman, describing the utility’s ash excavation and recycling

	Responsible Cleanup, with Recycling and Landfilling	Cap-in-Place Plus Remediation
Guaranteed Effective	Yes	No
Permanently eliminates vulnerability to hurricanes, storms, floods	Yes	No
Permanently eliminates pollution and potential public health risks	Yes	No
Helps fulfill manufacturing need	Yes	No
Provides long-term cleanup jobs for local workforce	Yes	No
Generates tax revenue	Yes	No
Improves property values	Yes	No
Cost	\$2.1 to 2.6 billion, likely less	\$1.86 billion, likely more

For more information, visit: [vcnva.org/coalash/](http://vcnva.org/coalash/)