

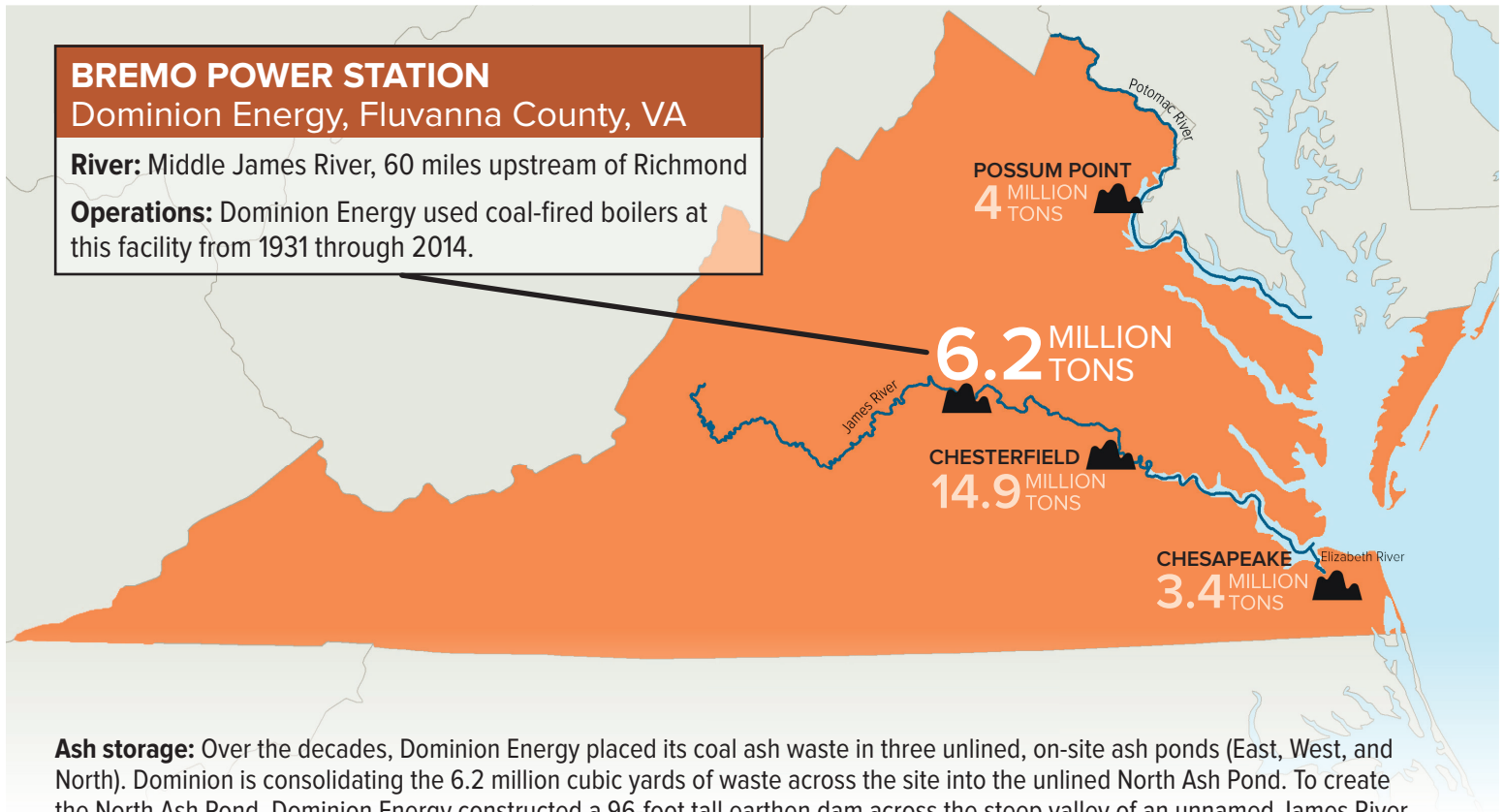
DOMINION PUTTING VIRGINIA AT RISK

BREMO POWER STATION

Dominion Energy, Fluvanna County, VA

River: Middle James River, 60 miles upstream of Richmond

Operations: Dominion Energy used coal-fired boilers at this facility from 1931 through 2014.



Ash storage: Over the decades, Dominion Energy placed its coal ash waste in three unlined, on-site ash ponds (East, West, and North). Dominion is consolidating the 6.2 million cubic yards of waste across the site into the unlined North Ash Pond. To create the North Ash Pond, Dominion Energy constructed a 96-foot tall earthen dam across the steep valley of an unnamed James River tributary and filled in the unlined pit with coal ash waste. After consolidation is complete, Dominion Energy is planning to leave the ash sitting in the unlined pit, perched above the James River with a thin cover installed on top.

- **Coal ash is full of heavy metals and carcinogens.** At the Bremo Power Station, numerous coal ash contaminants have been detected in groundwater, including boron, mercury, and radium. Dominion has disclosed a formal exceedance of the groundwater protection standard for lithium.
- **The pollution isn't contained.** The North Ash Pond is almost entirely saturated with groundwater, which flows through and beneath the pond, confirmed by Dominion regulatory filings. The groundwater picks up toxic pollutants along the way and carries them toward the James River.
- **Communities, drinking water supplies, and the James River at risk.** Expert analysis shows that a cap at Bremo "will not prevent continued contamination of groundwater." While a cap would reduce rainwater infiltrating the coal ash, groundwater would continue to flow through the sides and bottom of the pond.
- **Vulnerable to hurricanes and strong rains.** Earthen dams, like the one at Bremo Power Station, can fail. These risks are multiplied during heavy rainfall events like Hurricane Florence. Intense rains increase pressure on dams and can lead to structural failure.

Leaving coal ash in unlined lagoons is not acceptable. To deal effectively with this toxic legacy, the ash must be dug up. It then must be placed in a modern, lined landfill away from waterways or sold for use in concrete and cement. This approach has already proven to be environmentally beneficial and cost-effective in other Southeastern states and can work in Virginia with additional benefits such as creating local jobs, generating tax revenue, and improving property values.



For more information, visit: vcnva.org/coalash/

DOMINION PUTTING VIRGINIA AT RISK

POSSUM POINT STATION

Dominion Energy, Prince William County, VA

River: Quantico Creek and the Potomac River

Operations: Dominion Energy burned coal at Possum Point from 1955 until 2003 when the coal-fired units were converted to natural gas.

4 MILLION TONS

6.2 MILLION TONS

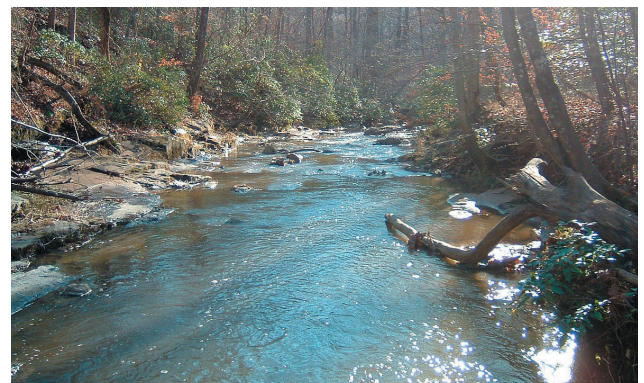
14.9 MILLION TONS

3.4 MILLION TONS

Ash storage: Dominion Energy dumped about 4 million tons of toxic coal ash into five unlined pits on site, three of which are in the floodplain and all of which are located within a mile of private homes. Dominion Energy is moving all of the ash from the older ponds into Pond D, which was constructed by creating an earthen dam across a natural creek valley and which lacks a modern liner system. A modern lined landfill has an impermeable liner, a leachate collection and treatment system and groundwater monitoring, all of which ensure that no toxic coal ash metals leak into the ground or our waterways. After consolidation is complete, Dominion Energy plans to leave the ash sitting in Pond D, perched above Quantico Creek with a thin cover installed on top.

- **Coal ash is full of heavy metals and carcinogens.** At the Possum Point site, Dominion Energy's own monitoring confirms that the coal ash has contaminated the groundwater with pollutants, including arsenic and radium. Dominion has disclosed a formal exceedance of the groundwater protection standard for cobalt and lithium.
- **The pollution isn't contained.** According to expert hydrogeologists, and through Dominion's regulatory filings, groundwater is flowing through Pond D. The contaminated groundwater is leaching toxic coal ash metals into Quantico Creek and the Potomac River.
- **Communities, drinking water supplies, and the James River at risk.** Burying the ash in place with a thin cover on top will not protect human health or the environment; groundwater will continue to flow through Pond D. Nearby residents are already concerned about spreading contamination, with private well testing showing elevated levels of lead and other metals. Additionally, in 2015, Dominion drained 27.5 million gallons of untreated coal ash pond water directly into Quantico Creek.
- **Vulnerable to hurricanes and strong rains.** Earthen dams, like the one at BreMO Power Station, can fail. These risks are multiplied during heavy rainfall events like Hurricane Florence. Intense rains increase pressure on dams and can lead to structural failure.

Leaving coal ash in unlined lagoons is not acceptable. To deal effectively with this toxic legacy, the ash must be dug up. It then must be placed in a modern, lined landfill away from waterways or sold for use in concrete and cement. This approach has already proven to be environmentally beneficial and cost-effective in other Southeastern states and can work in Virginia with additional benefits such as creating local jobs, generating tax revenue, and improving property values.



For more information, visit: vcnva.org/coalash/

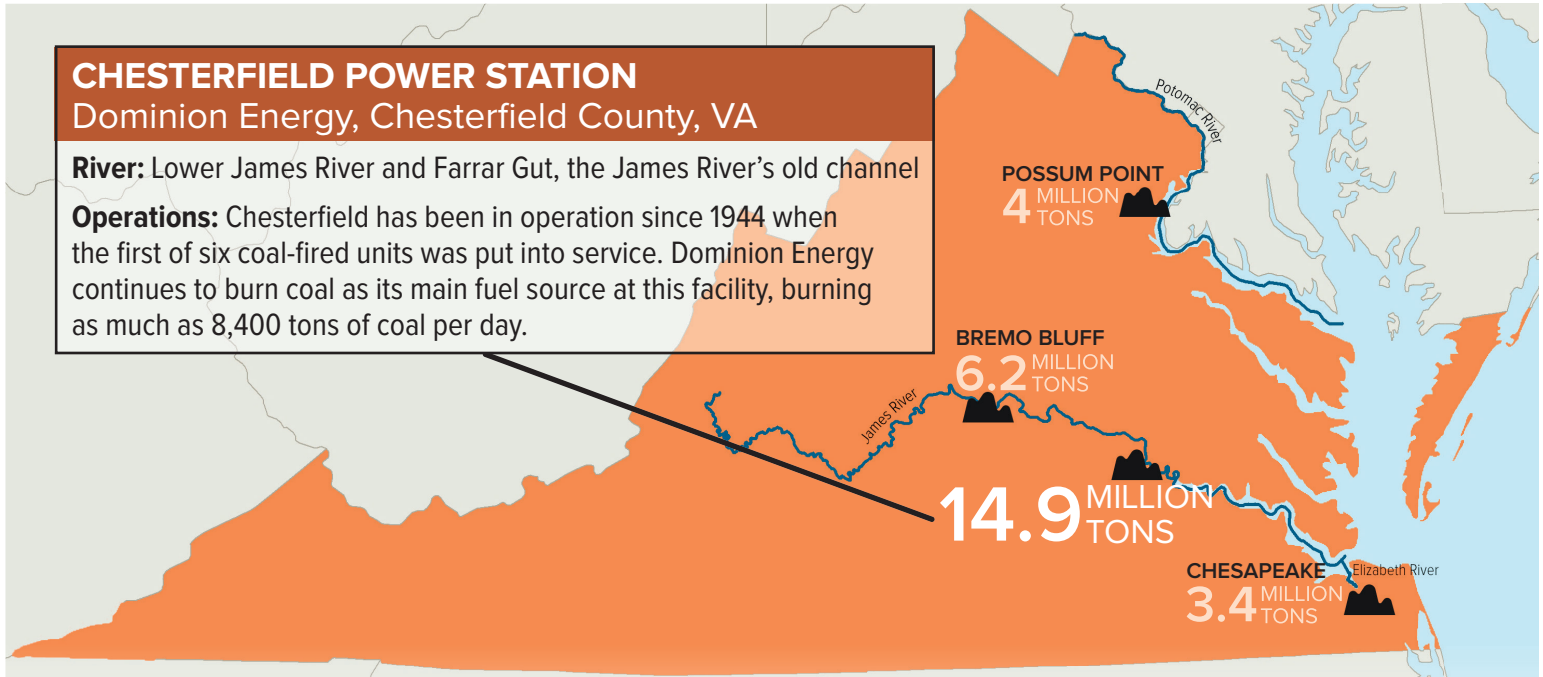
DOMINION PUTTING VIRGINIA AT RISK

CHESTERFIELD POWER STATION

Dominion Energy, Chesterfield County, VA

River: Lower James River and Farrar Gut, the James River's old channel

Operations: Chesterfield has been in operation since 1944 when the first of six coal-fired units was put into service. Dominion Energy continues to burn coal as its main fuel source at this facility, burning as much as 8,400 tons of coal per day.



Ash storage: 15 million tons of coal ash is stored in two unlined basins, the Lower and Upper Ash Ponds. Both ponds are surrounded by recreational waters and sit right next to Dutch Gap Conservation Area, a popular park for fishing, kayaking, and hiking. In fact, the Lower Ash Pond sits directly in the original channel of the James River. Dominion Energy is planning to leave the ash sitting in these unlined lagoons with a thin cover installed on top.

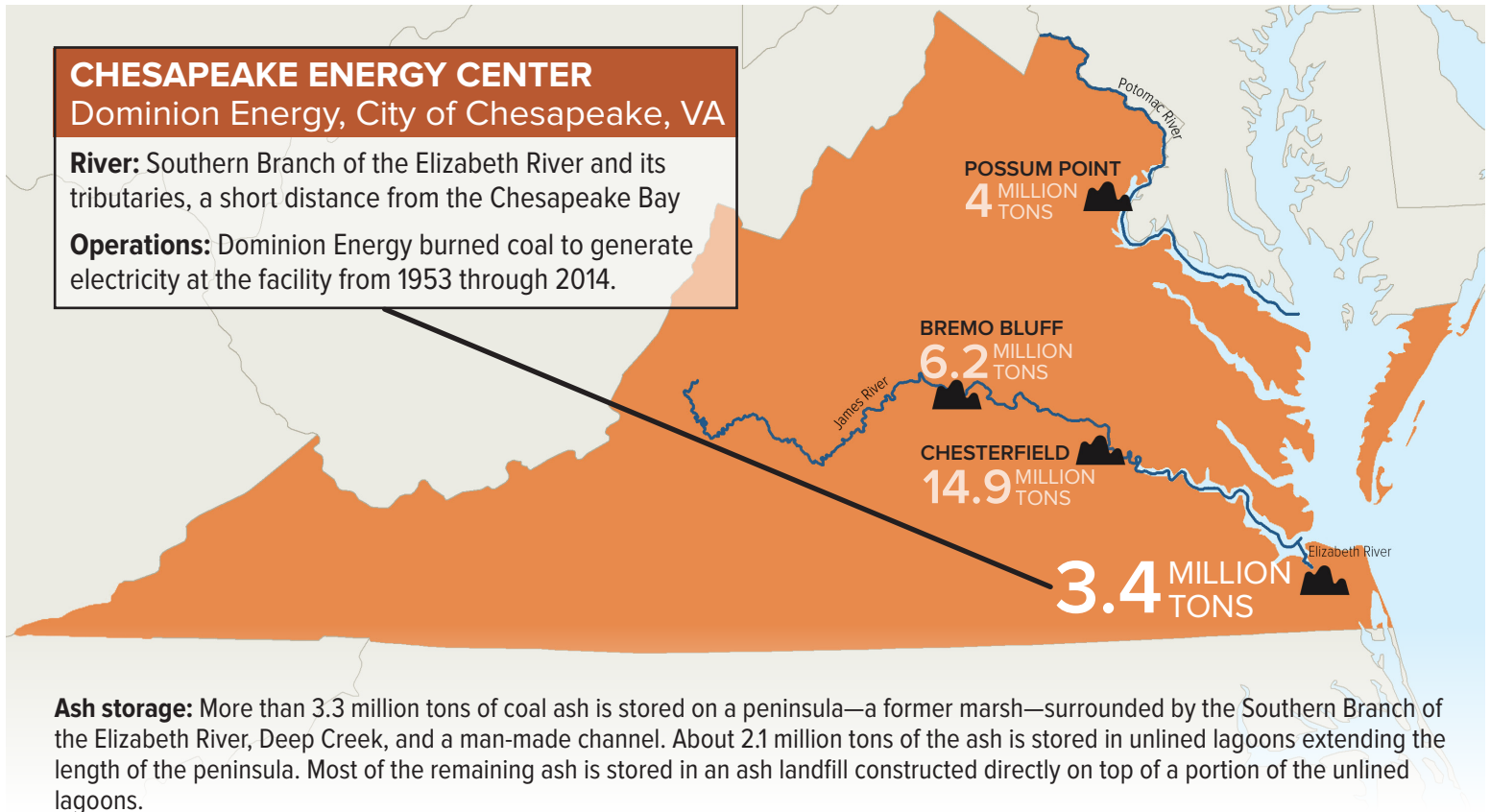
- **Coal ash is full of heavy metals and carcinogens.** At the Chesterfield Power Station, high levels of arsenic, radium, beryllium, cobalt, and lead have been detected in the groundwater. Dominion has disclosed formal exceedances of groundwater protection standards for arsenic, cobalt, lead, radium, and other pollutants.
- **The pollution isn't contained.** Hydrogeologists have found that groundwater is flowing through the stored coal ash waste, confirmed through Dominion's own regulatory filings, and carrying pollutants to adjacent surface waters. This flow of pollutants is documented in sampling collected at the Dutch Gap Conservation Area, where the James River Association and Southern Environmental Law Center found arsenic levels in the riverbed at 400 times above the level considered acceptable by the Environmental Protection Agency for residential uses.
- **Health threats in a public park.** An outside human health expert evaluated the Dutch Gap Conservation Area sampling data and concluded that Dominion Energy's coal ash is posing risks to human health and the environment. According to the report, people in Dutch Gap Conservation Area who interact with these contaminated areas face an increased cancer risk—7 to 9.6 times above what the Environmental Protection Agency considers the cutoff for acceptable cancer risk at Superfund sites.
- **Communities, drinking water supplies, and the James River at risk.** Expert analysis shows that leaving the coal ash in place, even with a cover on top, will not stop the ongoing contamination as groundwater continues to flow through the unlined base of the ponds and into nearby waterways.
- **Vulnerable to storms and flooding.** Chesterfield's low-lying ash ponds are within an active and changing river system, separated only by thin strips of land. A major rainfall, hurricane, or tidal surge could put the river back on its original course, causing severe erosion and a direct release of arsenic-laced pollution into the James River.



Leaving coal ash in unlined lagoons is not acceptable. To deal effectively with this toxic legacy, the ash must be dug up. It then must be placed in a modern, lined landfill away from waterways or sold for use in concrete and cement. This approach has already proven to be environmentally beneficial and cost-effective in other Southeastern states and can work in Virginia with additional benefits such as creating local jobs, generating tax revenue, and improving property values.

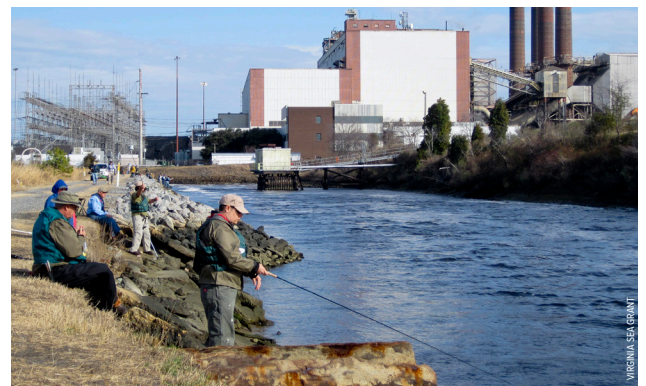
For more information, visit: vcnva.org/coalash/

DOMINION PUTTING VIRGINIA AT RISK



- **Coal ash is full of heavy metals and carcinogens.** At the Chesapeake site in particular, the coal ash contains approximately 150 tons of arsenic.
- **The pollution isn't contained.** A federal judge has already determined that Dominion Energy's coal ash storage at the Chesapeake site is polluting the surrounding waterways with arsenic. Arsenic from the ash is contaminating the groundwater, which then flows directly into the surrounding waterways. Much of the ash in the unlined lagoons sits up to six feet below sea level and is continually saturated with groundwater.
- **Communities and waterways at risk.** Monitoring data over more than 30 years shows persistent, high levels of arsenic in the groundwater—in some instances, these levels are as much as 100 times the groundwater protection standard. Leaving this ash in place with only a liner on top will not stop the pollution. In fact, the federal judge described this plan as "not an acceptable solution here."
- **Vulnerable to hurricanes, storm surges, and sea-level rise.** The millions of tons of coal ash at the site is a serious concern for the City of Chesapeake. Dominion Energy's site is particularly vulnerable to hurricanes, storm surge, and daily tidal erosion, posing a potential risk of catastrophic failure. The site sits on a former marsh surrounded by water on three sides. By 2100, sea levels in this area are projected to rise 5 to 7 feet above 2000 levels under a moderate scenario.

Leaving coal ash in unlined lagoons is not acceptable. To deal effectively with this toxic legacy, the ash must be dug up. It then must be placed in a modern, lined landfill away from waterways or sold for use in concrete and cement. This approach has already proven to be environmentally beneficial and cost-effective in other Southeastern states and can work in Virginia with additional benefits such as creating local jobs, generating tax revenue, and improving property values.



For more information, visit: vcnva.org/coalash/