

Georgia Power is permanently closing its 29 ash ponds at 11 coal-fired power plants across the state and has committed that all ash ponds will stop receiving coal ash within three years. Additionally, the company is completely removing the ash from 19 ponds located adjacent to lakes or rivers where advanced engineering methods designed to enhance the protection of groundwater around the closed pond may not be feasible. The ash from these ponds will either be relocated to a permitted landfill, consolidated with other closing ash ponds or recycled for beneficial use. More than 60 percent of the coal ash Georgia Power produces today is recycled for various uses such as Portland cement, concrete and cinder blocks. The company's remaining 10 ash ponds will be closed in place using advanced engineering methods and technologies that are designed to enhance protection of groundwater.

## Environment – A Balanced Approach

At Georgia Power, we strive to provide our customers with reliable and affordable electricity while minimizing the company's environmental impact. To meet the needs of 2.5 million customers, Georgia Power has created a diverse energy portfolio that delivers sustainable power.

At Georgia Power, compliance with federal and state environmental requirements is only the beginning of our environmental commitment. In addition to compliance, we emphasize conservation and recycling, and help our customers make efficient use of energy. We challenge ourselves every day to preserve the environment and strengthen the communities in which we live, work and serve.

## Cornerstones of Our Commitment

Three principles serve as the cornerstones of our environmental commitment:

### **Solutions**

Our environmental record is a top priority and we are taking steps in the communities we serve to improve the environment, including investing more than \$5 billion in environmental controls at our power plants in Georgia.

### **Balance**

We strive to maintain a balance that furthers environmental stewardship while providing for growing energy needs and the economy.

### **Stewardship**

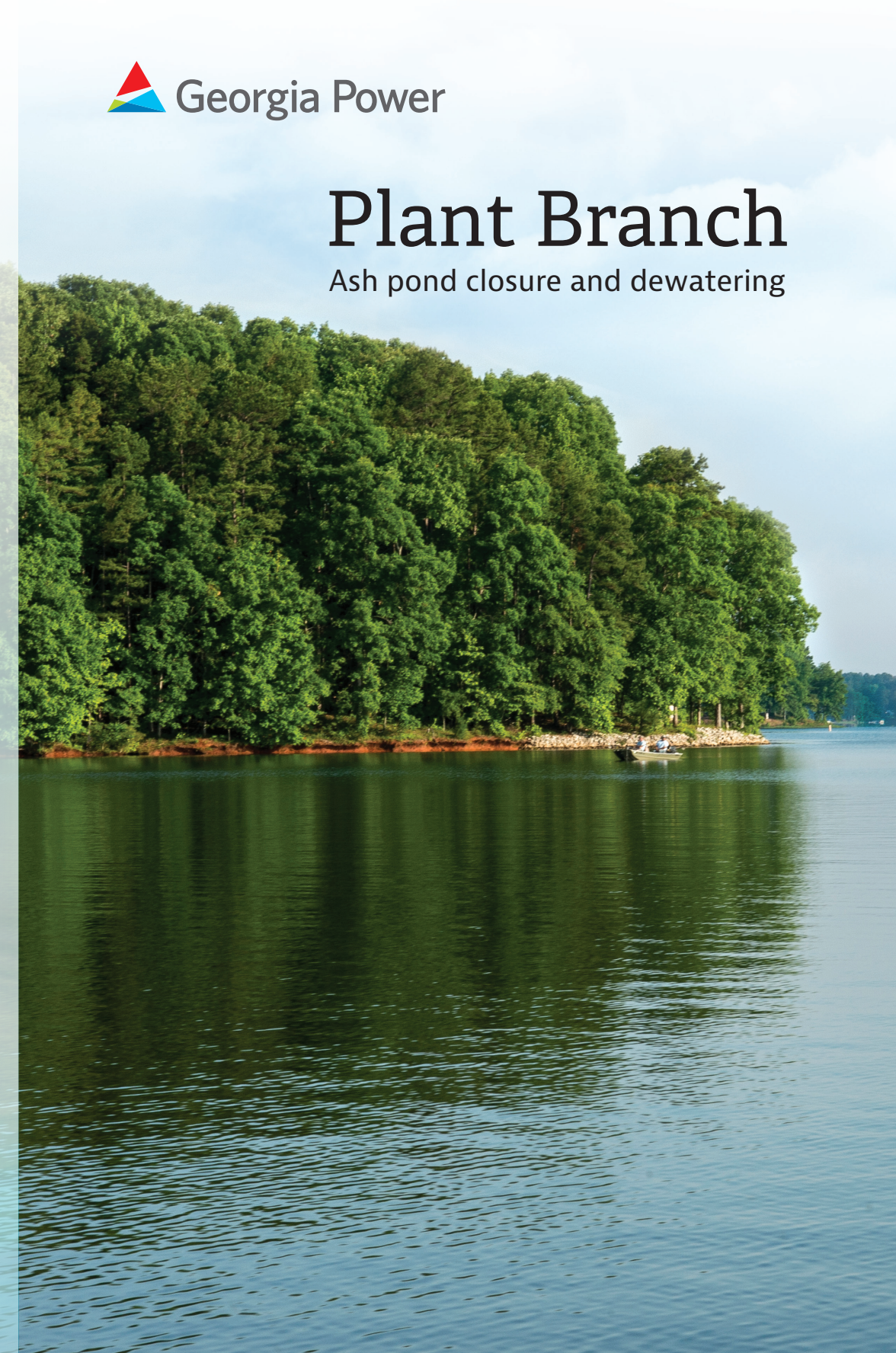
Providing environmental leadership is fundamental to Georgia Power's vision and our commitment to create sustainable change.

For more information visit [www.georgiapower.com/environment](http://www.georgiapower.com/environment)



# Plant Branch

Ash pond closure and dewatering





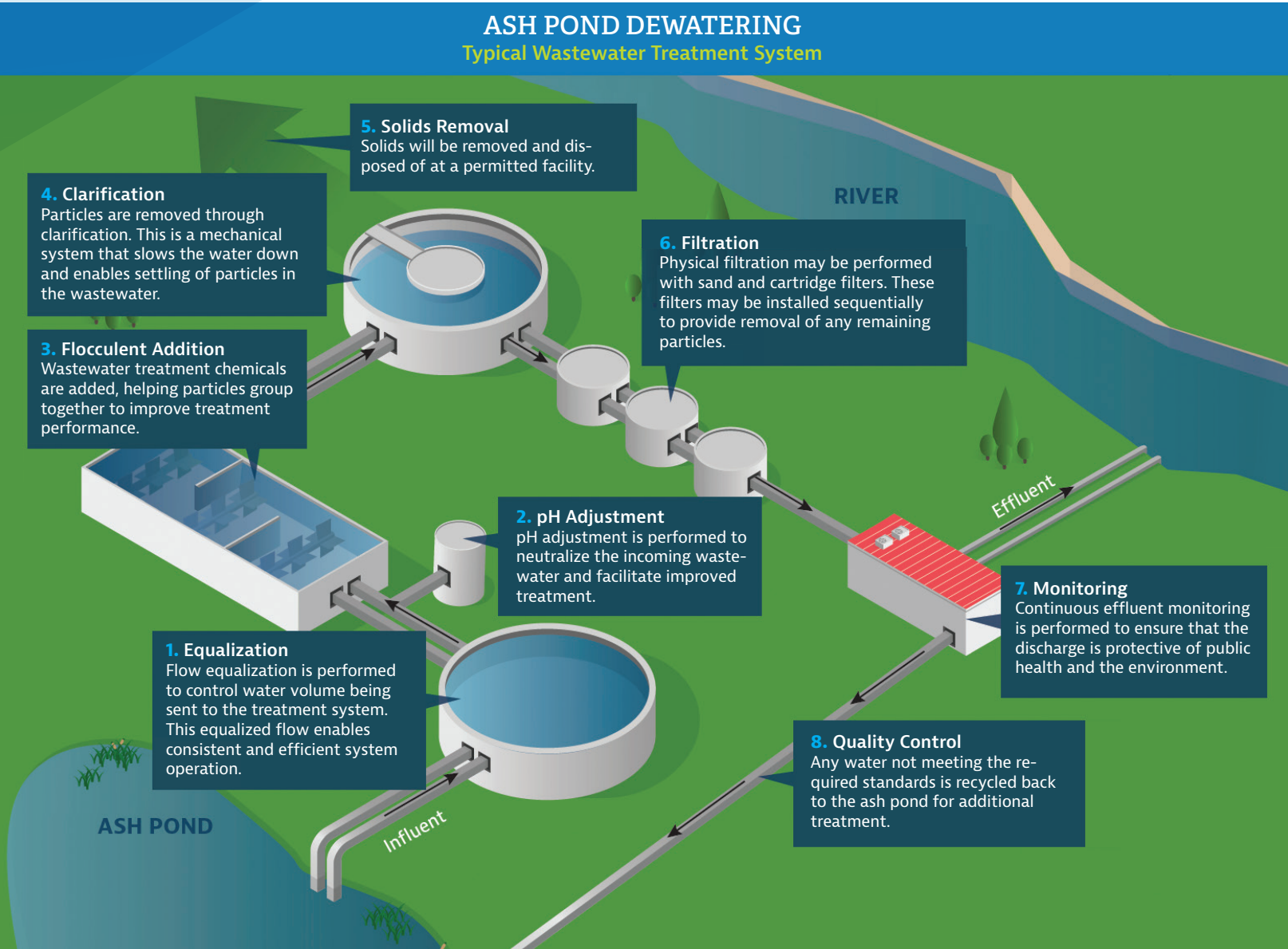
Typical Wastewater Treatment System

This diagram depicts the typical waste-water treatment process that’s being implemented at Georgia Power facilities. These systems are being utilized for enhanced treatment of wastewater during the dewatering process.

Ash Pond Closure and Dewatering

As Georgia Power closes its ash ponds, water in the ponds must be removed so the ash pond can either be excavated or closed using advanced engineering methods and technologies. In some cases, the water may be reused in plant processes, while in other cases, it will be treated before being discharged. This treatment and removal activity is known as “dewatering.” Throughout the dewatering process, the company will comply with its National Pollutant Discharge Elimination System (NPDES) permits, as well as the state Coal Combustion Residuals (CCR) Rule.

Before Georgia Power dewateres any ash pond, the company provides advance notice to the Georgia Environmental Protection Division (EPD). Additionally, the company prepares and submits an “ash pond dewatering plan” to EPD for its approval. That plan identifies the enhanced water treatment system, controls and monitoring that will be used during the process to ensure that the water discharged is protective of water quality standards.



Ash Pond Dewatering – Planning & Processes

The dewatering plan submitted to the Georgia EPD describes the additional safeguards and enhanced wastewater treatment system (illustrated above) that Georgia Power will put in place to ensure the facility’s NPDES permit effluent limitations continue to be met and that the receiving waterbody continues to be protected

during the ash pond dewatering process. The plan provides an overview of the wastewater treatment system; a narrative description of the key processes; details of the major process control measurements being performed; and a plan for performing additional effluent monitoring.

Georgia Power will sample and test the treated water for a broad range of substances, including metals, in accordance with its EPD-approved dewatering plan. Independent third-party contractors will conduct the sampling work. All samples will be analyzed by accredited independent laboratories for 23 parameters (see sample table above). Dewatering

plans and all sampling data will be reported to the Georgia EPD. Data tables summarizing results of individual rounds of testing at Plant Branch will also be posted on Georgia Power’s website at [www.georgiapower.com/environment](http://www.georgiapower.com/environment) with detailed footnotes that clearly explain the data.

Plant Branch  
Monthly Dewatering Results<sup>1</sup>  
SAMPLE TABLE

Prepared by: TETRA TECH

Parameter	Units	Effluent Concentration		Permit Limits	
		Minimum	Maximum	Daily Avg	Daily Max
Flow	MGD	***	***	***	***
pH	SU	***	***	6.0 - 9.0	
Total Suspended Solids	mg/L	***	***	30.0	100.0
Oil and Grease	mg/L	***	***	15.0	20.0

Parameter	Units	Measured Effluent Concentration	
		DATE	DATE
Turbidity	mg/L	***	***
Total Dissolved Solids	mg/L	***	***
Total Residual Chlorine	mg/L	***	***
Ammonia	mg/L	***	***
Total Kjeldahl Nitrogen	mg/L	***	***
Nitrate-Nitrite	mg/L	***	***
Organic Nitrogen	mg/L	***	***
Phosphorus	mg/L	***	***
Ortho-Phosphorus	mg/L	***	***
Hardness	mg/L	***	***

Parameter	Units	Effluent Concentration <sup>1</sup>		Calculated River Value <sup>3</sup>		Water Quality Standard <sup>4</sup>
		DATE	DATE	DATE	DATE	
Arsenic	µg/L	***	***	***	***	340
Cadmium	µg/L	***	***	***	***	1
Chromium <sup>5</sup>	µg/L	***	***	***	***	16
Copper	µg/L	***	***	***	***	7
Lead	µg/L	***	***	***	***	30
Nickel	µg/L	***	***	***	***	260
Selenium <sup>6</sup>	µg/L	***	***	***	***	5
Zinc	µg/L	***	***	***	***	65
Mercury	ng/L	***	***	***	***	1400

1 Tetra Tech verifies the correct laboratory analysis methods were used, any applicable permit limits have been met and other results are protective of Georgia EPD's water quality standards.

2 ND = Not Detected.

3 Calculated River Value shows what the total effluent concentration looks like once it has fully mixed in the receiving waterbody. This value is calculated as a dissolved concentration for an appropriate comparison to the numeric water quality criteria, which are also in the dissolved form. Consistent with Georgia EPD's, non-detectable effluent concentrations are not translated into calculated river values.

4 Numeric Water Quality Criteria is the maximum concentration of a parameter (calculated at a default hardness of 50 mg/L, as calcium carbonate) established for the receiving waterbody that will be protective of the designated use per Georgia EPD's rules and regulations. Calculated River Values less than these criteria are protective of the waterbody.

5 Numeric water quality criterion shown is for Hexavalent Chromium.

6 The numeric water quality criterion shown is the chronic (long-term) water quality criterion for selenium since this parameter does not have an acute (short-term) water quality criterion.

\*\*\* = Not Applicable

mg/L = milligrams per liter = parts per million; µg/L = micrograms per liter = parts per billion; ng/L = nanograms per liter = parts per trillion; SU = Standard Units; MGD = Million Gallons Day