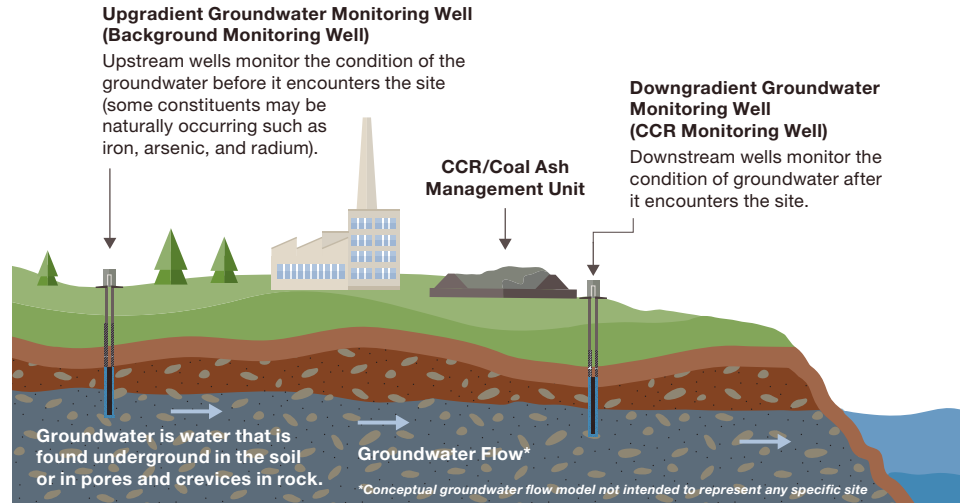


# Groundwater Monitoring: Cumberland Fossil Plant

Ensuring the protection of water resources

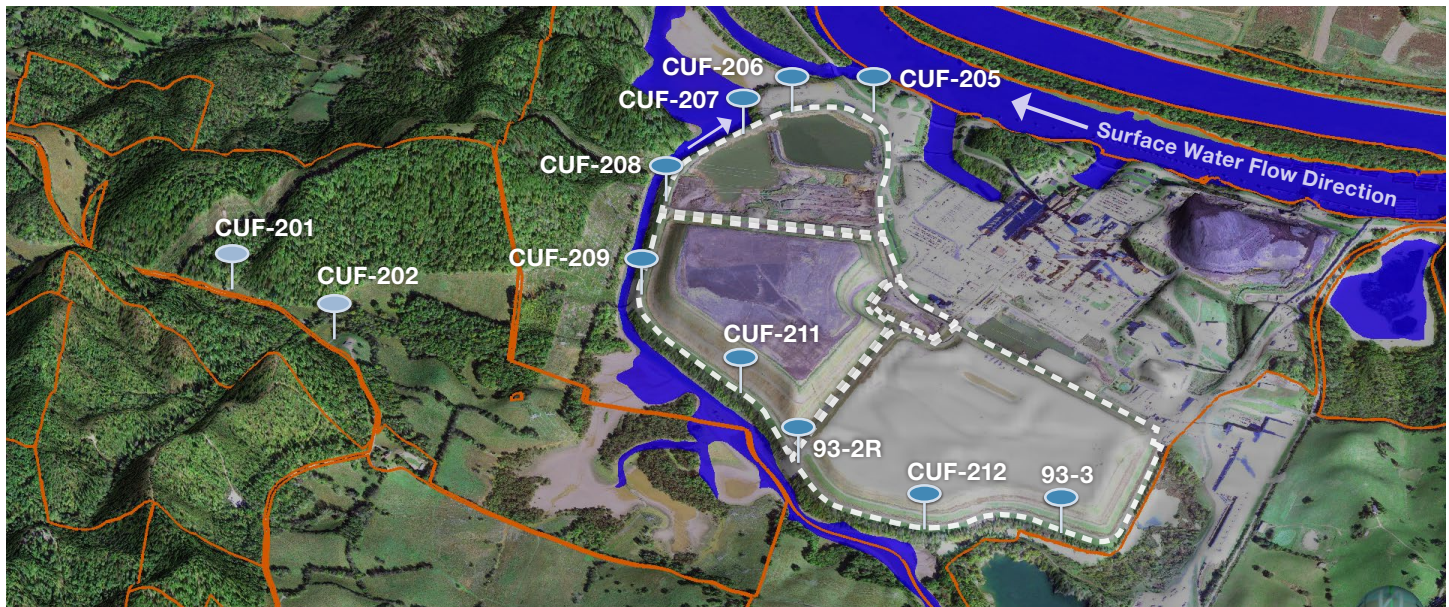
## Why We Monitor

As part of our commitment to environmental stewardship and in compliance with state and federal regulations, TVA continues to monitor the groundwater quality at the site to ensure water resources are not impacted by our coal ash management units. This fact sheet summarizes TVA's robust monitoring network program and provides the most recent monitoring results reported under federal regulations.



## How We Monitor

We maintain a robust network of monitoring wells that we sample regularly for groundwater quality. Many of the constituents in coal ash are naturally occurring in rocks and soil, which makes it important to understand groundwater quality before it reaches the site. That's why we typically install monitoring wells both before and after groundwater reaches the site. We proactively report the results to regulators and post the results on the TVA website.







-  Background Monitoring Well
-  CCR Monitoring Well
-  CCR Unit Subject to CCR Rule
-  TVA Property Boundary

Image shown is a rendering, well locations are approximate.

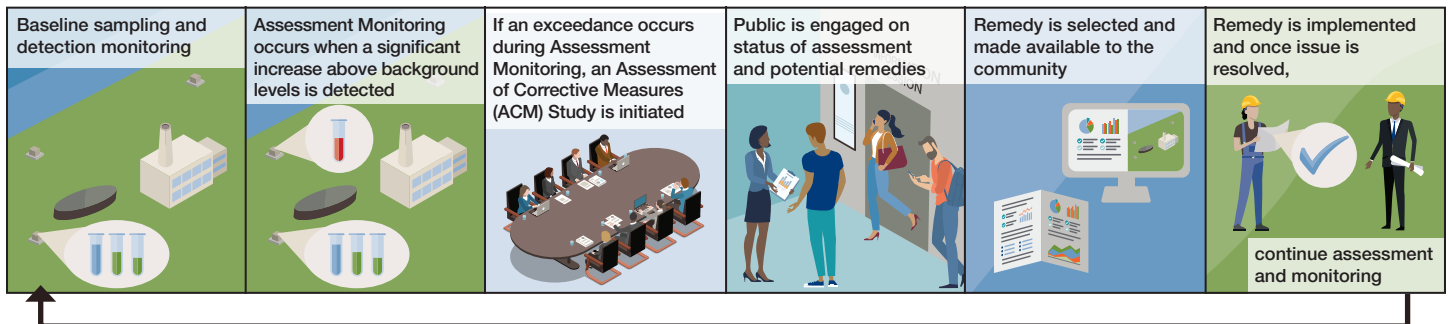
## Results of Assessment Monitoring for 2020

| 2020        |           | GROUNDWATER QUALITY MONITORING WELL LOCATIONS |         |                      |         |         |         |         |         |       |         |      |
|-------------|-----------|---|---------|----------------------|---------|---------|---------|---------|---------|-------|---------|------|
| Constituent | GWPS mg/L | Background Well                               |         | CCR Monitoring Wells |         |         |         |         |         |       |         |      |
|             |           | CUF-201                                       | CUF-202 | CUF-205              | CUF-206 | CUF-207 | CUF-208 | CUF-209 | CUF-211 | 93-2R | CUF-212 | 93-3 |
| Antimony    | 0.006     | ●   | ●       | ●                    | ●       | ●       | ●       | ●       | ●       | ●     | ●       | ●    |
| Arsenic     | 0.01      | ●   | ●       | ●                    | ●       | ●       | ●       | ●       | ●       | ●     | ●       | ●    |
| Barium      | 2         | ●   | ●       | ●                    | ●       | ●       | ●       | ●       | ●       | ●     | ●       | ●    |
| Beryllium   | 0.004     | ●   | ●       | ●                    | ●       | ●       | ●       | ●       | ●       | ●     | ●       | ●    |
| Cadmium     | 0.005     | ●   | ●       | ●                    | ●       | ●       | ●       | ●       | ●       | ●     | ●       | ●    |
| Chromium    | 0.1       | ●   | ●       | ●                    | ●       | ●       | ●       | ●       | ●       | ●     | ●       | ●    |
| Cobalt      | 0.006     | ●   | ●       | ●                    | ●       | ●       | ●       | ●       | ●       | ●     | ●       | ●    |
| Fluoride    | 4         | ●   | ●       | ●                    | ●       | ●       | ●       | ●       | ●       | ●     | ●       | ●    |
| Lead        | 0.015     | ●   | ●       | ●                    | ●       | ●       | ●       | ●       | ●       | ●     | ●       | ●    |
| Lithium     | 0.04      | ●   | ●       | ●                    | ●       | ●       | ●       | ●       | ●       | ●     | ●       | ●    |
| Mercury     | 0.002     | ●   | ●       | ●                    | ●       | ●       | ●       | ●       | ●       | ●     | ●       | ●    |
| Molybdenum  | 0.1       | ●   | ●       | ●                    | ●       | ●       | ●       | ●       | ●       | ●     | ●       | ●    |
| Rad226+228  | 5 pCi/L   | ●   | ●       | ●                    | ●       | ●       | ●       | ●       | ●       | ●     | ●       | ●    |
| Selenium    | 0.05      | ●   | ●       | ●                    | ●       | ●       | ●       | ●       | ●       | ●     | ●       | ●    |
| Thallium    | 0.002     | ●   | ●       | ●                    | ●       | ●       | ●       | ●       | ●       | ●     | ●       | ●    |

- Color Coding Key**
- Monitoring data results are below groundwater protection standards (GWPS)
  - Monitoring data results are below GWPS, but results are 65% or more of the GWPS
  - Monitoring data results exceed GWPS (TVA has initiated and completed assessment of corrective measures report)

## Monitoring and Remedy Process Under Federal Regulations

Below are the steps that TVA takes to understand groundwater conditions and resolve any issues that are detected as a part of our robust monitoring.



Should action be required to address an issue, the public is notified and corrective measures are taken. As the issue is resolved, monitoring continues. This is a cycle that continues as part of our robust monitoring program.

## Next Steps

TVA will continue to monitor and assess groundwater testing results and take the steps necessary to preserve and protect the quality of the environment and surrounding community.

**TVA will not waiver from our commitment to protecting water resources.**