

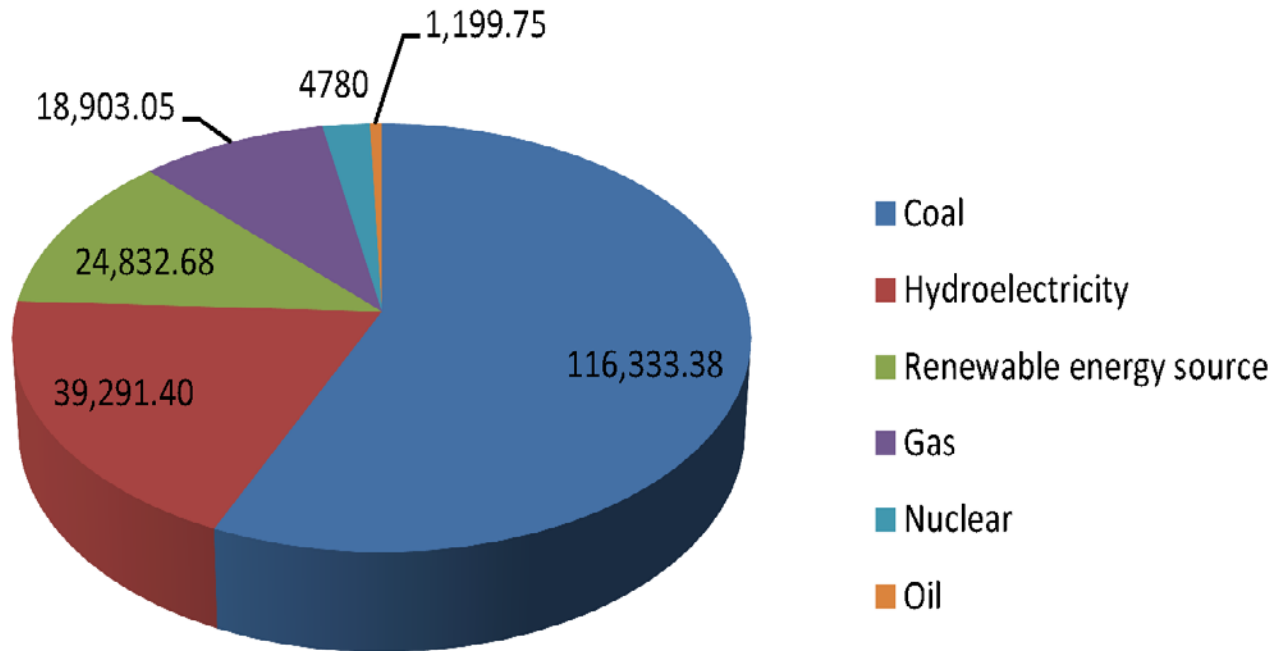


A Case Study of Coal Ash Management in North Carolina

Dr. Fafanyo Asiseh, Assistant Professor
Dr. Vereda J. Williams, Associate Professor
North Carolina A&T State University
Greensboro, NC



Power Generating Sources





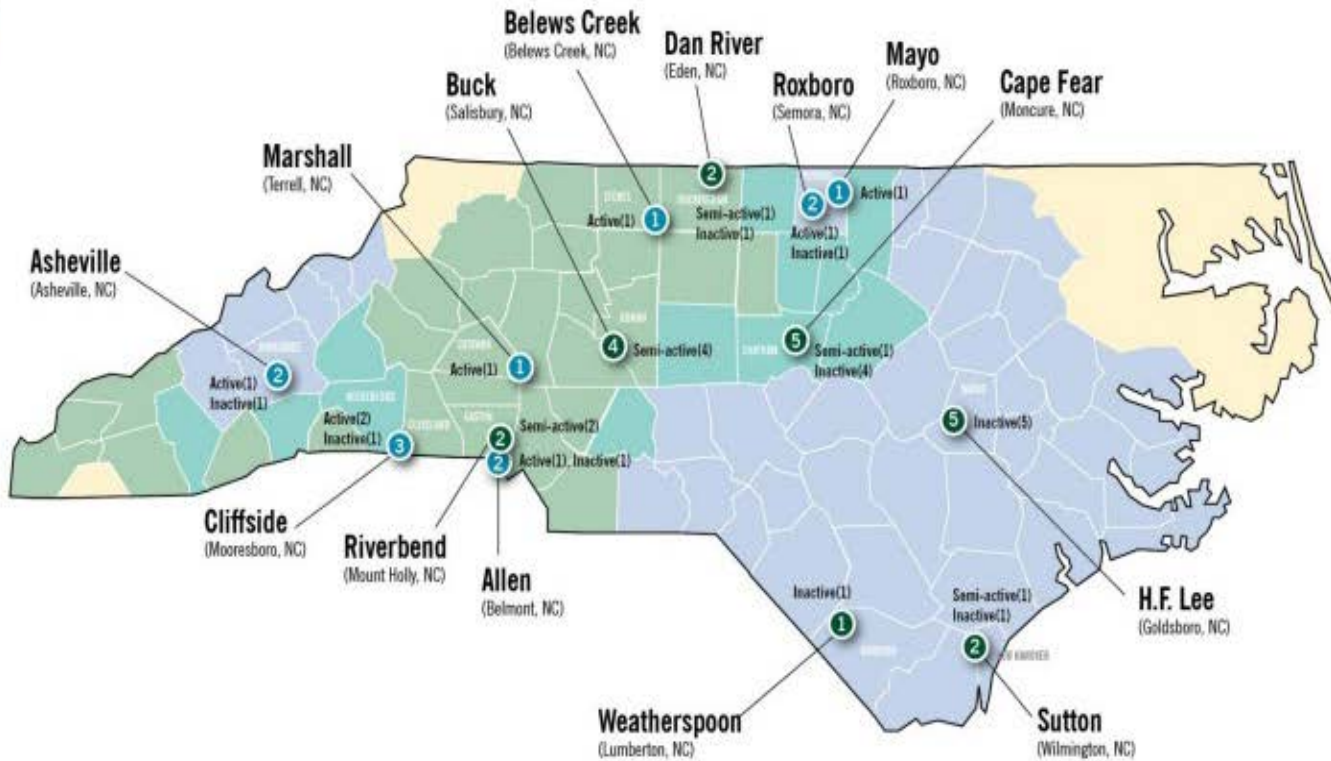
The Impact of the Tennessee Coal Ash Spill



- In December, 2008, an estimated 5.4 million cubic yards of coal ash was released to the Emory and Clinch Rivers and the adjacent River banks.



Coal Ash Ponds in NC



PLANT STATUS and TOTAL NUMBER OF ASH BASINS AT EACH SITE
(noted in the corresponding circle)

- Operating
- Retired

NC SERVICE TERRITORIES
(counties served)

- Duke Energy Carolinas
- Duke Energy Progress
- Overlapping Territory



North Carolina Coal Ash Risk

- Number of Coals Ash Ponds – 37 at 14 sites
- High Hazard Sites – 29
- Significant Hazard Sites- 2
- Documented Cases of Spills – All 14



The State of North Carolina Coal Ash Spills

- Pond Ratings: 29 ponds in NC have been rated “high hazard”, and 2 have been rated “intermediate hazard.”
- A high hazard rating means that pond failure will probably cause a loss of human life in addition to economic loss, environmental damage and damage to infrastructure
- An intermediate hazard rating indicates that a failure at the pond can cause economic loss, environmental damage, or damage to infrastructure.



Objectives

- Perception and knowledge of people living around the coal ash pond in NC



Study Focus

- Health impacts:
 - » Fly ash
 - » Water contamination
- Impact on aquatic life:
 - » Aquatic life destroyed and impacted by spill
- Impact on recreational activities
 - » Fishing as recreational activities
 - » Kayaking
 - » Swimming in river



Data

- Survey of respondents in the NC area
 - » Knowledge of coal ash spill
 - » Impact of coal ash spill